

Parameter list Vector Control

22.10.01

Parameter	Description	Data	Read/write
r001 Drive Status 1	Visualization parameter for the current status of the converter or inverter. The converter status is, for example, determined by the control commands for the internal sequence control (see control word 1 and 2 r550,r551) and by menu selection P060. 0 = Power section definition 1 = Initialization of converter or inverter 2 = Hardware initialization 3 = Drive system initialization 4 = Board configuration 5 = Drive setting 6 = Selection of several drive test functions 7 = Störung 8 = Start inhibit 9 = Ready for ON 10 = Precharging of Dc link bus 11 =Ready for operation 12 = Ground fault test 13 = "Flying restart" is active 14 = Operation 15 = OFF1 is active 16 = OFF3 is active 17 = "DC braking" is active 18 = Motor data identification at standstill is active 19 = Optimization of speed controller 20 = "Synchronization" active 21 = Download	Dec.Plc.: 0 Unit: - Indices: - Type: O2	Menus: - Parameter menu + General parameters + Motor/encoder + Encoder data + Control/gating unit + Position control + Diagnostics + Trace + Technology + Synchronism + Positioning - Fixed settings - Quick parameterization - Board configuration - Drive setting - Download - Uread/free access - Power section definition
r002 Rot Freq 2	Visualization parameter for the speed actual value in Hz (multiplied by the pole pair number P109 of the drive) Display quantity for the PMU parameterizing unit and the OPT (see P049). In function diagram: 350.7, 351.7, 352.7	Dec.Plc.: 3 Unit: Hz Indices: - Type: I4	Menus: - Parameter menu + General parameters - Uread/free access
r003 Output Volts 3	Visualization parameter for the output voltage of the converter or inverter (fundamental rms) In function plan: 285.3, 286.3	Dec.Plc.: 1 Unit: V Indices: - Type: I2	Menus: - Parameter menu + General parameters - Uread/free access
r004 Output Amps 4	Visualization parameter for the output current of the converter or inverter (fundamental rms) In function diagram: 285.7, 286.7	Dec.Plc.: 1 Unit: A Indices: - Type: I4	Menus: - Parameter menu + General parameters - Uread/free access
r005 Output Power 5	Visualization parameter for the ouput active power. The display value is normalized to the reference power which is derived from the product of reference frequency P352 and reference torque P354. In function diagram: 285.7, 286.7	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + General parameters - Uread/free access

Parameter	Description	Data	Read/write
r006 DC Bus Volts 6	Visualization parameter for DC link voltage. Displayed quantity for the PMU parameterizing unit and the OP (r049). In function diagram: 285.3, 286.7	Dec.Plc.: 0 Unit: V Indices: - Type: I2	Menus: - Parameter menu + General parameters - Uread/free access
r007 Motor Torque 7	Visualization parameter for torque, related to the reference torque (P354)	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + General parameters - Uread/free access
r008 Motor Utilizat. 8	Visualization parameter for thermal motor utilization (calculated value). Precondition: P383 >= 100 s and no temperature sensor selected. ATTENTION. The overload protection derived from this parameter is only effective if sufficient cooling of the motor is ensured.	Dec.Plc.: 0 Unit: % Indices: - Type: O2	Menus: - Parameter menu - Uread/free access
r009 Motor Temperat. 9	Visualization parameter for the current motor temperature. A correct display is only possible if the motor temperature is measured with a KTY84 temperature sensor or BICO parameter P385 is softwired to a connector which provides the temperature signal in the normalization 1°=40 Hex. Precondition: P380 > 1 or P381 > 1 or P386 = 2 and P381 > 1 In function diagram: 280.3	Dec.Plc.: 0 Unit: °C Indices: - Type: I2	Menus: - Parameter menu + General parameters + Functions - Uread/free access
r010 Drive Utilizat. 10	Visualization parameter for the current thermal utilization of the converter or inverter. The utilization is determined by an i2t calculation of the output current. A value of 100 % is achieved in continuous operation with the rated current. If a 100 % utilization is exceeded, an alarm message (A024) is tripped and the output current is reduced to 89 % of the rated current..	Dec.Plc.: 0 Unit: % Indices: - Type: O2	Menus: - Parameter menu + General parameters - Uread/free access
r011 act. MotDataSet 11	Visualization parameter for the currently active motor data sets. 1 = Data set 1 2 = Data set 2 3 = Data set 3 4 = Data set 4 A motor data set is selected with control word bits 18 and 19. The relevant BICO parameters for linking the control word bits are P578 and P579. In function diagram: 20.5	Dec.Plc.: 0 Unit: - Indices: - Type: O2	Menus: - Parameter menu + General parameters - Drive setting - Uread/free access

Parameter	Description	Data	Read/write
r012 Active BICO DSet 12	Visualization parameter for the currently active BICO data set. Plc.: 0 1 = Data set 1 2 = Data set 2 A BICO data set is selected with control word bit 30. The relevant BICO parameter for linking the control word bit is P590. In function diagram: 20.5	Unit: - Indices: - Type: O2	Menus: - Parameter menu + General parameters - Uread/free access
r013 Active FuncDSet 13	Visualization parameter for the currently active function data set. Dec.Plc.: 0 1 = Data set 1 2 = Data set 2 3 = Data set 3 4 = Data set 4 A function data set is selected with control word bits 16 and 17. The relevant BICO parameters for linking the control word bits are P576 and P577. In function diagram: 20.5	Unit: - Indices: - Type: O2	Menus: - Parameter menu + General parameters - Uread/free access
r014 Setp Speed 14	Visualization parameter for the speed setpoint at the speed controller input or at the frequency input of the v/f control. In function diagram: 360.4, 361.4, 362.4, 363.4	Dec.Plc.: 1 Unit: 1/min Indices: - Type: I4	Menus: - Parameter menu + General parameters - Uread/free access
r015 n(act) 15	Visualization parameter for the speed actual value. In function diagram: 350.7, 351.7, 352.7	Dec.Plc.: 1 Unit: 1/min Indices: - Type: I4	Menus: - Parameter menu + General parameters - Uread/free access
P028* SrcDispPowerConn 28	BICO parameter for selecting connectors which contain a power and are to be displayed in visualization parameter r029 in (%). The connector numbers entered in the respective index are displayed in the same index of parameter r029. In function diagram: 30.7	index1: 0 Unit: - Indices: 5 Type: L2 ,K	Menus: - Parameter menu + General parameters - Uread/free access Changeable in: - Drive setting - Ready
r029 DispPowerConn 29	Visualization parameter for displaying connectors given in P028 in (%). The connectors displayed in the respective index have been selected in the same index of parameter P028. Normalization is determined in P352 and P354. In function diagram: 30.8	Dec.Plc.: 1 Unit: % Indices: 5 Type: I4	Menus: - Parameter menu + General parameters - Uread/free access
P030* Src Disp Binec 30	BICO parameter for selecting binectors which are to be shown in visualization parameter r031. The binector number entered in the respective index are displayed in the same index of parameter r031. In function diagram: 30.1	index1: 0 Unit: - Indices: 5 Type: L2 ,B	Menus: - Parameter menu + General parameters - Uread/free access Changeable in: - Drive setting - Ready
r031 Display Binector 31	Visualization parameter for displaying the binectors given in P030. The binectors displayed in the respective index have been selected in the same index of parameter P030. In function diagram: 30.2	Dec.Plc.: 0 Unit: - Indices: 5 Type: O2	Menus: - Parameter menu + General parameters - Uread/free access

Parameter	Description	Data	Read/write
P032* Src Disp Conn 32	BICO parameter for selecting connectors which are to be displayed in visualization parameter r033 in [%]. The connector numbers shown in the respective index are displayed in the same index of parameter r033. In function diagram: 30.1	index1: 0 Unit: - Indices: 5 Type: L2 ,K ,K	Menus: - Parameter menu + General parameters - Uread/free access Changeable in: - Drive setting - Ready
r033 Display Conn 33	Visualization parameter for displaying the connectors given i Dec.Plc.: 3 P032. The connectors displayed in the respective index have been selected in the same index of parameter P032. A connector value of 4000 H or 4000 0000 H is shown at 100 %. In function diagram: 30.2	Unit: % Indices: 5 Type: I4	Menus: - Parameter menu + General parameters - Uread/free access
P034* SrcDispVoltsConn 34	BICO parameter for selecting connectors which contain a voltage and are to be displayed in visualization parameter r035 in [V]. The connector numbers entered in the respective index are displayed in the same index of parameter r035. In function diagram: 30.4	index1: 0 Unit: - Indices: 5 Type: L2 ,K	Menus: - Parameter menu + General parameters - Uread/free access Changeable in: - Drive setting - Ready
r035 Disp Volts Conn 35	Visualization parameter for displaying connectors given in P034 in [V]. The connectors displayed in the respective index have been selected in the same index of parameter P034. The normalization is specified in P351. The following method of calculation must be used: $r035 = P351 \times \text{Connector Value in [%]} / 100\%$. In function diagram: 30.5	Dec.Plc.: 1 Unit: V Indices: 5 Type: I4	Menus: - Parameter menu + General parameters - Uread/free access
P036* SrcDispAmpsConn 36	BICO parameter for selecting connectors which contain a current and are to be displayed in visualization parameter r037 in [A]. The connector numbers entered in the respective index are displayed in the same index of parameter r037. In function diagram: 30.4	index1: 0 Unit: - Indices: 5 Type: L2 ,K	Menus: - Parameter menu + General parameters - Uread/free access Changeable in: - Drive setting - Ready
r037 Disp Amps Conn 37	Visualization parameter for the display of connectors given in P036 in [A]. The connectors displayed in the respective index have been selected in the same index of parameter P036. The normalization is specified in P350. The following method of calculation must be used: $r037 = P350 \times \text{Connector Value in [%]} / 100\%$. In function diagram: 30.5	Dec.Plc.: 2 Unit: A Indices: 5 Type: I4	Menus: - Parameter menu + General parameters - Uread/free access
P038* Src DispTorqConn 38	BICO parameter for selecting connectors which contain a torque and are to be displayed in visualization parameter r039 in (%). The connector numbers entered in the respective index are displayed in the same index of parameter r039. In function diagram: 30.4	index1: 0 Unit: - Indices: 5 Type: L2 ,K	Menus: - Parameter menu + General parameters - Uread/free access Changeable in: - Drive setting - Ready
r039 Disp Torq Conn 39	Visualization parameter for the display of connectors given in P038 in (%). The connectors displayed in the respective index have been selected in the same index of parameter P038. Normalization is determined in P354. In function diagram: 30.5	Dec.Plc.: 1 Unit: % Indices: 5 Type: I4	Menus: - Parameter menu + General parameters - Uread/free access

Parameter	Description	Data	Read/write
P040* SrcDisp SpdConn 40	BICO parameter for selecting connectors which contain a speed and are to be displayed in visualization parameter r041. The connector numbers entered in the respective index are displayed in the same index of parameter r041.	index1: 0 Unit: - Indices: 5 Type: L2 ,K ,K	Menus: - Parameter menu + General parameters - Uread/free access Changeable in: - Drive setting - Ready In function diagram: 30.7
r041 Disp Speed Conn 41	Visualization parameter for the display of connectors given inDec.Plc.: 1 P040 in [1/min]. The connectors displayed in the respective index have been selected in the same index of parameter P040. The normalization is specified in P353. The following method of calculation must be used: $r041 = P353 \times \text{Connector Value} / 100\%$.	Unit: 1/min Indices: 5 Type: I4	Menus: - Parameter menu + General parameters - Uread/free access In function diagram: 30.8
P042* SrcDispFreqConn 42	BICO parameter for selecting connectors which contain a frequency and are to be displayed in visualization parameter r043 in [Hz]. The connector numbers entered in the respective index are displayed in the same index of parameter r043.	index1: 0 Unit: - Indices: 5 Type: L2 ,K ,K	Menus: - Parameter menu + General parameters - Uread/free access Changeable in: - Drive setting - Ready In function diagram: 30.7
r043 Disp Freq Conn 43	Visualization parameter for the display of connectors given inDec.Plc.: 3 P042 in [Hz]. The connectors displayed in the respective index have been selected in the same index of parameter P042. The normalization is specified in P352. The following method of calculation must be used: $r043 = P352 \times \text{Connector Value} / 100\%$.	Unit: Hz Indices: 5 Type: I4	Menus: - Parameter menu + General parameters - Uread/free access In function diagram: 30.8
P044* SrcDisp DecConn 44	BICO parameter for selecting connectors which are to be displayed in visualization parameter r045 as an integral decimal number preceded by a plus or minus sign. The connector numbers entered in the respective index are displayed in the same index of parameter r045.	index1: 0 Unit: - Indices: 5 Type: L2 ,K ,K	Menus: - Parameter menu + General parameters - Uread/free access Changeable in: - Drive setting - Ready In function diagram: 30.1
r045 Disp DecConn 45	Visualization parameter for the display of connectors given inDec.Plc.: 0 P044 as an integral whole decimal number. The connectors displayed in the respective index have been selected in the same index of parameter P044.	Unit: - Indices: 5 Type: I4	Menus: - Parameter menu + General parameters - Uread/free access In function diagram: 30.2
P046* SrcDisp HexConn 46	BICO parameter for selecting connectors which are to be displayed in visualization parameter r047 as an integral value (hexadecimal). The connector numbers entered in the respective index are displayed in the same index of parameter r047.	index1: 0 Unit: - Indices: 5 Type: L2 ,K ,K	Menus: - Parameter menu + General parameters - Uread/free access Changeable in: - Drive setting - Ready In function diagram: 30.1

Parameter	Description	Data	Read/write
r047 Disp Hex Conn 47	Visualization parameter for the display of connectors given inDec.Plc.: 0 P046 as a hexadecimal number. If word connectors have been selected in P046, then Indices 1 to 5 = Value of the connector Indices 6 to 10 = 0 If double word connectors have been selected in P046, then Indices 1 to 5 = Upper 16 bits of the connector Indices 6 to 10 = Corresponding lower 16 bits of the connector Example: KK0091 = 1234 5678 P046.1= 91 r047.1 = 1234 r047.6 = 5678 In function diagram: 30.2	Unit: - Indices: 10 Type: L2	Menus: - Parameter menu + General parameters - Uread/free access
P048* PMU OperDisp 48	Function parameter for selecting parameter whose value is to be indicated in the operating display of the PMU.	Init: 2 Min: 0 Max: 3999 Unit: - Indices: - Type: O2	Menus: - Parameter menu + General parameters - Uread/free access Changeable in: - Drive setting - Ready
P049* OP OperDisp 49	Function parameter for selecting parameters whose values are to be shown in the operating display of the optional OP1 user-friendly operator control panel. Index 1: 1st line left Index 2: 1st line right Index 3: 2nd line (actual value), only visualization parameter Index 4: 3rd line (setpoint) Index 5: 4th line In function diagram: For Compact/Chassis units: 60.1 For Compact PLUS units: 61.1	index1: 4 Min: 0 Max: 3999 Unit: - Indices: 5 Type: O2	Menus: - Parameter menu + General parameters - Uread/free access Changeable in: - Drive setting - Ready
P050* Language 50	Function parameter for setting the language in which texts are to be displayed on the optional OP1S user-friendly operator control panel. 0 = German 1 = English 2 = Spanish 3 = French 4 = Italian	Init: 0 Min: 0 Max: 4 Unit: - Indices: - Type: O2	Menus: - Parameter menu + General parameters - Uread/free access Changeable in: - Drive setting - Ready

This parameter is not reset during factory setting !

Parameter	Description	Data	Read/write
P053*	Function parameter for releasing interfaces for parameterization.	Init: 7 Min: 0 Max: 65535	Menus: All menus Changeable in: All states
Parameter Access		Unit: - Indices: - Type: V2	
53	0 Hex = None 1 Hex = CBx communication board 2 Hex = PMU operator control panel 4 Hex = Serial interface (SCom/SCom1), also OP1S and PC 8 Hex = SCB serial input/output modules 10 Hex = Txxx technology board 20 Hex = Serial interface 2 (SCom2) 40 Hex = Second CB board		
not Compact PLUS	Each interface has a code number. When the number or the sum of different numbers assigned to the interfaces is/are entered, the interface(s) is/are released for use as a parameterizing interface.		
	Example: The factory-setting value 6 is the sum of 2 and 4. This means that parameterization is allowed via the PMU and serial interface 1 and thus for the OP1S as well.		
	The parameter can always be written from any interface. This also applies if this interface has not been released for parameterization purposes.		
	During factory setting via CBx, SCB, TXXX, SCom2 or a second CB board, this parameter is not reset.		
P053*	Function parameter for releasing interfaces for parameterization.	Init: 39 Min: 0 Max: 65535	Menus: All menus Changeable in: All states
Parameter Access		Unit: - Indices: - Type: V2	
53	0 Hex = None 1 Hex = CBx communication board 2 Hex = PMU operator control panel 4 Hex = Serial interface (SST/SST1) 8 Hex = SCB serial input/output modules 10 Hex = Txxx technology board 20 Hex = Serial interface 2 (SST2), also OP1S and PC 40 Hex = Second CB board		
Compact PLUS only	Each interface has a code number. When the number or the sum of different numbers assigned to the interfaces is/are entered, the interface(s) is/are released for use as a parameterizing interface.		
	Example: The factory setting 27H is the sum of 1, 2, 4 and 20H. This means that parameterization is allowed via the PMU and serial interface 1 and for the OP1S via serial interface 2.		
	The parameter can always be written from any interface. This also applies if this interface has not been released for parameterization purposes.		
	During factory setting via the first CB, SCB, Txxx, SST2 or a second CB board this parameter is not reset.		

Parameter	Description	Data	Read/write
r054 Requester 54	This visualization parameter returns the origin of the read request. It can therefore be scanned to find out which interface is being used. The values correspond to those of P53.	Dec.Plc.: 0 Unit: - Indices: - Type: L2	Menus: - User parameters- Parameter menu + General parameters - Fixed settings - Quick parameterization - Board configuration - Drive setting - Download - Uread/free access - Power section definition
P060* Menu Select 60	Function parameter for selecting the current menu. 0 = User parameter (selection of the visible parameters in P360) 1 = Parameter menu 2 = Fixed settings (for factory settings) 3 = Quick parameterization (changes to "Drive Setting" state 4 = Board configuration (changes to "Board Configuration" state) 5 = Drive setting (changes to "Drive Setting" state) 6 = Download (changes to "Download" state) 7 = Uread/Free access 8 = Power section definition (changes to "Power section definition" state) If it is not possible to change to another state due to the currently valid state, the corresponding menu cannot be selected either. Example: "Operating" state, change to "Download" not possible. "Ready for switching on" state, change to "Download" not possible. With parameters P358 Key and P359 Lock, menus can be locked with the exception of the menus "User parameters" and "Fixed settings".	Init: 1 Min: 0 Max: 8 Unit: - Indices: - Type: O2	Menus: All menus Changeable in: All states
P068* Output Filter 68	Function parameter for entering the output filter. Parameter values 0 = without output filter 1 = with sinusoidal output filter 2 = with dv/dt output filter The parameter value 1 limits the implementable depth of modulation to the range of space vector modulation (see also P342 and r345, maximum depth of modulation). The pulse frequency P340 is adapted to the envisaged sinusoidal filter after exiting the drive setting (see P060 = 5). Notes: - For n/f/Torque control and for temperature adaption (P386 > 0), the sinusoidal filter envisaged for the converter is taken into account. - The parameter value 2 limits the adjustable pulse frequency P340 to 3 kHz. - dv/dt output filters are not no-load proof In function diagram: 430.3, 390.7, 405.6	Init: 0 Min: 0 Max: 2 Unit: - Indices: - Type: O2	Menus: - Parameter menu + General parameters - Drive setting - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
r069 SW Version 69	Visualization parameter for displaying the software versions of the basic board as well as the optional boards in slots A to G Index 1: Software version of basic board Index 2: Software version of optional board Slot A Index 3: Software version of optional board Slot B Index 4: Software version of optional board Slot C Index 5: Software version of optional board Slot D Index 6: Software version of optional board Slot E Index 7: Software version of optional board Slot F Index 8: Software version of optional board Slot G	Dec.Plc.: 1 Unit: - Indices: 8 Type: O2	Menus: - Parameter menu + General parameters - Fixed settings - Quick parameterization - Board configuration - Drive setting - Download - Uread/free access - Power section definition
not Compact PLUS	The slots D-G are not available in type COMPACT PLUS. For optional boards which contain no software, (e.g. SBR, SLB), the parameter value in the respective index is always 0.0.		
r069 SW Version 69	Visualization parameter to display software versions of basic board and option boards in slots A to B. Index 1: Software version of basic board Index 2: Software version of option board in slot A Index 3: Software version of option board in slot B	Dec.Plc.: 1 Unit: - Indices: 3 Type: O2	Menus: - Parameter menu + General parameters - Fixed settings - Quick parameterization - Board configuration - Drive setting - Download - Uread/free access - Power section definition
Compact PLUS only	For option boards that have no software (e.g. SBR, SLB), the parameter value in the corresponding index is always 0.0.		
P070* Order No. 6SE70.70 not Compact PLUS	Function parameter for entering the order numbers of converter or inverter modules. These numbers tell the CUMC control board which power section it works with. They are entered in the "Power section definition" status and are only necessary after the CU has been replaced. For parameter values, see annex "Compendium".	Init: 0 Min: 0 Max: 254 Unit: - Indices: - Type: O2	Menus: - Parameter menu + General parameters - Uread/free access - Power section definition Changeable in: - Power section definition
P070* Order No. 6SE70.70 Compact PLUS only	Function parameter for entering the order numbers of converter or inverter modules. These numbers tell the control board which power section it works with. For parameter values, see Compendium, chapter "Power section definition".	Init: 0 Min: 0 Max: 20 Unit: - Indices: - Type: O2	Menus: - Parameter menu + General parameters - Uread/free access - Power section definition Changeable in: - Power section definition
P071 Line Volts 71	Function parameter for entering the line voltage of the converter or inverter. Converter (AC/AC): rms value of the line AC voltage Inverter (DC/AC): input direct voltage The value is for calculating the rated DC link voltage as a basis for the voltage limits of the Vd(max) and Vd(min) [KIB] controller (e.g. undervoltage failure limit).	Init: ~ Min: 90 Max: 1320 Unit: V Indices: - Type: O2	Menus: - Parameter menu + General parameters - Quick parameterization - Drive setting - Uread/free access Changeable in: - Drive setting
P072 Rtd Drive Amps 72 Compact PLUS only	Parameter for displaying the rated current of the converter or inverter. The rated current is the current which can be output continuously. It must be identical to the current indicated on the rating plate of the converter. Note: This parameter must not be changed in the case of multi-parallel units as the converter rated current is determined in this case dynamically upon energizing the electronics power supply from the number of active slaves and the maximum converter rated current (in the EEPROM). If the parameter is changed this may overwrite the EEPROM value.	Init: 6,1 Min: 0,0 Max: 6540,0 Unit: A Indices: - Type: O4	Menus: - Parameter menu + General parameters - Drive setting - Uread/free access - Power section definition Changeable in: - Power section definition

Parameter	Description	Data	Read/write
P072 Rtd Drive Amps 72	Parameter for displaying the rated current of the converter or inverter. The rated current is the current which can be output continuously. It must be identical to the current indicated on the rating plate of the converter.	Init: ~ Min: 4,5 Max: 6540,0 Unit: A Indices: - Type: O4	Menus: - Parameter menu + General parameters - Drive setting - Uread/free access - Power section definition Changeable in: - Power section definition
not Compact PLUS	Note: This parameter must not be changed in the case of multi-parallel units as the converter rated current is determined in this case dynamically upon energizing the electronics power supply from the number of active slaves and the maximum converter rated current (in the EEPROM). If the parameter is changed this may overwrite the EEPROM value.		
P073 Rtd Drive Power 73	Parameter for displaying the rated power of the converter or inverter.	Init: ~ Min: 0,3 Max: 6400,0 Unit: kW Indices: - Type: O2	Menus: - Parameter menu + General parameters - Uread/free access - Power section definition Changeable in: - Power section definition
P075 X (magnet,d)tot 75	Function parameter for the motor magnetizing reactance (saturated) along the rotor axis (d axis) , referred to the rated motor impedance.	index1: 150,0 Min: 1,0 Max: 999,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: - Drive setting - Ready
P076 X (magnet,q)tot. 76	Function parameter for the motor magnetizing reactance (saturated) transverse to the rotor axis (q axis), referred to the rated motor impedance.	index1: 150,0 Min: 1,0 Max: 999,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: - Drive setting - Ready
P077 X (sigma,d) damp 77	Function parameter for motor leakage reactance of the damper winding along the rotor axis (d axis), referred to the rated motor impedance. Automatic parameterization (P115=1) should be executed after the parameter value is changed. Precondition: P095 = 12 (synchronous motor)	index1: 9,00 Min: 0,10 Max: 49,99 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: - Drive setting - Ready
P078 X (sigma,q) damp 78	Function parameter for motor leakage reactance of the damper winding transverse to the rotor axis (q axis) referred to the rated motor impedance. Automatic parameterization (P115=1) should be executed after the parameter value is changed. Precondition: P095 = 12 (synchronous motor)	index1: 9,00 Min: 0,10 Max: 49,99 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: - Drive setting - Ready
P079 R (damping,d) 79	Function parameter for motor resistance of damper winding along the rotor axis (d axis), referred to the rated motor impedance. Automatic parameterization (P115=1) should be executed after the parameter value is changed. Precondition: P095 = 12 (synchronous motor)	index1: 8,00 Min: 0,10 Max: 49,99 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P080 R (damping,q) 80	Function parameter for the motor resistance of the damper winding transverse to the rotor axis (q axis), referred to the rated motor impedance. Automatic parameterization (P115=1) has to be executed after the parameter value is changed.	index1: 8,00 Min: 0,10 Max: 49,99 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: - Drive setting - Ready
	Precondition: P095 = 12 (synchronous motor)		
P081 lexc(0)/lexc(n) 81	Function parameter for the ratio between no-load and rated excitation current. The parameter corresponds to the transmission factor between the rotating-field system of the current model and the direct-current system of the excitation current control.	index1: 50,0 Min: 1,0 Max: 100,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: - Drive setting - Ready
	Precondition: P095 = 12 (synchronous motor)		
P082 Psi(sat.char.,1) 82	Function parameter for entering the first (lowest) flux value of the saturation characteristic, referred to the rated rotor flux (rated EMF) of the motor. The value belongs to the first excitation current value P083.	index1: 60,0 Min: 10,0 Max: 200,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: - Drive setting - Ready
	Precondition: P095 = 12 (synchronous motor)		
P083 lexc(sat.char,1) 83	Function parameter for entering the first (lowest) current excitation value of the saturation characteristic, referred to the no-load excitation current of the motor. The value belongs to the first flux value P082.	index1: 30,0 Min: 5,0 Max: 799,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: - Drive setting - Ready
	Precondition: P095 = 12 (synchronous motor)		
P084 Psi(sat.char.,2) 84	Function parameter for entering the second flux value of the saturation characteristic, referred to the rated rotor flux (rate EMF) of the motor. The value belongs to the second excitation current value P085.	index1: 80,0 Min: 10,0 Max: 200,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: - Drive setting - Ready
	Precondition: P095 = 12 (synchronous motor)		
P085 lexc(sat.char,2) 85	Function parameter for entering the second current excitation value of the saturation characteristic, referred to the no-load excitation current of the motor. The value belongs to the second flux value P084.	index1: 45,0 Min: 5,0 Max: 799,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: - Drive setting - Ready
	Precondition: P095 = 12 (synchronous motor)		
P086 Psi(sat.char.,3) 86	Function parameter for entering the third (highest) flux value of the saturation characteristic, referred to the rated rotor flux (rated EMF) of the motor. The value belongs to the third excitation current value P087. A value of 100 % corresponds to an induced terminal voltage amounting to the rated motor voltage (in no-load at synchronous speed).	index1: 90,0 Min: 10,0 Max: 200,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: - Drive setting - Ready
	Precondition: P095 = 12 (synchronous motor)		

Parameter	Description	Data	Read/write
P087 lexc(sat.char,3) 87	Function parameter for entering the third (highest) excitation index: current value of the saturation characteristic, referred to the no-load excitation current of the motor. The value belongs to the third flux value P086. A value of 100 % corresponds to the rating plate value of the excitation current which produces a terminal voltage amounting to the rated motor voltage in no-load at synchronous speed. Precondition: P095 = 12 (synchronous motor)	index1: 65,0 Min: 5,0 Max: 799,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: - Drive setting - Ready
P088 kT(n) 88	Function parameter for entering the torque constant (kTn (100 Kelvin)). The value corresponds to the current/motor torque proportionality constants. Precondition: P095 = 13 (synchronous motor, permanently excited)	index1: 0,00 Min: 0,00 Max: 655,35 Unit: Nm/A Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Drive setting - Uread/free access Changeable in: - Drive setting
P095* Type of Motor 95	Function parameter for entering the type of motor It is possible to choose a certain type of motor (P095 = 2) or a general selection of a motor data parameterization which is international (IEC) or US (NEMA) motor data parameterization. If NEMA is selected, the efficiency and the rated motor output instead of the power factor cos(phi) are displayed during motor parameterization. Parameter values: 2: 1PH7(=1PA6), 1PL6, 1PH4 10: IEC induction or synchronous motor 11: NEMA induction or synchronous motor 12: Synchronous motor (externally excited) 13: Synchronous motor perm. (vector control only) Note: For operation of permanently excited synchronous motors with v/f characteristic P95 has to be set to 10 or 11. The selection of a synchronous motor (12, 13) is only considered for certain special applications (not for textile applications). Then the following functions are disabled: Synchronizing (P582), Flying restart (P583, P525, P526, P527), Automatic restart (P373), DC braking (P395), Motor identification (P115 = 2, 3, 4, 6), Control mode (P100 = 0, 1, 2, 3 for P95 = 12), Control mode (P100 = 0, 2, 4, 5 for P95 = 13). Synchronizing (P582) is used for P95 = 12 for resetting to the initial position if P172 is not connected.	index1: 10 Min: 0 Max: 13 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Quick parameterization - Drive setting - Uread/free access Changeable in: - Drive setting
P097* Select 1PH7 97	Function parameter for selecting a 1PH7 (=1PA6), 1PL6 and 1PH4 induction motor from the internal list of motors. For parameter values, see annex "Compendium".	index1: 0 Min: 0 Max: 80 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Quick parameterization - Drive setting - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
P100*	Function parameter for selecting the open/closed loop control mode	index1: 1 Min: 0 Max: 5 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Quick parameterization - Drive setting - Uread/free access Changeable in: - Drive setting
Control Mode 100	Parameter values: 0: v/f control with superposed speed control (only for P095 = 2, 10, 11) 1: v/f control (only for P095 = 2, 10, 11, 13) 2: v/f control for textile applications; allows no frequency corrections (e.g. by the current limitation controller) (only for P095 = 2, 10, 11) 3: Frequency control (without tachometer) (only for P095 = 2, 10, 11, 13) 4: Speed control (only for P095 = 2, 10, 11, 12) 5: Torque control (only for P095 = 2, 10, 11, 12)	In function diagram: 14 and 420	
P101*	Function parameter for entering the rated motor voltage.	index1: ~ Min: 100 Max: 2000 Unit: V Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Quick parameterization - Drive setting - Uread/free access Changeable in: - Drive setting
Mot Rtd Volts 101	The rating plate value of the voltage for the current kind of connection (star/delta) and for line duty has to be entered. Note: Input for Siemosyn motors is the rated voltage at rated motor frequency. For P95=13 (motor type =sync.perm.), the motor rated voltage is only used as a normalization quantity for the rated motor impedance to which all resistances and reactances are referred (e.g. P075).	In function diagram: 405.3	
P102*	Function parameter for entering the rated motor current for the connected synchronous or induction motor. The rating plate value for the current kind of connection (star/delta) has to be entered.	index1: ~ Min: 0,6 Max: 6553,5 Unit: A Indices: 4 Type: O4	Menus: - Parameter menu + Motor/encoder + Motor data - Quick parameterization - Drive setting - Uread/free access Changeable in: - Drive setting
Motor Rtd Amps 102	Permissible values: $0.125 * P072 \leq P102 < 1.36 * P072$		
P103*	Function parameter for entering the motor magnetizing current referred to the rated motor current. The correct input improves the calculation of motor parameters in automatic parameterization (P115=1). The value is determined during motor data identification (P115=2,3) and during the no-load test (P115=4). Synchronous motor (P95=12): Reactive current component at the motor rating point. Note: The value always has to be set to 0.0% so that the rated motor current is contributed completely to torque generation Precondition: P095 = 10,11,12 (Motor type = Induc.IEC, Induc.NEMA, synchronous motor)	index1: ~ Min: 0,0 Max: 95,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Drive setting - Uread/free access Changeable in: - Drive setting - Drive setting

Parameter	Description	Data	Read/write
P104* MotPwrFactor 104	Function parameter for entering the power factor for the connected induction motor. The rating plate value has to be entered. Precondition: P95 = 10,12 (motor type: induc.IEC, synchronous motor)	index1: ~ Min: 0,500 Max: 1,000 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Quick parameterization - Drive setting - Uread/free access Changeable in: - Drive setting
P105* Motor Rtd Power 105	Function parameter for entering the rated motor power in Hp (rating plate value). Precondition: P095 = 11 (motor type: NEMA induction motor)	index1: ~ Min: 0,1 Max: 2000,0 Unit: hp Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Quick parameterization - Drive setting - Uread/free access Changeable in: - Drive setting
P106* Motor Rtd Effic. 106	Function parameter for entering the rated motor efficiency (rating plate value). Precondition: P095 = 11 (motor type: NEMA induction motor)	index1: ~ Min: 50,0 Max: 99,9 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Quick parameterization - Drive setting - Uread/free access Changeable in: - Drive setting
P107* Motor Rtd Freq 107	Function parameter for entering the rated motor frequency (rating plate value). - P100 = 0, 1, 3, 4, 5: maximum value 200 Hz - P100 = 2: maximum value 600 Hz The pole pair number (P109) is automatically recalculated if parameters are changed.. For induction motors, a slip (r110) must exist to P108*P109/60 to enable the slip compensation to correctly operate. Note: Changing this parameter may also change the pulse frequency (P340). In function diagram: 405.4	index1: 50,00 Min: 8,00 Max: 500,00 Unit: Hz Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Quick parameterization - Drive setting - Uread/free access Changeable in: - Drive setting
P108* Motor Rtd Speed 108	Function parameter for entering the rated motor speed (rating plate value). Note: P100 = 0, 4, 5 (v/f control with speed controller, speed/torque control) is only available with this information. The pole pair number (P109) is automatically recalculated if parameters are changed. For induction motors, a slip (r100) must exist to P107/P109*60 to enable slip compensation to correctly operate.	index1: 0,0 Min: 0,0 Max: 36000,0 Unit: 1/min Indices: 4 Type: I4	Menus: - Parameter menu + Motor/encoder + Motor data - Quick parameterization - Drive setting - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
P109* Motor #PolePairs 109	Function parameter for entering the motor pole pair number for the connected synchronous/induction motor. The parameter is automatically calculated if the rated frequency (P107) and the rated speed (P108) are changed, and it can be checked and corrected if necessary.	index1: 2 Min: 1 Max: 99 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Quick parameterization - Drive setting - Uread/free access Changeable in: - Drive setting
	Note: - For applications with pulse encoder (130=11,12,15,16), a maximum pole pair number of P109=15 is possible. - P109 must be written into when downloading (P060=6). - For machines with rated data for regenerative duty, the automatically calculated pole pair number must be increased by 1.		
	In function diagrams: 360.2, 361.2, 362.2, 363.2, 364.2		
r110 Motor Rtd Slip 110	Visualization parameter for the rated motor slip, referred to rated motor frequency (P107). Precondition: P095 = 10, 11 (motor type = induc. IEC; induc. NEMA)	Dec.Plc.: 2 Unit: % Indices: - Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Drive setting - Uread/free access
	In function diagrams: 395.3		
P113* Mot Rtd Torque 113	Function parameter for entering the rated motor torque. The parameter is for normalizing torque quantities of the process data signals and visualization parameters and has no influence on the accuracy of the control system. If P113 and P354 (reference torque) are set identically, a signal is displayed to the amount of the rated motor torque a 100% (=4000 Hex).	index1: ~ Min: 0,01 Max: 900000,00 Unit: Nm Indices: 4 Type: O4	Menus: - Parameter menu + Motor/encoder + Motor data - Drive setting - Uread/free access Changeable in: - Drive setting
	In function diagram: 20.6		

Parameter	Description	Data	Read/write
P114 Technol. Cond.	Function parameter for selecting various technology boundary conditions for starting up the control system. 114 Depending on what is selected, the parameter influences some of the following parameters during automatic parameterization mode (P115=1) or during motor data identification (P115=2,3): P216,P217,P223,P235,P236,P240,P273,P279,P287, P291,P295,P303,P315,P339,P344,P536.	index1: 0 Min: 0 Max: 7 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data + Functions - Quick parameterization - Drive setting - Uread/free access Changeable in: - Drive setting
	0 = standard drive (e.g. pumps, fans) normal default setting 1 = torsion, gear play and large moment of inertia (e.g. paper machines) 2 = acceleration drives with constant inertia (e.g. shears) 3 = high load impact requirements (with f control only possible after approx. 20%fmot,n) 4 = high smooth running characteristics at low speeds (at n control with high number of encoder pulses) 5 = efficiency optimization during partial load by reducing the flux (dynamically simple drives) 6 = high starting torques (heavy-duty starting) 7 = Torque dynamics in the field weakening area (e.g. motor test beds)		

The parameter settings are only to be regarded qualitatively and only serve to show the influence on the respective application. A start-up always refers to a concrete application and cannot be replaced by this support. The supplementary notes in the Operating Instructions or in the Compendium should be observed.

CAUTION. Damage may arise as a result of incorrect settings!

Parameter	Description	Data	Read/write
P115* Calc MotModel 115	<p>Function parameter for selecting various start-up sections and special functions.</p> <p>Parameter values:</p> <ul style="list-style-type: none"> 1 = Automatic parameterization Calculation of parameters for the v/f open-loop control and closed-loop control from the rating plate data of the motor and the gating unit configuration (e.g. P340 Pulse frequency) 2 = Motor data identification at standstill: Parameterization of closed-loop control from the measured motor data (without setting the n/f controller); contains the ground fault test and function 1. (only for P095 = 10, 11 induction motor) 3 = Complete motor data identification: (contains the functions 1, 2, 4, 5, 7) (only for P100 = 3, 4, 5 vector control types). (only for P095 = 10, 11 induction motor) <p>Note: After alarm A078, the unit must be switched on and the measurement at standstill commences. After the measurement at standstill has been completed, the alarm message A080 appears and the unit has to be powered up again. Then the no-load measurement and the speed controller optimization begin.</p> <p>4 = No-load measurement (only for P100 = 3, 4, 5 vector control types), (only for P095 = 10, 11 induction motor).</p> <p>5 = n/f controller optimization (only for P100 = 3, 4, 5 vector control types)</p> <p>6 = Self-test: (corresponds to the functions of 2, but no parameters are changed) (only for P095 = 10, 11 induction motor)</p> <p>7 = Tachometer test: (only for P100 = 4, 5 n/m control)</p>	Init: 0 Min: 0 Max: 7 Unit: - Indices: - Type: O2	Menus: <ul style="list-style-type: none"> - Parameter menu + Motor/encoder + Motor data + Functions - Drive setting - Uread/free access Changeable in: <ul style="list-style-type: none"> - Drive setting - Drive setting
P116 Start-up Time 116	<p>Function parameter for setting the start-up time of the drive. index1: 1,00</p> <p>The start-up time is the time from standstill to rated motor speed at acceleration with rated motor torque. The parameter value thus corresponds to the moment of inertia and is allowed for in the calculation of the n/f controller pre-control (P471).</p> <p>Pre-assignment for automatic parameterization (P115=1,2) with 1.00 s or for n/f controller optimization (P115=3,5) with the measured value.</p> <p>Precondition: P100=3,4 (n/f control)</p> <p>Function diagrams: 317.7</p>	Min: 0,10 Max: 327,67 Unit: s Indices: 4 Type: O2	Menus: <ul style="list-style-type: none"> - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: <ul style="list-style-type: none"> - Drive setting - Ready

Parameter	Description	Data	Read/write
P117 Resist Cable 117	Function parameter for setting the cable resistance. The value corresponds to the ohmic resistance of the cable between the converter/inverter and the motor, referred to the rated impedance. The parameter value is always a part of the value in P121 (Total resistance) Rated motor impedance: $Z_{mot,n} = V_{mot,n} / 1,732 * I_{mot,n} = P101 / 1,732 * P102$	index1: 0,00 Min: 0,00 Max: 40,00 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: - Drive setting - Ready
	Note: The cable resistance must be entered before motor data identification (P115=2,3) so that it is allowed for in parameterization.		
	Precondition: P100 = 3, 4, 5 (vector control types) P386 = 0 (no temperature adaptation)		
	Function diagram: 430.7		
r118 Resist Stator ++ 118	Visualization parameter for the total stator resistance of the drive referred to the rated motor impedance. The value contains the stator resistance of the motor and the cable resistance. The value of this parameter is adapted with the motor temperature during active motor adaption (P386 > 0).	Dec.Plc.: 2 Unit: % Indices: - Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access
	Precondition: P100 = 3, 4, 5 (vector control types)		
	Function diagrams: 430.7		
r119 Magn. Current 119	Visualization parameter for the valid rated magnetizing current (see P103). P103 = 0.0 % r119 is calculated 0.0 % < P103 < 10.0 % r119 = 10 % * P102 P103 >= 10.0 % r119 = P103 * P102	Dec.Plc.: 1 Unit: A Indices: - Type: I4	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access
	Precondition: P095 = 10, 11 (induction motor)		
P120 Main Reactance 120	Function parameter for the main reactance of the motor referred to the rated impedance of the motor. The value is calculated during automatic parameterization (P115=1) or measured during motor data identification (P115=2,3,4)	index1: ~ Min: 1,0 Max: 999,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: - Drive setting - Ready
	Precondition: P100 = 3,4,5 (vector control types) P095 = 10, 11 (induction motor)		

Parameter	Description	Data	Read/write
P121 Stator Resist	Function parameter for setting the stator and cable resistance referred to the rated motor impedance.	index1: ~ Min: 0,00 Max: 49,99 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: - Drive setting - Ready
121	The value is calculated during automatic parameterization (P115 = 1) or measured during motor data identification (P115 = 2, 3) (only if P95 = 10,11)		
	Note: For P95 = 12, 13 (synchronous or sync. perm.), automatic parameterization has to be selected after parameter change are made.		
	Precondition: P386 = 0 (temperature adaptation not active)		
	Function diagrams: 430.3		
P122 Tot Leak React	Function parameter for setting the total stator-side leakage reactance of the motor referred to the rated motor impedance	index1: ~ Min: 1,00 Max: 49,99 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access Changeable in: - Drive setting - Ready
122	Notes: P095=10, 11: (induction motor) The value is calculated during automatic parameterization (P115=1) or pre-assigned during motor data identification (P115=2,3). P095=12, 13: (Synchronous motors) After the parameter value has been changed, automatic parameterization (P115=1) has to be carried out (for setting the current controller). P095=13: (Synchronous motor, permanently excited) For calculating the synchronizing reactance in the d-/axes, X(sigma) is added to X(main,d) (P075) or X(main,q) (P076).		
	Precondition: P100 = 3, 4, 5 (vector control types)		
	Function diagrams: 390.3, 395.3, 396.3		
r124 Rotor Time Const	Visualization parameter for the rotor time constant of the motor. For induction motors, the values for the d axis and the q axis are always identical.	Dec.Plc.: 0 Unit: ms Indices: 2 Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access
124	Synchronous motor: The parameter contains the damping time constants in rotor direction (Tdd) and vertical to the rotor axis (Tdq) with saturated main reactance (P075, P076). The time constants are used in the current model. Tdd can be evaluated in the model with factor P166, and Td with P167.		
	Indices: i001 = d axis i002 = q axis		
	Precondition: P095 = 10, 11, 12 (Motor type = Induc.IEC, Ind. NEMA, synchronous motor)		
	Function plans: 430.7		

Parameter	Description	Data	Read/write
r125 T(sigma)	Visualization parameter for the stator time constant of the motor (incl. cable)	Dec.Plc.: 0 Unit: ms Indices: 2	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access
125	For induction motors, the values for the d and the q axis are always identical. For synchronous motors (P095=12), disymmetry can only result from the damping resistances and reactances P079 and P077 for the d axis and P080 and P078 for the q axis, and for permanently excited synchronous motors (P095=13) from the main reactances P075 and P076	Type: O2	
	Indices: i001 = d axis i002 = q axis		
	Function diagrams: 430.7		
r126 RotResist	Visualization parameter for the rotor resistance of the motor referred to the rated motor impedance.	Dec.Plc.: 2 Unit: % Indices: -	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access
126	During active temperature adaptation (P366 > 0), this value follows the motor temperature	Type: O2	
	Precondition: P100 = 3, 4 5 (vector control types) P095 = 10, 11 (induction motor)		
	Function diagrams: 430.7		
P127 RotResistTmpFact	Function parameter to allow for the influence of the rotor temperature on the rotor resistance.	index1: ~ Min: 12,5 Max: 400,0	Menus: - Parameter menu + Motor/encoder + Motor data - Uread/free access
127	The value is pre-assigned during automatic parameterization (P115=1) for average motor temperatures or measured during motor data identification (P115=2,3).	Unit: % Indices: 4 Type: O2	Changeable in: - Drive setting - Ready
	Precondition: P100 = 3, 4 5 (vector control types) P386 = 0 (temperature adaptation not active) P095 = 10,11 (induction motor)		
	Function diagrams: 430.3		
P128 Imax	Function parameter for setting the maximum current (fundamental rms)	index1: ~ Min: 0,1 Max: 6553,5	Menus: - Parameter menu + Control/gating unit + Speed control + Current control + V/f open-loop control - Uread/free access
128	This parameter sets the setpoint for current limitation to protect the motor and the drive (Imax controller for v/f control modes or current controller for vector control modes).	Unit: A Indices: 4 Type: O4	Changeable in: - Drive setting - Ready
	Setting range: 0.125 to 4,00 * Imot,n , but maximum 1.36 or 1.6 * Iconv,n (P72). depending on the type of converter.		
	During automatic parameterization (P115 = 1) and motor data identification (P115 = 2, 3), the value is pre-set to 1.5 times the rated motor current (P102).		
	Reaction (derating) may result from the pulse frequency parameter change (P340).		
	Function diagrams: 370.2, 371.2, 372.2, 373.2		

Parameter	Description	Data	Read/write
r129 I _{max(set)}	Visualization parameter of the realized maximum current for current limitation (see P128). It allows for the influence of the I ² t calculation.	Dec.Plc.: 1 Unit: A Indices: - Type: I4	Menus: - Parameter menu + Control/gating unit + Speed control + Current control + V/f open-loop control - Uread/free access
129	v/f control modes (P100 = 0, 1, 2): Setpoint of the current limitation controller Vector control modes (P100 = 3, 4, 5): Limitation for the setpoints of the current controller		
	Function diagrams: 370.2, 371.2, 372.2, 373.2		
P130* Select MotEncod	Function parameter for setting the kind and place of connection of the used tachometer	index1: 10 Min: 0 Max: 16 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Encoder data + Control/gating unit + Position control - Drive setting - Uread/free access Changeable in: - Drive setting
130	05 = External SBP board 10 = without tachometer 11 =pulse encoder 12 = pulse encoder with control track 13 = analog tachometer via analog input 1 14 = analog tachometer via analog input 2 15 = pulse encoder with zero pulse 16 = pulse encoder with zero pulse and control track		
	Notes: P130 = 11, 12, 15, 16 (pulse encoder) - Only pulse encoders with a phase shift of 90° between the 2 tracks can be used. - At setting 12 or 16, a low level signal or disconnecting the terminal for the control track will cause the fault message F052. This is for reporting a broken wire in the tachometer cable. - P151 (pulse number of pulse encoder) Please refer to the relevant operating instructions for precise instructions on how to start up the tachometer you are using. P130 = 13, 14 (analog tachometer) - P138 (Analog tachometer scaling) The ATI board is necessary for tachometer voltages > 10 V P095 = 12 (synchronous motor): - P130 = 15 or 16 is necessary (due to zero pulse for position monitoring)		
	Function diagrams: 250.6		
P131* Select TmpSensor	Select the type of temperature sensor on the SBP that will be used to monitor the motor temperature. Setting values:	Init: 0 Min: 0 Max: 3 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Motor/encoder + Motor data - Drive setting - Uread/free access Changeable in: - Drive setting
131	0 = KTY84/PTC (evaluated by P380/P381) 3 = PT100 (can only be evaluated by SBP)		
Compact PLUS only			

Parameter	Description	Data	Read/write
P138 AnalogTachScale 138	<p>Function parameter for setting the analog tachometer scaling</p> <p>The speed at which a tachometer voltage of 10 V can be measured is set. The ATI board is required to connect the analog tachometer to the drive if the tachometer voltage exceeds 10 V.</p> <p>The parameter value set here is at the same time the limit of the speed measurement range. Speed overshoots must be allowed for. The analog tachometer can be used up to converter output frequencies of 100 Hz.</p> <p>Setting instructions: If, for example, the speed of 3000 rpm including 10% overshoot needs to be shown</p> <ol style="list-style-type: none"> 1. the parameter P138 has to be set to 3300 rpm 2. the motor has to be operated in the v/f control mode (P10 = 1) at a speed of 3300 rpm, 3. the output voltage of the ATI board, connected to the selected analog input terminal must be adjusted to 10V. <p>Note: The parameter is determined during motor data identification (P115=3, 4)</p> <p>Precondition: P130 = 13,14 (Analog tachometer)</p> <p>Function diagrams: 250.3</p>	index1: 3000 Min: 500 Max: 6000 Unit: 1/min Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Encoder data - Drive setting - Uread/free access Changeable in: - Drive setting - Drive setting - Ready
P139* ConfSetpEnc 139	<p>Function parameter for configuration of the setpoint encoder</p> <p>on an SBP. The setpoint encoder can either process one digital setpoint from two independent rectangular-shaped frequency signals or, alternatively, form one setpoint from an external pulse encoder signal and a rectangular-shaped frequency signal.</p> <p>xxx0 = channel 1 / encoder input HTL unipolar xxx1 = channel 1 / encoder input TTL unipolar xxx2 = channel 1 / encoder input HTL differential input xxx3 = channel 1 / encoder input TTL/RS422 differential input</p> <p>xx0x = channel 2 HTL unipolar xx1x = channel 2 TTL unipolar xx2x = channel 2 HTL differential input xx3x = channel 2 TTL/RS422 differential input</p> <p>x0xx = encoder with 5 V voltage supply x1xx = encoder with 15 V voltage supply</p> <p>0xxx = setpoint encoder deactivated 1xxx = Frequency counter mode (frequency evaluation) 2xxx = Encoder signal evaluation mode</p>	Init: 0 Unit: - Indices: - Type: L2	Menus: - Parameter menu + Motor/encoder + Encoder data - Board configuration - Drive setting - Uread/free access Changeable in: - Board configuration
P140* SetpEnc Pulse# 140	<p>Function parameter for the pulse number of the setpoint encoder.</p> <p>The parameter has to be set to the number of pulses of the setpoint encoder connected to an SBP board.</p> <p>If the first frequency channel of the setpoint encoder is in the "encoder signal evaluation" mode (P139=2xxx), the parameter value is used for normalizing the setpoint generation (together with the motor ref. frequency).</p>	index1: 1024 Min: 60 Max: 20000 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Motor/encoder + Encoder data - Drive setting - Uread/free access Changeable in: - Drive setting - Drive setting

Parameter	Description	Data	Read/write
P141* SetpEncFreq	Function parameter for the reference frequency of the setpoint encoder.	index1: 10000 Min: 500 Max: 1000000 Unit: Hz Indices: 2 Type: O4	Menus: - Parameter menu + Motor/encoder + Encoder data - Drive setting - Uread/free access Changeable in: - Drive setting - Drive setting
141	The parameter value determines which input frequency results in an output of 100% on the setpoint encoder. If the setpoint encoder is the "frequency counter" mode (P139=1xx), the parameter values are used to normalize the output values.		
P151* Encoder Pulse #	Function parameter for entering the number of pulses of the pulse encoder.	index1: 1024 Min: 60 Max: 20000 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Motor/encoder + Encoder data + Control/gating unit + Position control - Drive setting - Uread/free access Changeable in: - Drive setting
151	Setting instructions · The product "pulse number * motor frequency" (P107) should not exceed 400000, as otherwise the speed computation will be inaccurate. Precondition: P130 = 11,12,15,16 (Pulse encoder) Function diagrams 250.3		
P155* Src i(excit.)	BICO parameter for selecting the connector from which the excitation current actual-value is to be read in.	index1: 0 Unit: - Indices: 2 ,BDS	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting
155	Note: At a parameter value of 0, the actual-value (r156) is tracked with the setpoint (r160) and the minimum excitation current monitoring (see P157, P158) is de-activated. Precondition: P095 = 12 (synchronous motor)	Type: L2 ,K	
r156 lexc(act)	Visualization parameter for the excitation current actual-value, referred to the rated excitation current.	Dec.Plc.: 1 Unit: % Indices: -	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access
156	Precondition: P095 = 12 (synchronous motor)	Type: I2	
P157 i(exc.)-Reg. Kp	Function parameter for setting the gain of the P-controller for minimum excitation current monitoring.	index1: 0,500 Min: 0,000 Max: 8,000 Unit: - Indices: 4	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
157	As soon as the measured excitation current is less than half the minimum excitation current (P158), the difference is evaluated with the value of this parameter and connected to the stator-current-side flux-generating current setpoint component. This support shall prevent the excitation current being zero. Precondition: P095 = 12 (synchronous motor)	Type: O2	
P158 i(exc.,min.)	Function parameter for setting the minimum excitation current for minimum current monitoring (see P157) referred to the rated excitation current.	index1: 0,1 Min: 0,0 Max: 10,0 Unit: % Indices: 4	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
158	Above the minimum excitation current, the P controller for flux or voltage limitation control is connected to the flux-generating current setpoint component (see P163 to P165). This control is de-activated if the measured excitation current actual-value (r156) is below the minimum excitation current (P158). The monitoring control (with P157 as gain) is switched on as soon as half the minimum excitation current is fallen short of. Precondition P095 = 12 (synchronous motor)	Type: O2	

Parameter	Description	Data	Read/write
P159 Smooth. dl(exc) 159	Function parameter for setting the smoothing time constant for smoothing the difference between excitation current setpoint and actual-value (r160, r156) Note: Smoothing is stopped with P159 = 32001 ms. Precondition: P095 = 12 (synchronous motor)	index1: 100 Min: 0 Max: 32001 Unit: ms Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
r160 lexc(set) 160	Excitation current setpoint referred to the rated excitation current. Precondition: P095 = 12 (synchronous motor)	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access
P161 i(min.curr.val.) 161	Function parameter for the stator-side minimum current amount in no-load mode of the synchronous motor. A minimum current can be specified for calmer control behaviour at low stresses. If no torque-generating current setpoint (r272) is present, the entire minimum current is connected as a flux-generating current component (r281). With increasing load, this flux-generating component is reduced to zero if r272 achieves the value of the minimum current. The minimum current is not influenced by the cos PHI control (P162). The value is pre-set during automatic parameterization (P115=1). Precondition: P095 = 12 (synchronous motor)	index1: ~ Min: -3276,7 Max: 3276,7 Unit: A Indices: 4 Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
P162 df(changeCosPhi) 162	Function parameter for entering the frequency range below the frequency at which field weakening starts (base frequency KK0192) within which changeover is made between the inner and outer cos PHI control. If the parameter value is not zero, the flux-generating stator-side current setpoint component r281 above the base frequency is controlled in such a way that the stator voltage and current indicators are pointing more or less in the same direction (cos PHI = 1). Below the base frequency, minus this parameter value (P162), r281 is at zero (if no minimum current P161 is specified) and the entire converter current flows in the direction of the EMF (cos-PHI internal = 1). Within the settable frequency range, changeover is made linearly between these states. With P162=0.0%, control to the outer cos-PHI and the relevant flux control in the field weakening area are switched off. This is not recommended as the maximum output is considerably reduced as a result. Precondition: P095 = 12 (synchronous motor)	index1: 20,0 Min: 0,0 Max: 100,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P163 Flux Reg. Gain	Function parameter for entering the flux control gain (P controller).	index1: 1,500 Min: 0,000 Max: 6,000 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
163	The P flux controller operates on the dynamic field-generating stator current component (behind r281). The controller should support the excitation current control from the stator side during dynamic flux changes. The flux setpoint is supplied by the flux characteristic (r304 and the flux actual-value by the voltage model (r302). The controller is deactivated in the area of the current model (cutout ramp between P313 and P313*P314). In the range of field weakening, the controller is overridden by the Vmax controller (P164) or by the EMFmax controller (P165). Precondition: P095 = 12 (synchronous motor)		
P164 V(max) reg. Kp	Function parameter for entering the gain (P controller) of the field weakening controller.	index1: 1,500 Min: 0,000 Max: 6,000 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
164	The Vmax controller operates on the dynamic field-generating stator current component (behind r281). The controller should support the excitation current control during dynamic processes at the voltage limit (e.g. acceleration/deceleration in field weakening). Outside of the field weakening, the controller is overridden by the flux controller (P163). Precondition: P095 = 12 (synchronous motor)		
P165 EMF(max) reg. Kp	Function parameter for setting the gain (P controller) for the EMF maximum value controller (setpoint P306).	index1: 1,500 Min: 0,000 Max: 6,000 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
165	The EMFmax controller operates on the dynamic field-generating stator current component (behind r281). The controller is overridden by the flux controller (P163) or the field weakening controller (P164), if their set/actual value difference is less than that of the EMFmax controller. Precondition: P095 = 12 (synchronous motor)		
P166 Kp Tdd	Function parameter for evaluation of the damping time constant Tdd (saturated) in the current model.	index1: 100,0 Min: 25,0 Max: 400,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
166	Tdd is the result of the ratio of the sum of saturated main inductance and damping leakage to damping resistance (along the rotor axis). Precondition: P095 = 12 (synchronous motor)		
P167* Kp Tdq	Function parameter for evaluating the damping time constant Tdq (saturated) in the current model.	index1: 100,0 Min: 25,0 Max: 400,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
167	Tdq is the result of the ratio of the sum of saturated main inductance and damping leakage to the damping resistance (transverse to rotor axis). Precondition: P095 = 12 (synchronous motor)		

Parameter	Description	Data	Read/write
r168 Load angle 168	Visualization parameter for the angle between flux and rotor axis in the current model of the externally excited synchronous machine. In no-load mode, the angle is approx 0°. Precondition: P095 = 12 (synchronous motor)	Dec.Plc.: 1 Unit: ° (alt) Indices: - Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access
P172* Src Pos SetV 172	BICO parameter for selecting the connector from which the initial position is to be read in. Only if the initial angle is changed, the rotor angle (r186) or the position angle (r185) is set to the new initial angle. If the initial angle remains the same, no setting is made for r185 and r186. If a 16-bit value is connected here, only r186 and the lower-value word of r185 are changed. The higher-value word of r185 (number of revolutions) then remains unchanged. If a 32-bit value is specified, r185 and r186 are completely changed. Note: With synchronous motors (P095=12), it is necessary for the rotor angle at standstill to be provided by an external evaluation (normalization as in r186, 0Hex = fault). Only when the position encoder is adjusted for the first time (reset), the parameter value has to be set to P172=0. The drive then rotates into the zero position as soon as the inverter pulses are released and a minimum current is set in P161.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,K ,K	Menus: - Parameter menu + Control/gating unit + Position control - Uread/free access Changeable in: - Drive setting - Ready
	Precondition: P130 = 15,16 (rotary encoder with zero pulse)	Function diagrams: 250.6	
r185 Pos (act Mot) 185	Visualization parameter for the position actual-value over several revolutions of the rotor (r186) Representation of the angle: 0000 = 0°, 8000 Hex = 180°, FFFF Hex = 359.995° Precondition: P130 = 15,16 (rotary encoder with zero pulse)	Dec.Plc.: 1 Unit: ° (alt) Indices: - Type: I4	Menus: - Parameter menu + Control/gating unit + Position control - Uread/free access
	Function diagrams: 250.7		
r186 Rotor angle 186	Visualization parameter for the rotary angle fo the rotor whic is detected by a tachometer (P130). Representation of the value: 0000 = 0°, 8000 Hex = 180°, FFFF Hex = 359.995° Precondition: P130 = 15,16 (rotary encoder with zero pulse)	Dec.Plc.: 1 Unit: ° (alt) Indices: - Type: O2	Menus: - Parameter menu + Control/gating unit + Position control - Uread/free access
	Function diagrams: 250.7		

Parameter	Description	Data	Read/write
P187 T(dead,rot.ang.)	Function parameter for setting the dead time between measured and implemented rotor angle.	Init: 1,000 Min: 0,000 Max: 4,000 Unit: ms Indices: - Type: O2	Menus: - Parameter menu + Control/gating unit + Position control - Uread/free access Changeable in: - Drive setting - Ready
187	The parameter is used for correcting slip failure of the position signal in the area of the current model. The corrected position signal is brought to the angle control (P315) together with the load angle (r168).		
	Precondition: P095 = 12 (synchronous motor)		
P215 max. dn/dt	Function parameter for setting the maximum permissible change of the measured speed actual value within a control sampling time (P357).	index1: ~ Min: 0,00 Max: 600,00 Unit: Hz Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
215	The function is for detecting interfering pulses or interruptions in the speed signal (e.g. resulting from faulty cable shields or tachometer coupling).		
	ATTENTION: This function limits the change speed of the drive. If an alarm should be output during the acceleration process or load impacts, the parameter value may have to be increased.		
	The value is pre-set during automatic parameterization (P11 = 1, 2, 3).		
	Precondition: P130 > 10 (source speed actual value).		
	Function diagrams: 350.2		
P216 Smooth n/f(FWD)	Function parameter for setting the smoothing time constant of the n/f actual-value precontrol.	index1: ~ Min: 0,0 Max: 50,0 Unit: ms Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
216	Note: A smoothing time of approx. 4ms for n/T control (P100=4,5) is recommended only on drives with gear play. If interferenceType: O2 pulses occur in the encoder signal, the tachometer cable should be checked to make sure that it has a shield at both sides and over a large surface area.		
	The value is pre-set during automatic parameterization (P11 = 1,2,3).		
	Precondition: P100 = 3, 4, 5 (vector control types)		
	Function diagrams: 350.3, 351.4		
P217 Slip fail corr'n	Function parameter for setting the slip failure correction for the n/f actual-value.	index1: 0 Min: 0 Max: 2 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
217	Slip failure correction is only effective at speed control with encoder (P130 = 11, 12) and improves the torque accuracy during acceleration.		
	Parameter values: 0 = not active 1 = correction with smoothing of approx. 32ms 2 = Correction with smoothing of approx. 16ms.		
	Precondition: P100 = 4, 5 (n/T control)		
	Function diagrams: 350.5		

Parameter	Description	Data	Read/write
r218 n/f(act)	Visualization parameter for the speed frequency actual value P100 = 0, 3, 4, 5 and P100 = 1 and slip compensation (P336): Speed actual-value multiplied by the pole pair number (P109) of the motor. P100 = 1, 2 (v/f control, v/f control for textile), no slip compensation (P336): stator frequency	Dec.Plc.: 3 Unit: Hz Indices: - Type: I4	Menus: - Parameter menu + Control/gating unit + Speed control + V/f open-loop control - Uread/free access
218	Function diagrams: 350.7, 351.7		
r219 n (act)	Visualization parameter for the speed actual-value P100 = 0, 3, 4, 5, and P100 = 1 (v/f control), slip compensation (P336): Speed actual-value of the motor P100 = 1,2 (v/f control, v/f control for textile), no slip compensation (P336): stator frequency in Hz divided by the pole pair number of the motor (P109)	Dec.Plc.: 3 Unit: 1/min Indices: - Type: I4	Menus: - Parameter menu + Control/gating unit + Speed control + V/f open-loop control - Uread/free access
219	Function diagrams 360.2, 361.2, 362.2, 363.2		
P221 smooth n/f(set)	Function parameter for setting the smoothing time constant for the n/f setpoint before the tachometer.	index1: 4 Min: 0 Max: 2000	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access
221	The use is particularly recommended for preventing overshoot of the speed actual-value when the n/f controller precontrol (P471=0) is switched off and/or at ramp-function generator times of 0.0s. Precondition: P100 = 0, 3, 4, 5 (v/f control with n control, vector control types)	Unit: ms Indices: 4 Type: O2	Changeable in: - Drive setting - Ready
P222* Src n/f(act)	BICO parameter for selecting the connector from which the speed actual values are to be read in.	index1: 0 Unit: - Indices: 2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access
222	Synchronous motor: The torque limits and the angle controller P315 have to be disabled for trial operation (P222<>0). The drive may only be operated in the range of the current model. Precondition: P100 = 3,4,5 (vector control types)	,BDS Type: L2 ,K ,K	Changeable in: - Drive setting
	Function diagrams: 350.1, 351.7		
P223 Smooth n/f(act)	Function parameter for the smoothing time constant of the n actual value to the negative speed controller input.	index1: ~ Min: 0 Max: 2000	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access
223	The value is pre-set during automatic parameterization (P11 = 1,2,3) or is determined during controller optimization (P115 = 5). Precondition: P100 = 0, 3, 4, 5 (v/f control with n control, vector control types)	Unit: ms Indices: 4 Type: O2	Changeable in: - Drive setting - Ready
	Function diagrams: 360.2, 361.2, 362.2, 363.2		

Parameter	Description	Data	Read/write
r229 n/f(set,smo'd)	Visualization parameter for the n/f setpoint at the speed controller input or at the frequency input of the v/f characteristic.	Dec.Plc.: 3 Unit: Hz Indices: - Type: I4	Menus: - Parameter menu + Control/gating unit + Speed control + V/f open-loop control - Uread/free access
229	Function diagrams: 360.4, 361.4, 362.4, 363.4.		
r230 n/f(act,smo'd)	Visualization parameter for the smoothed n/f actual value at the speed controller input.	Dec.Plc.: 2 Unit: Hz Indices: - Type: I4	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access
230	Precondition: P100 = 0, 3, 4, 5 (v/f control with n control, vector control types).		
	Function diagrams: 360.3, 361.3, 362.3, 363.3		
P232* Src n/f RegAdapt	BICO parameter for selecting the connector from which the input signal for the gain adaption of the speed controller (P235) is to be read in.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
232	Precondition: P100 = 0, 3, 4, 5 (v/f control with n control, vector control types)		
	Function diagrams: 360.3, 361.3, 362.3, 363.3		
P233 n/f Reg. Adpat.1	Function parameter for entering the lower transition point for gain adaption of the speed controller gain.	index1: 0,0 Min: 0,0 Max: 200,0	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
233	Below this point, gain of the n/f controller is identical to P235 Between P233 and P234, evaluation is interpolated in a linear manner to P236. Precondition: P100 = 0, 3, 4, 5 (v/f control with n control, vector control types)	Unit: % Indices: 4 Type: O2	
	Function diagrams: 360.5, 361.5, 362.5, 363.5, 364.5		
P234 n/f-Reg. Adapt.2	Function parameter for entering the upper corner point for gain adaption of the speed controller gain.	index1: 100,0 Min: 0,0 Max: 200,0	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
234	Above this point, gain of the n/f controller is identical to P236 If P234 is less than P233, there is internal limitation to P233. Then the gain will jump from P235 to P236 if the threshold P233=P234 is exceeded. Precondition: P100 = 0, 3, 4, 5 (v/f control with n control, vector control types)	Unit: % Indices: 4 Type: O2	
	Function diagrams: 360.6, 361.6, 362.6, 363.6		
P235 n/f-Reg Gain 1	Function parameter for entering the n/f controller gain. The value is pre-set during automatic parameterization (P111 = 1, 2) or is calculated from the measured during n/f controller optimization (P114 = 3, 5).	index1: ~ Min: 0,0 Max: 2000,0 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
235	Precondition: P100 = 0, 3, 4, 5 (v/f control with n control, vector control types)		
	Function diagrams: 360.4, 361.4, 362.4, 363.4		

Parameter	Description	Data	Read/write
P236 n/f-Reg. Gain2	Function parameter for entering the speed controller gain above the corner point P234 of the gain adaption.	index1: ~ Min: 0,0 Max: 2000,0 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
236	At speeds between P233 and P234, the gain is interpolated linearly from P235 to P236. Precondition: P100 = 0,3,4,5 (v/f control with n control, vector control types)		
	Function diagrams: 360.4, 361.4, 362.4, 363.4		
r237 n/f RegGain(act)	Visualization parameter for the currently effective gain of the Dec.Plc.: 1 speed controller.	Unit: - Indices: - Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access
237	Precondition: P100 = 0, 3, 4, 5 (v/f control with n control, vector control types)		
	Function diagrams: 360.6, 361.6, 362.6, 363.		
P238* Src n-Reg.Adapt	BICO parameter for selecting the connector from which the evaluation signal for the gain adaption of the speed controller (P235) is to be read in.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
238	Precondition: P100 = 0, 3, 4, 5 (v/f control with n control, vector control types)		
	In function diagram: 360.3, 361.3, 362.3, 363.3, 364.3		
P240* n/f Reg Time	Function parameter for entering the integral time of the spee controller.	index1: ~ Min: 25 Max: 32001	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access
240	The value is pre-set during automatic parameterization (P11 = 1, 2) or is taken from the measurement during optimization (P115 = 3, 5). Note: With value 32001 ms, the I component is turned off (the speed controller operates as a P controller).	Unit: ms Indices: 4 Type: O2	Changeable in: - Drive setting - Ready
	Precondition: P100 = 0, 3, 4, 5 (v/f control with n control, vector control types)		
	Function diagrams: 360.7, 361.7, 362.7, 363.7		

Parameter	Description	Data	Read/write
P241* SrcSetV n/f-Reg1 241	BICO parameter for selecting the connector from which the setting value for the I component of the speed controller is to be read in. Note: - If the setting command is not interconnected (P242=0), a pending setting value is read in after pulse enable at the end of the excitation time (P602) and the integral component of the controller is set once. - If the connector 155 (n/f(Ref, I-Comp)) is interconnected, upon pulse enable, the integral component of the controller is set to the last value prior to pulse inhibit. CAUTION. - If the setting value P241 is interconnected, during speed control without an encoder, the integral component of the speed controller will not be moved to zero when the drive is stopped, but stays at the last value (from the range of the EMF model). This value corresponds to the static load if the acceleration torque has been correctly precontrolled. The current component is not reset until the pulse is disabled.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting
P242* Src Set n/f-Reg1 242	BICO parameter for selecting the binector from which the command for setting the I component of the speed controller is to be read in. Function diagrams: 360.5, 361.5, 362.5, 363.5	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting
P243* Src nf-Reg1 STOP 243	BICO parameter for selecting the binector from which the command to stop the I component of the speed controller is to be read in. If the value of the signal connected at the binector is logical "1", the I component of the speed controller is stopped. From then on, the speed controller only acts as a P controller. Function diagrams: 360.5, 361.5, 362.5, 363.5	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting
P245* Src Droop 245	BICO parameter for selecting the connector from which the input signal for the droop is to be read in. Connection of the I component of the speed controller (K0155) is preferred here. Function diagrams: P365.5, P367.2	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
P246 Scale Droop 246	<p>Function parameter for scaling the droop (selection see P245). Parameter values greater than 0 lead to a drop of the speed setpoint (r471) when the drive is loaded, and thus result in a speed deviation from the main setpoint.</p> <p>Setting instructions: $K_p = 0.000$ = droop inactive $K_p > 0.000$ and no external droop enable (see P584) = droop is calculated (KK0157), but is not processed in the setpoint channel. $K_p > 0.000$ and external droop enable (see P584) = droop active</p> <p>The second setting should be selected for the master drive if there is load equalization control between several motors. KK0157 can then, for example, be output via the analog interface, without the speed setpoint of the main drive being changed.</p> <p>Precondition: $P100 = 3, 4$ (n/f control)</p> <p>Function diagrams: 365.6, 367.3</p>	index1: 0,0 Min: 0,0 Max: 49,9 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
P249* DT1 Function T1 249	<p>Function parameter for the smoothing time constant for damping compensation.</p> <p>If the smoothing time is set at 0.0ms, the differentiation only operates during master drive control with the speed setpoint (smoothed with P221) and can be used as precontrol for the speed controller.</p> <p>Precondition: $P163 = 3, 4, 5$ (vector control types)</p> <p>Function diagrams: 365.6, 366.5, 367.3</p>	index1: 10,0 Min: 0,0 Max: 200,0 Unit: ms Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
P250 DT1 Function Td 250	<p>Function parameter for the gain of the damping compensation of the speed actual value to the setpoint of the torque-generating current.</p> <p>For n/f control (as master drive) the damping operates with the n/f control error. The characteristics correspond to a smoothed D component of the n/f controller.</p> <p>If the smoothing time is P249=0.0ms, only the setpoint speed is differentiated (smoothing time constant P221).</p> <p>Precondition: $P100 = 3, 4, 5$ (vector control types)</p> <p>Function diagrams: 365.6, 366.5, 367.3</p>	index1: 0,0 Min: 0,0 Max: 1000,0 Unit: ms Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P251 Band-Stop Gain	Function parameter for entering the evaluation factor for the band-stop filter.	index1: 0,0 Min: 0,0 Max: 150,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
251	At gain = 100 %, the band-stop filter (average frequency P254, band width P253) is switched on. A correction of the gain factor is only purposeful if speed deviations occur when stationary (r230 <> r229). This can occur if there are low resonance frequencies and large filter band widths.		
	Note: If the filter is switched on, the damping compensation (P250 P249) always operates with the speed signal (r230) and not with the control deviation.		
	ATTENTION. If the gain is set a lot less or more than 100%, the drive can be accelerated or decelerated very high.		
	Precondition: P100 = 3, 4, 5 (Vector control types)		
	Function diagrams: 360.4, 361.4, 362.4, 363.4		
P253 Filter bandwidth	Function parameter for entering the frequency band width (3dB) of the band-stop filter for the speed signal (r230).	index1: 0,5 Min: 0,5 Max: 20,0 Unit: Hz Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
253	ATTENTION: With very low resonance frequencies (P254) and large filter band widths, the dynamic response of the speed controller must be reduced so that the speed control will not become unstable.		
	Precondition: P100 = 3, 4, 5 (vector control types)		
	Function diagrams: 360.4, 361.4, 362.4, 363.		
P254 ResonFreqBStop	Function parameter for entering the resonance frequency of the band-stop filter.	index1: 50,0 Min: 5,0 Max: 200,0 Unit: Hz Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
254	The filter can be used to prevent mechanical resonances from overshooting over the speed control circuit. The parameter value describes the middle of the frequency disable area. It should be slightly below the resonance frequency.		
	ATTENTION: At very low resonance frequencies and large filter band widths (P253), the dynamic response of the speed controller must be reduced in order that the speed control does not become unstable.		
	Precondition: P100 = 3, 4, 5 (vector control types)		
	Function diagrams: 360.4, 361.4, 362.4, 363.4		

Parameter	Description	Data	Read/write
r255 T(set,reg. off)	Visualization parameter for the output signal of the n/f controller (torque setpoint) in front of the torque limitation referred to P354 (reference torque)	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access
255	Precondition: P100 = 3, 4, 5 (vector control types) Function diagrams: 360.8, 361.8, 362.8, 363.8		
P256* Src T(lim,reg1)	BICO parameter for selecting the connector from which the upper limit value for the torque at the speed controller output is to be read in.	index1: 172 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting
256	Function diagram: 360.8, 362.8		
P257* Src T(lim,reg2)	BICO parameter for selecting the connector from which the lower limit value for the torque at the speed controller output is to be read in.	index1: 173 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting
257	Function diagram: 360.8, 362.8		
P258 Max Gen Power	Function parameter for the maximum permissible motoring active power.	index1: ~ Min: 0,1 Max: 200,0 Unit: % Indices: 4 Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
258	Setting instruction: It is necessary to set an output limit for field weakening operation in order to enable cos PHI control (P162). The limit is automatically reduced internally if the converter supply voltage drops below the rated motor voltage. The value is pre-set during automatic parameterization (P115=1). Precondition: P095 = 12 (synchronous motor)		
P259 Max Regen Power	Function parameter for maximum permissible regenerative active power.	index1: ~ Min: -200,0 Max: -0,1 Unit: % Indices: 4 Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
259	Setting instructions: On units without a braking resistor and without a regenerative unit, the parameter value is set to support the Vdmax controller to values of approx. -10 %. The torque limits should not be used to limit the output. The value is pre-set during automatic parameterization (P115=1). Precondition: P100 = 3, 4, 5 (vector control types) Function diagrams: 370.2, 371.2, 372.2, 373.2		

Parameter	Description	Data	Read/write
P260* Src Torq (set) 260	BICO parameter for selecting the connector from which the torque setpoint in the "Master drive" operating mode is to be read in. If this parameter is connected, the torque is not obtained from the output of the speed controller.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting Precondition: P100 = 4 (speed control) Function diagrams: P375.2
P262* Src Torque(add) 262	BICO parameter for selecting the connector from which the additional setpoint for torque is to be read in. The additional setpoint is added to the setpoint of the torque (see P260). If this parameter is connected, the torque is not obtained from the output of the speed controller.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting Precondition: P100 = 4 (speed control) Function diagrams: P375.2
P268 Kp lsq(max) 268	Function parameter for the correction factor when calculating the maximum torque-generating current component in the field-weakening area (lsqmax: K0176) This parameter is only intended for service personnel.	index1: 100,0 Min: 25,0 Max: 400,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready Function diagrams: 370.3, 371.3, 372.3, 373.3
r269 Torq (set, Lim) 269	Visualization parameter for the limited torque setpoint at the output of the speed controller including additional torque. Precondition: P100 = 3, 4, 5 (vector control types)	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Function diagrams: 370.7, 371.7, 372.7, 373.7, 375.7
r272 lsq(set,lim) 272	Visualization parameter for the setpoint of the torque-generating current Precondition: P100 = 3, 4, 5 (vector control types)	Dec.Plc.: 1 Unit: A Indices: - Type: I4	Menus: - Parameter menu + Control/gating unit + Current control - Uread/free access Function diagrams: P370.8, P371.8, P372.8, P373.8, P375.7

Parameter	Description	Data	Read/write
P273 Smooth lsq(set) 273	<p>Function parameter for the smoothing time constant of the torque smoothing setpoint. This only operates in the field weakening area.</p> <p>The value is pre-set during automatic parameterization (P115=1) or during motor data identification (P115=2,3).</p> <p>Synchronous motor: Smoothing results from multiplication by the rise limitation.</p> <p>Precondition: P100 = 3, 4, 5 (vector control types)</p> <p>Function diagrams: 390.2</p>	index1: ~ Min: 0 Max: 20 Unit: ms Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Current control - Uread/free access Changeable in: - Drive setting - Ready
P274 lsq(set) grad. 274	<p>Function parameter of the rise limitation for steady-state current setpoint component lsq (and lsd in the case of externally excited synchronous motors).</p>	index1: ~ Min: 0,0 Max: 6553,5 Unit: A Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
P275* Src I(max) 275	<p>BICO parameter for selecting the connector from which an external setpoint is to be read in for maximum current.</p> <p>The read-in maximum current acts as a limitation of the internal value r129 which results from parameterization via P128.</p> <p>In function diagram: 370.1, 371.1, 372.1, 373.1</p>	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu + Control/gating unit + Speed control + Current control + V/f open-loop control - Uread/free access Changeable in: - Drive setting
r277 T(set,friction) 277	<p>Visualization parameter for the torque setpoint for making allowance for the friction. The friction torque is added after torque limitation. Negative values are displayed in the case of negative speeds.</p> <p>Precondition: P100 = 4, 5 (n/T control)</p> <p>In function diagram: 370.7, 371.7, 375.7</p>	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access

Parameter	Description	Data	Read/write
P278 Torque (static) 278	Function parameter for the maximum required steady-state torque during encoder-less speed control (frequency control in the lower speed range). At frequency control (P100=3) and non-active EMF model (B0253 = 0), a constant current is impressed to the motor. Torque(static) represents the maximum torque occurring during constant setpoint frequency. For safety reasons, the parameter should allow for at least 10 % more than the expected load.	index1: ~ Min: 0,0 Max: 200,0 Unit: % Indices: 4 Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
	Parameter values: 0 % = Rated magnetizing current is injected (r119)		
	Setting instructions: During acceleration, the transition to the counter EMF mode (B0253 = 1) is significantly influenced by the setting of this parameter and by the protective mode of the ramp function generator (P467). The value is assigned during automatic parameterization (P115=1).		
	Precondition: P100 = 3 (frequency control)		
P279 Torque (dynamic) 279	Function parameter for the maximum additional dynamic torque during encoder-less speed control (frequency control in the lower speed range). An additional acceleration torque (P279) is added to the steady state torque (P278) during frequency acceleration and deceleration. The total current during acceleration is calculated from the settings of P278 and P279. During steady state operation only the current for P278 is impressed.	index1: ~ Min: 0,0 Max: 200,0 Unit: % Indices: 4 Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
	Setting instructions: For the sole purpose of acceleration torques, the speed control precontrol (P471) can be used. The value is assigned during automatic parameterization (P115=1).		
	Precondition: P100 = 3 (frequency control)		
	In function diagram: 382.2		
P280 Smooth I(Set) 280	Function parameter for setting the smoothing time constants of the current setpoint impressed via P278 and P279. Precondition: P100 = 3 (frequency control)	index1: 40 Min: 4 Max: 32000 Unit: ms Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
	In function diagram: 382.6		

Parameter	Description	Data	Read/write
r281 lsd(set)	Visualization parameter for the setpoint of the flux-generator current components.	Dec.Plc.: 1 Unit: A Indices: - Type: I4	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access
281	Synchronous motor (P095 = 12): visualization parameter for the steady-state setpoint of the stator-side flux-generating current component. Output signal of the rise limitation (P274) which is connected downstream of the cos-PHI control (P162) and the minimum current (P161). The flux-generating excitation current component is calculated in the current model.. Precondition: P100 = 3, 4, 5 (vector control types) In function plan: 380.8, 381.8		
P282 Gain PRE Isq	Function parameter for evaluation of the differential precontrol of the current controller.	index1: 60,0 Min: 0,0 Max: 200,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Current control - Uread/free access Changeable in: - Drive setting - Ready
282	Precondition: P100 = 3,4,5 (vector control types) In function diagram: 390.4		
P283 Current Reg Gain	Function parameter for adjusting the gain of the PI current controller in the range of the asynchronous modulation of the modulator.	index1: ~ Min: 0,000 Max: 2,500 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Current control - Uread/free access Changeable in: - Drive setting - Ready
283	The adaption of this gain is automatically performed depending on the pulse frequency in the modulator. The value is preset during automatic parameterization (P115 = 1) or during motor data identification (P115 = 2, 3). Note: After the pulse frequency or motor parameter has been changed, automatic parameterization or motor identification should be repeated in order to precisely set the controller. Precondition: P100 = 3, 4, 5 (vector control types) In function diagram: 390.4		
P284 Current Reg Time	Function parameter for setting the adjustment time of the PI current controller in the range of asynchronous modulation of the modulator.	index1: ~ o Min: 2,0 Max: 200,0 Unit: ms Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Current control - Uread/free access Changeable in: - Drive setting - Ready
284	The value is pre-set during automatic parameterization (P115 = 1) or motor data identification (P115 = 2, 3). Precondition: P100 = 3, 4, 5 (vector control types) In function diagram: 390.4		

Parameter	Description	Data	Read/write
P287 SmoothDCBusVolts 287	<p>Function parameter for setting the time constant for smoothing the DC link bus voltage as an input quantity of theMin: 0 Vd correction.</p> <p>The smoothing time constant is calculated as follows: $T1 = Tpulse^2 \exp(\text{parameter value})$</p> <p>Setting instructions: If high requirements are made on the dynamic response of the drive system and the thus related fast changes in DC link voltage, P287 has to be reduced to 0..3.</p> <p>Note: At P287 = 16, the DC link voltage calculated from the converter line voltage is displayed.</p> <p>In function diagram: 285.2</p>	index1: 9 Max: 16 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Current control + V/f open-loop control - Uread/free access Changeable in: - Drive setting - Ready
P288 Decoupl. Gain1 288	<p>Function parameter for the evaluation factor of decoupling switching-in during current control in the constant flux range of the motor.</p> <p>This parameter is only envisaged for service personnel.</p> <p>Precondition: P100 = 3, 4, 5 (vector control types)</p> <p>In function diagram: 390.3</p>	index1: 100,0 Min: 0,0 Max: 200,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Current control - Uread/free access Changeable in: - Drive setting - Ready
P289 Decoupl. Gain 2 289	<p>Function parameter for the evaluation factor of decoupling switching-in during current control in the field weakening range of the motor.</p> <p>This parameter is only envisaged for service personnel.</p> <p>Precondition: P100 = 3, 4, 5 (vector control types)</p> <p>In function diagram: 390.4</p>	index1: 25,0 Min: 0,0 Max: 200,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Current control - Uread/free access Changeable in: - Drive setting - Ready
P291 FSetp Flux (set) 291	<p>Function parameter for setting the flux setpoint, referred to the rated rotor flux of the motor.</p> <p>Note: At values below 100 %, the drive is operated under-magnetized, and at higher values it is operated over-magnetized.</p> <p>Precondition: P100 = 3, 4, 5 (vector control types) P095 = 10, 11, 12 (induction motor, synchronous motor)</p> <p>In function diagram: 380.2, 381.2</p>	index1: 100,0 Min: 50,0 Max: 200,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
P293 Field Weak Freq 293	<p>Function parameter for setting the frequency limit above which the voltage of the v/f characteristic is kept constant. If the voltage limit is already reached below this value, field weakening starts at a lower frequency.</p> <p>Precondition: P100 = 0, 1, 2 (v/f modes)</p> <p>In function diagram: 405.1</p>	index1: ~ Min: 8,00 Max: 600,00 Unit: Hz Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + V/f open-loop control - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
P295 Efficiency Optim	Function parameter for setting the setpoint for the rotor flux under no-load conditions for load-adaptive magnetization.	index1: ~ Min: 50,0 Max: 100,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting
295	When the flux is reduced, the stator losses of the motor in the partial load range are reduced. The reference flux increases when loaded, so that the magnetization current corresponds to the torque-generating current (r272).		
	Parameter values: 100.0 %: No load-adaptive magnetization <100.0 %: Load-adaptive magnetization activated.		
	Setting instructions: - An increase of the flux setpoint (P291) to approx. 110.0 % contributes towards further efficiency optimizing. - The load-adaptive magnetization in the partial load range restricts the dynamic performance of the drive. - The smoothing time constant of the flux setpoint (P303) must be selected to be that much higher the lower the load-dependent rotor flux is set (at least 100 ms for speed control or 500 ms for frequency control). - Upon activation of the efficiency optimization mode, the differentiation of the flux setpoint for forming the field-generating current component is switched off.		
	Precondition: P100 = 3, 4, 5 (vector control types) P095 = 10, 11 (induction motor)		
	In function diagram: 380.2, 381.2		
P297 Flux Reg. Gain	Function parameter for entering the flux controller gain (PI controller).	index1: 1,00 Min: 0,00 Max: 250,00 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
297	The flux controller operates on the field-generating components of the excitation current setpoint. The flux actual value (r302) at the negative controller input is set to the setpoint in the case of low speeds (in the current model) with the result that the controller is ineffective in this area. The flux setpoint (r304) arises from the smoothed output of the flux characteristic.		
	The integral-action time of the PI controller can be set in P298. The output signal can be visualized by means of K0212.		
	As soon as the deviation between the maximum voltage (r346) and the reference voltage of vector control is less than the deviation between the setpoint and actual flux, the control transcends to a voltage limitation control. The gain of this Vmax control is 8 times less than that of flux control. The integral-reaction time can be set in P305. The same applies to the EMFmax control (see P307).		
	Precondition: P095 = 12 (synchronous motor)		
P298 Flux Reg Time	Function parameter for adjusting the flux controller integral-action time.	index1: 100 Min: 10 Max: 32001 Unit: ms Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
298	Setting instructions: The integral component is stopped with value 32001 ms (flux controller then operates as a P controller).		
	Precondition: P095 = 12 (synchronous motor)		

Parameter	Description	Data	Read/write
P301 Smooth Psi(act)	Function parameter for setting the smoothing time constant for the rotor flux actual value.	index1: 4,0 Min: 0,0 Max: 200,0 Unit: ms Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
301	Precondition: P100 = 3,4,5 (vector control types) P095 = 12 (synchronous motor)		
r302 Flux(act)	Visualization parameter for the smoothed flux actual value o Dec.Plc.: 1 vector control, converted to the rated voltage of the motor. A Unit: % a setpoint flux of r304=100.0%, a value corresponding to the Indices: - rated EMF is set.	Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access
302	The smoothed flux actual value is added to the flux control (see P297) and the unsmoothed actual value is used for stall detection (see P805). In the range of the current model (B0253=0), the parameter is guided to the setpoint flux. Precondition: P095 = 12 (synchronous motor)		
P303 Smooth Flux(Set)	Function parameter for setting the smoothing time constant for the flux setpoint.	index1: ~ Min: 4 Max: 2000 Unit: ms Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
303	The value is pre-set during automatic parameterization (P115 = 1) or during motor data identification (P115 = 2, 3). Setting instructions: P303 > 100 ms: for load-adaptive magnetization with speed control P303 > 500 ms: for load-adaptive magnetization with frequency control Precondition:: P100 = 3, 4, 5 (vector control types) P095 = 10, 11, 12 (induction motor, synchronous motor)		
	In function diagram: 380.5, 381.5		
r304 Flux(Set,Total)	Visualization parameter for the flux setpoint of vector control referred to the rated rotor flux of the motor.	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access
304	Precondition: P100 = 3, 4, 5 (vector control types) P095 = 10, 11, 12 (induction motor, synchronous motor)		
	In function diagram: 380.6, 381.6		
P305 FieldWeakRegTime	Function parameter for the integral-action time of the field-weakening or V(max) controller.	index1: 150 Min: 10 Max: 32001 Unit: ms Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
305	Synchronous motor (P095 = 12): Integral-action time of the field-weakening controller (PI controller); Kp = P297/8). This overrides the flux controller (P297, P298) as soon as the voltage limit is reached. Precondition: P100 = 3, 4, 5 (vector control types)		
	In function diagram: 380.4, 381.4		

Parameter	Description	Data	Read/write
P306 EMF(max) 306	Function parameter for setting the maximum EMF The parameter is used as a positive input signal for EMF max control. The value is calculated during automatic parameterization (P115=1). Precondition: P095 = 12 (synchronous motor)	index1: ~ Min: 100 Max: 2000 Unit: V Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
P307 EMF(max.)-Reg Ti	Function parameter for the integral-action time of the EMF max controller. The EMF max controller acts if the difference between P306 Unit: ms and the EMF actual value is less than the deviation from setpoint and actual value flux or from maximum and setpoint voltage. The PI controller then operates with a gain of P297 / 8 on the flux-generating excitation current component of the current model and thus overridess the flux controller (P297,P298) or the field-weakening controller (P305). Setting instructions: The I component is stopped with value 32001 ms (the EMF max controller operates as a P controller). Precondition: P095 = 12 (synchronous motor)	index1: 150 Min: 10 Max: 32001 Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
r308 Psi(set,I-mod.) 308	Visualization parameter for the flux setpoint, referred to the rated EMF. The flux setpoint is situated at the positive input of the PI flux controller of the current model of the externally excited synchronous machine with rotor-side damper winding. Precondition: P095 = 12 (motor type = synchronous motor)	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access
r309 Psi(act,I-mod.) 309	Visualization parameter for the flux actual value at the output of the current model (behind the saturation characteristic) of the externally excited synchronous machine referred to rated EMF. The signal is guided back to the negative input of the PI flux controller of the current model. Precondition: P095 = 12 (synchronous motor)	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access
P310 Psi(mod)-reg. Kp 310	Function parameter for the flux controller gain in the current model. The flux controller operates on the field-generating components of the magnetizing current setpoint in the current model of the externally excited synchronous machine. The controller is precontrolled by the steady-state magnetization current of the no-load mode and therefore only has to correct deviations resulting from dynamic processes (e.g. load change) and the asymmetry of the rotor. Precondition: P095 = 12 (synchronous motor)	index1: 4,000 Min: 0,000 Max: 6,000 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P311 Psi(mod)-reg. Tn	Function parameter for the flux controller integral-action time index1: 50 in the current model.	index1: 50 Min: 4 Max: 999 Unit: ms Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
311	Precondition: P095 = 12 (synchronous motor)		
P312 Kp L(sig,U mod.)	Function parameter for evaluation of the stator inductance in index1: 100,0 the dynamic portion of the voltage model.	index1: 100,0 Min: 0,0 Max: 200,0	Menus: - Parameter menu + Control/gating unit + Current control - Uread/free access Changeable in: - Drive setting - Ready
312	In addition to the stator leakage (P122), the damper leakage also enters transverse to the Rotor axis (P078). Precondition: P095 = 12 (synchronous motor)	Unit: % Indices: 4 Type: O2	
P313 f(cEMF Mod)	Function parameter for the changeover from the current model to the counter EMF model.	index1: ~ Min: 0,00 Max: 600,00	Menus: - Parameter menu + Control/gating unit + Current control - Uread/free access Changeable in: - Drive setting - Ready
313	The value is pre-set during automatic parameterization (P115=1). Synchronous motor (P095=12): The parameter value represents the upper frequency limit of the changeover ramp between the current and the voltage model. Changeover is approximately at the following frequency: P313 * (0.85*P314 + 15%) Precondition: P100 = 3, 4, 5 (vector control types) In function diagram: 395.7, 396.7	Unit: Hz Indices: 4 Type: O2	
P314 f(cEMF->AMP-mod)	Function parameter for the frequency limit for changing over index1: 50,0 from the counter EMF model to the current model, referred to f(cEMF Mod) (P313). Example: Frequency limit [Hz] = P313 * P314	index1: 50,0 Min: 1,0 Max: 99,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Current control - Uread/free access Changeable in: - Drive setting - Ready
314	Synchronous motor (P095=12): The parameter value represents the lower frequency limit of the changeover ramp between the current model and the voltage model in relation to the upper limit (P313). Precondition: P100 = 3, 4, 5 (vector control types) In function diagram: 395.7, 396.7		

Parameter	Description	Data	Read/write
P315 cEMF Reg Gain 315	<p>Function parameter of the gain of the PI controller for the counter EMF model at rated motor voltage. At low voltage setpoints, the gain is increased.</p> <p>The value determined during automatic parameterization (P115 = 1) or during motor data identification (P115 = 2, 3).</p> <p>Note: The control circuit only operates in the current model if gain = 0.</p> <p>Synchronous motor: The parameter includes the P controller gain of the flux angle controller in the range of the current model.</p> <p>Note (only for P095=12): At Kp = 0, the angle control is switched off which means that considerable orientation errors may occur in the current mode!!</p> <p>Precondition: P100 = 3, 4, 5 (vector control types)</p> <p>In function diagram: 395.4, 396.4</p>	index1: ~ Min: 0,000 Max: 6,000 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Current control - Uread/free access Changeable in: - Drive setting - Ready
P316 cEMF Reg Time 316	<p>Function parameter for the integral-action time of the PI controller for the counter EMF model.</p> <p>The value is pre-set during automatic parameterization (P115 = 1) or during motor data identification (P115 = 2, 3).</p> <p>Precondition: P100 = 3, 4, 5 (vector control types) P095 = 10, 11, 13 (motor type= IEC, NEMA, Sync.Perm.)</p> <p>In function diagram: 395.4, 396.4</p>	index1: ~ Min: 4,0 Max: 999,9 Unit: ms Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Current control - Uread/free access Changeable in: - Drive setting - Ready
P317* Src U (set) 317	<p>BICO parameter for selecting the connector from which an external setpoint for setpoint voltage is to be read in.</p> <p>The setpoint voltage replaces the output voltage of the v/f characteristic.</p> <p>Precondition: P100 = 2 (v/f control, textile)</p> <p>In function diagram: 405.4</p>	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu + Control/gating unit + V/f open-loop control - Uread/free access Changeable in: - Drive setting
P318 Boost Mode 318	<p>Function parameter for the boost mode at F = 0 Hz.</p> <p>0: Current boost: A voltage boost is calculated by means of a starting current (P319) allowing for the measured stator resistance..</p> <p>1: Voltage boost: The voltage boost of the v/f characteristic is directly entered via P325.</p> <p>Precondition: P100 = 0, 1, 2 (v/f control modes)</p> <p>In function diagram: 405.2</p>	index1: 1 Min: 0 Max: 1 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + V/f open-loop control - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
P319 Boost Amps 319	<p>Function parameter for entering the current boost.</p> <p>A voltage boost at $f = 0$ Hz is calculated from the boost current and the total measured resistance (motor + cable).</p> <p>The value is calculated during automatic parameterization (P115=1).</p> <p>Precondition: P100 = 0, 1, 2 (v/f control modes) P318 = 0 (current boost)</p> <p>In function diagram: 405.1</p>	index1: ~ Min: 0,0 Max: 6553,5 Unit: A Indices: 4 Type: O4	Menus: - Parameter menu + Control/gating unit + V/f open-loop control - Uread/free access Changeable in: - Drive setting - Ready
P322 Accel Amps 322	<p>Function parameter for an additional current setpoint enabling a higher acceleration torque at low frequencies.</p> <p>The acceleration current is only active during acceleration and up the end frequency (P326) of the voltage boost. It may be used to generate a break off torque</p> <p>The value is determined during automatic parameterization (P115=1).</p> <p>Precondition: P100 = 0, 1, 2 (v/f control modes)</p>	index1: ~ Min: 0,0 Max: 6553,5 Unit: A Indices: 4 Type: O4	Menus: - Parameter menu + Control/gating unit + Current control + V/f open-loop control - Uread/free access Changeable in: - Drive setting - Ready
P325 Boost Volts 325	<p>Function parameter for the voltage boost at $f = 0$ Hz.</p> <p>The value is calculated during automatic parameterization (P115 = 1, 2).</p> <p>Precondition: P100 = 0, 1, 2 (v/f control modes) P318 = 1 (voltage boost)</p> <p>In function diagram: 405.1</p>	index1: ~ Min: 0,0 Max: 500,0 Unit: V Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + V/f open-loop control - Uread/free access Changeable in: - Drive setting - Ready
P326 Boost End Freq 326	<p>Function parameter for the end frequency of the voltage boost.</p> <p>In the range from 0 Hz to end frequency, the voltage boost is reduced to 0.</p> <p>Special case: The input value 0 Hz causes the output voltage to stay constant until crossing the normal v/f curve ("horizontal" boost).</p> <p>The value is pre-set during automatic parameterization (P11 = 1) or during motor data identification (P115 = 2, 3).</p> <p>Precondition: P100 = 0,1,2 (v/f control modes)</p> <p>In function diagram: 405.3</p>	index1: ~ Min: 0,00 Max: 300,00 Unit: Hz Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + V/f open-loop control - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P330 V/Hz Mode 330	<p>Function parameter for the v/f mode.</p> <p>Parameter values: 0: linear characteristic (for constant-torque drives) 1: parabolic characteristic (for pumps, fans, etc.)</p> <p>Precondition: P100 = 0, 1, 2 (v/f control modes)</p> <p>In function diagram: 405.2</p>	index1: 0 Min: 0 Max: 1 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + V/f open-loop control - Drive setting - Uread/free access Changeable in: - Drive setting
P331 I _{max} Reg Gain 331	<p>Function parameter for the gain of the PI controller for current limitation (I_{max} controller).</p> <p>The value is pre-set during automatic parameterization (P111 = 1) or during motor data identification (P115 = 2, 3).</p> <p>Precondition: P100 = 0, 1, 2 (v/f control modes)</p> <p>In function diagram:</p>	index1: 0,050 Min: 0,005 Max: 0,499 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Current control + V/f open-loop control - Uread/free access Changeable in: - Drive setting - Ready
P332 I _{max} Reg Time 332	<p>Function parameter for the integral-action time of the PI controller for current limitation (I_{max} controller).</p> <p>Precondition: P100 = 0, 1, 2 (v/f control modes)</p> <p>In function diagram:</p>	index1: 100 Min: 4 Max: 32001 Unit: ms Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Current control + V/f open-loop control - Uread/free access Changeable in: - Drive setting - Ready
P334 I _{xR} Compens Gain 334	<p>Function parameter for the compensation factor of voltage losses on the stator resistor or on long cables.</p> <p>The factor corresponds to the cable resistance referred to the rated motor impedance. The output voltage is increased depending on the actual torque-generating current.</p> <p>The value is pre-set during automatic parameterization (P115 = 1, 2,3)</p> <p>Precondition: P100 = 0, 1, 2 (v/f control modes)</p> <p>In function diagram: 405.3</p>	index1: ~ Min: 0,00 Max: 40,00 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + V/f open-loop control - Uread/free access Changeable in: - Drive setting - Ready
P335 Smooth Isq 335	<p>Function parameter for the smoothing time constant of the torque-generating current.</p> <p>The value is pre-set during automatic parameterization (P115 = 1) or during motor data identification (P115 = 2, 3).</p> <p>Precondition: P100 = 0, 1 (v/f control modes without textile)</p> <p>In function diagram: 286.6</p>	index1: ~ Min: 0 Max: 3200 Unit: ms Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + V/f open-loop control - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
P336 Slip Comp Gain 336	<p>Function parameter for the proportional gain of slip compensation (also taking the rotor temperature into account).</p> <p>The value is pre-set during automatic parameterization (P115 = 1, 2,3).</p> <p>Setting instructions:</p> <ul style="list-style-type: none"> 0.0 %: Slip compensation off 50 % - 70 %: Full slip compensation at cold motor (partial load) 100 %: Full slip compensation at warm motor (full load) <p>Note:</p> <p>Rating plate data for rated current (P102), rated speed (P108) and rated frequency (P107) must be entered correctly and fully.</p> <p>Precondition: P100 = 1 (v/f control)</p> <p>In function diagram:</p>	index1: ~ Min: 0,0 Max: 400,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + V/f open-loop control - Uread/free access Changeable in: - Drive setting - Ready
P337 Reson Damp Gain 337	<p>Function parameter for the gain of the resonance damping. v/f control modes, without v/f textile application (P100 = 0, 1)</p> <p>The resonant damping circuit is effective in a range from about 5 % to 70 % of the rated motor frequency.</p> <p>The value is pre-set during automatic parameterization (P115 = 1, 2,3).</p> <p>Note:</p> <p>The resonance damping circuit damps oscillations of the active current. These oscillations mainly occur during no-load operation. The parameter cannot be used to optimize the response behaviour at P100 = 0 (v/f control with speed control).</p> <p>If the value is too high, this will cause instability (forward control effect).</p> <p>Frequency control (P100 = 3) The resonance damping circuit is used to damp oscillations in the low speed range.</p> <p>Precondition:: P100 = 0,1,3 (v/f control modes without textile applications, frequency control)</p> <p>In function diagram:</p>	index1: ~ Min: -10,000 Max: 10,000 Unit: - Indices: 4 Type: I2	Menus: - Parameter menu + Control/gating unit + Current control + V/f open-loop control - Uread/free access Changeable in: - Drive setting - Ready
P338 Common Mode Comp 338	<p>Function parameter for the compensation of the direct components of the inverter.</p> <p>In order to improve the smooth running characteristics, the edges of the control pulses of the individual inverter valves can be staggered in time such that pulse frequency-dependent direct components can be compensated.</p> <p>Indices:</p> <ul style="list-style-type: none"> i001 = PHUN: Phase U negative switching edge i002 = PHUP: Phase U positive switching edge i003 = PHVN: Phase V negative switching edge i004 = PHVP: Phase V positive switching edge i005 = PHWN: Phase W negative switching edge i006 = PHWP: Phase W positive switching edge 	index1: 3,00 Min: 0,00 Max: 25,55 Unit: μ s Indices: 6 Type: O2	Menus: - Parameter menu + Gating unit - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P339 ModSystemRelease	Function parameter for release of the edge modulation systems	index1: 0 Min: 0 Max: 5 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Gating unit - Drive setting - Uread/free access Changeable in: - Drive setting
339	Parameter values: 0: all systems 1: edge modulation systems above 60 Hz 2: edge modulation systems above 100 Hz 3: no edge modulation systems 4: overmodulated space vector modulation 5: overmodulated space vector modulation without pulse frequency switchover		
	Note: During operation with overmodulated space vector modulation, the harmonic contents in the output current are increased. The drive can then be heated up more strongly. With P342, the modulation depth factor can be limited gradually again (result in r345).		
	In function diagram: 390.8, 405.8		
P340* Pulse Frequency	Function parameter for entering the pulse frequency for asynchronous space vector modulation.	index1: 2,5 Min: 1,5 Max: 16,0 Unit: kHz Indices: 4 Type: O2	Menus: - Parameter menu + Gating unit - Drive setting - Uread/free access Changeable in: - Drive setting
340	Note: The setting range of the pulse frequency depends on the type of unit and on the settings of the open/closed loop control. (e.g. by selecting an output filter (see P068)).		
	If noise damping is active (P535>0), the pulse frequency is limited to a minimum value of 45*motor rated frequency (P107), otherwise to a minimum value of 30*P107 and at P107=83.3...104Hz to a minimum value of 2.5kHz.		
	Caution: If the pulse frequency is increased, P128 (maximum current) can be reduced (derating). If the pulse frequency is then reduced again, the changed value in P128 remains!		
	In function diagram: 390.6, 420.5, 405.5		

Parameter	Description	Data	Read/write
P342 Max ModulatDepth 342	<p>Function parameter for the maximum modulation depth of the modulator. The parameter defines the maximum possible output voltage. At a maximum modulation depth of 96%, the line voltage can be reached as output voltage.</p> <p>Setting instructions:</p> <ul style="list-style-type: none"> - High output voltages can be reached by using the edge modulation mode at a high modulation depth. Low parameter values prevent the change from space vector to edge modulation mode; the readable output voltage is lower. - The depth of modulation at the change from space vector to edge modulation depends on the type of the unit and the pulse frequency. - Typical values at 2.5 kHz: for a rated converter current <= 186 A: about 87 % at a rated converter current > 186 A: about 84 % - The change to an edge modulation system can be prevented with P339.. <p>Note:</p> <p>If a sinusoidal filter (P068 = 1) is used, the maximum modulation depth is so far reduced that the modulator only operates in the space vector modulation mode. The effective modulation depth limit is displayed in r345.</p> <p>In function diagram: 390.7, 405.7</p>	Min: 20,0 Max: 96,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + V/f open-loop control + Gating unit - Uread/free access Changeable in: - Drive setting - Ready
r343 Modulation Depth 343	<p>Visualization parameter for the current modulation depth of the modulator.</p> <p>In function plan: 390.8, 405.8</p>	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Control/gating unit + Current control + V/f open-loop control + Gating unit - Uread/free access
P344 ModDepth Headrm 344	<p>Function parameter for the headroom of the modulation depth.</p> <p>The parameter value reduces the maximum modulation depth (P342) during steady-state operation by reducing the setpoint voltage of the field weakening controller. During dynamic operation, this headroom remains essentially ineffective due to the reaction time of the controller. As a result, the maximum possible output voltage for torque and speed changes can be completely utilized.</p> <p>In function diagram: 380.2, 381.2</p>	index1: 0,0 Min: 0,0 Max: 50,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Control/gating unit + Speed control + Gating unit - Uread/free access Changeable in: - Drive setting - Ready
r345 Mod Depth Limit 345	<p>Visualization parameter for the maximum possible modulation depth.</p> <p>The limit is mainly influenced by the modulator and is always equal to or less than the value in P342 (e.g. if P069 = 1 sinusoidal filter has been selected or if P339 > 0 or when edge modulation is off).</p> <p>Note: The maximum possible modulation depth (approx. 93%) of the modulator at frequencies less than 28Hz is only taken into account in r346.</p> <p>In function diagram: 380.1, 381.1, 405.7</p>	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control + Current control + V/f open-loop control + Gating unit - Uread/free access

Parameter	Description	Data	Read/write
r346 Max Output Volts 346	Visualization parameter for the maximum possible output voltage. It is calculated from the maximum modulation depth of the modulator (P342) and the current DC link voltage. Note: The headroom for the modulation depth (P344) is allowed for in vector control modes.	Dec.Plc.: 1 Unit: V Indices: - Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control + V/f open-loop control + Gating unit - Uread/free access
P347 ON VoltsCompens.	Function parameter for the correction of the symmetrical valve voltage drops of the inverter IGBTs.	index1: ~ Min: 0,0 Max: 20,0 Unit: V	Menus: - Parameter menu + Gating unit - Uread/free access
347	The parameter value is pre-set during automatic parameterization (P115 = 1) or measured during motor data identification (P115 = 2, 3).	Indices: 4 Type: O2	Changeable in: - Drive setting - Ready
P348* Dead Time Comp.	Function parameter for selection of the deadtime compensation in the gating unit	Init: 1 Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Gating unit - Uread/free access
348	The deadtime compensation eliminates the voltage error which is obtained as a result of the interlock times in the gating unit. Compensation is enabled/disabled during automatic parameterization (P115 = 1). Parameter values: 0: no deadtime compensation in the gating unit 1: deadtime compensation in the gating unit enabled Setting instructions: For high pulse frequencies, for motors with low stator time constant (r_{125}) (positioning drives) and for long cables, it may be practical to disable the compensation in order to improve the smooth running characteristics at low speeds.	Init: ~ Min: 0,00 Max: 25,55 Unit: μ s Indices: - Type: O2	Changeable in: - Drive setting - Ready
P349 T(DeadTimeComp.)	Function parameter for the compensation time of the gating unit interlock.	Init: ~ Min: 0,00 Max: 25,55 Unit: μ s Indices: - Type: O2	Menus: - Parameter menu + Gating unit - Uread/free access
349	In the case of induction motors, the value is pre-set during motor data identification (P115 = 2, 3). Setting instructions: - For positioning drives or for the improvement of the smooth running characteristics at low frequencies, it may be practical to disable the compensation (P348 = 0). In this case, it is not permissible to reset P349, in order that the missing compensation voltage can be calculated internally from it. (Only for P100=3,4,5) - To improve the smooth running characteristics for the v/f control (P100=0,1,2) the compensation of the interlock time can be changed. - At high pulse frequencies (above approx. 6 kHz), it is not recommended to disable the compensation as the torque ripple would then increase again due to voltage areas in the range of the zero passages of the phase currents.	Init: ~ Min: 0,00 Max: 25,55 Unit: μ s Indices: - Type: O2	Changeable in: - Drive setting - Ready
P350* Ref Amps 350	Function parameter for entering the reference current. The value entered is for normalizing all current quantities and corresponds to a connector value of 4000 H (100 %). The closed-loop control system can process up to twice the value entered. In function diagram: 20.5	Init: ~ Min: 0,1 Max: 6553,5 Unit: A Indices: - Type: O2	Menus: - Parameter menu + Functions - Drive setting - Uread/free access
Changeable in: - Drive setting			

Parameter	Description	Data	Read/write
P351* Ref Volts 351	Function parameter for entering the reference voltage. The value entered is for normalizing all voltage quantities and corresponds to a connector value of 4000 H (100 %). The closed-loop control system can process up to twice the value entered. In function diagram: 20.5	Init: ~ Min: 100 Max: 2000 Unit: V Indices: - Type: O2	Menus: - Parameter menu + Functions - Drive setting - Uread/free access Changeable in: - Drive setting
P352* Ref Frequency 352	Function parameter for entering the reference frequency. The value entered is for normalizing all frequency quantities and corresponds to a connector value of 4000 0000 H (100 %). The closed-loop control system can process up to twice the value entered. Note: If the parameter is changed, P353 is automatically adjusted. Caution: By changing the parameter, the frequency limitations are changed as well. In function diagram: 20.5	Init: ~ Min: 4,00 Max: 600,00 Unit: Hz Indices: - Type: O2	Menus: - Parameter menu + Functions - Drive setting - Uread/free access Changeable in: - Drive setting
P353* Ref Speed 353	Function parameter for entering the reference speed. The value entered is for normalizing all the speed quantities and corresponds to a connector value of 4000 0000H (100 %). The closed-loop control system can process up to twice the value entered. Note: If the parameter is changed, P352 is automatically adjusted. Caution: By changing the parameter, the speed limitations are changed as well. In function diagram: 20.5	Init: ~ Min: 1 Max: 36000 Unit: 1/min Indices: - Type: O2	Menus: - Parameter menu + Functions - Drive setting - Uread/free access Changeable in: - Drive setting
P354* Ref Torque 354	Function parameter for entering the reference torque. The value entered is for normalizing all torque quantities and corresponds to a connector value of 4000 H (100 %). The closed-loop control system can process up to twice the value entered. Note: The reference power is the product of reference frequency and reference torque. Caution: By changing the parameter, the torque limitations are changed as well. In function diagram: 20.5	Init: ~ Min: 0,10 Max: Unit: Nm Indices: - Type: O4	Menus: - Parameter menu + Functions - Drive setting - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
P357 Sampling Time	Function parameter for the base sampling time T0 of the n/f/T control and the v/f control.	Init: 1,2 Min: 0,8 Max: 4,0 Unit: ms Indices: - Type: O2	Menus: - Parameter menu + Functions - Drive setting - Uread/free access Changeable in: - Drive setting
357	Setting instructions: - Before reducing the sampling time, the calculation time headroom should be checked (parameter r829) in the "Operating" state. A minimum headroom of 5 % should always be ensured to prevent the operation from programming a slow reaction. - If fault message F042 "Calculation time" occurs, the sampling time must be increased. In function diagram: 15.7		
P358* Key	Function parameter for entering the key. If the values in both index1: 0 indices tally with the values entered in Lock parameter P359 Unit: - other menus can also be selected in P060 as well as the menu "User Parameters" and the menu "Fixed settings".	Indices: 2 Type: L2	Menus: - User parameters- Parameter menu + Functions - Uread/free access Changeable in: - Drive setting
358			
P359* Lock	Function parameter for entering the password. If the same value is entered in both indices in the Key parameter, other menus can also be selected in P060 as well as the menu "User Parameters" and the menu "Fixed settings".	index1: 0 Unit: - Indices: 2 Type: L2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting
359			
P360* Select UserParam	Function parameter for selecting the parameters which are to be visible in the "User Parameters" menu. After selection of the "User Parameters" menu (P60 = 0), apart from parameters P53 and P60, only those parameters are visible whose numbers have been entered in indices 3 to 100.	index1: 60 Min: 0 Max: 2999 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
360			
P361* OP Backlight	Background lighting of the OP Paramter values: 0 = background lighting always active 1 = background lighting only active during operation.	Init: 1 Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
361			
P362* Copy MDS	Function call "Copy motor data set". In the last two figures of the parameter value, which source data set (penultimate figure, value range 1 to 4) is to be copied to which target data set (last figure, value range 1 to 4) is encoded. After the function has been performed, the parameter is automatically reset to "0". Function parameter at the start of function "Copy motor data set". This function enables the settings of a motor data set (index 1,2, 3 or 4) to be transferred to another data set. The start is carried out by a parameter setting not equal to 0. In the last two figures of the parameter value, which source data set (penultimate figure) is to be copied to which target data set (last figure) is encoded. After the function is performed, the parameter is automatically reset to 0. Examples: 0 = no activity 12 = copies Index 1 of MDS parameter in Index 2 31 = copies Index 3 of MDS parameter in Index 1 24 = kopiert Index 2 of MDS parameter in Index 4	Init: 0 Unit: - Indices: - Type: L2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting
362			

Parameter	Description	Data	Read/write
P363*	Function parameter for starting the "Copy BICO Data Set" function. With this function, the settings of one BICO data set (Index 1 or 2) are transferred to the other data set.	Init: 0 Unit: - Indices: -	Menus: - Parameter menu + Functions - Uread/free access
Copy BICO DSet	Starting takes place with a parameter setting not equal to 0. Type: L2 The last two digits of the parameter value indicate which source data set (penultimate digit) is to be copied to which target data set (last digit). After the function has been performed, the parameter is automatically reset to 0. 0 = No activity 12 = Copies Index 1 of the BDS parameters to Index 2 21 = Copies Index 2 of the BDS parameters to Index 1	Type: L2	Changeable in: - Drive setting
363			
P364*	Function call for "Copy Function Data Set". The last two digits of the parameter value indicate which source data set (penultimate digit, value range 1 to 4) is to be copied to which target data set (last digit, value range 1 to 4). After the function has been performed, the parameter is automatically reset to "0".	Init: 0 Unit: - Indices: -	Menus: - Parameter menu + Functions - Uread/free access
Copy FuncDSet	Function parameter for starting the "Copy Function Data Set" function. With this function, the settings of a function data set (Index 1, 2, 3 or 4) are transferred to another data set. Starting takes places with a parameter setting not equal to 0 The last two digits of the parameter value indicate which source data set (penultimate digit) is to be copied to which target data set (last digit). After the function has been performed, the parameter is automatically reset to 0.	Type: L2	Changeable in: - Drive setting
364			
	Examples 0 = No activity 12 = Copies Index 1 of the FDS parameters to Index 2 31 = Copies Index 3 of the FDS parameters to Index 1 24 = Copies Index 2 of the FDS parameters to Index 4		
P366*	Function parameter for selecting a factory setting or fixed setting. After the parameter reset (P970) has been started, the parameters are set to the selected setting.	Init: 0 Min: 0 Max: 10 Unit: - Indices: -	Menus: - Parameter menu + Functions
Select FactSet	Parameter values:	Type: O2	- Fixed settings - Uread/free access
366			Changeable in: - Drive setting - Drive setting
Compact PLUS only			
P366*	Function parameter for selecting a factory setting or fixed setting. After the parameter reset (P970) has been started, the parameters are set to the selected setting.	Init: 0 Min: 0 Max: 10 Unit: - Indices: -	Menus: - Parameter menu + Functions
Select FactSet	Parameter values:	Type: O2	- Fixed settings - Uread/free access
366			Changeable in: - Drive setting - Drive setting
not Compact PLUS			

Parameter	Description	Data	Read/write
P368*	Function parameter for selecting a setpoint/command sourceInit: 1 which is to be parameterized when a quick parameterization (P370) is carried out.		Menus: - Parameter menu - Quick parameterization - Uread/free access
Select Setp Src		Min: 0 Max: 8 Unit: - Indices: - Type: O2	Changeable in: - Drive setting
368	0 = - not used - 1 = Analog input and terminal strip 2 = Fixed setpoints and terminal strip 3 = Motor operated potentiometer and terminal strip 4 = USS 5 = - not used - 6 = PROFIBUS (CBP required) 7 = OP1S and fixed setpoints 8 = OP1S and motor operated potentiometer		
Compact PLUS only			
	Notes: During converter initialization, a parameter error may be displayed if the parameter does not correspond with the factory setting P366:		
	P366 P368 =0 =0...8 =1 =7 =2 =7 =3 =0 =4 =8 >4 =0...8		
	If the values do not correspond, P368 has to be adapted (in P60=3).		
P368*	Function parameter for selecting a setpoint and command source which is to be parameterized when a quick parameterization (P370) is carried out.	Init: 1 Min: 0 Max: 8 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Functions - Quick parameterization - Uread/free access
Select Setp Src			Changeable in: - Drive setting
368	0 = PMU 1 = Analog input and terminal strip 2 = Fixed setpoints and terminal strip 3 = Motor operated potentiometer and terminal strip 4 = USS 5 = SIMOLINK (cannot currently be implemented) 6 = PROFIBUS (CBP required) 7 = OP1S and fixed setpoints 8 = OP1S and motor operated potentiometer		
not Compact PLUS			
	Notes: During converter initialization, a parameter error may be displayed if the parameter does not correspond with the factory setting P366:		
	P366 P368 =0 =0...8 =1 =7 =2 =7 =3 =0 =4 =8 >4 =0...8		
	If the values do not correspond, P368 has to be adapted (in P60=3)		
P370*	Function parameter for starting quick parameterization. When quick parameterization is selected, the unit is parameterized according to the selected parameter modules	Init: 0 Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Functions - Quick parameterization - Uread/free access
Quick Param			Changeable in: - Drive setting
370	0 = No quick parameterization 1 = Start quick parameterization		
	After quick parameterization has been completed, the parameter is reset to 0.		

Parameter	Description	Data	Read/write
P371 Selectivity 371	In configurations where one drive is feeding a number of parallel motors, in the case of a failure (short circuit, ground fault, motor blocked) one of these motors may be disconnected from the drive by blowing its fuses. This function can be selected with "Selectvity".	Init: 0 Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting
	IMPORTANT. If the selectivity function is selected, there is no protection available against a terminal short circuit, but the overcurrent protection is still active.		
	Parameter values: 0: Selectivity OFF 1: Selectivity ON		
	Precondition: P095 = 10, 11, 12 (induction motor, sync.perm.)		
P372* Simulation Mode 372	Function parameter for selecting simulated operation. Simulated operation allows test operation of the drive without DC link voltage. The unit must, therefore, have an external V supply. Simulated operation can not be selected if the DC link voltage is more than 5 % of the rated DC link voltage.	Init: 0 Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting
	0 = Simulated operation not active 1 = Simulated operation active		
P373* Auto Restart 373	Parameter for enabling the auto restart after power outage. Parameter values: x0 = blocked x1 = only power outage fault reset x2 = when power returns, drive turns on again after the wait time (P374) x3 = immediately after power return, the drive turns on and performs the "flying restart" function.	index1: 0 Min: 0 Max: 13 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting
	11,12,13 = In addition to F008, F006 is also acknowledged.		
	Note:: Independently of the status of the control word bit "Flying restart", the "Flying restart function is always released at P373 = 3, 13, i.e. also at every ON command. If a permanently excited synchronous motor is connected, auto restart is only enabled if a speed controller is present.		
	IMPORTANT. It must be ensured by external safety means that the drive cannot start unintentionally!		
P374 AutoRestart Wait 374	Wait time between return of power and automatic driver restart if auto restart is on. Note: The wait time is not effective if the "Flying restart" function (via P373 = 3, 13 or P583 is active. The coasting time of the drive should be set.	index1: 0 Min: 0 Max: 650 Unit: s Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P375* Ground Flt Test 375	<p>Function parameter for enabling the ground fault test.</p> <p>The ground fault test is carried out during enabling after the ON command and before the motor starts up. The motor cables are checked to see if they show any ground fault.</p> <p>0 = no ground fault test 1 = ground fault test once only after the next ON command (Parameter is reset to 0 afterwards) 2 = ground fault test after every ON command 3 = no ground fault test, even not during motor data identification</p> <p>The ground fault test is not a protective function according to the VDE guidelines.</p>	Init: 1 Min: 0 Max: 3 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting
r376 GrdFltTestResult 376	<p>Result of ground fault test</p> <p>Bit-coded display of the reason which has caused the test to be broken off.</p> <p>Parameter values:</p> <p>Bit 0 =1: VCE Phase W Bit 1 =1: VCE Phase V Bit 2 =1: VCE Phase U Bit 3 =1: Overcurrent</p> <p>Bit 8 =1: negative IW Bit 9 =1: positive IW Bit 10 =1: negative IU Bit 11 =1: positive IU</p> <p>Attention! Bits 12 to 14 or the highest value nibble on the OP1S code the semiconductor which was triggered where the fault occurred.</p> <p>Bits 12 to 14 all OFF: no semiconductor triggered.</p>	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Functions - Uread/free access

Parameter	Description	Data	Read/write
r377 Meas Sect	Display of the actual measuring step of the motor data identification, The "100" digit displays the type of measurement: 1xx: ground fault test 2xx: test pulse measurement 3xx: leakage inductance measurement 4xx: DC current measurement 5xx: tachometer test 6xx: no-load measurement 7xx: optimization of n/f controller. For a ground fault test and test pulse measurement for converters switched in parallel, the "ones" position allows a differentiation to be made as to which partial inverter is currently executing the measurement. 1x1: ground fault test inverter 1 1x2: ground fault test inverter 2 2x1: test pulse measurement inverter 1 2x2: test pulse measurement inverter 2 2x3: test pulse measurement of both inverters. The "tens" digit separates the measurement into several steps. The detailed meaning depends on the "100" digit: 10x: ground fault test selected 11x: no transistor ON 12x: transistor V+ ON 13x: transistor V- ON 14x: transistor U+ ON 15x: transistor U- ON 16x: transistor W+ ON 17x: transistor W- ON 20x: test pulse measurement selected 21x: U+, V-, W- triggered 22x: U-, V+, W+ triggered 23x: U-, V-, W+ triggered 24x: U+, V+, W- triggered 25x: U+, V-, W+ triggered 26x: U-, V+, W- triggered 300: leakage measurement selected 310, 320: measurement in phase direction V 330, 340: measurement in phase direction W 350, 360: measurement in phase direction U 40x: DC measurement selected 41x: measurement in phase direction U 42x: measurement in phase direction V 43x: measurement in phase direction W 44x: performance of parameterization 50x, 60x, 70x: function selected 51x, 61x, 71x: drive is accelerating 52x, 62x, 72x: measurement at constant speed 53x, 63x, 73x: measurement at n/f setpoint 54x, 64x, 74x: oscillation test 55x, 65x, 75x: performance of parameterization. The "ones" digit displays more details of the steps: 4x0, 5x0, 6x0, 7x0: not active 4x1, 5x1, 6x1, 7x1: waiting 4x2, 5x2, 6x2, 7x2: data recording 4x3, 5x3, 6x3, 7x3: data evaluation 4x4, 5x4, 6x4, 7x4: setting parameter values	Dec.Plc.: 0 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Functions - Uread/free access
377	0: not activated 1: delay time for fan The "100" digit displays the type of measurement: 1xx: ground fault test 2xx: test pulse measurement 3xx: leakage inductance measurement 4xx: DC current measurement 5xx: tachometer test 6xx: no-load measurement 7xx: optimization of n/f controller. For a ground fault test and test pulse measurement for converters switched in parallel, the "ones" position allows a differentiation to be made as to which partial inverter is currently executing the measurement. 1x1: ground fault test inverter 1 1x2: ground fault test inverter 2 2x1: test pulse measurement inverter 1 2x2: test pulse measurement inverter 2 2x3: test pulse measurement of both inverters. The "tens" digit separates the measurement into several steps. The detailed meaning depends on the "100" digit: 10x: ground fault test selected 11x: no transistor ON 12x: transistor V+ ON 13x: transistor V- ON 14x: transistor U+ ON 15x: transistor U- ON 16x: transistor W+ ON 17x: transistor W- ON 20x: test pulse measurement selected 21x: U+, V-, W- triggered 22x: U-, V+, W+ triggered 23x: U-, V-, W+ triggered 24x: U+, V+, W- triggered 25x: U+, V-, W+ triggered 26x: U-, V+, W- triggered 300: leakage measurement selected 310, 320: measurement in phase direction V 330, 340: measurement in phase direction W 350, 360: measurement in phase direction U 40x: DC measurement selected 41x: measurement in phase direction U 42x: measurement in phase direction V 43x: measurement in phase direction W 44x: performance of parameterization 50x, 60x, 70x: function selected 51x, 61x, 71x: drive is accelerating 52x, 62x, 72x: measurement at constant speed 53x, 63x, 73x: measurement at n/f setpoint 54x, 64x, 74x: oscillation test 55x, 65x, 75x: performance of parameterization. The "ones" digit displays more details of the steps: 4x0, 5x0, 6x0, 7x0: not active 4x1, 5x1, 6x1, 7x1: waiting 4x2, 5x2, 6x2, 7x2: data recording 4x3, 5x3, 6x3, 7x3: data evaluation 4x4, 5x4, 6x4, 7x4: setting parameter values	Dec.Plc.: 0 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Functions - Uread/free access

Parameter	Description	Data	Read/write
P379 ambient temp. 379	Function parameter for the ambient temperature of the motor at the time of motor data identification or at the setting point of the stator (P121) and rotor resistance (P127). Notes: - The ambient temperature has to be entered prior to motor data identification. - An accuracy of +/- 10°C is adequate.. - Identification should be carried out on a cold motor (ambient temperature = stator temperature = rotor temperature) - The highest accuracy at temperature adaption can be achieved with a connected KTY84 sensor (P386=2). Precondition: P386 > 0 (temperature adaption active)	Min: -40,00 Max: 80,00 Unit: °C Indices: 4 Type: I2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
P380* Mot Tmp Warning 380	Function parameter for entering the temperature threshold which the alarm message "Motor overtemperature" (A023) is tripped. Example: for isolation class B: <= 110 °C (60 K-value is at 1FK6/1FT6) for isolation class F: <= 145 °C (100 K-value is at 1FK6/1FT6) Description for setting: a parameter value > 0 activates this function	Min: 0 Max: 200 Unit: °C Indices: 4 Type: I2	Menus: - Parameter menu + Diagnostics + Faults/warnings + Functions - Drive setting - Uread/free access Changeable in: - Drive setting - Drive setting - Ready
P381* Mot Tmp Fault 381	Function parameter for entering the temperature threshold which the fault message "Motor overtemperature" (F020) is tripped. Example: for isolation class B: <= 120 °C (60 K-value is at 1FK6/1FT6) for isolation class F: <= 155 °C (100 K-value is at 1FK6/1FT6) Setting instructions: The PTC evaluation is activated by setting P381=1. The PTC thermistor evaluation identifies an overtemperature condition if the PTC thermistor resistance is > 1.5KOhm. The temperature sensing using a KTY84 sensor is activated for a setting value P381>1.	Min: 0 Max: 200 Unit: °C Indices: 4 Type: I2	Menus: - Parameter menu + Diagnostics + Faults/warnings + Functions - Drive setting - Uread/free access Changeable in: - Drive setting - Drive setting - Ready
P382* Motor Cooling 382	The type of motor cooling has an influence on the calculation of the permissible load cycle during the I2t monitoring for the motor. The parameter value 1 (= factory setting) has to be selected for all 1FT6 and 1FK6 motors. Parameter values: 0: self-cooled 1: force-cooled	Min: 0 Max: 1 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Diagnostics + Faults/warnings + Functions - Quick parameterization - Drive setting - Uread/free access Changeable in: - Drive setting - Drive setting - Ready

Parameter	Description						Data	Read/write																																																																																																																																																																																																																																																																																																																																																															
P383 Mot ThermT-Const 383	Thermal time constant of motor Setting instructions: The i_t^* calculation is activated by a parameter value ≥ 100 seconds. Example: for a 2-pole 1LA5063 motor, the value should be set to 8 min (from the table) *60s/min = 480s .						index1: 100 Min: 0 Max: 16000 Indices: 4 Type: O2	Menus: - Parameter menu + Diagnostics + Faults/warnings + Functions - Quick parameterization - Drive setting - Upread/free access Changeable in: - Drive setting - Drive setting - Ready																																																																																																																																																																																																																																																																																																																																																															
	The thermal time constants for Siemens standard motors are indicated in the following table (in minutes)																																																																																																																																																																																																																																																																																																																																																																						
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<tr><td>1LA5113</td><td>14</td><td>11</td><td>13</td><td>12</td><td>-</td><td>-</td></tr> <tr><td>1LA5130</td><td>11</td><td>10</td><td>13</td><td>10</td><td>-</td><td>-</td></tr> <tr><td>1LA5131</td><td>11</td><td>10</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>1LA5133</td><td>-</td><td>10</td><td>14</td><td>10</td><td>-</td><td>-</td></tr> <tr><td>1LA5134</td><td>-</td><td>-</td><td>16</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>1LA5163</td><td>15</td><td>19</td><td>20</td><td>12</td><td>-</td><td>-</td></tr> <tr><td>1LA5164</td><td>15</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>1LA5166</td><td>15</td><td>19</td><td>20</td><td>14</td><td>-</td><td>-</td></tr> <tr><td>1LA5183</td><td>25</td><td>30</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>1LA5186</td><td>-</td><td>30</td><td>40</td><td>45</td><td>-</td><td>-</td></tr> <tr><td>1LA5206</td><td>30</td><td>-</td><td>45</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>1LA5207</td><td>30</td><td>35</td><td>45</td><td>50</td><td>-</td><td>-</td></tr> <tr><td>1LA6220</td><td>-</td><td>40</td><td>-</td><td>55</td><td>-</td><td>-</td></tr> <tr><td>1LA6223</td><td>35</td><td>40</td><td>50</td><td>55</td><td>-</td><td>-</td></tr> <tr><td>1LA6253</td><td>40</td><td>45</td><td>50</td><td>60</td><td>-</td><td>-</td></tr> <tr><td>1LA6280</td><td>40</td><td>50</td><td>55</td><td>65</td><td>-</td><td>-</td></tr> <tr><td>1LA6283</td><td>40</td><td>50</td><td>55</td><td>65</td><td>-</td><td>-</td></tr> <tr><td>1LA6310</td><td>45</td><td>55</td><td>60</td><td>75</td><td>-</td><td>-</td></tr> <tr><td>1LA6313</td><td>-</td><td>55</td><td>60</td><td>75</td><td>-</td><td>-</td></tr> <tr><td>1LA6316</td><td>48</td><td>58</td><td>63</td><td>78</td><td>-</td><td>-</td></tr> <tr><td>1LA6317</td><td>-</td><td>58</td><td>63</td><td>78</td><td>-</td><td>-</td></tr> <tr><td>1LA6318</td><td>-</td><td>-</td><td>63</td><td>78</td><td>-</td><td>-</td></tr> 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</table>	Type	2-pole	4-pole	6-pole	8-pole	10-pole	12-pole	1LA5063	8	13	-	-	-	-	1LA5070	8	10	12	-	-	-	1LA5073	8	10	12	-	-	-	1LA5080	8	10	12	-	-	-	1LA5083	10	10	12	-	-	-	1LA5090	5	9	12	12	-	-	1LA5096	6	11	12	14	-	-	1LA5106	8	12	12	16	-	-	1LA5107	-	12	-	16	-	-	1LA5113	14	11	13	12	-	-	1LA5130	11	10	13	10	-	-	1LA5131	11	10	-	-	-	-	1LA5133	-	10	14	10	-	-	1LA5134	-	-	16	-	-	-	1LA5163	15	19	20	12	-	-	1LA5164	15	-	-	-	-	-	1LA5166	15	19	20	14	-	-	1LA5183	25	30	-	-	-	-	1LA5186	-	30	40	45	-	-	1LA5206	30	-	45	-	-	-	1LA5207	30	35	45	50	-	-	1LA6220	-	40	-	55	-	-	1LA6223	35	40	50	55	-	-	1LA6253	40	45	50	60	-	-	1LA6280	40	50	55	65	-	-	1LA6283	40	50	55	65	-	-	1LA6310	45	55	60	75	-	-	1LA6313	-	55	60	75	-	-	1LA6316	48	58	63	78	-	-	1LA6317	-	58	63	78	-	-	1LA6318	-	-	63	78	-	-	1LA831.	35	40	45	45	50	50	1LA835.	40	45	50	50	55	55	1LA840.	45	50	55	55	60	60	1LA845.	55	55	60	60	70	70	1LL831.	25	25	30	30	35	35	1LL835.	30	30	35	35	40	40	1LL840.	35	35	35	35	40	40	1LL845.	40	35	40	40	45	45	1LA135.	30	35	40	-	-	-	1LA140.	35	40	45	45	-	-	1LA145.	40	45	50	50	55	55	1LA150.	50	50	55	55	65	65	1LA156.	60	55	60	60	70	70	1LL135.	20	20	25	-	-	-	1LL140.	25	25	30	30	-	-	1LL145.	30	30	30	30	35	35	1LL150.	35	30	35	35	40	40	1LL156.	40	35	35	35	40	40	1LA7 motors: and 1LA5 motors		Type: 1PH610 1PH613 1PH616 1PH618 1PH620 1PH622 25 30 35 40 40 40 Exceptions:					
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1LA5063	8	13	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA5070	8	10	12	-	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA5073	8	10	12	-	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA5080	8	10	12	-	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA5083	10	10	12	-	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA5090	5	9	12	12	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA5096	6	11	12	14	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA5106	8	12	12	16	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA5107	-	12	-	16	-	-																																																																																																																																																																																																																																																																																																																																																																	
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1LA5163	15	19	20	12	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA5164	15	-	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																	
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1LA5183	25	30	-	-	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA5186	-	30	40	45	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA5206	30	-	45	-	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA5207	30	35	45	50	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA6220	-	40	-	55	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA6223	35	40	50	55	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA6253	40	45	50	60	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA6280	40	50	55	65	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA6283	40	50	55	65	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA6310	45	55	60	75	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA6313	-	55	60	75	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA6316	48	58	63	78	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA6317	-	58	63	78	-	-																																																																																																																																																																																																																																																																																																																																																																	
1LA6318	-	-	63	78	-	-																																																																																																																																																																																																																																																																																																																																																																	
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Parameter	Description	Data	Read/write
	<p>1PH7(=1PA6): Shaft height: 100 132 160 180 225 T1 in min 25 30 35 40 40</p> <p>1PL6: Shaft height: 180 225 T1 in min 30 30</p> <p>1PH4: Shaft height: 100 132 160 T1 in min 25 30 35</p> <p>If the utilization limit parameterized in P384 is exceeded, the diagnostic signal F021 is set.</p>		
	Precondition: P95 >=10 or P97=0		
P384*	<p>Function parameter for the messages of the motor load cycle</p> <p>monitor. The parameter is valid for all motor data sets.</p> <p>Reference value is the rated motor power.</p> <p>Indices: i001: WARN When the entered load value is reached, a warning message is edited via B0150/B0151</p> <p>i002: STOE When the entered load value is reached, a fault message is edited via B0152/B0153</p> <p>Visualization parameter: r008 (Motor utilization)</p> <p>Setting instructions: 0: no evaluation</p>	index1: 100 Min: 0 Max: 300 Unit: % Indices: 2 Type: O2	Menus: - Parameter menu + Diagnostics + Faults/warnings + Functions - Drive setting - Uread/free access Changeable in: - Drive setting - Drive setting - Ready
P385*	<p>BICO parameter for selecting the connector for the motor temperature. If the motor temperature is supplied by external sensors (e.g. via serial communication SCom2), and not via the internal KTY84 sensor, the parameter has to be adjusted, BDS to the relevant source.</p> <p>Note: The temperature is shown in normalization 4000H=100% (100%=256°C). The temperature is displayed in r009.</p> <p>Parameter values: 0245: Temperature from KTY84 Further values: Connector softwiring</p> <p>Precondition: P380 > 1 or P381 > 1 or P386 = 2 (and not P380 = 1 or P381 = 1) Temperature adaption with KTY sensor and no PTC thermistor evaluation.</p> <p>Note: If the PTC thermistor evaluation is selected (P380=1 or P381 = 1), the motor temperature is not indicated.</p> <p>In function diagram: 280.4</p>	index1: 245 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
P386* RotResistTmpAdap	<p>Function parameter for selecting the temperature adaption of the rotor and stator resistance.</p> <p>The adaption operates at loads above approx. 5 % - 10 % and in the range of the EMF model (B0253 = 1) with an electric motor model. As this model is dependent on very accurate speed measured values, it is only activated for speed/torque control (P100 = 4, 5) and when a pulse encoder is connected (P130=11,12).</p> <p>The adaption operates with a precise thermal motor simulation (3-mass model) outside of these conditions, e.g. for frequency control (P100 = 3) or in the current model range (B0253 = 0).</p> <p>The best adaption results can be achieved for speed/torque control with a pulse tachometer and stator temperature sensing (e.g.KTY84-sensor) (connector -X103).</p> <p>If the drive temperature has increased or fallen since the last motor identification, if the power supply has failed, if a motor data set was changed, parameters P386..P392 or the drive was re-commissioned (P60 = 5, 8) , the output temperatures of the 3-mass model and the resistance values are reset. Setting corresponding to the current motor temperature can be realized using a sensor. A new motor identification run is recommended if a sensor is not available.</p> <p>The stator resistance (r118) can also be adapted using the 3 mass model. In order to increase the accuracy of R(stator), before the identification run, the feeder resistance (P117) should be determined and entered.</p> <p>Parameter values: 0: not active 1: without temperature sensor (not for P095 >1) 2: with temperature sensor</p> <p>Notes: - All motor data (P095, P101 to P109) should be entered according to the motor rating plate. - After parameter P386 has been activated, the motor series (P387) should be selected. In this case, a possibly known feeder resistance is entered in P117, the cooling type (P382) and the ambient temperature (P379) selected and a motor identification run should be executed (P115 = 3 or 2, 4) in order to determine the actual values of rotor and stator resistance. - The adaption is automatically calculated, just the same as without KTY sensor, if the sensor feeder cable is open-circuit, is short-circuited or if the PTC thermistor is activated (P381 = 1)! - When the EMF model is switched out (P315 = 0 or P313 > f(max)), then only the 3-mass model operates for speed/torque control. These settings are not recommended, as the adaption accuracy is obtained from the combination with the electrical model. - A KTY sensor is also recommended for f- control (P100 = 3) or n/m control with analog tachometer, as this also corrects deviations of the ambient temperature from 20°C, inaccuracies for the rated motor speed (P108: rating plate possibly inaccurate) as well as deviations from the standard temperature rises (see P390) - The BICO parameter for the motor temperature (P385) must be correctly softwired for adaption with sensor (P386=2) (Normalization 40Hex=1°C).</p>	o index1: 0 Min: 0 Max: 2 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
386			

Precondition:

Parameter	Description	Data	Read/write
	P095 = 12, 13 (Synchronous motor, sync.perm.): Rs-adaption possible with temperature sensor. In function diagram: 430.5		
P387* Motor Series 387	Function parameter for selecting the motor series for the connected motor. When selecting one of the specified series P387 > 0), known motor characteristics are automatically transferred: e.g. type of internal fan (P389) Parameter values: 0: Foreign or unlisted motor 1: 1LA5/1LA7 series 2: 1LA6 series 3: 1LA8 series 4: 1LA1 series 5: 1PH6 series 6: 1PH7 series (identical to 1PA6 series) Setting notes: - If unlisted motors are selected, P388 to P392 can be individually adapted. Precondition: P386 > 0 (temperature adaption active) P095 = 10, 11 (induction motor)	index1: 1 Min: 0 Max: 7 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
P388 Motor Weight 388	Function parameter for the total weight of the motor. The value can be taken from the motor catalog. The more accurately it is known, the easier it is to calculate the thermal mass relationships. The value is pre-set during automatic parameterization (P11 = 1, 2, 3). Precondition: P386 > 0 (temperature adaption active)	index1: ~ Min: 5 Max: 9999 Unit: kg Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
P389 Internal Fan 389	Function parameter for selection of an internal fan. Motors of series 1LA1 and 1LA8 have a special internal fan (not to be confused with the fan at the end of the motor shaft). This has to be entered here. Motor with internal fan -> P389 = 1 Motor without internal fan -> P389 = 0 At P387 <> 0, P389 is automatically pre-set; manual changes are not effective. Precondition: Unlisted motor (P387 = 0)	index1: 0 Min: 0 Max: 1 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
	In function diagram: 430.4		

Parameter	Description	Data	Read/write
P390 Overtemp. Factor 390	Function parameter for evaluating the internally assumed standard temperature rises for sinusoidal operation (line supply temperature rises). All the temperature rises of stator (80K), rotor (100 K) and iron (50 K) are evaluated simultaneously with this factor. If the rotor temperature rise of the motor is known, then the relationship to 100 K can be entered here. If only the temperature rise of the stator is known, the relationship to 80 K has to be entered. The temperature rises due to converter operation (modulation losses) which are a function of both the pulse frequency (P340) and the output filter (P068 = 2) are automatically taken into account.	index1: 100,0 Min: 25,0 Max: 200,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
P391 K(overtemp.,rot) 391	Function parameter for an additional evaluation of the internally assumed standard temperature rise of the rotor from P390. Notes: - Total evaluation for the rotor is $P390 \cdot P391 \cdot 100K$ - As a result of the additional adjustment possibilities, any overtemperature ratios between the rotor and the stator can be realized.	index1: 100,0 Min: 25,0 Max: 200,0 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
P392 Iron Losses 392	Function parameter for making allowance for the iron losses in the motor. The value is referred to the rated motor apparent power ($1.732 \cdot P101 \cdot P102$). The iron losses affect both the electrical and the 3-mass model of temperature adaption. The value is pre-set during automatic parameterization. (P115 = 1, 2, 3).	index1: ~ Min: 0,05 Max: 10,00 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
	Precondition: Unlisted motor (P387 = 0)		
	In function diagram: 430.5		
	Precondition: Unlisted motor (P387 = 0)		
	In function diagram: 430.6		
	Precondition: Listed motor (P387 = 0)		
	In function diagram: 430.6		

Parameter	Description	Data	Read/write
r393 Model Temp.	Visualization parameter for the temperature values of the mass model for the adaption of rotor and stator resistance. For adaption with temperature sensor (P386 = 2) the stator temperature of the model T(s) is controlled to the measured temperature (r009). Only in this case will the ambient temperature T(u) deviate from P379. The difference between the ambient temperature and the real value is, for example, explained by the fact that the internally assumed temperature rise (80 K) does not tally with of the motor. Moreover, the hot point, not the average temperature, is recorded in the windings. During loading and relieving processes, T(u) also fluctuates on account of control processes. The temperatures are adapted during parameter adjustment of P127 (e.g. during standstill measurement P115 = 2, 3). Inaccuracies of P127 and in the rated motor slip resulting from the rated motor speed P108 can lead to implausible temperatures. Note: If no temperature sensor is available, a motor identification should be carried out whenever leaving start-up (P060 = 5), after changing motor data set, after changing parameters P386 to P392 or after every switching off of the electronic boards, because the model temperatures are then calculated back to the values of the last setting of P127. This is not necessary if the setting of R(rotor) (P127, r126) are in accordance with the currenttemperature conditions (e.g. motor has ambient temperature)..	Dec.Plc.: 2 Unit: °C Indices: 4 Type: I2	Menus: - Parameter menu + Functions - Uread/free access
393	Indices: i001 = T(l): rotor temperature i002 = T(s): stator temperature i003 = T(f): iron temperature i004 = T(u): ambient temperature Precondition: R(rotor) adaption selected (P386 > 0) In function diagram: 430.6		
P394* SrcStartDCBrake 394	BICO parameter for selecting the binector from which the command for starting the DC braking function is to be read in. Precondition: P395 = 2 (DC braking with selection via binector) In function diagram: 615	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
P395 DC Braking 395	Function parameter for the selection of DC braking of the motor for braking an induction motor without optional braking equipment. (Chopper, rectifier unit) ATTENTION: All loss energy concentrates in the motor, the danger of a local overheating of the motor exists!	index1: 0 Min: 0 Max: 2 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting
	Note: The function is only suitable for induction motors. Overcurrent interventions (alarm A020) can occur for overdimensioned motors (P102 > P072) when starting the DC braking function. In this case, the de-excitation time (P603) must be increased.		
	Parameter values: 0: Not selected 1: DC braking active with OFF3 command ("quick stop") 2: DC braking via binector (P394) activated.		
	Precondition: P095 = 10, 11 (induction motor)		
P396 DC Braking Amps 396	Setpoint of the DC injection braking current. The value is calculated during automatic parameterization (P115=1,2,3). Precondition: P395 = 1,2 (selection of DC injection braking)	index1: ~ Min: 0,0 Max: 6553,5 Unit: A Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
P397 DC Braking Time 397	Duration of DC injectin braking Precondition: P395 = 1,2 (selection of DC injection braking)	index1: 5,0 Min: 0,1 Max: 99,9 Unit: s Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
P398 DC Braking Freq 398	Start frequency for DC injection braking; after activating DC injection braking is performed below this frequency. Precondition: P395 = 1,2 (selection of DC injection braking)	index1: 100,0 Min: 0,1 Max: 600,0 Unit: Hz Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
P399* Special Access 399	Function parameter for special access	Init: 0 Min: 0 Max: 65535 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Functions - Uread/free access - Power section definition Changeable in: - Power section definition - Board configuration - Drive setting - Drive setting - Ready
P401* Fixed setpoint 1 401	Function parameter for entering fixed setpoint 1. The fixed setpoint is activated by means of the source specified by P580 and P581 by setting the relevant control word bits (see r551).	index1: 0,000 Min: -200,000 Max: 200,000 Unit: % Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P402* Fixed setpoint 2 402	Function parameter for entering fixed setpoint 2. The fixed setpoint is activated by means of the source specified by P580 and P581 by setting the relevant control word bits (see r551).	index1: 0,000 Min: -200,000 Max: 200,000 Unit: % Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P403* Fixed setpoint 3 403	Function parameter for entering fixed setpoint 3. The fixed setpoint is activated by means of the source specified by P580 and P581 by setting the relevant control word bits (see r551).	index1: 0,000 Min: -200,000 Max: 200,000 Unit: % Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P404* Fixed setpoint 4 404	Function parameter for entering fixed setpoint 4. The fixed setpoint is activated by means of the source specified by P580 and P581 by setting the relevant control word bits (see r551).	index1: 0,000 Min: -200,000 Max: 200,000 Unit: % Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P405* Fixed Setp 5 405	Function parameter for entering fixed setpoint 5. The fixed setpoing is activated by means of the source specified by P580 and P581 by setting the relevant control word bit (see r551).	index1: 0,000 Min: -600,000 Max: 600,000 Unit: Hz Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P406* Fixed Setp 6 406	Function parameter for entering fixed setpoint 6. The fixed setpoint is activated by means of the source specified by P580 and P581 by setting the relevant control word bit (see r551).	index1: 0,000 Min: -600,000 Max: 600,000 Unit: Hz Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P407* Fixed Setp 7 407	Function parameter for entering fixed setpoint 7. The fixed setpoint is activated by means of the source specified by P580 and P581 by setting the relevant control word bit (see r551).	index1: 0,000 Min: -600,000 Max: 600,000 Unit: Hz Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P408* Fixed Setp 8 408	Function parameter for entering fixed setpoint 8. The fixed setpoint is activated by means of the source specified by P580 and P581 by setting the relevant control word bit (see r551).	index1: 0,000 Min: -600,000 Max: 600,000 Unit: Hz Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P409* Fixed Setp 9 409	Function parameter for entering fixed setpoint 9. The fixed setpoint is activated by means of the source specified by P580 and P581 by setting the relevant control word bit (see r551).	index1: 0,0 Min: -36000,0 Max: 36000,0 Unit: 1/min Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P410* Fixed Setp 10 410	Function parameter for entering fixed setpoint 10. The fixed setpoint is activated by means of the source specified by P580 and P581 by setting the relevant control word bit (see r551).	index1: 0,0 Min: -36000,0 Max: 36000,0 Unit: 1/min Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P411* Fixed Setp 11 411	Function parameter for entering fixed setpoint 11. The fixed setpoint is activated by means of the source specified by P580 and P581 by setting the relevant control word bit (see r551).	index1: 0,0 Min: -36000,0 Max: 36000,0 Unit: 1/min Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P412* Fixed Setp 12 412	Function parameter for entering fixed setpoint 12. The fixed setpoint is activated by means of the source specified by P580 and P581 by setting the relevant control word bit (see r551).	index1: 0,0 Min: -36000,0 Max: 36000,0 Unit: 1/min Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P417* Src FSetp Bit2 417	BICO parameter for selecting the binector from which bit 2 for selecting a fixed setpoint is to be read in. For selecting a fixed setpoint, the states of bit 0 (P580), bit 1 (P581), bit 3 (P418) are also of significance.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P418* Src FSetp Bit3 418	BICO parameter for selecting the binector from which bit 3 for selecting a fixed setpoint is to be read in. For selecting a fixed setpoint, the states of bit 0 (P580), bit 1 (P581), bit 2 (P417) are also of significance.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
r419 # Active FSetp 419	Visualization parameter for displaying the number of the fixe Dec.Plc.: 0 setpoint currently active.	Unit: - Indices: - Type: O2	Menus: - Parameter menu + Setpoint channel - Uread/free access
r420 Active FSetp 420	Visualization parameter for displaying the value of the fixed setpoint currently active.	Dec.Plc.: 3 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access
P421* MOP (max) 421	Function parameter for entering the upper limit for the internal motor operated potentiometer. The value output by the motor operated potentiometer is limited to the entered limit in a positive direction.	Init: 100,0 Min: -200,0 Max: 200,0 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P422* MOP (min) 422	Function parameter for entering the lower limit for the internal motor operated potentiometer. The value output by the motor operated potentiometer is limited to the entered limit in a negative direction.	Init: 0,0 Min: -200,0 Max: 200,0 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P423* Src MOP inv. 423	BICO parameter for selecting the binector from which the signal for inverting the motor operated potentiometer is to be read in. If a change is made from inversion to non- inversion or vice versa, the output signal of the motor operated potentiometer does not alter abruptly but in the form of a ramp with the acceleration times and deceleration times entered in P431 and P432	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
r424 MOP (Out) 424	Visualization parameter for displaying the output value provided by the motor operated potentiometer for further processing.	Dec.Plc.: 2 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access
P425* Conf MOP 425	Function parameter for configuring the motor operated potentiometer. xxx0 = MOP output is not stored during OFF Starting point is stipulated by P426 after ON. xxx1 = MOP output is stored after OFF. After ON, the MOP is set to this value. xx0x = Ramp generator is not effective in automatic mode. xx1x = Ramp generator is always effective. x0xx = Acceleration without initial rounding x1xx = Acceleration with initial rounding	Init: 110 Unit: - Indices: - Type: L2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
P426* StartValue MOP 426	Function parameter for entering the starting value for the motor operated potentiometer. With appropriate parameterization in P425, the output value of the motor operated potentiometer is set to this value after ON command.	Init: 0,0 Min: -200,0 Max: 200,0 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
P427* Src Set MOP 427	BICO parameter for selecting the binector from which the command for setting the motor operated potentiometer is to be read in. When the edge of the signal rises, the set value is adopted.	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
P428* Src SetV MOP 428	BICO parameter for selecting the connector from which the set value for the motor operated potentiometer is to be read in.	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
P429* Src Auto Setp 429	BICO parameter for selecting the connector from which the automatic setpoint for the motor operated potentiometer is to be read in.	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
P430* Src Manual/Auto 430	BICO parameter for selecting the binector from which the command for switching the motor oper. potentiometer between manual and automatic is to be read in. In automatic operation (signal logical 1), an external setpoint is adopted by the ramp generator of the motor operated potentiometer. After switchover to manual operation (signal logical 0), the motor operated potentiometer can be moved, beginning from the last setpoint for automatic operation.	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
P431* MOP Accel Time 431	Function parameter for entering the acceleration time for the motor oper. potentiometer. The time is to be entered which the motor oper. potentiometer is to need for accelerating from zero to +/- 100 %. In the event of acceleration with initial rounding, the acceleration time increases. Rounding can be activated in P425.	Init: 10,0 Min: 0,0 Max: 1000,0 Unit: s Indices: - Type: O2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
P432*	Function parameter for entering the deceleration time for the motor oper. potentiometer. The time is to be entered which the motor oper. potentiometer is to need for decelerating from +/- 100 % to zero. In the event of deceleration with initial rounding, the deceleration time increases. Rounding can be activated in P425.	Init: 10,0 Min: 0,0 Max: 1000,0 Unit: s Indices: - Type: O2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
P433*	BICO parameter for selecting the connector from which additional setpoint 1 is to be read in. Additional setpoint 1 is added to the main setpoint in front of the ramp-function generator.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,K ,K	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
P434	Function parameter for entering the scaling factor for additional setpoint 1.	index1: 100,0C Min: -300,00 Max: 300,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
r437	Current additional setpoint 1 (switching-in in front of the ramp-function generator)	Dec.Plc.: 3 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access
P438*	BICO parameter for selecting the connector from which additional setpoint 2 is to be read in. Additional setpoint 2 is added to the main setpoint after the ramp function generator. Abrupt changes are directly passed on to the speed control.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,K ,K	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
P439	Function parameter for entering the scaling factor for additional setpoint 2.	index1: 100,0C Min: -300,00 Max: 300,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
r441	Parameter is only necessary for the parameter model of PROFIdrive V3 standard. Parameter is only visible if PROFIdrive V3 is set.	Dec.Plc.: 0 Unit: - Indices: - Type: N4	Menus: - Parameter menu - Uread/free access
r442	Current additional setpoint 2 (switching-in behind the ramp-function generator)	Dec.Plc.: 3 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access
P443*	BICO parameter for selecting the connector from which the main setpoint is to be read in.	index1: 58 Unit: - Indices: 2 ,BDS Type: L2 ,K ,K	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
P444	Function parameter for entering the scaling factor for the main setpoint.	index1: 100,0C Min: -300,00 Max: 300,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P445* Base Setpoint 445	Function parameter for entering the basic setpoint. The basic setpoint is added to the main setpoint.	index1: 0,0 Min: -200,0 Max: 200,0 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
r446 Main Setp (act) 446	Parameter is only necessary for the parameter model of PROFIdrive V3 standard. Parameter is only visible if PROFIdrive V3 is set.	Dec.Plc.: 0 Unit: - Indices: - Type: N4	Menus: - Parameter menu - Uread/free access
r447 Main Setp (act) 447	Current main setpoint	Dec.Plc.: 3 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access
P448 Jog Setp 1 448	Function parameter for entering jogging setpoint 1. Selection of the jogging setpoints and the transition to Jogging mode take place by means of the control word bits, Jogging bit 0 and Jogging bit 1 (P568, P569).	Init: 10,000 Min: -200,000 Max: 200,000 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P449 Jog Setp 2 449	Function parameter for entering jogging setpoint 2. Selection of the jogging setpoints and the transition to Jogging mode take place by means of the control word bits, Jogging bit 0 and Jogging bit 1 (P568, P569).	Init: 20,000 Min: -200,000 Max: 200,000 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
r451 n/f(set,total1) 451	Setpoint at the addition point in front of the ramp-function generator	Dec.Plc.: 3 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access
P452* n/f(max, FWD Spd) 452	Maximum setpoint for clockwise rotating field. Limitation by: - 5 times the rated motor frequency - pulse frequency (P761)	index1: 110,0 Min: 0,0 Max: 200,0 Unit: % Indices: 4 Type: I4	Menus: - Parameter menu + Setpoint channel - Drive setting - Uread/free access Changeable in: - Drive setting
P453* n/f(max,REV Spd) 453	Maximum setpoint for counter-clockwise rotating field. Limitation by: - 5 times the rated motor frequency - pulse frequency (P761)	index1: -110,0 Min: -200,0 Max: 0,0 Unit: % Indices: 4 Type: I4	Menus: - Parameter menu + Setpoint channel - Drive setting - Uread/free access Changeable in: - Drive setting
P455 Skip Value 455	Skip value for the setpoint in front of the ramp-function generator. Steady-state operation is not possible in the range of the positive and negative values of the skip frequency. Note: The setpoint frequency skipping is off at parameter values between 0.00 und 0.5*P456.	index1: 0,0 Min: 0,0 Max: 200,0 Unit: % Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P456 Skip Freq Width 456	Width of the skip frequency band in the setpoint channel; see description of P455	index1: 5,0 Min: 0,0 Max: 200,0 Unit: % Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P457* Min Setp 457	Minimum setpoint Min (amount) of the drive; same as frequency skipping around 0 with band width 2 * Min; effective for the setpoint in front of the ramp-function generator. Only the amount is taken into account. Given setpoint: Set: realized setpoint - - Min < set (coming from the lower value) < Min - Min - - Min < set (coming from the higher value) < Min + Min - 0 <= set (after turning ON) < Min + Min - - Min < set (after turning ON) < 0 - Min - Set > Min Set - Set < -Min Set Notes: The bits for selecting clockwise rotating field or counter-clockwise rotating field (see P571, P572) are taken into account.	index1: 0,0 Min: -200,0 Max: 200,0 Unit: % Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
r460 n/f(set,Ramp IN) 460	Setpoint at the ramp-function generator input	Dec.Plc.: 3 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access
P462 Accel. Time 462	Acceleration time of the ramp-function generator for acceleration from 0 to 100%. Unit: as defined in P463 (acceleration time unit) Note: The value is only increased during motor identification (P115 = 3.5) if the set acceleration time is too low and the unit (P463, P465) for acceleration and deceleration times is in seconds. (The drive cannot realize the set acceleration time as the torque limit was reached earlier).	index1: 10,0 Min: 0,0 Max: 999,9 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P463 Accel. Time Unit 463	Unit of the ramp-function generator acceleration time Parameter values: 0 = seconds 1 = minutes 2 = hours	index1: 0 Min: 0 Max: 2 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P464 Decel. Time 464	Deceleration time of the ramp-function generator for deceleration from 100% to 0% Unit: as defined in P465 (unit of deceleration time) Note: The value is only increased during motor identification (P115 = 3.5) if the set time is too small and the unit (P463, P465) for acceleration and deceleration is indicated in seconds. (The drive cannot realize the set deceleration time as the torque limit was reached earlier).	index1: 10,0 Min: 0,0 Max: 999,9 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P465 Decel. Time Unit 465	Unit of the deceleration time of the ramp-function generator Parameter values: 0 = seconds 1 = minutes 2 = hours	index1: 0 Min: 0 Max: 2 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P466 Decel. Time OFF3 466	Deceleration time OFF3 (quick stop) for deceleration from 100% to standstill Index 1: OFF3-deceleration time Index 2: Initial rounding time Setting instructions: - The set value must be high enough to prevent the drive from shutting down with a DC link overvoltage fault during "OFF3" quick stop. - At P100 = 0, 1, 2, 3 (v/f characteristic, f-control), overcurrent shutdowns may occur if the deceleration time is too low. - If at P100 = 3, 4, 5 (vector control types), deceleration during OFF3 does not take place at the torque limit, P466 can be reduced.	index1: 5,0 Min: 0,0 Max: 999,9 Unit: s Indices: 2 Type: O2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P467 ProtRampGen Gain 467	<p>Factor by which the acceleration time (P462) is extended (protective ramp-function generator)</p> <p>Notes</p> <p>V/f open-loop control types (P100 = 0, 1, 2):</p> <p>Protective ramp-function generator is active up to a frequency of 15 % of the rated motor frequency (P107). See ,FDS</p> <p>Section "Ramp-function generator RFG" in operating instructions, part 2</p> <p>f-control (P100 = 3):</p> <p>The protective ramp-function generator is active up to 1.1 times the changeover frequency to EMF model (P284).</p> <p>Acceleration is also influenced by the current settings (P202 P203, P204) with inactive EMF model (P284 = 0).</p> <p>During control of permanently excited synchronous motors (P100=3), the protective ramp-function generator (>=5) has to be set such that the drive does not stall during acceleration. Also at least 20% has to be input in P202.</p> <p>n/Torque control (P100 = 4, 5)</p> <p>The protective ramp-function generator is ineffective.</p> <p>The protective ramp-function generator is only active if the acceleration time (P463) is selected in seconds.</p> <p>During motor identification (P052 = 8, 10), the value is only increased if the set acceleration time is too low and the unit (P463, P465) for both acceleration and deceleration times is in seconds.</p> <p>Setting instruction: The parameter value 1.0 turns the protective ramp-function generator OFF.</p> <p>Precondition: P100 = 0, 1, 2, 3 (v/f open-loop control, f regulation.</p>	index1: 1,0 Min: 1,0 Max: 100,0 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P468 RGen Round Type 468	<p>Operating mode for rounding of the ramp-function generator</p> <p>0 = rounding is not effective if there is sudden reduction of the input value during acceleration</p> <p>1 = rounding is always effective. If there is a sudden reduction of the input value, overshooting may occur.</p>	Init: 0 Min: 0 Max: 1 Unit: - Indices: - ,FDS Type: O2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P469 Ramp StartSmooth 469	<p>Initial rounding time of the ramp-function generator</p> <p>During acceleration from 0 to 100%, the actual acceleration time is increased to</p> $P462 * (1 + P469 / 2 + P470 / 2)$ <p>Precondition: P463 = 0, P466 = 0 (acceleration and deceleration times are in seconds)</p>	index1: 0,50 Min: 0,00 Max: 10,00 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P470 Ramp End Smooth 470	<p>Final rounding time of the ramp-function generator</p> <p>During acceleration from 0 to 100%, the actual acceleration time is increased to</p> $P462 * (1 + P469 / 2 + P470 / 2)$ <p>Precondition: P463 = 0, P465 = 0 (acceleration and deceleration times are in seconds)</p>	index1: 0,50 Min: 0,00 Max: 10,00 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P471 Scale Torq(PRE)	Function parameter for the gain of the n/f controller precontrol.	index1: ~ Min: 0,0 Max: 200,0	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
471	The acceleration torque is calculated from the speed setpoint Unit: % changes at the ramp-function generator output (r478) taking Indices: 4 into consideration the moment of inertia (see P116). Type: O2 Accelerations due to additional setpoint 2 in the setpoint channel are not accounted for in the calculation. The value is pre-assigned with 0.0% during automatic parameterization (P115 = 1, 2) and with 100.0% during n/f controller optimization (P115 = 3, 5). Setting instructions: 0.00%: Precontrol inactive 100.0%: Precontrol of the n/f controller with rated motor torque at the time indicated in P116 Precondition: P100 = 3, 4 (n/f control) in function diagram: 317.7		
P473* SrcScaleT(FWD) 473	BICO parameter for selecting the connector from which the precontrol torque or moment of inertia is to be evaluated. If connected to connector K0156 (n/f-Reg.gain(act)), the precontrol torque is multiplied by the factor Gain/Gain1 = r237/P235. Precondition: P100=3,4 Function diagram: 317.7	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
P475 Ramp Limitation 475	Ramp-function generator tracking function The output value of the ramp-function generator is tracked according to the maximum possible acceleration of the drive Max: 50,0 The reference value is the deviation at the speed controller input which is necessary in order to ensure acceleration at the torque limit of the motor. Setting instructions: The value 0.0 deactivates the ramp-function generator tracking. - The higher the parameter value, the greater is the permissible deviation between the n/f setpoint and the actual value. Precondition: P100 = 4 (n control)	Init: 0,0 Min: 0,0 Max: 50,0 Unit: % Indices: - Type: O2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P476 RampGen Act Hyst 476	Hysteresis for the message "Ramp-function generator active" The "Ramp-function generator active" message is output if the deviation between ramp-function generator input and output	Init: 1,0 Min: 0,0 Max: 20,0 Unit: % Indices: - Type: O2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P477* Src Set Rgen 477	Parameter for selecting a binector with which the command to set the ramp-function generator is given. Setting value: P478 Acceptance upon positive edge. Note: internal setting processes of the ramp-function generator have priority.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P478* Src SetV Rgen 478	Parameter with which a connector can be selected from which the setting value for the ramp-function generator is read in. Acceptance of the setting value upon positive edge at P477.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,K ,K	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
r480 n/f(set,rampOUT)	Setpoint at the output of the ramp-function generator	Dec.Plc.: 3 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access
480			
r481 n/f(set,total2)	Setpoint at the addition point behind the ramp-function generator	Dec.Plc.: 3 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access
481			
r482 n/f(set)	Setpoint at the input of the v/f control or the n/f/T control	Dec.Plc.: 3 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Setpoint channel - Uread/free access
482			
P483* Src n/f(max,pos)	BICO parameter for selecting the connector from which the positive maximum speed is to be read in. The connector value reduces the fixed maximum speed. Only positive values are processed. The frequency limit in the gating unit is not tracked. During controller optimization and no-load measurement, the fixed maximum speeds are used.	index1: 2 Unit: - Indices: 2 ,BDS Type: L2 ,K ,K	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
483			
Function diagram: 316.7			
P484* Src n/f/(max,reg)	BICO parameter for selecting the connector from which the negative maximum speed is to be read in. The connector value increases the fixed minimum speed. Only positive values are processed and internally negated. The frequency limit in the gating unit is not tracked. During controller optimization and no-load measurement, the fixed maximum speeds are used.	index1: 2 Unit: - Indices: 2 ,BDS Type: L2 ,K ,K	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
484			
Function diagram: 316.7			
P486* Src Torque Setp	BICO parameter for selecting the connector from which the torque setpoint is to be read in. Precondition: P100=3,4,5	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
486			
P487 Scale Torq Sept	Function parameter for entering the scaling factor for the torque setpoint. Precondition: P100= 3,4,5	index1: 100,0C Min: -300,00 Max: 300,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
487			
r490 Torque Setpoint	Current torque setpoint, referred to the rated motor torque. Precondition: P100 = 3,4,5 (vector control types) Only effective for f/n control if operated as a slave drive (control word 2 bit 27 = 1). During f control, a torque setpoint under 1% of the rated motor torque causes the drive to decelerate in the range of the l model.	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access
490			
P492 FixTorque 1 Set	Fixed upper limit of the torque setpoint. To limit the regenerative output (in negative direction of rotation), P259 (Pw(gen, max)) has to be reduced and the Vdmax controller (P515) has to be activated. This is necessary if overvoltage shutdown occurs on converters without a rectifier unit and without a braking resistor. Precondition: P100 = 3, 4, 5 (vector control types)	index1: 100,0 Min: -200,0 Max: 200,0 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
492			

Parameter	Description	Data	Read/write
P493* Src FixTorque 1 493	BICO parameter for selecting the connector from which the upper torque limitation is to be read in. Precondition: P100=3,4,5	index1: 170 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
P494 FixTorque 1 Gain 494	Function parameter for entering the scaling factor for the upper torque limitation. Precondition: P100=3,4,5	index1: 100,0C Min: -300,00 Max: 300,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
r496 Fix Torque 1 496	Maximum value of the upper torque limit Precondition: P100 = 3,4,5 (vector control types)	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access
r497 Max Torque 1 497	Actual upper torque limit This value only differs from r496 in the torque control. Note: This value may be reduced by the power limitation (P259) or the current limitation (P128). Precondition: P100 = 3,4,5 (vector control types)	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access
P498 FixTorq 2 Set 498	Fixed lower limit of the torque setpoint. To limit the regenerative output (in positive direction of rotation), P259 (Pw(gen, max) has to be reduced and the Vdmax controller P515 has to be activated. This is necessary if overvoltage shutdown occurs on converters without a regenerative unit and without a braking resistor. Precondition: P100 = 3,4,5 (vector control types)	index1: -100,0 Min: -200,0 Max: 200,0 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P499* Src FixTorq 2 499	BICO parameter for selecting the connector from which the lower torque limitation is to be read in. Precondition: P100=3,4,5 (vector control types)	index1: 171 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
P500 Scale TorqLim2 500	Function parameter for entering the scaling factor for the lower torque limitation. Precondition: P100=3,4,5 (vector control types)	index1: 100,0C Min: -300,00 Max: 300,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
r502 Fix Torque 2 502	Maximum value of the lower torque limit Precondition: P100 = 3,4,5 (vector control types)	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access
r503 Max Torque 2 503	Actual lower torque limit. This value differs from r502 only in the torque control. Note: This value may be reduced by the power limitation (P259) or the current limitation (P126). Precondition: P100 = 3,4,5 (vector control types)	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access
P504 I Add Fsetp 504	Function parameter for entering a fixed setpoint for the additional current setpoint	index1: 0,0 Min: -200,0 Max: 200,0 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P505 Torq AddFSetp 505	Function parameter for entering a fixed setpoint for the additional torque setpoint Precondition: P100 = 3, 4, 5 (vector control types)	index1: 0,0 Min: -200,0 Max: 200,0 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P506* Src Torq Add 506	BICO parameter for selecting the connector from which the additional torque setpoint is to be read in. Precondition: P100=3,4,5 (vector control types)	index1: 87 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
P507 ScaleTorqAddSetup 507	Function parameter for entering the scaling factor for the additional torque setpoint. Precondition: P100=3,4,5 (vector control types)	index1: 100,0C Min: -300,00 Max: 300,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
P508* Src I Add 508	BICO parameter for selecting the connector from which the additional current setpoint is to be read in.	index1: 88 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting
P509 Scale I Add Setup 509	Function parameter for entering the scaling factor for the additional current setpoint.	index1: 100,0C Min: -300,00 Max: 300,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
r510 Torq AddSetup 510	Additional torque setpoint	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access
r511 I AddSetup 511	Additional current setpoint	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Setpoint channel - Uread/free access
P514 Auto Acknowl 514	Automatic acknowledgment of certain converter faults. If the same fault occurs more than twice in succession, the fault is no longer acknowledged. The following faults are not acknowledged: F038, F060, F061, F081, F090 to F115. Parameter values: 0: without automatic acknowledgement 1: with automatic acknowledgement	Init: 0 Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
P515 DC Bus Volts Reg 515	Function parameter for the limitation controller for DC link voltage; limits the DC link voltage during regenerative duty (e.g. fast reverse) to the maximum permissible value. Notes: - This function cannot replace a braking or rectifier unit during active regenerative loads! - If a braking unit or a rectifier unit is connected, the Vdmax controller should be disabled. Parameter values: 0: Disabled 1: Vdmax controller released With a Vdmax controller dynamic response of P516 = 0 %, the controller is switched off.	index1: 0 Min: 0 Max: 1 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting
P516 DC bus Volts Dyn 516	Function parameter for dynamic response of the Vdmax controller At P516 = 0 % the Vdmax controller is switched off. Precondition: P515 = 1 (select Vdmax controller)	index1: 25 Min: 0 Max: 200 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
P517 KIB/FLR 517	Function parameter for selecting the kinetic buffering (KIB) or index1: 0 flexible response (FLR) Kinetic buffering: Operation may be continued during short power outages by regenerating energy from the load / motor to the converter. Loads with high inertia and high speed allow longer sustaining periods Flexible response. The flexible response function enables the converter to continue to operate in the case of line voltage drops. The available output power is then reduced according to the current line voltage and the nominal converter current. The implementable control factor is limited to the range of space vector modulation if function (P517=2,3) is enabled. FLR with $f=const.$ is only permissible with v/f operating modes (P100=0,1,2). Note: The electronics power supply must be supported during flexible response by an external auxiliary power supply. Parameter values: 0: blocked 1: KIB enabled 2: FLN enabled with $U=f=const.$ 3: FLN enabled with $f=const.$ (only for P100=0,1,2)	index1: 0 Min: 0 Max: 3 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting
P518 KIB/FLR LowVolts 518	Function parameter for entering the application point of the KIB control or the FLR activation. Parameter contains the value of the DC link voltage at which it is fallen short of, the KIB or the FLR is activated (base value: rated DC link voltage: for AC units P071*1.32, for DC units P071). Exception: At P517=2 and characteristic mode (P100=0,1,2), the frequency is reduced as soon as the maximum possible output voltage is less than the setpoint voltage of the v/f characteristic. Precondition: P517 = 1,2,3	index1: 76 Min: 65 Max: 115 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P519 KIB/FLR Reg Dyn 519	Function parameter for the dynamic response of the controller for kinetic buffering (P517=1) for all types of control, or flexible response (P517=2, v/f= const.) for v/f characteristic (P100=0,1,2) At 0%, the KIB function is switched off.	index1: 25 Min: 0 Max: 200 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
P520 KIB/VdmaxRegGain 520	KIB / FLR / Vdmax controller gain. This parameter is only intended for service personnel.	Init: 25,0 Min: 0,0 Max: 999,9 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
P521 KIB/Vdmax Reg TI 521	Integration time constant of the KIB/FLR/Vdmax controller. This parameter is only intended for service personnel.	Init: 1,6 Min: 0,1 Max: 999,9 Unit: ms Indices: - Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
P522 KIB/Vdmax Reg TD 522	Differentiation time constant of the KIB/FLR/Vdmax controller. This parameter is only intended for service personnel.	Init: 40,0 Min: 0,0 Max: 999,9 Unit: ms Indices: - Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
P523 FLR Vd min 523	Function parameter for the value of the DC link voltage at which, if it is fallen short of, shutdown occurs with the fault message "Undervoltage DC link" (base value: rated DC link voltage: on AC units P071*1.32, on DC units P071). Precondition: P517 = 2, 3 (FLR enabled)	index1: 76 Min: 50 Max: 76 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
r524 Fly StandMeas 524	Visualization parameter for the currently valid values for the search function set in P527. Indices: 1: T(ent) in 0.1ms 2: I(threshold,average) 4000h=4*P102 3: I(threshold, end) 4000h=4*P102	Dec.Plc.: 0 Unit: - Indices: 3 Type: I2	Menus: - Parameter menu + Functions - Uread/free access
P525 Fly Search Amps 525	Function parameter for current setpoint injected into the motor for flying restart if no tachometer is used. The flying restart function must be enabled via the control bit (source see P583) or via P373 = 3 (automatic restart (only for induction motors)). The value is calculated during hte automatic parameterization mode (P115 = 1,2,3). Setting instructions: At P100=3 (f-control) a maximum of two times the rated magnetizing current (r119) is used Preconditions: P100 = 1, 3 (v/f control, f-control)	index1: ~ Min: 0,0 Max: 6553,5 Unit: A Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P526 Fly Search Speed 526	Function parameter for entering the search speed Frequency range which is to be passed during flying restart within 1 sec. without a tachometer is set. Preconditions: as for P525 and P100=0,1 (induction motor)	index1: 1,0 Min: 0,0 Max: 100,0 Unit: Hz Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
P527* Fly Stand Kp 527	Function parameter for changing the duration and threshold values for the standstill detection during flying restart without a speed controller (search). The parameter is only envisaged for service personnel. Indices: 1: Evaluation of duration of de-magnetizing 2: Evaluation of average current value 3: Evaluation of final current value	index1: 100,0 Min: 0,0 Max: 500,0 Unit: % Indices: 3 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
r528 Sync Status 528	Visualization parameter of the synchronization process Parameter values: 0 = synchronizing switched off 1 = frequency measurement active 2 = phase control active 3 = synchronized 4 = synchronization error Precondition: TSY board is present P100 = 1,2,3 (v/f control without n-controller, f-control) in function diagram X01.5	Dec.Plc.: 0 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Functions - Uread/free access
P529 SyncStartDelta f 529	Function parameter for entering the maximum permissible frequency deviation for start of synchronization. Synchronizing process will not start until target frequency - frequency of the synchronization converter < P529 not Compact PLUS Note: Upper limit is defined by synchronization controller limitation (P532) Precondition: TSY board is present P100 = 1,2,3 (v/f control without n-controller, f-control) in function diagram: X02.5	Init: 0,10 Min: 0,00 Max: 1,00 Unit: Hz Indices: - Type: I4	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
P530 Sync Angle(set) 530	Function parameter for entering the phase angle deviation setpoint for synchronization for adjusting the phase position of the synchronizing converter to that of the synchronizing signal of a target voltage system.	Init: 0,0 Min: -180,0 Max: 179,9 Unit: ° (alt) Indices: -	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting
not Compact PLUS	A negative parameter value means that the voltage system oType: I2 the synchronizing drive is delayed against the measured signal.		
	Example: - A converter is to be synchronized to phase R of a voltage system - A measured synchronization signal is derived from the delta voltage V_R-S -> P530 is set to -30° (converter compares its own voltage V_R with the measured signal V_R-S which has a phase shift of 30° electr.)		
	Precondition: TSY board P100 = 1,2,3 (V/f control without n-controller, f-control)		
	in function diagram: X02.3		
P531 Sync Window	Function parameter for entering the phase deviation for the synchronization fault message.	Init: 2,0 Min: 1,0 Max: 20,0 Unit: ° (alt) Indices: -	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting
531	The parameter defines the phase angle deviation which generates a synchronization fault message after synchronization of the frequency. If the tolerance range is exceeded, a previously issued synchronization signal to binector B0134 will not be withdrawn, but an alarm and the synchronization fault signal binector B0160 will be issued. Alarm, synchronization fault signal and synchronization signal can only be withdrawn by canceling the synchronization command (P582) or by an OFF command.	Type: I2	
not Compact PLUS	Precondition:: TSY board is present P100 = 1,2,3 (v/f control without n-controller, f-control)		
	in function diagram: X02.5		
P532 Sync f-max	Function parameter for the maximum operating range of the synchronization controller. The parameter describes the limitation of the synchronization controller to a frequency setting range.	Init: 0,20 Min: 0,00 Max: 1,00 Unit: Hz Indices: -	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting
532		Type: I4	
not Compact PLUS	During synchronization, a frequency step of maximum the entered value is possible. The lower value of the setting range is limited by the value o the maximum permissible frequency deviation at the beginning of the synchronization (P529).		
	Precondition: TSY board is present P100 = 1,2,3 (v/f control without n-controller, f-control)		
	in function diagram: X02.6		

Parameter	Description	Data	Read/write
r533 Sync Target Freq 533 not Compact PLUS	Visualization parameter for the measured target frequency during synchronization. Maximum value which can be displayed: 8 times rated motor frequency (P107). Precondition: TSY board is present P100 =1,2,3 (v/f control without n-controller, f-control) in function diagram: X02.3	Dec.Plc.: 3 Unit: Hz Indices: - Type: I4	Menus: - Parameter menu + Functions - Uread/free access
P534 Select Synchr 534 not Compact PLUS	Function parameter for selecting synchronization. During the synchronization of textile converters, the setpoint frequency has to be set the same for main and starting converters. During line synchronization, the setpoint frequency is automatically corrected to the line frequency. The sense of direction for synchronization can be determined via the polarity of the speed main setpoint or via the sense of direction selection (see P571, P572). Precondition: TSY board available P100 = 1,2,3 (v/f control without n controller, f control)	Init: 1 Min: 0 Max: 2 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting
P535 SIMO Sound 535	Function parameter for changing the noise spectrum of the machine; the parameter can result in reduction of noise with low pulse frequencies. Due to increased harmonics, it is necessary to set a minimum pulse frequency P340 of 45% of rated motor frequency when activating this function. Only then can SIMO Sound be switched on.	index1: 0 Min: 0 Max: 4 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Gating unit + Functions - Uread/free access Changeable in: - Drive setting - Ready
P536 n/f RegDyn(set) 536	Setting instruction: As the development of noise is essentially determined by mechanical vibrations of the entire machine, the various settings must be tried out. Parameter values: 0: not activated 1: noise level 1 2: noise level 2 3: noise level 3 4: noise level 4 Function parameter for setting the dynamic response of the speed control circuit. It is used as an optimization criterion for dimensioning the n/f controller (P115 = 3, 5). Note: A change will only become active if the n/f controller optimization is subsequently carried out (P115 = 3, 5)	index1: 50 Min: 10 Max: 200 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting - Ready
	Setting instructions: - For drives with gear play and/or shafts with strong torsion, optimization should be commenced with low dynamic response values (from 10%). - For drives with high requirements on synchronism and dynamic response, 200% should be selected. - In the case of encoder-free speed control (f-control), maximum values of approx. 100% are to be selected.		
	Precondition: P100 = 3,4,5 (Vector control modes);		

Parameter	Description	Data	Read/write
P537 n/f RegDyn(act)	Function parameter for the actual implemented dynamic response during n/f controller optimization	index1: 0 Min: 0 Max: 200 Unit: % Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting
537	Precondition: P100 = 3, 4, 5 (Vector control types)		
P538 n/f Reg Osc Freq	Function parameter for oscillating frequency	index1: 0,0 Min: 0,0 Max: 100,0 Unit: Hz Indices: 4 Type: O2	Menus: - Parameter menu + Functions - Uread/free access Changeable in: - Drive setting
538	The parameter contains oscillating frequency measured by the oscillation monitor of the n/f control circuit. The value 0 means that no oscillation was found.		
	Precondition: P100 = 3, 4, 5 (Vector control modes)		
r539 TestPulsesResult	Visualization parameter for test pulse results The results of the measured test pulses can be called up in bit-coded form. The index indicates the number of the test pulse and thus the switching status. 1 always means that the described event has happened during the measurement. Bit00: UCE W (L3) Bit01: UCE V (L2) Bit02: UCE U (L1) Bit03: Overcurrent Bit04: UCE W (L3) inverter 2 (parallel circuit) Bit05: UCE V (L2) inverter 2 (parallel circuit) Bit06: UCE U (L1) inverter 2 (parallel circuit) Bit07: Results okay Bit08: Iw > 0 Bit09: Iw < 0 Bit10: Iu > 0 Bit11: Iu < 0 Bit12, 13, 14: Switching status of inverter branches W, V and U 1: output terminal is connected to positive DC link bus, 0: output terminal is connected to negative DC link bus bit15: not used Indices: i00n corresp. to Tp0n, n = 1 to 18	Dec.Plc.: 0 Unit: - Indices: 18 Type: V2	Menus: - Parameter menu + Functions - Uread/free access
539			
r540 TachTest Result	Visualization parameter for the result of the tachometer test. Dec.Plc.: 0 The test is performed during the settings of the parameter P115 = 3, 4, 5, 7 At P115 = 5, 7 only individual parts of the tachometer test are carried out (function selection). Parameter values: 0: Test is not active or not yet completed 1: Tachometer signal correct 2: Analog tachometer adjustment (P138) was automatically adapted (only P115 = 3, 4). 3: The calculated analog tachometer adjustment was limited to the permissible value range (only P115 = 3, 4) 4: No speed signal was received. 5: The polarity of the speed signal is incorrect 6: A track signal of the pulse encoder is missing 7: The current analog tachometer scaling is incorrect (P138). (P115 = 5, 7) Proposal: Carry out the no-load measurement (P115 = 4) 8: The set number of pulses of the pulse encoder (P151) is incorrect. Precondition: P100 = 3, 4, 5 (Vector control modes)	Unit: - Indices: - Type: O2	Menus: - Parameter menu + Functions - Uread/free access
540			

Parameter	Description	Data	Read/write
r541 Mot ID R(Stator)	Visualization parameter for individual measurement results o the motor identification at standstill for the stator resistor + feeder resistances.	Dec.Plc.: 2 Unit: % Indices: 3	Menus: - Parameter menu + Functions - Uread/free access
541	Reference value is the rated motor impedance. Indices: i001 = Me U: result of measurement in phase direction U i002 = Me V: result of measurement in phase direction V i003 = Me W: result of measurement in phase direction W	Type: O2	
	For future use with induction machines.		
r542 Mot ID R(Rotor)	Visualization parameter for individual measurement results o the motor identification at standstill for the rotor resistor, referred to the rated motor impedance.	Dec.Plc.: 2 Unit: % Indices: 3	Menus: - Parameter menu + Functions - Uread/free access
542	Indices: i001 = Me U: result of measurement in phase direction U i002 = Me V: result of measurement in phase direction V i003 = Me W: result of measurement in phase direction W	Type: O2	
r543 Mot ID VoltsDrop	Visualization parameter for individual measurement results o the motor identification at standstill for the valve voltages.	Dec.Plc.: 2 Unit: V Indices: 3	Menus: - Parameter menu + Functions - Uread/free access
543	Indices: i001 = Me U: result of measurement in phase direction U i002 = Me V: result of measurement in phase direction V i003 = Me W: result of measurement in phase direction W	Type: O2	
r544 Mot ID Quadvolts	Visualization parameter for individual measurement results o the motor identification at standstill for the voltages vertical t the used current direction.	Dec.Plc.: 2 Unit: V Indices: 3	Menus: - Parameter menu + Functions - Uread/free access
544	Indices: i001 = Me U: result of measurement in phase direction U i002 = Me V: result of measurement in phase direction V i003 = Me W: result of measurement in phase direction W	Type: I2	
r545 Mot ID Dead Time	Visualization parameter for individual measurement results o the motor identification at standstill for the deadtime compensation. Display is in multiples of 50 nsec.	Dec.Plc.: 0 Unit: - Indices: 3	Menus: - Parameter menu + Functions - Uread/free access
545	Indices: i001 = Me U: result of measurement in phase direction U i002 = Me V: result of measurement in phase direction V i003 = Me W: result of measurement in phase direction W	Type: O2	
r546 MotId X(leakage)	Visualization parameter for individual measurement results o the motor identification at standstill for referred total leakage reactance.	Dec.Plc.: 1 Unit: % Indices: 12	Menus: - Parameter menu + Functions - Uread/free access
546	For future use with induction machines.	Type: O2	
r547 Time Const Match	Visualization parameter for time constant of the compensation function during leakage measurement.	Dec.Plc.: 0 Unit: μ s Indices: -	Menus: - Parameter menu + Functions - Uread/free access
547		Type: O2	
r550 Control Word 1	Visualization parameter for displaying control word 1. Bits 0 to 15 are displayed.	Dec.Plc.: 0 Unit: - Indices: -	Menus: - Parameter menu + Control and status words - Uread/free access
550		Type: V2	
r551 Control Word 2	Visualization parameter for displaying control word 2. Bits 16 to 31 are displayed.	Dec.Plc.: 0 Unit: - Indices: -	Menus: - Parameter menu + Control and status words - Uread/free access
551		Type: V2	
r552 Status Word 1	Visualization parameter for displaying status word 1. Bits 0 to 15 are displayed.	Dec.Plc.: 0 Unit: - Indices: -	Menus: - Parameter menu + Control and status words - Uread/free access
552		Type: V2	

Parameter	Description	Data	Read/write
r553 Status Word 2	Visualization parameter for displaying status word 2 Bits 16 to 31 are displayed.	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Control and status words - Uread/free access
553			
P554* Src ON/OFF1	BICO parameter for selecting the binector from which the ON/OFF command (control word 1, bit 0) is to be read in.	index1: 22 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
554 Compact PLUS only			
P554* Src ON/OFF1	BICO parameter for selecting the binector from which the ON/OFF command (control word 1, bit 0) is to be read in.	index1: 5 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
554 not Compact PLUS			
P555* Src1 OFF2(coast)	BICO parameter for selecting the 1st binector from which the OFF2 command (control word 1, bit 1) is to be read in. Further sources for the OFF2 command are selected in P556 and P557.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
555			
P556* Src2 OFF2(coast)	BICO parameter for selecting the 2nd binector from which the OFF2 command (control word 1, bit 1) is to be read in. Further sources for the OFF2 command are selected in P555 and P557.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
556			
P557* Src3 OFF2(coast)	BICO parameter for selecting the 3rd binector from which the OFF2 command (control word 1, bit 1) is to be read in. Further sources for the OFF2 command are selected in P555 and P556.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
557			
P558* Src1 OFF3(QStop)	BICO parameter for selecting the 1st binector from which the OFF3 command (control word 1, bit 2) is to be read in. Further sources for the OFF3 command are selected in P559 and P560.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
558			
P559* Src2 OFF3(QStop)	BICO parameter for selecting the 2nd binector from which the OFF3 command (control word 1, bit 2) is to be read in. Further sources for the OFF3 command are selected in P558 and P560.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
559			
P560* Src3 OFF3(QStop)	BICO parameter for selecting the 3rd binector from which the OFF3 command (control word 1, bit 2) is to be read in. Further sources for the OFF3 command are selected in P558 and P559.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
560			

Parameter	Description	Data	Read/write
P561* Src InvRelease 561	BICO parameter for selecting the binector from which the command for releasing the inverter (control word 1, bit 3) is to be read in.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P562* Src RampGen Rel 562	BICO parameter for selecting the binector from which the command for releasing the ramp generator (control word 1, bit 4) is to be read in.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P563* Src RampGen Stop 563	BICO parameter for selecting the binector from which the command for starting the ramp generator (control word 1, bit 5) is to be read in.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P564* Src Setp Release 564	BICO parameter for selecting the binector from which the command for releasing the setpoint (control word 1, bit 6) is to be read in.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P565* Src1 Fault Reset 565	BICO parameter for selecting the 1st binector from which the command for acknowledging a fault (control word 1, bit 7) is to be read in. Further sources for the fault acknowledgement are selected in P566 and P567.	index1: 2107 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P566* Src2 Fault Reset 566	BICO parameter for selecting the 2nd binector from which the command for acknowledging a fault (control word 1, bit 7) is to be read in. Further sources for the fault acknowledgement are selected in P566 and P567.	index1: 6107 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
Compact PLUS only			
P566* Src2 Fault Reset 566	BICO parameter for selecting the 2nd binector from which the command for acknowledging a fault (control word 1, bit 7) is to be read in. Further sources for the fault acknowledgement are selected in P566 and P567.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
not Compact PLUS			
P567* Src3 Fault Reset 567	BICO parameter for selecting the 3rd binector from which the command for acknowledging a fault (control word 1, bit 7) is to be read in. Further sources for the fault acknowledgement are selected in P565 and P566.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P568* Src Jog Bit0 568	BICO parameter for selecting the binector from which bit 0 for selecting a jogging setpoint and the command for startingUnit: - jogging operation (control word 1, bit 8) are to be read in. For Indices: 2 selecting a jogging setpoint, the status of bit 1 (P569) is also ,BDS important.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P569* Src Jog Bit1 569	BICO parameter for selecting the binector from which bit 0 for selecting a jogging setpoint and the command for startingUnit: - jogging operation (control word 1, bit 9) are to be read in. For Indices: 2 selecting a jogging setpoint, the status of bit 0 (P568) is also ,BDS important.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P571* Src FWD Speed 571	BICO parameter for selecting the binector from which the command for releasing the positive direction of rotation (control word 1, bit 11) is to be read in.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P572* Src REV Speed 572	BICO parameter for selecting the binector from which the command for releasing the negative direction of rotation (control word 1, bit 12) is to be read in.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P573* Src MOP UP 573	BICO parameter for selecting the binector from which the command for increasing the motor operated potentiometer (control word 1, bit 13) is to be read in.	index1: 8 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P574* Src MOP Down 574	BICO parameter for selecting the binector from which the command for lowering the motor operated potentiometer (control word 1, bit 14) is to be read in.	index1: 9 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P575* Src No ExtFault1 575	BICO parameter for selecting the binector from which the command for tripping an external fault 1 (control word 1, bit 15) is to be read in.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P576* Src FuncDSetBit0 576	BICO parameter for selecting the binector from which bit 0 for selecting a function data set (control word 2, bit 16) is to be read in. For the selection of a function data set, the statusIndices: 2 of bit 1 (P577) is important.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P577* Src FuncDSetBit1 577	BICO parameter for selecting the binector from which bit 1 for selecting a function data set (control word 2, bit 17) is to be read in. For the selection of a function data set, the statusIndices: 2 of bit 0(P576) is important.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P578* Src MotDSet Bit0 578	BICO parameter for selecting the binector from which bit 0 for selecting a motor data set (control word 2, bit 18) is to be read in. For selection of a motor data set, the state of Bit 1 (P579) is also of significance.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P579* Src MotDSet Bit1 579	BICO parameter for selecting the binector from which bit 1 for selecting a motor data set (control word 2, bit 19) is to be read in. For selection of a motor data set, the state of Bit 0 (P578) is also of significance.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P580* Src FixSetp Bit0 580	BICO parameter for selecting the binector from which bit 0 for selecting a fixed setpoint (control word 2, bit 20) is to be read in. For the selection of a fixed setpoint, the statuses of bit 1 (P581), bit 2 (P417) and bit 3 (P418) are important.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P581* Src FixSetp Bit1 581	BICO parameter for selecting the binector from which bit 1 for selecting a fixed setpoint (control word 2, bit 21) is to be read in. For the selection of a fixed setpoint, the statuses of bit 0 (P580), bit 2 (P417) and bit 3 (P418) are important.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P582* Src Sync Release 582 not Compact PLUS	BICO parameter for selecting the binector from which the command to enable the "Synchronizing" function (control word 2, bit 22) is to be read in. Binector values: 0: Synchronizing not enabled 1: Synchronizing enabled	index1: 5002 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
<p>Note:</p> <ul style="list-style-type: none">- For synchronizing, the TSY board is required, and the open loop/closed-loop control type v/f control for textile application (P100 = 2) has to be set.- For line synchronizations (see P534) the control modes f-control (P100=3) and v/f control (P100=1) are possible.			
<p>With the synchronizing enable, for synchronous motors (P95=12), the initial position of the position encoder can be reset (see B0134, B0135), if the position signal is not softwired (P172=0).</p>			
<p>Precondition: TSY board P100 = 1,2,3 (v/f control without n-controller, f-control) P95 = 12 (separately excited synchronous motor)</p>			
<p>in function diagram: X01.4</p>			

Parameter	Description	Data	Read/write
P583* Src Fly Release 583	BICO parameter for selecting the binector from which the command to enable the Flying restart function (control word 2, bit 23) is to be read in. Precondition: No permanently-excited synchronous motor (P95 <> 13)	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P584* Src Droop Rel 584	BICO parameter for selecting the binector from which the command for releasing the droop (control word 2, bit 24) is to be read in.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P585* Src n/f-Reg Rel 585	BICO parameter for selecting the binector from which the command to enable the speed controller (control word 2, bit 25) is to be read in. Precondition: P100 = 0,4,5 (v/f control with speed controller, n/T control).	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P586* Src No ExtFault2 586	BICO parameter for selecting the binector from which the command for tripping an external fault 2 (control word 2, bit 26) is to be read in. A signal, logical 0, causes a shutdown of the unit on faults after a waiting time of 200 ms after completion of pre-charging (converter status in r001 is larger than 10). With external fault 2, an external braking unit, for example, can be monitored.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P587* Src Master/Slave 587	BICO parameter for selecting the binector from which the command to change over between master and slave drive (control word 2, bit 27) is to be read in. Parameter values: 0: The control works with speed and frequency setpoints (master drive) 1: The control operates with torque setpoints (slave drive). Note: During the excitation time (P602), the control always operates as a master drive, but the gain of the n/f controller is blocked. Precondition: P100=3,4 (n/f control)	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P588* Src No Ext Warn1 588	BICO parameter for selecting the binector from which the command for tripping an external warning 1 (control word 2, bit 28) is to be read in.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P589* Src No Ext Warn2 589	BICO parameter for selecting the binector from which the command for tripping an external warning 2 (control word 2, bit 29) is to be read in.	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P590* Src BICO DSet 590	BICO parameter for selecting the binector from which the bit Init: 14 for selecting a BICO data set (control word 2, bit 30) is to be read in.	Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P591* Src ContactorMsg 591	BICO parameter for selecting the binector from which the check-back message of a main contactor (control word 2, bit 31) is to be read in. If a source for the check-back message of the main contactor is not parameterized (input value = 0), the check-back time parameterized in P600 is waited out after the ON command and then precharging is started. If a source for the check-back message of the main contactor is parameterized (input value not equal to 0), a transition to precharging only takes place when the check-back message is logical 1.	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Control and status words - Uread/free access Changeable in: - Drive setting - Ready
P600* ContactorMsgTime 600	Function parameter for entering the checkback time for a main contactor. If no source has been parameterized for the main contactor checkback (P591 > 0), the parameterized checkback time has to elapse after the ON command and then precharging is commenced. If no checkback signal is given, error F001 is triggered. If no source has been parameterized for the main contactor checkback (P591 = 0), the parameterized checkback time has to elapse after the ON command and then precharging is commenced. During this time, the main contactor has to close. If a main contactor is available, a checkback time of at least 120 ms is recommended. The checkback time is applicable both for energizing and de energizing the contactor. If the line contactor is controlled from the converter (via X9.7 and X9.9), the main contactor checkback time should be set to at least 120ms.	Init: 120 Min: 0 Max: 6500 Unit: ms Indices: - Type: O2	Menus: - Parameter menu + Sequence control - Uread/free access Changeable in: - Drive setting
Function diagrams: 91, 92, 93, 94			
P601* Src DigOutMCon 601 Compact PLUS only	BICO parameter for selecting the binector from which the command to control the main contactor (terminal -X102) is to be read.	index1: 124 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Terminals + Sequence control - Uread/free access Changeable in: - Drive setting
P601* Src DigOutMCon 601 not Compact PLUS	BICO parameter for selecting the binector from which the command for actuating the main contactor (terminal -X9) is to be read out.	index1: 124 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Terminals + Sequence control - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
P602 Excitation Time	Function parameter for determining the excitation time of the motor.	index1: ~ Min: 0,01 Max: 10,00	Menus: - Parameter menu + Sequence control - Uread/free access Changeable in: - Drive setting - Ready
602	Waiting time between pulse enable and ramp function generator enable. Within this time, the magnetization of the induction motor is built up.	Unit: s Indices: 4 Type: O2	
	The value is determined during automatic parameterization (P115=1) and motor data identification (P115=2, 3).		
	Notes: P100 = 0, 1, 2 (v/f control types): The magnetization is built up at frequency of 0 Hz and relevant curve voltage see P319 and P325). If smooth acceleration mode (P604 = 1) is selected, the voltage increases ramp-like instead of step-like. P100 = 3, 4, 5 (vector control types): The magnetization is ramped up. If smooth acceleration (P604 = 1) is selected, the flux increases in a parabolic way. P095 = 12 (synchronous motor). Within the excitation time, the rotor flux is built up via the excitation current r160. The external excitation current control has to be able to follow the flux build-up. (Dynamic behaviour as high as possible), as otherwise the fault message F012 "Current too low" will occur. At P602=0.01s, the excitation current setpoint is already output before pulse enable (from converter state "Precharging"), but only if the motor rotates more slowly than 2 % of rated speed. P095 = 13 (Sync.Perm.): Within the excitation time, the drive can align itself before the no-encoder open-loop or closed-loop control accelerate (see.also P467). During the excitation phase, the status bit "Flying restart active" is set (see B0132, B0133).		
	In function diagram: 380.3, 381.3, 405.4		
P603 De-MagnetizeTime	Function parameter for entering the de-excitation time for a connected induction motor.	index1: ~ Min: 0,00 Max: 10,00	Menus: - Parameter menu + Sequence control - Uread/free access Changeable in: - Drive setting
603	The de-excitation time is the wait time between switching off the drive and switching it on again. Within this time, there is a restart inhibit. During the de-excitation time, the induction motor de-magnetizes. If a synchronous motor is connected, the de-excitation time has to be set to 0.	Unit: s Indices: 4 Type: O2	
	The value is determined during automatic parameterization (P115 = 1) and motor data identification (P115 = 2, 3).		
	ATTENTION: After OFF1, OFF3 and JOG commands the de-excitation time is not active.		

Parameter	Description	Data	Read/write
P604 Smooth Accel 604	<p>Function parameter for selecting the smooth starting function index 1: 0</p> <p>For smooth starting, the flux in the motor is established with some delay. This is to ensure that even with residual magnetization, the motor only rotates in the required direction of rotation.</p> <p>P100 = 0, 1, 2 (v/f control types): When activated, the output voltage during energizing increases ramp-like to the curve voltage within the excitation time (P602).</p> <p>P100 = 3, 4, 5 (Vector control types): When smooth starting is activated, during energizing, the value of the flux setpoints (P291) increases in a parabolic way within the excitation time (P602).</p> <p>Parameter values: 0 = not active 1 = active</p> <p>Precondition: P095 = 10, 11, 12 (Induction motor, synchronous motor)</p> <p>In function diagram: 380.4, 381.4, 405.5</p>	Min: 0 Max: 1 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Sequence control - Uread/free access Changeable in: - Drive setting - Ready
P605 BrakeCtrl 605	Function parameter for selecting a brake control unit. 0 = Without brake 1 = Brake without check-back message 2 = Brake with check-back message	Init: 0 Min: 0 Max: 2 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Sequence control - Uread/free access Changeable in: - Drive setting
P606 BrakeOpenTime 606	Function parameter for entering the brake opening time. If there is a brake present (P605), the setpoint release is delayed by the set time. The brake can thus open safely before starting of the motor.	Init: 0,20 Min: 0,00 Max: 10,00 Unit: s Indices: - Type: O2	Menus: - Parameter menu + Sequence control + Diagnostics + Messages/displays - Uread/free access Changeable in: - Drive setting
P607 BrakeCloseTime 607	Function parameter for entering the brake closing time. If there is a brake present (P605), blocking of the firing pulses is additionally delayed by the set time after an OFF command. The brake can thus safely close before the motor is de-energised. In addition, the turn-off time set in P0801 must be greater than the sum of the set times in P617 and P607.	Init: 0,10 Min: 0,00 Max: 10,00 Unit: s Indices: - Type: O2	Menus: - Parameter menu + Sequence control + Diagnostics + Messages/displays - Uread/free access Changeable in: - Drive setting
P608* Src BrakeOpen 608	BICO parameter for selecting the binectors from which the command for opening the brake is to be read in.	index1: 104 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Sequence control - Uread/free access Changeable in: - Drive setting
P609* Src BrakeClose 609	BICO parameter for selecting the binectors from which the command for closing the brake is to be read in.	index1: 105 Unit: - Indices: 4 Type: L2 ,B	Menus: - Parameter menu + Sequence control - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
P610* Src BrakeThresh1 610	BICO parameter for selecting the connector from which the actual value for comparison with brake threshold 1 is to be read in. If the current component (K0242) is used, magnetizing in the case of induction motors and voltage boost in the case of v/f control can be monitored. A torque-generating current component (K0184) only results after setpoint enable.	Init: 242 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Sequence control - Uread/free access Changeable in: - Drive setting
P611 Brake Thresh 611	Function parameter for entering brake threshold 1, whereby, if this threshold is exceeded, the brake is to open.	Init: 0,0 Min: 0,0 Max: 200,0 Unit: % Indices: - Type: O2	Menus: - Parameter menu + Sequence control - Uread/free access Changeable in: - Drive setting - Ready
P612* Src SigBrakeOp 612	BICO parameter for selecting the binector from which the check-back message "Brake opened" is to be read in.	Init: 1 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Sequence control - Uread/free access Changeable in: - Drive setting
P613* Src SigBrakeClos 613	BICO parameter for selecting the binector from which the check-back message "Brake closed" is to be read in.	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Sequence control - Uread/free access Changeable in: - Drive setting
P614* Src PBrakeClos 614	BICO parameter for selecting the binector from which the command for closing a holding brake is to be read in.	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Sequence control - Uread/free access Changeable in: - Drive setting
P615* Src BrakeThresh2 615	BICO parameter for selecting the connector from which the actual-value for comparison with brake threshold 2 should be read in.	Init: 148 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Sequence control - Uread/free access Changeable in: - Drive setting
P616 BrakeThresh2 616	Function parameter for entering brake threshold 2. If the actual value falls below this threshold after an OFF command, the brake is closed and a firing-pulse block is initiated by the brake control unit (B278). The value entered here should not be smaller than the turn-off value parameterized in P800.	Init: 0,5 Min: 0,0 Max: 200,0 Unit: % Indices: - Type: O2	Menus: - Parameter menu + Sequence control - Uread/free access Changeable in: - Drive setting - Ready
P617 BrakeThresh2Time 617	Function parameter for entering the time by which closing of the brakes is to be delayed after an OFF command. If the threshold value falls below brake threshold 2 after an OFF command, closing of the brake is delayed by the time entered.	Init: 0,00 Min: 0,00 Max: 100,00 Unit: s Indices: - Type: O2	Menus: - Parameter menu + Sequence control + Diagnostics + Messages/displays - Uread/free access Changeable in: - Drive setting - Ready
P631* Analn Offset 631	Function parameters for entering the offset for the analog input on the terminal strip of the basic unit. The offset is added to the analog input signal. Indices: i001 = CU-1: Offset of the analog input 1 i002 = CU-2: offset of the analog input 2	index1: 0,00 Min: -20,00 Max: 20,00 Unit: V Indices: 2 Type: I2	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting

Parameter	Description		Data	Read/write
P632*	Configuration of analog inputs on the basic converter terminal strip. This determines which input signal values will be processed.		index1: 0 Min: 0 Max: 4 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting
Analn Conf 632	Parameter value 0 1 2 3 4	Input range -10V...10V 0V...10V -20mA... 20mA (not for AI1) 0mA... 20mA (not for AI1) 4mA... 20mA (not for AI1)		
P632*	Function parameter for configuring the analog inputs on the terminal strip of the basic unit. The value range of the input signal to be processed is selected.		index1: 0 Min: 0 Max: 4 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting
Analn Conf 632 not Compact PLUS	Parameter value 0 1 2 3 4	Input range -10V...10V 0V...10V -20mA... 20mA 0mA... 20mA 4mA... 20mA		
	Indices : i001 = CU-1: Configuration of analog input 1 i002 = CU-2: Configuration of analog input 2.			
P634*	Function parameter for entering the smoothing time constant for the analog inputs on the terminal strip of the basic unit.		index1: 4,0 Min: 0,0 Max: 1000,0 Unit: ms Indices: 2 Type: O2	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting - Ready
Analn Smooth 634	i001 = CU-1: Smoothing time constant of analog input 1 i002 = CU-2: smoothing time constant of analog input 2			
P636*	BICO parameter for selecting the binector from which the command for releasing the analog inputs on the terminal strip of the basic unit is to be read in. Without a release, the setpoints provided by the analog inputs is at 0.		index1: 1 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting
Src Analn Rel 636	Indices: i001 = CU-1: Release of the analog input 1 i002 = CU-2: Release of the analog input 2			
r637	Visualization parameter for displaying the setpoint provided by the analog input.		Dec.Plc.: 1 Unit: % Indices: 2 Type: I2	Menus: - Parameter menu + Terminals - Uread/free access
Analn Setp 637	i001 = CU-1: Setpoint of the analog input 1 i002 = CU-2: Setpoint of the analog input 2			
P638*	Function parameter for selecting wire break monitoring for the analog inputs of the CU board. Monitoring is only active with the configuration P632.x = 2 (4-20mA). In the factory setting (P638.x=0), a fault message is generated when the permitted input value range is left. No fault message is generated with the setting P638.x=1, but the binectors B0031 and B0032 display that the permitted input value range has been left.		index1: 0 Min: 0 Max: 1 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting
AI Monitor 638	i001 = CU-1: Wire break monitoring of analog input 1 i002 = CU-2: Wire break monitoring of analog input 2			
P640*	BICO parameter for selecting the connectors whose values are to be output at the analog outputs of the terminal strip of the basic unit.		index1: 148 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting - Ready
Src AnaOut 640	Indices: i001 = CU-1: Connector number to analog output 1 i002 = CU-2: connector number to analog output 2			

Parameter	Description	Data	Read/write
P643 CU AnalogOutGain 643	Proportional gain of the analog outputs on the CU Parameter values: P643.x = desired output voltage at connector value (PWE) = 100 % The output voltage is calculated according to the following equation: $U_{off} = PWE / 100 \% * P643.x + P644.x$ Indices: i001=CU-1: calculated output voltage of channel 1 at PWE = 100 % i002=CU-2: calculated output voltage of channel 2 at PWE = 100 % Note: The output voltage at the analog output can be at the maximum $\pm 10 \text{ V}$	index1: 10,00 Min: -320,00 Max: 320,00 Unit: V Indices: 2 Type: I2	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting - Ready
P644 CU-AnalogOutOff 644	Offset of analog outputs on the CU, see P643. Indices: i001 = CU-1: Offset of analog output 1 i002 = CU-2: Offset of analog output 2	index1: 0,00 Min: -100,00 Max: 100,00 Unit: V Indices: 2 Type: I2	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting - Ready
r646 Status DigIn 646	Visualization parameter for displaying the signal level at the digital inputs and outputs of the terminal strip for the basic unit.	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Terminals - Uread/free access
P650* Src DigOutp TSY 650 not Compact PLUS	BICO parameter for selecting the binector whose value is to be output at terminal -X100 of the TSY board. Index 1: TSY relay output 1, -X110:16,17 Factory setting: B0134 relay closes when synchronization is reached. Index 2: TSY relay output 1, -X110:18,19 Factory setting: B0161 relay opens if there is a synchronization error.	index1: 134 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting - Ready
P651* Src DigOut1 651	BICO parameter for selecting the binector whose value is to be output at terminal -X101/3 of the terminal strip for the basic unit. In order to use terminal -X101/3 as a digital input, both indices must be set to 0.	index1: 107 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting - Ready
P652* Src DigOut2 652	BICO parameter for selecting the binector whose value is to be output at terminal -X101/4 of the terminal strip for the basic unit. In order to use terminal -X101/4 as a digital input, both indices must be set to 0.	index1: 104 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting - Ready
P653* Src DigOut3 653	BICO parameter for selecting the binector whose value is to be output at terminal -X101/5 of the terminal strip for the basic unit. In order to use terminal -X101/5 as a digital input, both indices must be set to 0.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P654* Src DigOut4 654	BICO parameter for selecting the binector whose value is to be output at terminal -X101/6 of the terminal strip for the basic unit. In order to use terminal -X101/6 as a digital input, both indices must be set to 0.	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting - Ready
P655* EB1 Signal Type 655	Parameter for selection of the signal type for analog input 1 on EB1. 0 = +/- 10 V 1 = 0 ... 20 mA	index1: 0 Min: 0 Max: 1 Unit: - Indices: 6 Type: O2	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting
	Index 1: AI1 of the first inserted EB1 Index 4: AI1 of the second inserted EB1 Index 2, 3, 5 and 6: no significance		
P656* EB1 AnalnNorm 656	Parameter for normalization of the analog inputs on EB1. Incoming signals are multiplied by the entered parameter value. Index 1 to 3: AI1 to AI3 of the first inserted EB1 Index 4 to 6: AI1 to AI3 of the second inserted EB1	index1: 1,00 Min: 0,00 Max: 100,00 Unit: - Indices: 6 Type: O2	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting - Ready
P657 EB1 Analn Offset 657	Parameter for entering the offset for the analog inputs on EB1. The offset is added to the already scaled analog input signal. Index 1 to 3: AI1 to AI3 of the first inserted EB1 Index 4 to 6: AI1 to AI3 of the second inserted EB1	index1: 0,00 Min: -100,00 Max: 100,00 Unit: - Indices: 6 Type: I2	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting - Ready
P658* EB1 Analn Conf 658	Parameter for configuring the analog inputs on EB1. Selection is made here of the sign with which the read-in analog value has to be provided. 0 = Do not change sign 1 = Always pass on value with positive sign 2 = Invert sign 3 = Always pass on value with negative sign Index 1 to 3: AI1 to AI3 of the first inserted EB1 Index 4 to 6: AI1 to AI3 of the second inserted EB1	index1: 0 Min: 0 Max: 3 Unit: - Indices: 6 Type: O2	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting
	The sign can be changed again by the "Invert analog input" command (P659)		
P659* EB1SrcAnaln inv. 659	Parameter for selecting the binector from which the command to invert the analog input signal on EB1 has to be read in. Index 1 to 3: AI1 to AI3 of the first inserted EB1 Index 4 to 6: AI1 to AI3 of the second inserted EB1	index1: 0 Unit: - Indices: 6 Type: L2 ,B	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting
P660* EB1 AnalnSmooth2 660	Parameter for entering the smoothing time constants for the analog inputs on EB1. Index 1 to 3: AI1 to AI3 of the first inserted EB1 Index 4 to 6: AI1 to AI3 of the second inserted EB1	index1: 0 Min: 0 Max: 1000 Unit: ms Indices: 6 Type: O2	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting - Ready
P661* EB1 SrcAnalnRel 661	Parameter for selecting the binectors from which the commands to enable the analog inputs on EB1 have to be read in. Without an enable, the setpoint provided by the analog input is at 0. Index 1 to 3: AI1 to AI3 of the first inserted EB1 Index 4 to 6: AI1 to AI3 of the second inserted EB1	index1: 1 Unit: - Indices: 6 Type: L2 ,B	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
r662 EB1 AnalnSetp	Visualization parameter for displaying the setpoints which are provided by the analog inputs of EB1.	Dec.Plc.: 2 Unit: % Indices: 6 Type: I2	Menus: - Parameter menu + Terminals - Uread/free access
662	Index 1 to 3: AI1 to AI3 of the first inserted EB1 Index 4 to 6: AI1 to AI3 of the second inserted EB1		
P663* EB1 SrcAnaOut	Parameter for selecting the connectors whose values have to be output at the analog outputs on EB1.	index1: 0 Unit: - Indices: 4 Type: L2 ,K	Menus: - Parameter menu + Terminals - Uread/free access
663	Index 1 and 2: AO1 and AO2 of the first inserted EB1 Index 3 and 4: AO1 and AO2 of the second inserted EB1		Changeable in: - Drive setting - Ready
P664* EB1 AnaOut Conf	Parameter for configuring the analog outputs on EB1. Selection of the sign is made here with which the value of the connector selected in P663 has to be output at the analog output. 0 = Do not change sign 1 = Always output value with positive sign 2 = Invert sign 3 = Always output value with negative sign	index1: 0 Min: 0 Max: 3 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Terminals - Uread/free access
664	Index 1 and 2: AO1 and AO2 of the first inserted EB1 Index 3 and 4: AO1 and AO2 of the second inserted EB1		Changeable in: - Drive setting - Ready
P665* EB1 AnaOutSmooth	Parameter for entering the smoothing time constants for the analog outputs on EB1.	index1: 0 Min: 0 Max: 10000 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Terminals - Uread/free access
665	Index 1 and 2: AO1 and AO2 of the first inserted EB1 Index 3 and 4: AO1 and AO2 of the second inserted EB1		Changeable in: - Drive setting - Ready
P666* EB1AnaOutNorm	Parameter for scaling the analog outputs on EB1. With the help of the entered parameter value, the analog output voltage to which an internal signal value of 100% (4000 H) should correspond is determined.	index1: 10,00 Min: -200,00 Max: 200,00 Unit: V Indices: 4 Type: I2	Menus: - Parameter menu + Terminals - Uread/free access
666	Index 1 and 2: AO1 and AO2 of the first inserted EB1 Index 3 and 4: AO1 and AO2 of the second inserted EB1		Changeable in: - Drive setting - Ready
P667 EB1 AnaOutOffset	Parameter for entering the offset for the analog outputs on EB1. The offset is added to the already scaled analog output signal.	index1: 0,00 Min: -200,00 Max: 200,00 Unit: V Indices: 4 Type: I2	Menus: - Parameter menu + Terminals - Uread/free access
667	Index 1 and 2: AO1 and AO2 of the first inserted EB1 Index 3 and 4: AO1 and AO2 of the second inserted EB1		Changeable in: - Drive setting - Ready
r668 EB1 AnaOut Value	Visualization parameter for displaying the actual values which are connected to the analog outputs of EB1.	Dec.Plc.: 2 Unit: % Indices: 4 Type: I2	Menus: - Parameter menu + Terminals - Uread/free access
668	Index 1 and 2: AO1 and AO2 of the first inserted EB1 Index 3 and 4: AO1 and AO2 of the second inserted EB1		
P669* EB1 Src DigOut	Parameter for selecting the binectors whose values have to be output at terminal -X480/43 to 46 of EB1. The relevant index of the binector has to be set to 0 in order to use terminal -X480/43 to 48 as digital inputs.	index1: 0 Unit: - Indices: 8 Type: L2 ,B	Menus: - Parameter menu + Terminals - Uread/free access
669	Index 1 to 4: DO1 to DO4 of the first inserted EB1 Index 5 to 8: DO1 to DO4 of the second inserted EB1		Changeable in: - Drive setting - Ready
r670 EB1 TerminalDisp	Visualization parameter for displaying the signal level of the digital inputs and outputs of EB1.	Dec.Plc.: 0 Unit: - Indices: 2 Type: V2	Menus: - Parameter menu + Terminals - Uread/free access
670	Index 1: First inserted EB1 Index 2: Second inserted EB1		

Parameter	Description	Data	Read/write
r673 EB2 Termin Disp	Visualization parameter for displaying the signal level of the digital inputs and outputs of EB2	Dec.Plc.: 0 Unit: - Indices: 2 Type: V2	Menus: - Parameter menu + Terminals - Uread/free access
673	Index 1: First inserted EB2 Index 2: Second inserted EB2		
P674* EB2 Src RelayOut	Parameter for selecting the binectors for activation of the relay outputs on EB2.	index1: 0 Unit: - Indices: 8 Type: L2 ,B	Menus: - Parameter menu + Terminals - Uread/free access
674	Index 1 to 4: Relay outputs of the first inserted EB2 Index 5 to 8: Relay outputs of the second inserted EB2		Changeable in: - Drive setting - Ready
P675* EB2 Signal Type	Parameter for selecting the signal type for the analog input on EB2.	index1: 0 Min: 0 Max: 1 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Terminals - Uread/free access
675	0 = +/- 10 V 1 = 0 ... 20 mA Index 1: First inserted EB2 Index 2: Second inserted EB2		Changeable in: - Drive setting
P676* EB2 AnalInNorm	Parameter for normalizing the analog input on EB2. Incoming signals are multiplied by the entered parameter value.	index1: 1,00 Min: 0,00 Max: 100,00 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Terminals - Uread/free access
676	Index 1: First inserted EB2 Index 2: Second inserted EB2		Changeable in: - Drive setting - Ready
P677 EB2 AnalInOffset	Parameter for entering the offset for the analog input on EB2. The offset is added to the already scaled analog input signal	index1: 0,00 Min: -100,00 Max: 100,00 Unit: - Indices: 2 Type: I2	Menus: - Parameter menu + Terminals - Uread/free access
677	Index 1: First inserted EB2 Index 2: Second inserted EB2		Changeable in: - Drive setting
P678* EB2 AnalInConf	Function parameter for configuring the analog input on EB2. Selection is made here of the sign with which the read-in analog value has to be provided.	index1: 0 Min: 0 Max: 3 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Terminals - Uread/free access
678	0 = Do not change sign 1 = Always pass on value with positive sign 2 = Invert sign 3 = Always pass on value with negative sign Index 1: First inserted EB2 Index 2: Second inserted EB2		Changeable in: - Drive setting
	The sign can be changed again by the "Invert analog input" command (P681).		
P679* EB2 Src AnalInv	Parameter for selecting the binector from which the command to invert the analog input signal on EB2 has to be read in.	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Terminals - Uread/free access
679	Index 1: First inserted EB2 Index 2: Second inserted EB2		Changeable in: - Drive setting
P680* EB2 AnalSmooth2	Parameter for entering the smoothing time constant for the analog input on EB2.	index1: 0 Min: 0 Max: 1000 Unit: ms Indices: 2 Type: O2	Menus: - Parameter menu + Terminals - Uread/free access
680	Index 1: First inserted EB2 Index 2: Second inserted EB2		Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P681* EB2 Src AnaInRel 681	Parameter for selecting the binector from which the command to enable the analog input on EB2 has to be read in. Without an enable, the setpoint provided by the analog input is at 0. Index 1: First inserted EB2 Index 2: Second inserted EB2	index1: 1 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting
r682 EB2 Analn Setp 682	Visualization parameter for displaying the setpoint which is provided by the analog input of EB2. Index 1: First inserted EB2 Index 2: Second inserted EB2	Dec.Plc.: 2 Unit: % Indices: 2 Type: I2	Menus: - Parameter menu + Terminals - Uread/free access
P683* EB2 Src AnaOut 683	Parameter for selecting the connector whose value has to be index1: 0 output at the analog output on EB2. Index 1: First inserted EB2 Index 2: Second inserted EB2	Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting - Ready
P684* EB2 AnaOutConf 684	Parameter for configuring the analog output on EB2. The sign with which the value of the connector selected in P683 has to be output at the analog output is selected here. 0 = Do not change sign 1 = Always output value with positive sign 2 = Invert sign 3 = Always output value with negative sign Index 1: First inserted EB2 Index 2: Second inserted EB2	index1: 0 Min: 0 Max: 3 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting - Ready
P685* EB2AnaOutSmooth 685	Parameter for entering the smoothing time constant for the analog output on EB2. Index 1: First inserted EB2 Index 2: Second inserted EB2	index1: 0 Min: 0 Max: 10000 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting - Ready
P686* EB2 AnaOutNorm 686	Parameter for scaling the analog output on EB2. With the help of the entered parameter value, it is determined which analog output voltage an internal signal value of 100% (4000 Max: 200,00 H) should correspond to. Index 1: First inserted EB2 Index 2: Second inserted EB2	index1: 10,00 Min: -200,00 Max: 200,00 Unit: V Indices: 2 Type: I2	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting - Ready
P687 EB2 AnaOutOffset 687	Parameter for entering the offset for the analog output on EB2. The offset is added to the already scaled analog output signal. Index 1: First inserted EB2 Index 2: Second inserted EB2	index1: 0,00 Min: -200,00 Max: 200,00 Unit: V Indices: 2 Type: I2	Menus: - Parameter menu + Terminals - Uread/free access Changeable in: - Drive setting - Ready
r688 EB2 AnaOut Value 688	Visualization parameter for displaying the actual value which is connected to the analog output of EB2. Index 1: First inserted EB2 Index 2: Second inserted EB2	Dec.Plc.: 2 Unit: % Indices: 2 Type: I2	Menus: - Parameter menu + Terminals - Uread/free access

Parameter	Description	Data	Read/write
P690*	Configuration of the analog inputs of the SCI1 boards. It determines the type of input signals.	index1: 0 Min: 0 Max: 2 Unit: - Indices: 6 Type: O2	Menus: - Parameter menu + Communication + SCB/SCI - Uread/free access Changeable in: - Drive setting - Ready
SCI Analn Conf 690 not Compact PLUS	Parameter values Terminals X428/3, 6, 9 0: - 10 V ... + 10 V 1: 0 V ... + 10 V 2: 4 mA ... + 20 mA Terminals X428/5, 8, 11 - 20 mA ... + 20 mA 0 mA ... + 20 mA 4 mA ... + 20 mA Notes: - Only one signal can be processed per input. Voltage or current signals can be evaluated alternatively. - Voltage and current signals must be connected at different terminals. - The settings 1and 2 only permit unipolar signals, i.e. the internal process variables are also unipolar. - With setting 2 an input current < 2 mA results in a fault trip (wire-break monitoring). - The offset compensation of the analog inputs is carried out via parameter P692. Indices: i001: Slave 1, analog input 1 i002: Slave 1, analog input 2 i003: Slave 1, analog input 3 i004: Slave 2, analog input 1 i005: Slave 2, analog input 2 i006: Slave 2, analog input 3		
P691*	Smoothing time constant of the analog inputs of the SCI boards Formula: $T=2 \text{ ms}^2 \text{ power P691}$ Indices: see P690	index1: 2 Min: 0 Max: 14 Unit: - Indices: 6 Type: O2	Menus: - Parameter menu + Communication + SCB/SCI - Uread/free access Changeable in: - Drive setting - Ready
SCI AnalnSmooth 691 not Compact PLUS			
P692*	Zero balancing of the analog inputs of the SCI boards For setting notes see operating instructions for SCI Indices: see P690	index1: 0,00 Min: -20,00 Max: 20,00 Unit: V Indices: 6 Type: I2	Menus: - Parameter menu + Communication + SCB/SCI - Uread/free access Changeable in: - Drive setting - Ready
SCI Analn Offset 692 not Compact PLUS			
P693*	Actual-value output via analog outputs of the SCI boards Setting notes: Input of the parameter number of the variable whose value is to be output; for details see operating instructions for SCI Indices: i001: Slave 1, analog output 1 i002: Slave 1, analog output 2 i003: Slave 1, analog output 3 i004: Slave 2, analog output 1 i005: Slave 2, analog output 2 i006: Slave 2, analog output 3	index1: 0 Unit: - Indices: 6 Type: L2 ,K	Menus: - Parameter menu + Communication + SCB/SCI - Uread/free access Changeable in: - Drive setting - Ready
SCI AnaOut ActV 693 not Compact PLUS			
P694*	Gain for the analog outputs via the SCI slaves Setting instruction: see operating instructions for SCI For indices: see P690	index1: 10,00 Min: -320,00 Max: 320,00 Unit: V Indices: 6 Type: I2	Menus: - Parameter menu + Communication + SCB/SCI - Uread/free access Changeable in: - Drive setting - Ready
SCI AnaOut Gain 694 not Compact PLUS			

Parameter	Description	Data	Read/write
P695* SCI AnaOutOffset 695 not Compact PLUS	Offset of the analog outputs of the SCI boards Setting instruction: see operating instructions for SCI Indices: see P690	index1: 0,00 Min: -100,00 Max: 100,00 Unit: V Indices: 6 Type: I2	Menus: - Parameter menu + Communication + SCB/SCI - Uread/free access Changeable in: - Drive setting - Ready
P696* SCB Protocol 696 not Compact PLUS	SCB board can be operated as - master for the SCI boards or as - communications board (see SCB operating instructions). Parameter values: 0 = master for SCI boards 1 = 4-wire USS 2 = 2-wire USS 3 = Peer-to-Peer 4 = not connected 5 = not connected	Init: 0 Min: 0 Max: 5 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Communication + SCB/SCI - Board configuration - Uread/free access Changeable in: - Board configuration
<p>Please keep in mind that every change of parameter value leads to a new initialization of the SCB and the CUMC or CUVC. Therefore this parameter cannot be kept in a download file, since initialization has the effect that the parameters loaded on the converter are not accepted.</p> <p>In the case of a factory setting via SCB2, this parameter is not reset.</p>			

Parameter	Description	Data	Read/write
r697 SCB Diagnosis	Diagnostic information SCB All values in hexadecimal display. Displayed numbers have an overflow at FF.	Dec.Plc.: 0 Unit: - Indices: 24	Menus: - Parameter menu + Communication + SCB/SCI - Uread/free access
697 not Compact PLUS	The meaning of individual indices depends on the selected SCB protocol (P682) Indices: i001: Number of error-free telegrams i002: Number of error-free telegrams i003: USS: Number of Byte Frame errors SCI module: Number of voltage drops of the slaves i004: USS: Number of overrun errors SCI module: Number of fiber optic link interrupts i005: USS: Parity error SCI module: Number of missing answer telegrams i006: USS: STX-error SCI module: Number of search telegrams to accept a slave i007: ETX-error i008: USS: Block check-error SC module: Number of configuration telegrams i009: USS/Peer to Peer: incorrect telegram length SCI modules: required maximum number of terminals according to process data wiring (P 554 to P631) i010: USS: Timeout SCI modules: highest maximum number of analog inputs/outputs as per process data wiring of the setpoint channel and actual-value output via SCI (P664) . i011: Reserve i012: Reserve i013: SCB-DPR alarm word i014: Information whether slave No. 1 is needed and if yes, which type 0: no slave needed 1: SCI1 2: SCI2 i015: Information if slave No. 2 is needed and if yes, which type 0: no slave needed 1: SCI1 2: SCI2 i016: SCI modules: initialization error i017: SCB generation of year i018: SCB generation of day and month i019: SCI Slave1 SW version i020: SCI Slave1 generation of year i021: SCI Slave1 generation of day and month i022: SCI Slave2 SW version i023: SCI Slave2 generation of year i024: SCI Slave2 generation of day and month	Type: L2	

Parameter	Description	Data	Read/write
P698* Src SCI DigOut 698 not Compact PLUS	BICO parameter for selecting the binectors which are to be displayed via the digital outputs of the SCI boards. Meaning of the indices: i001: Select binector for SCI slave1 binary output1 i002: Select binector for SCI slave1 binary output2 i003: Select binector for SCI slave1 binary output3 i004: Select binector for SCI slave1 binary output4 i005: Select binector for SCI slave1 binary output5 i006: Select binector for SCI slave1 binector output6 i007: Select binector for SCI slave1 binary output7 i008: Select binector for SCI slave1 binary output 8 i009: Select binector for SCI slave1 binary output9 i0010: Select binector for SCI slave1 binary output10 i0011: Select binector for SCI slave1 binary output11 i0012: Select binector for SCI slave1 binary output12 i0013: Select binector for SCI slave2 binary output1 i0014: Select binector for SCI slave2 binary output2 i0015: Select binector for SCI slave2 binary output3 i0016: Select binector for SCI slave2 binary output4 i0017: Select binector for SCI slave2 binary output5 i0018: Select binector for SCI slave 2 binary output6 i0019: Select binector for SCI slave2 binary output7 i0020: Select binector for SCI slave2 binary output8 i0021: Select binector for SC slave2 binary output9 i0022: Select binector for SCI slave2 binary output10 i0023: Select binector for SCI slave2 binary output11 i0024: Select binector for SCI slave2 binary output12	index1: 0 Unit: - Indices: 24 Type: L2 ,B	Menus: - Parameter menu + Communication + SCB/SCI - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
r699 SCB/SCI Values 699 not Compact PLUS	<p>Display parameter process data SCB All values in hexadecimal display The meaning of the individual indices depends on the selected SCB protocol (P696) Meaning for USS protocol and peer-to-peer:</p> <p>i001: Process data transmit word1 i002: Process data transmit word2 i003: Process data transmit word3 i004: Process data transmit word4 i005: Process data transmit word5 i006: Process data transmit word6 i007: Process data transmit word7 i008: Process data transmit word8 i009: Process data transmit word9 i0010: Process data transmit word10 i0011: Process data transmit word11 i0012: Process data transmit word12 i0013: Process data transmit word13 i0014: Process data transmit word14 i0015: Process data transmit word15 i0016: Process data transmit word16 i0017: Process data receive word1 i0018: Process data receive word2 i0019: Process data receive word3 i0020: Process data receive word4 i0021: Process data receive word5 i0022: Process data receive word6 i0023: Process data receive word7 i0024: Process data receive word8 i0025: Process data receive word9 i0026: Process data receive word10 i0027: Process data receive word11 i0028: Process data receive word12 i0029: Process data receive word13 i0030: Process data receive word14 i0031: Process data receive word15 i0032: Process data receive word16</p> <p>Meaning for SCI modules:</p> <p>i001: SCI Slave1 digital inputs i002: SCI Slave1 analog input1 i003: SCI Slave1 analog input2 i004: SCI Slave1 analog input3 i005: SCI Slave2 digital outputs i006: SCI Slave2 analog input1 i007: SCI Slave2 analog input2 i008: SCI Slave2 analog input3 i009: SCI Slave1 digital outputs i0010: SCI Slave1 analog output1 i0011: SCI Slave1 analog output2 i0012: SCI Slave1 analog output3 i0013: SCI Slave2 digital outputs i0014: SCI Slave2 analog output1 i0015: SCI Slave2 analog output2 i0016: SCI Slave2 analog output3</p>	Dec.Plc.: 0 Unit: - Indices: 32 Type: L2	Menus: - Parameter menu + Communication + SCB/SCI - Uread/free access
P700* SCom BusAddr 700	<p>Bus address of the serial interfaces (see section "Serial interfaces" in operating instructions, Part 2)</p> <p>Indices: i001 = SCom1: bus address of the ser. interface 1(CU) i002 = SCom2: bus address of the ser. interface 2 (CU), i003 = SCB: bus address of the SCB, if P696 = 1, 2</p> <p>In the case of a factory setting via SCom1, SCom2 or SCB2 this parameter is not reset.</p>	index1: 0 Min: 0 Max: 31 Unit: - Indices: 3 Type: O2	Menus: - Parameter menu + Communication + SCom1/SCom2 + SCB/SCI - Quick parameterization - Drive setting - Uread/free access Changeable in: - Drive setting - Drive setting - Ready

Parameter	Description	Data	Read/write
P701*	Function parameter for entering the baud rates for the serial interfaces with USS protocol	index1: 6 Min: 0 Max: 13 Unit: - Indices: 3 Type: O2	Menus: - Parameter menu + Communication + SCom1/SCom2 + SCB/SCI - Drive setting - Uread/free access Changeable in: - Drive setting - Drive setting - Ready
701	Index 1: serial interface 1 (Scom/SCom1) Index 2: serial interface 2 (SCom2) Index 3: SCB 1 = 300 Baud 2 = 600 Baud 3 = 1200 Baud 4 = 2400 Baud 5 = 4800 Baud 6 = 9600 Baud 7 = 19200 Baud 8 = 38400 Baud 9 = 57600 Baud only SCB 1/2 10 = 76800 Baud only SCB 1/2 11 = 93750 Baud only SCB 1/2 12 = 115200 Baud only SCB 1/2 13 = 187500 Baud only SCB 2		
	The settings in indices 2 and 3 have no significance for units of the Compact PLUS type.		
	In the case of a factory setting via SCom1, SCom2 or SCB2 this parameter is not reset.		
P702*	Function parameter for entering the number of PKWs for the serial interfaces with USS protocol. The number of PKWs defines the number of words in the telegram which are to be used for transmitting parameter values.	index1: 127 Min: 0 Max: 127 Unit: - Indices: 3 Type: O2	Menus: - Parameter menu + Communication + SCom1/SCom2 + SCB/SCI - Uread/free access Changeable in: - Drive setting - Ready
702	Index 1: Serial interface 1 (SCom(/SCom1) Index 2: Serial interface 2 (SCom2) Index 3: SCB 0 = No transmission of parameters 3 = 3 words for PKE, index and PWE 4 = 4 words for PKE, index, PWE1 and PWE2 127 = Variable length for transmitting parameter descriptions, texts and values of indicated parameters with one request.		
	The settings in indices 2 and 3 have no significance for Compact PLUS units.		
	In the case of a factory setting via SCom1, SCom2 or SCB2 this parameter is not reset.		
P703*	Function parameter for entering the number of PcDs for the serial interfaces with USS protocol. The number of PcDs defines the number of words in the telegram which are to be used for transmitting control words and setpoints or status words and actual values.	index1: 2 Min: 0 Max: 16 Unit: - Indices: 3 Type: O2	Menus: - Parameter menu + Communication + SCom1/SCom2 + SCB/SCI - Uread/free access Changeable in: - Drive setting - Ready
703	Index 1: Serial interface 1 (SCom(/SCom1) Index 2: Serial interface 2 (SCom2) Index 3: SCB		
	The settings in indices 2 and 3 have no significance for Compact PLUS units.		
	In the case of a factory setting via SCom1, SCom2 or SCB2 this parameter is not reset.		

Parameter	Description	Data	Read/write
P704* SCom TlgOFF 704	<p>Function parameter for entering the telegram failure time for index1: 0 the serial interfaces with USS protocol. The telegram failure time defines the time within which a valid telegram has to be received. If no valid telegram is received within the specified time, the unit trips a fault. With the help of P781, tripping of the fault can be delayed and the drive shut down if necessary. If a parameter value of 0 is entered, there is no monitoring. This setting is to be selected for non-cyclical telegram transmission (e.g. for OP1S).</p> <p>Index 1: Serial interface 1 (SCom1/SCom2) Index 2: Serial interface 2 (SCom2) Index 3: SCB</p> <p>The settings in indices 2 and 3 have no significance for Compact PLUS units.</p> <p>In the case of a factory setting via SCom1, SCom2 or SCB2 this parameter is not reset.</p>	Min: 0 Max: 6500 Unit: ms Indices: 3 Type: O2	<p>Menus:</p> <ul style="list-style-type: none"> - Parameter menu + Communication + SCom1/SCom2 + SCB/SCI <p>Changeable in:</p> <ul style="list-style-type: none"> - Drive setting - Ready
P705* SCB Peer2PeerExt 705 not Compact PLUS	<p>Direct transfer of peer-to-peer receive data of the SCB Identification of the words of the received peer-to-peer telegram which are to be transferred directly.</p> <p>Parameter values: 0: no direct transfer (only to CU) 1: direct transfer (and transfer to CU)</p> <p>Indices: i001 = Word1 in PZD part of the telegram i002 = Word2 in PZ part of the telegram ... i005 = Word5 in PZD part of the telegram.</p> <p>Precondition: P696 = 3 (Peer-to-Peer protocol)</p>	index1: 0 Min: 0 Max: 1 Unit: - Indices: 5 Type: O2	<p>Menus:</p> <ul style="list-style-type: none"> - Parameter menu + Communication + SCB/SCI <p>Changeable in:</p> <ul style="list-style-type: none"> - Drive setting - Ready
P706* Src SCB TrnsData 706 not Compact PLUS	<p>BICO parameter for selecting the connectors which are to be transmitted from the serial interface on the SCB. In addition to the connectors themselves, their place in the transmit telegram will also be defined.</p> <p>Index 1: Word 1 in PZD part of the telegram Index 2: Word 2 in PZD part of the telegram ... Index 16: Word 16 in PZD part of the telegram</p> <p>The word 1 should be assigned with the status word 1 (K0032). With double-word connectors, the relevant connector number must be entered at 2 consecutive indices, as otherwise only the higher-value word will be transferred. The number of the words transferred in the PZD part of the telegram is set in P703, Index i003.</p> <p>IMPORTANT: With P696 = 3 (Peer-to- peer protocol) a maximum of 5 words can be transferred (i001 to i005).</p>	Unit: - Indices: 16 Type: L2 ,K	<p>Menus:</p> <ul style="list-style-type: none"> - Parameter menu + Communication + SCB/SCI <p>Changeable in:</p> <ul style="list-style-type: none"> - Drive setting - Ready
P707* SrcSCom1TrnsData 707	<p>BICO parameter for selecting the connectors which are to be transmitted by serial interface 1 (SCom1). In addition to the connectors themselves, their place in the telegram is also defined.</p> <p>Index 1: Word 1 in the PZD part of the telegram Index 2: Word 2 in the PZD part of the telegram ... Index 16: Word 16 in the PZD part of the telegram</p> <p>Word 1 should be assigned status word 1 (K0032). With double-word connectors, the associated connector number must be entered in 2 successive indices because, otherwise only the higher-value word is transmitted.</p> <p>The number of words transmitted in the PZD part of the telegram is set in P703, Index i001.</p>	Unit: - Indices: 16 Type: L2 ,K	<p>Menus:</p> <ul style="list-style-type: none"> - Parameter menu + Communication + SCom1/SCom2 <p>Changeable in:</p> <ul style="list-style-type: none"> - Drive setting - Ready

Parameter	Description	Data	Read/write
P708* SrcSCom2TrnsData 708	BICO parameter for selecting the connectors which are to be sent from the serial interface 2 (SCom2). Not only the connectors themselves but also their place in the transmit telegram are defined.	Index1: 0 Unit: - Indices: 16 Type: L2 ,K	Menus: - Parameter menu + Communication + SCom1/SCom2 - Uread/free access Changeable in: - Drive setting - Ready
not Compact PLUS	Index 1: Word 1 in PZD part of telegram Index 2: Word 2 in PZD part of telegram ... Index 16: Word 16 in PZD part of telegram		
	Word 1 should be assigned with status word 1 (K0032) . In the case of double word connectors, the relevant connector number must be entered at 2 consecutive indices otherwise only the higher-value word will be transferred. The number of the words transferred in the PZD part of the telegram is set in P703, Index i002.		
P708* SrcSCom2TrnsData 708	BICO parameter for selecting the connectors which are to be sent from the serial interface 2 (SCom2). Not only the connectors themselves but also their place in the transmit telegram are defined.	Index1: 32 Unit: - Indices: 16 Type: L2 ,K	Menus: - Parameter menu + Communication + SCom1/SCom2 - Uread/free access Changeable in: - Drive setting - Ready
Compact PLUS only	Index 1: Word 1 in PZD part of telegram Index 2: Word 2 in PZD part of telegram ... Index 16: Word 16 in PZD part of telegram		
	Word 1 should be assigned with status word 1 (K0032) . In the case of double word connectors, the relevant connector number must be entered at 2 consecutive indices otherwise only the higher-value word will be transferred. The number of the words transferred in the PZD part of the telegram is set in P703, Index i002.		
r709 SCom1/2 RecvData 709	Display of the process data received via the interface SCom or SCom2. Index 1 - 16 : SCom1 process data Index 17 - 32: SCom2 process data	Dec.Plc.: 0 Unit: - Indices: 32 Type: L2	Menus: - Parameter menu + Communication + SCom1/SCom2 - Uread/free access
r710 SCom1/2 TrnsData 710	Display of the process data transmitted via the interface SCom1 or SCom2. Index 1 - 16 : SCom1 process data Index 17 - 32: SCom2 process data	Dec.Plc.: 0 Unit: - Indices: 32 Type: L2	Menus: - Parameter menu + Communication + SCom1/SCom2 - Uread/free access
P711* CB Parameter 1 711	Function parameter for entering the CB-specific parameter. The parameter is only relevant if there is a communication board (CBx). Its significance depends on the type of Cbx built in. If a set parameter value is outside the value range accepted by the built-in Cbx, the unit trips a fault. Index 1: 1st CB Index 2: 2nd CB In the case of a factory setting via 1st CB or 2nd CB, this parameter is not reset.	index1: 0 Min: 0 Max: 65535 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Communication + Field bus interfaces - Board configuration - Drive setting - Uread/free access Changeable in: - Board configuration - Drive setting
P712* CB Parameter 2 712	See P711 for description	index1: 0 Min: 0 Max: 65535 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Communication + Field bus interfaces - Board configuration - Drive setting - Uread/free access Changeable in: - Board configuration - Drive setting

Parameter	Description	Data	Read/write
P713* CB Parameter 3 713	See P711 for description	index1: 0 Min: 0 Max: 65535 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Communication + Field bus interfaces - Board configuration - Drive setting - Uread/free access Changeable in: - Board configuration - Drive setting
P714* CB Parameter 4 714	See P711 for description	index1: 0 Min: 0 Max: 65535 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Communication + Field bus interfaces - Board configuration - Drive setting - Uread/free access Changeable in: - Board configuration - Drive setting
P715* CB Parameter 5 715	See P711 for description	index1: 0 Min: 0 Max: 65535 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Communication + Field bus interfaces - Board configuration - Drive setting - Uread/free access Changeable in: - Board configuration - Drive setting
P716* CB Parameter 6 716	See P711 for description	index1: 0 Min: 0 Max: 65535 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Communication + Field bus interfaces - Board configuration - Drive setting - Uread/free access Changeable in: - Board configuration - Drive setting
P717* CB Parameter 7 717	See P711 for description	index1: 0 Min: 0 Max: 65535 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Communication + Field bus interfaces - Board configuration - Drive setting - Uread/free access Changeable in: - Board configuration - Drive setting
P718* CB Parameter 8 718	See P711 for description	index1: 0 Min: 0 Max: 65535 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Communication + Field bus interfaces - Board configuration - Drive setting - Uread/free access Changeable in: - Board configuration - Drive setting

Parameter	Description	Data	Read/write
P719* CB Parameter 9 719	See P711 for description	index1: 0 Min: 0 Max: 65535 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Communication + Field bus interfaces - Board configuration - Drive setting - Uread/free access Changeable in: - Board configuration - Drive setting
P720* CB Parameter 10 720	See P711 for description	index1: 0 Min: 0 Max: 65535 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Communication + Field bus interfaces - Board configuration - Drive setting - Uread/free access Changeable in: - Board configuration - Drive setting
P721* CB Parameter 11 721	Function parameter for entering the 11th CB-specific parameter. The parameter is only relevant if there is a communication board (CBx). Its meaning depends on the type of Cbx built in. If a set parameter value is outside the value range accepted by the built-in Cbx, the unit trips a fault. Index 1-5: 1st CB Index 6-10: 2nd CB In the case of a factory setting via 1st CB or 2nd CB, this parameter is not reset.	index1: 0 Min: 0 Max: 65535 Unit: - Indices: 10 Type: O2	Menus: - Parameter menu + Communication + Field bus interfaces - Board configuration - Drive setting - Uread/free access Changeable in: - Board configuration - Drive setting
P722* CB/TB TlgOFF 722	Function parameter for entering the telegram failure time for a built-in communication board (CBx) or technology board (TB). The telegram failure time defines the time within which a valid telegram has to be received. If no valid telegram is received the unit trips a fault. With the help of P781, fault tripping can be delayed and the drive shut down if necessary. If a parameter value of 0 is entered, there is no monitoring. In the case of a factory setting via 1st CB or 2nd CB, this parameter is not reset.	index1: 10 Min: 0 Max: 6500 Unit: ms Indices: 2 Type: O2	Menus: - Parameter menu + Communication + Field bus interfaces - Uread/free access Changeable in: - Drive setting - Ready
P724* Select CB synch 724	Selection of the CB board (1st or 2nd) which is synchronized to reading basic unit setpoints (only one board can be synchronized in this way). 0 = 1st CB 1 = 2nd CB Important: Modification is required for special applications only (customer-specific CBC)	Init: Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting
r732 CB Diagnosis 732	Visualization parameter for displaying diagnostic information for a built-in communication board (CBx) or technology board (TB). The meaning of the displayed values is specific to each particular board.	Dec.Plc.: 0 Unit: - Indices: 64 Type: L2	Menus: - Parameter menu + Communication + Field bus interfaces - Uread/free access
r733 CB/TB RecvData 733	Visualization parameter for displaying control words and setpoints (process data) which are received by a communication board (CBx) or a technology board (TB) and passed on to the basic unit.	Dec.Plc.: 0 Unit: - Indices: 32 Type: L2	Menus: - Parameter menu + Communication + Field bus interfaces - Uread/free access

Parameter	Description	Data	Read/write
P734* SrcCB/TBTrnsData 734	BICO parameter for selecting connectors which are to be transmitted by a communication board (CBx) or a technology board (TB). In addition to the connectors themselves, their place in the transmitted telegram is also defined. Index 1: Word 1 in the PZD part of the telegram Index 2: Word 2 in the PZD part of the telegram ... Index 16: Word 16 in the PZD part of the telegram Word 1 should be assigned status word 1 (K0032). For double-word connectors, the associated connector number must be entered in two successive indices because, otherwise, only the higher-value word is transmitted.	index1: 32 Indices: 16 Type: L2 ,K	Menus: - Parameter menu + Communication + Field bus interfaces - Uread/free access Changeable in: - Drive setting - Ready
r735 CB/TB TrnsData 735	Display of the process data sent to the TB or the CB in hexadecimal form Index 1 .. 16 : Transmit data for TB/CB Index 17 .. 32: Transmit data for 2nd CB	Dec.Plc.: 0 Unit: - Indices: 32 Type: L2	Menus: - Parameter menu + Communication + Field bus interfaces - Uread/free access
P736* Src CB2 TrnsData 736	BICO parameter for selecting the connectors which are to be transmitted by the 2nd communication board (2nd CBX). Both the connectors themselves and their position in the transmit telegram are defined. Index 1: Word 1 in PCD part of telegram Index 2: Word 2 in PCD part of telegram ... Index 16: Word 16 in PCD part of telegram Word 1 should be assigned with status word 1 (K0032). In the case of double word connectors the relevant connector number must be entered at 2 consecutive indices, otherwise only the higher-value word is transferred.	index1: 32 Unit: - Indices: 16 Type: L2 ,K	Menus: - Parameter menu + Communication + Field bus interfaces - Uread/free access Changeable in: - Drive setting - Ready
r738 PKW Order 738	Visualization parameter for displaying the parameter task (PKW) which is received by a communication board (CBx) or a technology board (TB) and passed on to the basic unit. Index 1: Task code and parameter number Index 2: Parameter index Index 3: 1st parameter value Index 4: 2nd parameter value Index 1 to 4: SCom1 Index 5 to 8: 1st CB Index 9 to 12: SCB Index 13 to 16: SCom2 Index 17 to 20: 2nd CB All values are shown as hexadecimals.	Dec.Plc.: 0 Unit: - Indices: 20 Type: L2	Menus: - Parameter menu + Communication + SCom1/SCom2 + Field bus interfaces + SCB/SCI - Uread/free access
r739 PKW Reply 739	Visualization parameter for displaying the parameter reply (PKW) which is passed on from the basic unit to a communication board (CBx) or a technology board (TB) and from there, is transmitted to the communication partner. Index 1: Task number and parameter number Index 2: Parameter index Index 3: 1st parameter value Index 4: 2nd parameter value Index 1 to 4: SCom1 Index 5 to 8: 1st CB Index 9 to 12: SCB Index 13 to 16: SCom2 Index 17 to 20: 2nd CB All values are shown as hexadecimals.	Dec.Plc.: 0 Unit: - Indices: 20 Type: L2	Menus: - Parameter menu + Communication + SCom1/SCom2 + Field bus interfaces + SCB/SCI - Uread/free access

Parameter	Description	Data	Read/write
P740* SLB NodeAddr 740	Function parameter for entering the node address for a built-in SIMOLINK board (SLB). The node address defines the telegrams to which the relevant unit is allowed writing access. Reading access is set in P749. The node address also defines whether a node also acts as the dispatcher. 0 = Dispatcher (generates telegram circulation) Not equal to 0 = Transceiver	Min: 0 Max: 200 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + SIMOLINK - Quick parameterization - Board configuration - Uread/free access Changeable in: - Board configuration - Drive setting
	In the SIMOLINK ring, only one node is allowed to perform the dispatcher function. It is not permitted to allocate node address 0 if a higher-level automation unit (automation master) performs the dispatcher function.		
P741* SLB TlgOFF 741	Function parameter for entering the telegram failure time for a built-in SIMOLINK board (SLB). The telegram failure time defines the time within which a valid synchronizing telegram must be received. If no valid synchronizing telegram is received within the specified time, the unit trips a fault. With the help of P781, tripping of the fault can be delayed and the drive can be shut down if necessary.	Init: 0 Min: 0 Max: 6500 Unit: ms Indices: - Type: O2	Menus: - Parameter menu + SIMOLINK - Board configuration - Uread/free access Changeable in: - Board configuration - Drive setting
P742* SLB Trns Power 742	Function parameter for setting the transmission power for a built-in SIMOLINK board (SLB). Operation with reduced transmission power increases the life of the transmitter and receiver components. 1 = 0 m to 15 m cable length 2 = 15 m to 25 m cable length 3 = 25 m to 40 m cable length	Init: 3 Min: 1 Max: 3 Unit: - Indices: - Type: O2	Menus: - Parameter menu + SIMOLINK - Board configuration - Uread/free access Changeable in: - Board configuration - Drive setting
P743 SLB # Nodes 743	Function parameter for entering the number of nodes in the SIMOLINK ring. The entered value enables a built-in SIMOLINK board (SLB) to determine its position in the ring and to compensate for the bus transfer time. The total of all nodes (e.g. SLBs etc.) in the SIMOLINK ring is to be entered	index1: 0 Min: 0 Max: 255 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + SIMOLINK - Board configuration - Uread/free access Changeable in: - Board configuration - Drive setting
P744* Src SYNC Sel 744	no function	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + SIMOLINK - Uread/free access Changeable in: - Drive setting
P745* SLB Channel # 745	Function parameter for entering the channels which the dispatcher is to provide to each transceiver. The number of channels together with P746 determines the number of nodes which can be addressed. This parameter is only relevant for the dispatcher (P740=0).	index1: 2 Min: 1 Max: 8 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + SIMOLINK - Board configuration - Uread/free access Changeable in: - Board configuration - Drive setting
P746* SLB Cycle Time 746	Function parameter for entering the cycle time for SIMOLINK. The cycle time is the time which is needed for complete circulation of all telegrams in the SIMOLINK ring. It also determines the time reference in which the transceivers receive synchronizing telegrams. For synchronization of the transceivers to take place, the cycle time must amount to several times that of time slot T2 of the transceivers. The length of time slot T2 ($T2 = 4/P340$) is defined by the pulse frequency (P340). Together with P745, the time cycle determines the number of addressable nodes. The parameter is only relevant for the dispatcher (P740=0).	index1: 3,20 Min: 0,20 Max: 6,50 Unit: ms Indices: 2 Type: O2	Menus: - Parameter menu + SIMOLINK - Board configuration - Uread/free access Changeable in: - Board configuration - Drive setting

Parameter	Description	Data	Read/write
P747* SrcSLBAppl.Flags 747	BICO parameter for selecting the binectors which are to be sent as application flags by the SIMOLINK board (SLB). In addition to the binectors themselves, their place in the application part of the transmitted telegram is defined. Index 1: 1st binector Index 2: 2nd binector Index 3: 3rd binector Index 4: 4th binector	index1: 0 Unit: - Indices: 4 Type: L2 ,B	Menus: - Parameter menu + SIMOLINK - Uread/free access Changeable in: - Drive setting
r748 SLB Diagnosis 748	Visualization parameter for displaying the diagnostic information for a built-in SIMOLINK board (SLB). Index 1: Number of error-free synchronizing telegrams Index 2: Number of CRC errors Index 3: Number of time-out errors Index 4: Last address actuated Index 5: Address of the node which transmits the special telegram, "Time out". Index 6: Active SYNC interrupt delay 1 = 273 ns Index 7: Position of the node in the ring Index 8: Number of nodes in the ring Index 9: Synchronism deviation (65535 synchronization not active) should fluctuate between 65515 and 20 Index 10: Corrected pulse period in units of 100 ns (65535 synchronization not active) Index 11: T0 counter (0 with active synchronization) Index 12: internal Index 13: internal Index 14: Time counter (0 with active synchronization) Index 15: implemented bus cycle time Index 16: internal Index 17: internal In function diagram 140.7	Dec.Plc.: 0 Unit: - Indices: 17 Type: O2	Menus: - Parameter menu + SIMOLINK - Uread/free access
P749* SLB Read Addr 749	Function parameter for entering the node addresses and channels from which a built-in SIMOLINK board (SLB) is to read out data. The places before the comma in the input value define the node address and the places after the comma define the channel. Example: 2.0 = node address 2, Channel 0	index1: 0,0 Min: 0,0 Max: 200,7 Unit: - Indices: 8 Type: O2	Menus: - Parameter menu + SIMOLINK - Board configuration - Uread/free access Changeable in: - Board configuration - Drive setting
r750 SLB Rcv Data 750	Visualization parameter for the data received via SIMOLINK	Dec.Plc.: 0 Unit: - Indices: 16 Type: L2	Menus: - Parameter menu + SIMOLINK - Uread/free access
P751* SrcSLBTrnsData 751	BICO parameter for selecting the connectors which are to be transmitted by a SIMOLINK board (SLB). In addition to the connectors themselves, their place in the transmitted telegram is also defined. Index 1: Channel 1, low-word Index 2: Channel 1, high-word Index 3: Channel 2, low-word Index 4: Channel 2, high-word ... Index 15: Channel 8, low-word Index 16: Channel 8, high-word For double-word connectors, the relevant connector number must be entered in 2 successive indices because, otherwise only the higher-value word is transmitted.	index1: 0 Unit: - Indices: 16 Type: L2 ,K	Menus: - Parameter menu + SIMOLINK - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
r752 SLB TrnsData	Process data transmitted via SIMOLINK in hexadecimal display	Dec.Plc.: 0 Unit: - Indices: 16 Type: L2	Menus: - Parameter menu + SIMOLINK - Uread/free access
752			
P755* SIMOLINK Conf	Function parameter for configuring various properties of SIMOLINK transfer.	Init: 0 Unit: - Indices: - Type: L2	Menus: - Parameter menu + SIMOLINK - Uread/free access
755	xxx0 No deadtime compensation xxx1: Compensation of the different deadtimes between transceiver-transceiver and transceiver-dispatcher-transceiver. xx0x: Switchover between 2 SLBs in operation disabled xx1x: Switchover between 2 SLBs in operation enabled x0xx: Bus cycle time is internally corrected to whole telegram number x1xx: Bus cycle time is implemented precisely		Changeable in: - Board configuration - Drive setting
P756* SrSLB_Specialdat	BICO parameter for selecting the parameters that are to be sent from a SIMOLINK board (SLB) as special data. Special data can be sent from an SLB master or dispatcher only.	index1: 0 Unit: - Indices: 8 Type: L2 ,K	Menus: - Parameter menu + SIMOLINK - Uread/free access
756	Index 1: Special telegram 1, low-word Index 2: Special telegram 1, high-word Index 3: Special telegram 2, low-word ... Index 7: Special telegram 4, low-word Index 8: Special telegram 4, high-word In the case of double word connectors the relevant connecto number must be entered at 2 successive indices as otherwise only the higher-value word will be transmitted.		Changeable in: - Drive setting - Ready
P760 T(friction) cons	Function parameter for the constant proportion of the friction torque.	index1: 0,000 Min: 0,000 Max: 10,000 Unit: % Indices: 4 Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access
760	Note: The parameter value refers to the reference torque (P354) and is internally limited to 10% of the rated motor torque. Precondition: P100 = 3, 4, 5 (vector control)		Changeable in: - Drive setting - Ready
	In function diagram: 370.7, 371.7, 375.7		
P761 T(frict) prop.n.	Function parameter for the amount of friction torque proportional to speed.	index1: 0,000 Min: 0,000 Max: 10,000 Unit: % Indices: 4 Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access
761	Note: The parameter value refers to the reference torque (P354) and is internally limited to 10% of the rated motor torque. Th parameter value is implemented at reference speed. Precondition: P100 = 3, 4, 5 (vector control)		Changeable in: - Drive setting - Ready
	In function diagram: 370.7, 371.7, 375.7		

Parameter	Description	Data	Read/write
P762 T(frict) prop.n2	Function parameter for the amount of friction torque in proportion with the squared speed.	index1: 0,000 Min: 0,000 Max: 10,000 Unit: % Indices: 4 Type: I2	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting - Ready
762	Note: The parameter value refers to the reference torque (P354) and is internally limited to 10% of the rated motor torque. Th parameter value is implemented at reference speed. Precondition: P100 = 3, 4, 5 (vector control)		
	In function diagram: 370.7, 371.7, 375.7		
P763* SrcT(frict,char) 763	BICO parameter for selecting the connector from which the torque value of a friction characteristic is to be read in (see P2190...2198). Note: The parameter value refers to the reference torque (P354). Positive values are always processed (internal absolute-value generation). The total of all friction torques (see P760...P763 is limited to 100% of the rated motor torque. If the speed is reversed, the total friction torque is also negated. Precondition: P100 = 4,5 (n/T control)	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu + Control/gating unit + Speed control - Uread/free access Changeable in: - Drive setting
	In function diagram: P370.6, P371.6, P375.6		
P781* Fault Delay 781	Function parameter for setting a delay time for various faults Special case: Value 101.0 means that the fault is never triggered. Index 1: Ext. fault 1 Index 2: Ext. fault 2 Index 4: Index 5: Index 6: Index 7: Index 8: Index 9: Index 10: Index 11: SCom1 telegram failure Index 12: SCom2 telegram failure Index 13: CB/TB telegram failure Index 14: 2nd CB telegram failure Index 15: SCB telegram failure Index 16: SLB telegram failure Index 17: Index 18: Index 19: Index 20:	index1: 0,0 Min: 0,0 Max: 101,0 Unit: s Indices: 20 Type: O2	Menus: - Parameter menu + Diagnostics + Faults/warnings - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
r782 Trip Time	Visualization parameter for displaying the times at which the last 8 faults occurred. The current status of the operating-hours counter (r825) is displayed.	Dec.Plc.: 0 Unit: - Indices: 24 Type: O2	Menus: - Parameter menu + Diagnostics + Faults/warnings - Uread/free access
782	Index 1: Day of the 1st (last) fault trip Index 2: Hour of the 1st fault trip Index 3: Second of the 1st fault trip Indices 4 to 6: 2nd fault trip Indices 7 to 9: 3rd fault trip Indices 10 to 12: 4th fault trip Indices 13 to 15: 5th fault trip Indices 16 to 18: 6th fault trip Indices 19 to 21: 7th fault trip Indices 22 to 24: 8th (oldest) fault trip		
	Further details for describing the fault trips are contained in r947, r949, P952. The fault memory is deleted with the help of P952.		
r783 Fault n/f(act)	Frequency/speed actual value (r218) at the time of tripping	Dec.Plc.: 3 Unit: Hz Indices: - Type: I4	Menus: - Parameter menu + Diagnostics + Faults/warnings - Uread/free access
783			
r784 Fault dn/dt	Frequency/speed change per second at the time of tripping	Dec.Plc.: 2 Unit: Hz Indices: - Type: I2	Menus: - Parameter menu + Diagnostics + Faults/warnings - Uread/free access
784			
r785 Fault Isq(act)	Actual value of the torque-generating current component (K0184) at the time of tripping.	Dec.Plc.: 1 Unit: A Indices: - Type: I4	Menus: - Parameter menu + Diagnostics + Faults/warnings - Uread/free access
785			
r786 Fault Out Volts	Actual value of the converter output voltage (r003) at the time of tripping	Dec.Plc.: 1 Unit: V Indices: - Type: I2	Menus: - Parameter menu + Diagnostics + Faults/warnings - Uread/free access
786			
r787 Fault CtrlStatus	Control status at the time of tripping.	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Diagnostics + Faults/warnings - Uread/free access
787			
P792 Perm Deviation	Function parameter for entering the permissible deviation of the actual value from the setpoint. A deviation is indicated in status word 1, bit 8. In function diagram 480.3.	Min: 0,0 Max: 200,0 Unit: % Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Uread/free access Changeable in: - Drive setting - Ready
792			
P793 Set/Act Hyst	Function parameter for entering the hysteresis which is taken into account during determination of the actual-value/setpoint deviation. A deviation is indicated in status word 1, bit 8.	Min: 0,0 Max: 200,0 Unit: % Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Uread/free access Changeable in: - Drive setting - Ready
793			

Parameter	Description	Data	Read/write
P794 Deviation Time 794	Function parameter for entering the time by which the message indicating an actual-value/setpoint deviation is to be delayed. A deviation is indicated in status word 1, bit 8.	index1: 3,0 Min: 0,0 Max: 100,0 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Uread/free access Changeable in: - Drive setting - Ready
P795* Src Comp ActV 795	BICO parameter for selecting a connector from which the actual value for generating the message "Comparison value reached" is to be read in. If the actual value reaches the comparison value (P796), this is indicated in status word 1, bit 10.	Init: 148 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Diagnostics + Messages/displays - Uread/free access Changeable in: - Drive setting
P796 Compare Value 796	Function parameter for entering the comparison value. If the actual value reaches the comparison value entered, this is indicated in status word 1, bit 10.	index1: 100,0 Min: 0,0 Max: 200,0 Unit: % Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Uread/free access Changeable in: - Drive setting - Ready
P797 Compare Hyst 797	Function parameter for entering the hysteresis which is to be taken into account during generation of the message "Comparison value reached". If the actual value reaches the comparison value, this is indicated in status word 1, bit 10.	index1: 3,0 Min: 0,0 Max: 200,0 Unit: % Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Uread/free access Changeable in: - Drive setting - Ready
P798 Compare Time 798	Function parameter for entering the time by which the message "Comparison value reached" is to be lengthened if the actual value falls below the comparison value. If the actual value reaches the comparison value, this is indicated in status word 1, bit 10.	index1: 3,0 Min: 0,0 Max: 100,0 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Uread/free access Changeable in: - Drive setting - Ready
P800 OFF Value 800	Function parameter for entering the turn-off value below which the firing-pulse block is to be generated. If the actual value falls below the turn-off value after an OFF command, the firing pulses are blocked. The firing-pulse block can be delayed by the time entered in P801. In function diagram 480.3	index1: 0,5 Min: 0,0 Max: 200,0 Unit: % Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Uread/free access Changeable in: - Drive setting - Ready
P801 OFF Time 801	Function parameter for entering the time by which the firing-pulse block is to be delayed. If the actual value falls below the turn-off value after an OFF command, blocking of the firing pulses is delayed by the time entered. In function diagram: 480.5	index1: 0,00 Min: 0,00 Max: 100,00 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Uread/free access Changeable in: - Drive setting - Ready
P802* Src Speed Setp 802	BICO parameter for selecting the connector from which the speed setpoint for detection of the direction of rotation is to be read in. The speed setpoint of the setpoint channel (KK0075) is used with preference. The message "Positive speed setpoint" is displayed in status word 1, bit 14.	Init: 75 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Diagnostics + Messages/displays - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
P804 Overspeed Hyst 804	Function parameter for entering the hysteresis for the "Overspeed" message. An overspeed message is indicated in status word 2, bit 18.	Init: 10,0 Min: 0,0 Max: 20,0 Unit: % Indices: - Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Uread/free access Changeable in: - Drive setting - Ready
P805 PullOut/BlckTime 805	Delay time between the message "Deviation" (status word 1 bit 8) during blocking or between detection of stalling in the rotor flux monitor and output of the fault message (r553). Bit28). Note: For synchronous motors (P095=12,13) a stall message is generated as soon as the maximum frequency is reached without waiting the delay time in P805. For externally excited synchronous motors (P095=12) the converter and excitation current is reduced before the fault message is issued. Dependent parameters: P792 (Frequency of set/actual deviation), P794 (Set/actual deviation time)	index1: 2,00 Min: 0,00 Max: 100,00 Unit: s Indices: 4 Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Uread/free access Changeable in: - Drive setting - Ready
P806 Reac Tacho Fault 806	Function parameter for setting the reaction to tachometer faults. If the speed difference between two sampling intervals exceeds the four-fold parameter value in P215, the alarm A43 and after 20*T0 usually fault F53 are generated (P806=0). During speed control, it is possible to change over to encoder-free vector control in the area of the EMF model. For this purpose, P806=1 has to be set. In the event of a fault, the alarm A43 is displayed up until the next pulse inhibit and the binector B0256 is set. At the next pulse inhibit, fault F53 is generated with fault value 0. Caution: It is not advisable to change over to f control when a tachometer with zero track P130=15, 16 (for position sensing) has been parameterized. Fault message F51 may be generated if a zero track is parameterized. Note: It is only possible to change over to f control when the EMF controller is operating (P315>0 and frequency >P313). Changeover back to speed control is not effected until pulse block, and no longer during operation. Changeover is improved if the rotor resistance is correct (see P386). Speed control (P235, P240) must also be operating in a stable manner during f control. With binector B0256 (tacho fault), the gain of the speed controller can be changed over for this purpose (see P238). For torque control by overmodulation of the speed controller, the speed setpoint (smoothed with approx. 100ms) should be followed up with the speed actual value. Parameter values: 0 = fault 1 = changeover from n to f control Precondition: P100 = 4 (n control) In function diagram: 350.2	index1: 0 Min: 0 Max: 1 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
r825 Operat. Hours	Visualization parameter for displaying the operating- hours counter. Only that time is counted during which the unit is operated with released firing pulses (inverter release).	Dec.Plc.: 0 Unit: - Indices: 3 Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Uread/free access
825	Index 1: Days Index 2: Hours Index 3: Seconds		
r826 PCB Code	Visualization parameter for displaying the board code used to determine which electronic boards are installed.	Dec.Plc.: 0 Unit: - Indices: 3	Menus: - Parameter menu + Diagnostics + Messages/displays
826 Compact PLUS only	Index 1: Basic board Index 2: Option board in slot A Index 3: Option board in slot B	Type: O2	- Fixed settings - Quick parameterization - Board configuration - Drive setting - Download - Uread/free access - Power section definition
	Board codes: 90 to 109 = Main board or Control Unit (CUx) 92 = VC basic board 93 = MC Compact basic board 94 = MC CompactPLUS basic board 95 = VC CompactPLUS basic board 106 = AFE basic board		
	110 to 119 = Sensor Board (SBx) 111 = SBP evaluation of pulse encoder 112 = SBM evaluation of encoder/multiturn encoder 1 113 = SBM2 evaluation of encoder/multiturn encoder 2 114 = SBR1 Resolver evaluation 1 115 = SBR2 Resolver evaluation 2		
	120 to 129 = Serial Communication Board (SCB) 121 = not used 122 = not used		
	130 to 139 = Technology Board 131 = T100 Technology board 131 = T300 Technology board 134 = T400 Technology board		
	140 to 149 = Communication Board (CBx) 143 = CBP Profibus board 1 145 = CBD DeviceNet communications board 146 = CBC CAN-Bus board 147 = CC-Link communications board 148 = CBP2 Profibus board 2		
	150 to 169 = Special boards (EBx, SLB) 151 = EB1 Expansion board 1 152 = EB2 Expansion board 2 161 = SLB SIMOLINK board		

Parameter	Description	Data	Read/write
r826 PCB Code	Visualization parameter for displaying the board codes. With the help of these codes the type of the built-in electronics boards can be determined.	Dec.Plc.: 0 Unit: - Indices: 8 Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Fixed settings - Quick parameterization - Board configuration - Drive setting - Download - Uread/free access - Power section definition
826 not Compact PLUS	Index 1: Basic board Index 2: Optional board in slot A Index 3: Optional board in slot B Index 4: Optional board in slot C Index 5: Optional board in slot D Index 6: Optional board in slot E Index 7: Optional board in slot F Index 8: Optional board in slot G		
	Slots D-G are not available in type Compact PLUS.		
	Board codes: 90 to 109 = Main board or Control Unit (CUx) 110 to 119 = Sensor Board (SBx) 120 to 129 = Serial Communication Board (SCB) 130 to 139 = Technology Board 140 to 149 = Communication Board (CBx) 150 to 169 = Special boards (EBx, SLB)		
r827 Generat. Date	Visualization parameter for displaying the date on which the firmware of the basic unit was generated.	Dec.Plc.: 0 Unit: - Indices: 3 Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Drive setting - Uread/free access - Power section definition
827	Index 1: Year Index 2: Month Index 3: Day		
r828 SW ID	Visualization parameter for displaying the software codes. With the help of these codes, the compatibility of the individual software versions can be checked.	Dec.Plc.: 1 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Fixed settings - Quick parameterization - Board configuration - Drive setting - Download - Uread/free access - Power section definition
828 Compact PLUS only	Index 1: Basic board Index 2: Option board in slot A Index 3: Option board in slot B Index 4: Basic board add-on		
	On boards with no software (e.g. SBR, SLB), the corresponding index will always contain 0.0.		
r828 SW ID	Visualization parameter for displaying the software codes. With the help of these codes, the compatibility of the individual software versions can be checked.	Dec.Plc.: 1 Unit: - Indices: 9 Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Fixed settings - Quick parameterization - Board configuration - Drive setting - Download - Uread/free access - Power section definition
828 not Compact PLUS	Index 1: Basic board Index 2: Optional board in slot A Index 3: Optional board in slot B Index 4: Optional board in slot C Index 5: Optional board in slot D Index 6: Optional board in slot E Index 7: Optional board in slot F Index 8: Optional board in slot G Index 9: Basic board add-on		
	For boards without software (e.g. SBR, SLB), 0.0 is always shown in the corresponding index.		

Parameter	Description	Data	Read/write
r829 CalcTimeHdroom	Visualization parameter for displaying the free calculating time. The reserve of the microprocessor system in the basic unit is shown in relation to its total calculating capacity in index 1. The free calculating time is influenced by the set pulse frequency (P340) as well as the number and processing frequency of the activated function blocks.	Dec.Plc.: 0 Unit: - Indices: 10 Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Uread/free access
829	The failed time slots from T2 to T10 are counted in Index 2 t Index 10. Index 11 displays the minimum free number of words of the DSP stack. Caution! A value of 1 means that the stack has an overflow! Index 12 to Index 19 display the remaining calculating time of the 8 DSP residual time slots. The values refer to an empirical value of an empty residual time slot.		
P830* Fault Mask	The faults entered in this parameter are suppressed. Setting note: - Despite suppression, a pulse disable occurs with some faults (UCE, overcurrent, overvoltage, etc.)	index1: 0 Min: 0 Max: 255 Unit: - Indices: 5 Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
830			
r832 Phase Flow	Service parameter, only for Siemens service personnel	Dec.Plc.: 1 Unit: A	Menus: - Parameter menu - Uread/free access
832	"Non-linearized value" of phase currents from A/D converter The hexadecimal values range from 8000h (max. displayed negative current) to 7FFF0h (max. displayed positive current) Index 1: Phase L1 (U) Index 2: Phase L3 (W)	Indices: 2 Type: I4	
	Converter output current: Phase U (Value at the moment)		
r833 Drive Temperat.	Index 1: Inverter temperature Index 2: Rectifier temperature (model specific on AC units with rectifier temperature sensors)	Dec.Plc.: 0 Unit: °C Indices: 4 Type: I2	Menus: - Parameter menu - Uread/free access
833			
Compact PLUS only			
r833 Drive Temperat.	Inverter temperature	Dec.Plc.: 0 Unit: °C Indices: - Type: I2	Menus: - Parameter menu - Uread/free access
833	Maximum temperature of all measuring points in the converter/inverter (heat sink and maybe air flow)		
not Compact PLUS			
P834* OFF1 on Fault	Parameter for entering faults where the drive reacts with a ramp-function generator ramp-down (OFF1) prior to a fault trip in the "Operation" status.	index1: 0 Min: 0 Max: 65535 Unit: - Indices: 5 Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
834	Only faults which do not necessitate an immediate trip can be entered here. The following faults are not permitted: F006, F008, F010, F011, F015, F017, F023, F025, F026, F027		
P835* CtrlBootOptPCB	Service parameter, only for Siemens service personnel	index1: 0 Min: 0 Max: 2 Unit: - Indices: 7 Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting
835			
not Compact PLUS			
P835* CtrlBootOptPCB	Service parameter, only for Siemens service personnel	index1: 0 Min: 0 Max: 2 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting
835			
Compact PLUS only			

Parameter	Description	Data	Read/write
P836* DataOptPCBBoot 836	Service parameter, only for Siemens service personnel Selection of trial operation, only for manufacturer	index1: 0 Min: 0 Max: 65535 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting
P837* state TEST 837	Service parameter, only for Siemens service personnel Selection of trial operation, only for manufacturer	index1: 0 Min: 0 Max: 65535 Unit: - Indices: 3 Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting
r838 VCE/OC/SC Result 838	Service parameter, only for Siemens service personnel Coded results of the VCE/overcurrent/short-circuit test	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu - Uread/free access
P839* AdrConnector 839	Service parameter, only for Siemens service personnel Copies the contents of an address into a connector value, thus enabling any random C16x variable (near, 16 bit address) to be interconnected. This means that any random (internal) variables can be traced. The address of the variables can be determined from the M66 file.	index1: 0 Unit: - Indices: 8 Type: L2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting
	The address (16 bit address) has to be entered in the index. Index 1-4 for near addresses Index 5-8 for DPR addresses (input of the 16-bit offset) Function number 258 -> P2952.58 Enter time slot Index -> connector number 1 -> K434 2 -> K435 3 -> K436 4 -> K437 5 -> K438 6 -> K439 7 -> K440 8 -> K441		
P840* RAM Addr 840	Service parameter, only for Siemens service personnel Address for direct Random Access Memory (RAM) on board Indices: 2 CU. Indices: i001: CS: Code Segment (64kbyte-segment) i002: Off: Offset The contents of the memory cell is displayed in P841. Setting instructions for P840: - In access stage 3, the parameter can only be read, whereas in access stage 4, it can also be written. - Access stage 3 prevents the indicated value in the background from always being written to the visualized address.	index1: 0 Unit: - Indices: 2 Type: L2	Menus: - Parameter menu - Download - Uread/free access - Power section definition Changeable in: - Power section definition - Board configuration - Drive setting - Drive setting - Ready

Parameter	Description	Data	Read/write
P841* RAM Value 841	Service parameter, only for Siemens service personnel Contents of a memory cell on the CU board.	Init: 0 Unit: - Indices: - Type: L2	Menus: - Parameter menu - Download - Uread/free access - Power section definition Changeable in: - Power section definition - Board configuration - Drive setting - Drive setting - Ready
P842* VCS RAM ADDR 842	Service parameter, only for Siemens service personnel Address for direct random memory access (RAM) on gating unit µC. Indices: i001: CS: Code segment (64kByte segment) i002: Off: Offset The contents of the memory cell is displayed in P843. Setting instructions for P843: - In access stage 3, the parameters can only be read, whereas they can also be written in access stage 4. - Access stage 3 prevents the displayed value in the background from always being written to the visualized address.	index1: 0 Unit: - Indices: 2 Type: L2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
P843* VCS RAM Val 843	Service parameter, only for Siemens service personnel Contents of a memory cell of the gating unit µC	Init: 0 Unit: - Indices: - Type: L2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
P844* SEB AnaOut 844	Service parameter, only for Siemens service personnel Parameterization of the SEB board Index 1 to 4 : Extract level address SEB analog output 1 to 4. For this, no connector should be indicated in P845 for the analog output (value=0) Index 5 to 8 : Reinforcement SEB analog output 1 to 4 in graduation 2^n , e.g. value 5: reinforcement = $2^5 = 32$. Attention: Hexadecimal input 10=A Index 9 to 12 : Offset SEB analog output 1 to 4. The value is specified as hexadecimal. 4000h=100%=5V. Index 13 to 16: Segment for address in Index 1 to 4 for SEB analog output 1 to 4.	index1: 0 Unit: - Indices: 16 Type: L2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
P845* SEB AnaOut 845	Service parameter, only for Siemens service personnel Output of connectors to the analog outputs of the SEB Indices 1 - 4 correspond to analog outputs 1 - 4 on the SEB Note: If an address is to be output, the parameter value must be zero before the address is entered in P844.	index1: 0 Unit: - Indices: 4 Type: L2 ,K	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
P847 Paralleling Mode 847	<p>Service parameter, only for Siemens service personnel</p> <p>Setting of the operating mode on parallel connected units. For test purposes, the compensation control or one of the two partial inverters can be switched off.</p> <p>Parameter values:</p> <ul style="list-style-type: none"> 0: both partial inverters released, compensation control active 1: only partial inverter 1 released 2: only partial inverter 2 released 3: both partial inverters released, compensation control not active <p>Note: The parameter may only be used for test purposes. Precondition: parallel connected unit</p>	Init: 0 Min: 0 Max: 3 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting
P848* Test Multiparl. 848	<p>Service parameter, only for Siemens service personnel</p> <p>Setting of the test moduses for the multi-parallel connected devices.</p> <p>Indices:</p> <ul style="list-style-type: none"> i001: SIFr: Pulse release of the individual slaves (each bit corresponds to a slave) <ul style="list-style-type: none"> Bit 0 is for pulse release of the master, Bit 1 is for pulse release of slave1 etc. i002: OCLS: programmable shutdown threshold for overcurrent. <ul style="list-style-type: none"> The value range 0 to 7 corresponds to a shutdown threshold of 70 to 140% of the rated converter current. Only the lowest 3 bits of these values are adopted. i003: OCTR: Overcurrent trip released. (Each bit corresponds to a slave). If the corresponding bit is set, the converter is switched off when the current limit set in Index i002 is exceeded. <ul style="list-style-type: none"> This bit has no effect on the hardware-related overcurrent trip. i004: RGEN: Current compensation control released (each bit corresponds to a slave). If the corresponding bit is set, the compensation control of the current of the corresponding slaves is released. <p>Note: The parameter may only be used for test purposes. Precondition: Multi-parallel connected unit</p>	index1: 255 Min: 0 Max: 255 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
r849 Status Multiparl 849	<p>Service parameter, only for Siemens service personnel</p> <p>Display of the status of the individual slaves.</p> <p>Significance of the individual bits:</p> <ul style="list-style-type: none"> Bit0 = Header Bit1-Bit2 = Hardware version Bit3 = Overvoltage Bit4 = Undervoltage Bit5-Bit7 = Number of inverters Bit8 = Overcurrent error Bit9-Bit11 = Overcurrent flags Bit12 = Hardware conflict Bit13-Bit15 = UCE error(R,S,T) <p>Indices: i001: Slv1: Status slave 1 (master) i002: Slv2: Status slave 2 i003: Slv3: Status slave 3 i004: Slv4: Status slave 4 i005: Slv5: Status slave 5 i006: Slv6: Status slave 6 i007: Slv7: Status slave 7 i008: Slv8: Status slave 8</p> <p>Precondition: multi-parallel connected unit</p>	Dec.Plc.: 0 Unit: - Indices: 8 Type: V2	Menus: - Parameter menu - Uread/free access - Drive setting

Parameter	Description	Data	Read/write
r850 OP Special 1	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Dec.Plc.: 0 Unit: - Indices: 20 Type: O2	Menus: - Parameter menu - Uread/free access
850			
r851 OP Special 2	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Dec.Plc.: 0 Unit: - Indices: 24 Type: O2	Menus: - Parameter menu - Uread/free access
851			
P852* OP Special 3	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Init: 0 Min: - 2147483647 Max: 2147483647 Unit: - Indices: - Type: I4	Menus: - Parameter menu - Uread/free access Changeable in:
852			
r853 OP Special 4	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Dec.Plc.: 0 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access
853			
r854 OP Special 5	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Dec.Plc.: 0 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access
854			
P855 OP Special 6	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	index1: 0 Min: 0 Max: 4294967293 Unit: - Indices: 8 Type: O4	Menus: - Parameter menu - Uread/free access Changeable in:
855			
r856 OP Special 7	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Dec.Plc.: 0 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access
856			
r857 OP Special 8	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Dec.Plc.: 0 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access
857			
r858 OP Special 9	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Dec.Plc.: 0 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access
858			
P888* Quick Param	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Init: 0 Min: 0 Max: 19 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in:
888			
P889* Fixed Settings	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Init: 0 Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in:
889			

Parameter	Description	Data	Read/write
P891* no function 891	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Init: 0 Min: 0 Max: 2 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in:
P892* Diagnostics 892	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Init: 0 Min: 0 Max: 2 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in:
P893* Reg/GateUnit 893	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Init: 0 Min: 0 Max: 4 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in:
P894* Mot/EncodData 894	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Init: 0 Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in:
P895* Communication 895	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Init: 0 Min: 0 Max: 3 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in:
P896 Parameter Menu 896	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Init: 0 Min: 0 Max: 13 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in:
P897* Menu Select 897	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Init: 0 Min: 0 Max: 8 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in:
P898* VectorControl 898	Service parameter, only for Siemens service personnel. Parameter is not visible via the OP1S.	Init: 0 Min: 0 Max: 6 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in:
P918* CB Bus Address 918	Function parameter for entering the bus addresses for a built-in communications board (CBx). The significance of the bus address depends on the protocol. If a set value is not accepted by the communication board, the unit trips a fault. Note: This parameter is not overwritten on downloading via Profibus. Index 1: 1st CB Index 2: 2nd CB In the case of a factory setting via 1st CB or 2nd CB, this parameter is not reset.	index1: 3 Min: 0 Max: 200 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu + Communication + Field bus interfaces - Quick parameterization - Board configuration - Drive setting - Uread/free access Changeable in: - Board configuration - Drive setting

Parameter	Description	Data	Read/write
P922* Telegram Select	The parameter value shows the set telegram to PROFIdrive V3.	Init: 0 Min: 0 Max: 65535	Menus: - Parameter menu + Communication + Field bus interfaces - Quick parameterization - Board configuration - Drive setting - Uread/free access Changeable in: - Board configuration - Drive setting - Drive setting
922	Only visible if the unit is parameterized acc. to PROFIdrive V3.	Unit: - Indices: - Type: O2	
r923 Profibus StdSig	List of all parameters for standard signals	Dec.Plc.: 0 Unit: - Indices: 100	Menus: - Parameter menu + Communication + Field bus interfaces + Motor/encoder + Encoder data - Uread/free access
923	Specific parameter for PROFIdrive V3.	Type: O2	
P927* Parameter Access	Function parameter to enable interfaces for parameterization	Init: 7 Min: 0 Max: 65535	Menus: - User parameters- Parameter menu + General parameters - Fixed settings - Quick parameterization - Board configuration - Drive setting - Download - Uread/free access - Power section definition Changeable in: - Power section definition - Board configuration - Drive setting - Drive setting - Ready
927	For description, see parameter P053.	Unit: - Indices: - Type: V2	
Only visible if the unit is parameterized acc. to PROFIdrive V3.			
r944 Fault Counter	The fault counter is incremented each time there is a change in the fault buffer (P947, P948, P782). This allows a check to be performed on whether data in the fault buffer is being extracted consistently.	Dec.Plc.: 0 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Drive setting - Uread/free access
944			
r947 Fault Memory	Visualization parameter for displaying the last 8 fault trips. For each fault trip, up to 8 faults occurring at the same time can be stored. Only those faults are stored to which a fault number is assigned.	Dec.Plc.: 0 Unit: - Indices: 64 Type: O2	Menus: - Parameter menu + Diagnostics + Faults/warnings - Drive setting - Uread/free access
947	Index 1 to 8: 1st (last) fault trip, faults 1 to 8 Index 9 to 16: 2nd fault trip, faults 1 to 8 Index 17 to 24: 3rd fault trip, faults 1 to 8 Index 25 to 32: 4th fault trip, faults 1 to 8 Index 33 to 40: 5th fault trip, faults 1 to 8 Index 41 to 48: 6th fault trip, faults 1 to 8 Index 49 to 56: 7th fault trip, faults 1 to 8 Index 57 to 64: 8th (oldest) fault trip, faults 1 to 8		
	The value 0 in index 1 means that no fault is active at the present time. Further information for describing fault trips is contained in r782, r949, P952. The fault memory is deleted with the help of P952.		

Parameter	Description	Data	Read/write
r949 Fault Value 949	Visualization parameter for displaying fault values. Fault values contain additional information on the faults which have occurred and allow more exact diagnosis. The fault values are assigned to the faults and are stored in the same indices as the associated fault numbers in r947. Indices 1 to 8: 1st (last) fault trip, fault values 1 to 8 Indices 9 to 16: 2nd fault trip, fault values 1 to 8 Indices 17 to 24: 3rd fault trip, fault values 1 to 8 Indices 25 to 32: 4th fault trip, fault values 1 to 8 Indices 33 to 40: 5th fault trip, fault values 1 to 8 Indices 41 to 48: 6th fault trip, fault values 1 to 8 Indices 49 to 56: 7th fault trip, fault values 1 to 8 Indices 57 to 64: 8th (oldest) fault trip, fault values 1 to 8 Further information on describing fault trips is contained in r782, r947, P952. The fault memory is deleted with the help of P952.	Dec.Plc.: 0 Unit: - Indices: 64 Type: O2	Menus: - Parameter menu + Diagnostics + Faults/warnings - Drive setting - Uread/free access
r951 FaultTextList 951	List of fault texts. Each fault text is stored under the index corresponding to its fault.	Dec.Plc.: 0 Unit: - Indices: 254 Type: O2	Menus: - Parameter menu + Diagnostics + Faults/warnings - Uread/free access
P952* # of Faults 952	Function parameters for displaying the stored fault trips and for deletion of the fault memory. If 0 is entered, the whole fault memory consisting of r782, r947, r949 is deleted.	Init: 0 Min: 0 Max: 8 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Diagnostics + Faults/warnings - Uread/free access Changeable in: - Drive setting
r953 Warning Param 1 953	Visualization parameter for displaying which of warnings 1 to 16 are active.	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Diagnostics + Faults/warnings - Uread/free access
r954 Warning Param 2 954	Visualization parameter for displaying which of warnings 17 to 32 are active.	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Diagnostics + Faults/warnings - Uread/free access
r955 Warning Param 3 955	Visualization parameter for displaying which of warnings 33 to 48 are active.	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Diagnostics + Faults/warnings - Uread/free access
r956 Warning Param 4 956	Visualization parameter for displaying which of warnings 49 to 64 are active.	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Diagnostics + Faults/warnings - Uread/free access
r957 Warning Param 5 957	Visualization parameter for displaying which of warnings 65 to 80 are active.	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Diagnostics + Faults/warnings - Uread/free access
r958 Warning Param 6 958	Visualization parameter for displaying which of warnings 81 to 96 are active. Warnings 81 to 96 are tripped by a built-in communication board (CBx).	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Diagnostics + Faults/warnings - Uread/free access

Parameter	Description	Data	Read/write
r959 Warning Param 7 959	Visualization parameter for displaying which of warnings 97 to 112 are active. Warnings 97 to 112 are tripped by a built-in technology board.	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Diagnostics + Faults/warnings - Uread/free access
r960 Warning Param 8 960	Visualization parameter for displaying which of warnings 113 to 128 are active. Warnings 113 to 128 are tripped by a built-in technology board.	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Diagnostics + Faults/warnings - Uread/free access
r964 Drive ID	Function parameter for unit data identification. (see also PROFIDrive Profile Version 3).	Dec.Plc.: 0 Unit: - Indices: 5 Type: O2	Menus: - Parameter menu - Uread/free access
964	Index 1: Manufacturer value=42 Index 2: Unit type Index 3: Version (format xxxy) Index 4: Date of firmware (year) Index 5: Date of firmware (day/month)		
	The value of the unit type is 3080 on MASTERDRIVES VC, 3085 on MASTERDRIVES VC Compact PLUS, 3090 on MASTERDRIVES MC, 3100 on MASTERDRIVES MC Compact PLUS.		
	Only visible if the unit has been parameterized according to PROFIdrive V3		
r965 Profile # 965	Profibus-specific parameter Value depends on whether the unit has been parameterized according to PROFIdrive V3.	Dec.Plc.: 0 Unit: - Indices: - Type: OS	Menus: - Parameter menu - Uread/free access
r967 Control Word 1 967	Visualization parameter for displaying control word 1. Bits 0 to 15 are displayed.	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu - Uread/free access
r968 Status Word 1 968	Visualization parameter for displaying status word 1. Bits 0 to 15 are displayed.	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu - Uread/free access
P970* Factory Setting 970	Function parameter for starting the parameter reset to a factory or fixed setting. After completion of the factory setting, this parameter is also reset to its original value, 1. 0 = Start parameter reset 1 = No parameter reset	Init: 1 Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Functions - Fixed settings - Uread/free access Changeable in: - Board configuration - Drive setting - Drive setting
	Caution: A parameter reset causes the loss of all parameter changes.		
	If the factory setting of the parameter is made via an interface (SCom1, SCom2, SCB2, 1st CB, 2nd CB) to 0 = "Start parameter reset", the following parameters are not reset: SCom1, SCom2: P053, P700-704 SCB2: P053, P700-704, P696 1st CB, 2nd CB: P053, P711-722, P918		
	The following parameters are only reset to a certain extent: P050, P072		

Parameter	Description	Data	Read/write
P971*	Function parameter for starting saving of the parameters from the RAM to the EEPROM. Volatile stored parameters can be transferred to the EEPROM by overwriting a parameter value of 0 with 1. The parameter values are then stored non-volatilely and are secured against mains failure.	Init: 0 Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu + General parameters - Uread/free access Changeable in: - Drive setting - Ready
971	0 = No saving 1 = One-time saving		
	The parameter must be reset manually to 0.		
P972*	Power-On reset	Init: Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Board configuration - Drive setting - Uread/free access - Power section definition Changeable in: - Power section definition - Board configuration - Drive setting - Drive setting
972	The Power-On reset works in the same way as Electronic voltage Off -> On. This initializes the control board and leads to a loss of communication. This value should therefore not normally be included in a download file.		
r980	Visualization parameter for displaying the first 100 parameter numbers in the range 0 to 999. The parameter numbers are arranged in ascending order. The first 0 occurring in the index signals that there are no further parameter numbers. If the number of indices is not sufficient to display all parameter numbers, index 101 contains the parameter numbers in which the list is continued.	Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
Par # List pt1			
980			
r981	Visualization parameter for displaying the second 100 parameter numbers in the range 0 to 999. The parameter numbers are arranged in ascending order. The first 0 occurring in the index signals that there are no further parameter numbers. If the number of indices is not sufficient to display all parameter numbers, index 101 contains the parameter numbers in which the list is continued.	Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
Par # List pt2			
981			
r982	Visualization parameter for displaying the third 100 parameter numbers in the range 0 to 999. The parameter numbers are arranged in ascending order. The first 0 occurring in the index signals that there are no further parameter numbers. If the number of indices is not sufficient to display all parameter numbers, index 101 contains the parameter numbers in which the list is continued.	Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
Par # List pt3			
982			
r983	Visualization parameter for displaying the fourth 100 parameter numbers in the range 0 to 999. The parameter numbers are arranged in ascending order. The first 0 occurring in the index signals that there are no further parameter numbers. If the number of indices is not sufficient to display all parameter numbers, index 101 contains the parameter numbers in which the list is continued.	Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
Par # List pt4			
983			
r984	Visualization parameter for displaying the fifth 100 parameter numbers in the range 0 to 999. The parameter numbers are arranged in ascending order. The first 0 occurring in the index signals that there are no further parameter numbers. If the number of indices is not sufficient to display all parameter numbers, index 101 contains the parameter numbers in which the list is continued.	Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
Par # List pt5			
984			
r985	Visualization parameter for displaying the sixth 100 parameter numbers in the range 0 to 999. The parameter numbers are arranged in ascending order. The first 0 occurring in the index signals that there are no further parameter numbers. If the number of indices is not sufficient to display all parameter numbers, index 101 contains the parameter numbers in which the list is continued.	Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
Par # List pt6			
985			

Parameter	Description	Data	Read/write
r986 Par # List pt7	Visualization parameter for displaying the seventh 100 parameter numbers in the range 0 to 999. The parameter numbers are arranged in ascending order. The first 0 occurring in the index signals that there are no further parameter numbers. If the number of indices is not sufficient to display all parameter numbers, index 101 contains the parameter numbers in which the list is continued.	Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
986			
r987 Par # List pt8	Visualization parameter for displaying the eighth 100 parameter numbers in the range 0 to 999. The parameter numbers are arranged in ascending order. The first 0 occurring in the index signals that there are no further parameters. If the number of indices is not sufficient to display all parameter numbers, index 101 contains the parameter numbers in which the list is continued.	Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
987			
r988 Par # List pt9	Visualization parameter for displaying the ninth 100 parameter numbers in the range 0 to 999. The parameter numbers are arranged in ascending order. The first 0 occurring in the index signals that there are no further parameter numbers. If the number of indices is not sufficient to display all parameter numbers, index 101 contains the parameter numbers in which the list is continued.	Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
988			
r989 Par # List pt10	Visualization parameter for displaying the tenth 100 parameter numbers in the range 0 to 999. The parameter numbers are arranged in ascending order. The first 0 occurring in the index signals that there are no further parameter numbers.	Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
989			
r990 Par # List chg1	Visualization parameters for displaying the first 100 changed parameter numbers in the range 0 to 999. The parameter numbers are arranged in ascending order. The first 0 occurring in the index signals that there are no further parameters. If the number of indices is not sufficient to display all parameter numbers, index 101 contains the parameter numbers in which the list is continued.	Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
990			
r991 Par # List chg2	Visualization parameters for displaying the second 100 changed parameter numbers in the range 0 to 999. The parameter numbers are arranged in ascending order. The first 0 occurring in the index signals that there are no further parameters. If the number of indices is not sufficient to display all parameter numbers, index 101 contains the parameter numbers in which the list is continued.	Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
991			
r992 Par # List chg3	Visualization parameters for displaying the third 100 change parameter numbers in the range 0 to 999. The parameter numbers are arranged in ascending order. The first 0 occurring in the index signals that there are no further parameters.	Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
992			
U001 FixSetup 17	Function parameter for entering fixed setpoint 17.	index1: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2001			
U002 FixSetup 18	Function parameter for entering fixed setpoint 18.	index1: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2002			

Parameter	Description	Data	Read/write
U003 FixSetup 19	Function parameter for entering fixed setpoint 19.	index1: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2003			
U004 FixSetup 20	Function parameter for entering fixed setpoint 20.	index1: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2004			
U005 FixSetup 21	Function parameter for entering fixed setpoint 21.	index1: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2005			
U006 FixSetup 22	Function parameter for entering fixed setpoint 22.	index1: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2006			
U007 FixSetup 23	Function parameter for entering fixed setpoint 23.	index1: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2007			
U008 FixSetup 24	Function parameter for entering fixed setpoint 24.	index1: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2008			
U009 FixSetup 25	Function parameter for entering fixed setpoint 25.	index1: 0 Min: 0 Max: 65535 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2009			
U011 FixSetup 26	Function parameter for entering fixed setpoint 26.	index1: 0,000 Min: -200,000 Max: 200,000 Unit: % Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2011			

Parameter	Description	Data	Read/write
U012 FixSetup 27	Function parameter for entering fixed setpoint 27.	index1: 0,000 Min: -200,000 Max: 200,000 Unit: % Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2012			
U013 FixSetup 28	Function parameter for entering fixed setpoint 28.	index1: 0,000 Min: -200,000 Max: 200,000 Unit: % Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2013			
U014 FixSetup 29	Function parameter for entering fixed setpoint 29.	index1: 0,000 Min: -200,000 Max: 200,000 Unit: % Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2014			
U015 FixSetup 30	Function parameter for entering fixed setpoint 30.	index1: 0 Min: - 2147483647 Max: 2147483647 Unit: - Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2015			
U016 FixSetup 31	Function parameter for entering fixed setpoint 31.	index1: 0 Min: - 2147483647 Max: 2147483647 Unit: - Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2016			
U017 FixSetup 32	Function parameter for entering fixed setpoint 32.	index1: 0 Min: - 2147483647 Max: 2147483647 Unit: - Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2017			
U018 FixSetup 33	Function parameter for entering fixed setpoint 33.	index1: 0 Min: - 2147483647 Max: 2147483647 Unit: - Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2018			
U019* Src SH1 KK	Sample&Hold element Input parameter for the double word connectors	index1: 0 Unit: - Indices: 4 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2019			

Parameter	Description	Data	Read/write
U020* Src SH1 K 2020	Sample&Hold element Input parameter for connectors	index1: 0 Unit: - Indices: 8 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U021 Fixed Bit 1 2021	Function parameter for entering fixed bit 1.	index1: 0 Min: 0 Max: 1 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U022 Fixed Bit 2 2022	Function parameter for entering fixed bit 2.	index1: 0 Min: 0 Max: 1 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U023 Fixed Bit 3 2023	Function parameter for entering fixed bit 3.	index1: 0 Min: 0 Max: 1 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U024 Fixed Bit 4 2024	Function parameter for entering fixed bit 4.	index1: 0 Min: 0 Max: 1 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U025 Fixed Bit 5 2025	Function parameter for entering fixed bit 5.	index1: 0 Min: 0 Max: 1 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U026 Fixed Bit 6 2026	Function parameter for entering fixed bit 6.	index1: 0 Min: 0 Max: 1 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U027 Fixed Bit 7 2027	Function parameter for entering fixed bit 7.	index1: 0 Min: 0 Max: 1 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U028 Fixed Bit 8 2028	Function parameter for entering fixed bit 8.	index1: 0 Min: 0 Max: 1 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U029* Src SH2 KK 2029	Sample&Hold element Input parameter for the double word connectors	index1: 0 Unit: - Indices: 4 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U030* Src SH2 K 2030	Sample&Hold element Input parameter for connectors	index1: 0 Unit: - Indices: 8 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U031* Src Conn Disp 1 2031	BICO parameter for selecting the connector for connector display 1.	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
n032 Conn Disp 1 2032	Visualization parameter for connector display 1.	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access
U033* Src Conn Disp 2 2033	BICO parameter for selecting the connector for connector display 2.	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
n034 Conn Disp 2 2034	Visualization parameter for connector display 2.	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access
U035* Src Conn Disp 3 2035	BICO parameter for selecting the connector for connector display 3.	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
n036 Conn Disp 3 2036	Visualization parameter for connector display 3.	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access
U037* Src DConn Disp 1 2037	BICO parameter for selecting the connector for double-connector display 1.	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
n038 DConn Disp 1 2038	Visualization parameter for double-connector display 1.	Dec.Plc.: 3 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access

Parameter	Description	Data	Read/write
U039* Src DConn Disp 2 2039	BICO parameter for selecting the connector for double-connector display 2.	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
n040 DConn Disp 2 2040	Visualization parameter for double-connector display 2	Dec.Plc.: 3 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access
U041* Src DConn Disp 3 2041	BICO parameter for selecting the connector for double-connector display 3	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
n042 DConn Disp 3 2042	Visualization parameter for double-connector display 3	Dec.Plc.: 0 Unit: - Indices: - Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access
U043* Src DConn Disp 4 2043	BICO parameter for selecting the connector for double-connector display 4	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
n044 DConn Disp 4 2044	Visualization parameter for double-connector display 4	Dec.Plc.: 0 Unit: - Indices: - Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access
U045* Src Bin Disp 1 2045	BICO parameter for selecting the binector for binector display 1.	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
n046 Bin Disp 1 2046	Visualization parameter for binector display 1.	Dec.Plc.: 0 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access
U047* Src Bin Disp 2 2047	BICO parameter for selecting the binector for binector display 2.	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
n048 Bin Disp 2 2048	Visualization parameter of binector display 2	Dec.Plc.: 0 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access

Parameter	Description	Data	Read/write
U049* Src Bin Disp 3	BICO parameter for selecting the binector for binector display 3	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2049			
n050 Bin Disp 3	Visualization parameter of binector display 3	Dec.Plc.: 0 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access
2050			
U051* Src Bin Disp 4	BICO parameter for selecting the binector for binector display 4	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2051			
n052 Bin Disp 4	Visualization parameter of binector display 4	Dec.Plc.: 0 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access
2052			
U053* SrcConnDispSmth	BICO parameter for selecting the connector for connector display with smoothing.	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2053			
n054 Conn Disp Smooth	Visualization parameter of connector display with smoothing	Dec.Plc.: 2 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access
2054			
U055* SrcDConnDispSmth	BICO parameter for selecting the connector for double-connector display with smoothing.	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2055			
n056 DConnDisp Smooth	Visualization parameter of the double-connector display with smoothing.	Dec.Plc.: 3 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access
2056			
U057* SrcBin/Con Conv4	BICO parameter for selecting the binectors for binector/connector converter 1.	index1: 0 Unit: - Indices: 16 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2057			
n058 IndBin/Con Conv4	Visualization parameter of binector/connector converter 1.	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Free blocks - Uread/free access
2058			
U059* Src SH1 B	Sample&Hold module Input parameter for binectors	index1: 0 Unit: - Indices: 8 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2059			

Parameter	Description	Data	Read/write
U060* SH1 Time Slot 2060	Sample&Hold element Parameter for entering the slower time slot	Init: 2 Min: 2 Max: 10 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U061* Src Fault F148 2061	BICO parameter for selecting the binector for fault trip 1 (F148).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U062* Src Fault F149 2062	BICO parameter for selecting the binector for fault trip 2 (F149).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U063* Src Fault F150 2063	BICO parameter for selecting the binector for fault trip 3 (F150).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U064* Src Fault F151 2064	BICO parameter for selecting the binector for fault trip 4 (F151).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U065* Src Warning A061 2065	BICO parameter for selecting the binector for warning trip 1 (A061).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U066* Src Warning A062 2066	BICO parameter for selecting the binector for warning trip 2 (A062).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U067* Src Warning A063 2067	BICO parameter for selecting the binector for warning trip 3 (A063).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U068* Src Warning A064 2068	BICO parameter for selecting the binector for warning trip 4 (A064).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U070* Src Conn/DConnC 2070	BICO parameter for selecting the connectors for the 3 connector/double-connector converter.	index1: 0 Unit: - Indices: 6 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U071* Src DConn/ConnC 2071	BICO parameter for selecting the connectors for the 3 double-connector/connector converters.	index1: 0 Unit: - Indices: 3 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U072* Src Conn/BinC 2072	BICO parameter for selecting the connectors for the 3 connector/binector converters.	index1: 0 Unit: - Indices: 3 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
n073 # Conn/BinC1 2073	Visualization parameter of connector/binector converter 1.	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Free blocks - Uread/free access
n074 # Conn/BinC2 2074	Visualization parameter of connector/binector converter 2	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Free blocks - Uread/free access
n075 # Conn/BinC3 2075	Visualization parameter of connector/binector converter 3	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Free blocks - Uread/free access
U076* Src Bin/ConnC1 2076	BICO parameter for selecting the binectors for binector/connector converter 1.	index1: 0 Unit: - Indices: 16 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
n077 #Bin/ConnC1 2077	Visualization parameter of binector/connector converter 1.	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Free blocks - Uread/free access
U078* Src Bin/ConnC2 2078	BICO parameter for selecting the binectors for binector/connector converter 2.	index1: 0 Unit: - Indices: 16 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
n079 # Bin/ConnC2 2079	Visualization parameter of binector/connector converter 2.	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Free blocks - Uread/free access
U080* Src Bin/ConnC3 2080	BICO parameter for selecting the binectors for binector/connector converter 3.	index1: 0 Unit: - Indices: 16 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
n081 # Bin/ConnC3	Visualization parameter of binector/connector converter 3.	Dec.Plc.: 0 Unit: - Indices: - Type: V2	Menus: - Parameter menu + Free blocks - Uread/free access
2081			
U082* Src Conn Add 1	BICO parameter for selecting the connectors for adder 1 (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2082			
U083* Src Conn Add 2	BICO parameter for selecting the connectors for adder 2 (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2083			
U084* Src Conn Add 3	BICO parameter for selecting the connectors for adder 3 (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2084			
U085* Src Conn Add 4	BICO parameter for selecting the connectors for adder 4 (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2085			
U086* Src Conn Add 5	BICO parameter for selecting the connectors for adder 5 with four inputs (1 word).	index1: 0 Unit: - Indices: 4 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2086			
U087* Src ConnSub1	BICO parameter for selecting the connectors for subtracter 1 (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2087			
U088* Src ConnSub2	BICO parameter for selecting the connectors for subtracter 2 (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2088			
U089* Src ConnSub3	BICO parameter for selecting the connectors for subtracter 3 (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2089			
U090* Src DConnAdd 1	BICO parameter for selecting the connectors for adder 1 (2 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2090			

Parameter	Description	Data	Read/write
U091* Src DConnAdd 2 2091	BICO parameter for selecting the connectors for adder 2 (2 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U092* Src DConnAdd 3 2092	BICO parameter for selecting the connectors for adder 3 (2 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U093* Src DConnAdd 4 2093	BICO parameter for selecting the connectors for adder 4 (2 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U094* Src DConnSub1 2094	BICO parameter for selecting the connectors for subtracter 1 (2 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U095* Src DConnSub2 2095	BICO parameter for selecting the connectors for subtracter 2 (2 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U096* Src ConnM A/S 2096	BICO parameter for selecting the connectors for modulo 2^16 adder / subtracter.	index1: 0 Unit: - Indices: 3 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U097* Src ConnM A/S 2097	BICO parameter for selecting the connectors for modulo 2^32 adder / subtracter.	index1: 0 Unit: - Indices: 3 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U098* Src Conn Inv1 2098	BICO parameter for selecting the connector for sign inverter 1 (1 word).	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U099* Src Conn Inv2 2099	BICO parameter for selecting the connector for sign inverter 2 (1 word).	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U100* Src Conn Inv3 2100	BICO parameter for selecting the connector for sign inverter 3 (1 word).	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
U101* Src DConn Inv 1 2101	BICO parameter for selecting the connector for sign inverter 1 (2 word).	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U102* Src DConn Inv 2 2102	BICO parameter for selecting the connector for sign inverter 2 (2 word).	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U103* Src1 Conn SwInv 2103	BICO parameter for selecting the binector for the switchable sign inverter (1 word).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U104* Src2 Conn SwInv 2104	BICO parameter for selecting the connector for the switchable sign inverter (1 word).	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U105* Src1 DConnSwInv 2105	BICO parameter for selecting the binector for the switchable sign inverter (2 word).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U106* Src2 DConnSwInv 2106	BICO parameter for selecting the connector for the switchable sign inverter (2 word).	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U107* Src Conn Mult1 2107	BICO parameter for selecting the connectors for multiplier 1 (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U108* Src Conn Mult2 2108	BICO parameter for selecting the connectors for multiplier 2 (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U109* Src Conn Mult3 2109	BICO parameter for selecting the connectors for multiplier 3 (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U110* Src DConn Mult 2110	BICO parameter for selecting the connectors for multiplier 1 (2 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
U111* Src Conn Div1 2111	BICO parameter for selecting the connectors for divider 1 (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U112* Src Conn Div2 2112	BICO parameter for selecting the connectors for divider 2 (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U113* SrcDConn Div 2113	BICO parameter for selecting the connectors for divider 1 (2 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U114* SrcConnMult/Div1 2114	BICO parameter for selecting the connectors for high-resolution multiplier/divider 1 (1 word).	index1: 0 Unit: - Indices: 3 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U115* SrcConnMult/Div2 2115	BICO parameter for selecting the connectors for high-resolution multiplier/divider 2 (1 word).	index1: 0 Unit: - Indices: 3 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U116* SrcConnMult/Div3 2116	BICO parameter for selecting the connectors for high-resolution multiplier/divider 3 (1 word).	index1: 0 Unit: - Indices: 3 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U117* Src ConnAbsV1 2117	BICO parameter for selecting the connector for the 1st absolute-value generator with smoothing (1 word).	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U118* Mode ConnAbsV1 2118	Function parameter for selecting the mode of the 1st absolute-value generator with smoothing (1 word).	Init: 0 Min: 0 Max: 3 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U119 SmoothConAbsV1 2119	Function parameter for entering the smoothing time constant of the 1st absolute-value generator with smoothing (1 word).	Init: 0 Min: 0 Max: 10000 Unit: ms Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U120* Src ConnAbsV2 2120	BICO parameter for selecting the connector for the 2nd absolute-value generator with smoothing (1 word).	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
U121* Mode ConnAbsV2 2121	Function parameter for selecting the mode of the 2nd absolute-value generator with smoothing (1 word).	Init: 0 Min: 0 Max: 3 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U122 SmoothConAbsV2 2122	Function parameter for entering the smoothing time constants of the 2nd absolute-value generator with smoothing (1 word).	Init: 0 Min: 0 Max: 10000 Unit: ms Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U123* Src ConnAbsV3 2123	BICO parameter for selecting the connector for the 3rd absolute-value generator with smoothing (1 word).	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U124* Mode ConnAbsV3 2124	Function parameter for selecting the mode of the 3rd absolute-value generator (1 word).	Init: 0 Min: 0 Max: 3 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U125 SmoothConAbsV3 2125	Function parameter for entering the time constants of the 3rd absolute-value generator with smoothing (1 word).	Init: 0 Min: 0 Max: 10000 Unit: ms Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U126* SrcDConnAbsV 2126	BICO parameter for selecting the connector for the 1st absolute-value generator with smoothing (2 word).	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U127* Mode DConnAbsV 2127	Function parameter for selecting the mode of the 1st absolute-value generator with smoothing (2 word).	Init: 0 Min: 0 Max: 3 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U128 SmoothDConnAbsV 2128	Function parameter for entering the smoothing time constants of the 1st absolute-value generator with smoothing (2 word).	Init: 0 Min: 0 Max: 10000 Unit: ms Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U129 FSetpConnLimiter1 2129	Function parameter for entering the fixed setpoint for limiter (1 word).	index1: 100,0C Min: -200,00 Max: 200,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U130* Src ConnLimitr1 2130	BICO parameter for selecting the connector for limiter 1 (1 word).	index1: 503 Unit: - Indices: 3 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U131 FSetpConnLimitr2 2131	Function parameter for entering the fixed setpoint for limiter (1 word).	index1: 100,0C Min: -200,00 Max: 200,00 Unit: % Indices: 4 ,FDS Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U132* Src ConnLimitr2 2132	BICO parameter for selecting the connector for limiter 2 (1 word).	index1: 506 Unit: - Indices: 3 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U133 FSetp DConnLmt 2133	Function parameter for entering the fixed setpoint for limiter (2 word).	index1: 100,0C Min: -200,00 Max: 200,00 Unit: % Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U134* SrcDConnLimitr 2134	BICO parameter for selecting the connector for limiter 1 (2 word).	index1: 509 Unit: - Indices: 3 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U135 FSetpConnLmtMon1 2135	Function parameter for entering the fixed setpoint for the 1st limit-value monitor with smoothing (1 word).	Init: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U136* SrcConnLmtMon1 2136	BICO parameter for selecting the connector for the 1st limit-value monitor with smoothing (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U137 SmConnLmtMon1 2137	Function parameter for entering the smoothing time constants of the 1st limit-value monitor with smoothing (1 word).	Init: 0 Min: 0 Max: 10000 Unit: ms Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U138 HysConnLmtMon1 2138	Function parameter for entering the hysteresis of the 1st limit-value monitor with smoothing (1 word).	Init: 0,00 Min: 0,00 Max: 199,99 Unit: % Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U139* ModeConnLmtMon1 2139	Function parameters for entering the mode of the 1st limit-value monitors with smoothing (1 word).	Init: 0 Min: 0 Max: 2 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U140 FSetpConnLmtMon1 2140	Function parameter for entering the fixed setpoint for the 2nd limit-value monitor with smoothing (1 word).	Init: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U141* SrcConnLmtMon2 2141	BICO parameter for selecting the connector for the 2nd limit-value monitor with smoothing (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U142 SmConnLmtMon 2 2142	Function parameter for entering the smoothing time constants of the 2nd limit-value monitors with smoothing (1 word).	Init: 0 Min: 0 Max: 10000 Unit: ms Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U143 HysConnLmtMon2 2143	Function parameter for entering the hysteresis of the 2nd limit-value monitors with smoothing (1 word).	Init: 0,00 Min: 0,00 Max: 199,99 Unit: % Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U144* ModeConnLmtMon2 2144	Function parameter for entering the mode of the 2nd limit-value monitors with smoothing (1 word).	Init: 0 Min: 0 Max: 2 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U145 FSDConnLmtMon1 2145	Function parameter for entering the fixed setpoint for the 1st limit-value monitor with smoothing (2 word).	Init: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U146* SrcDConnLmtMon1 2146	BICO parameter for selecting the connector for the 1st limit-value monitor with smoothing (2 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U147 HysLmtMon3 2147	Function parameter for entering the smooothing time constants of the 1st limit-value monitor with smoothing (2 word).	Init: 0 Min: 0 Max: 10000 Unit: ms Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U148 HysDConnLmtMon1	Function parameter for entering the hysteresis of the 1st limit-value monitor with smoothing (2 word).	Init: 0,00 Min: 0,00 Max: 199,99 Unit: % Indices: - Type: O4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2148			
U149* ModeDConnLmtMon 1	Function parameter for entering the mode of the 1st limit-value monitors with smoothing (2 word).	Init: 0 Min: 0 Max: 2 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2149			
U150 FSDConnLmtMon2	Function parameter for entering the fixed setpoint for the 2nd limit-value monitor without smoothing (2 word).	Init: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2150			
U151* SrcDConnLmtMon2	BICO parameter for selecting the connector for the 2nd limit-value monitor without smoothing (2 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2151			
U152 HysDConnLmtMon2	Function parameter for entering the hysteresis of the 2nd limit-value monitor without smoothing (2 word).	Init: 0,00 Min: 0,00 Max: 199,99 Unit: % Indices: - Type: O4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2152			
U153* ModeDConnLmtMon 2	Function parameters for entering the mode of the 2nd limit-value monitor without smoothing (2 word).	Init: 0 Min: 0 Max: 2 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2153			
U154* Src Cam 1/2	BICO parameter for selecting the connector for the cam controller with cam 1 and cam 2.	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2154			
U155 Hys Cam 1/2	Function parameter for entering the hysteresis of the cam controller with cam 1 and cam 2.	Init: 0 Min: 0 Max: 2147483647 Unit: - Indices: - Type: O4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2155			
U156 ON-Pos Cam1	Function parameter for entering the ON-position of cam 1. The value of the ON position must be smaller than that of the OFF position.	index1: 0 Min: -2147483647 Max: 2147483647 Unit: - Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2156			

Parameter	Description	Data	Read/write
U157 OFF-Pos Cam1	Function parameter for entering the OFF-position of cam 1.	index1: 0 Min: - 2147483647 Max: 2147483647 Unit: - Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2157			
U158 ON-Pos Cam2	Function parameter for entering the ON-Position of cam 2.	index1: 0 Min: - 2147483647 Max: 2147483647 Unit: - Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2158			
U159 OFF-Pos Cam2	Function parameter for entering the OFF-position of cam 2.	index1: 0 Min: - 2147483647 Max: 2147483647 Unit: - Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2159			
U160* Src Cam 3/4	BICO parameter for selecting the connector for the cam controller with cam 3 and cam 4.	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2160			
U161 Hys Cam 3/4	Function parameter for entering the hysteresis of the cam controller with cam 3 and cam 4.	Init: 0 Min: 0 Max: 2147483647 Unit: - Indices: - Type: O4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2161			
U162 ON-Pos Cam3	Function parameter for entering the ON-position of cam 3.	index1: 0 Min: - 2147483647 Max: 2147483647 Unit: - Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2162			
U163 OFF-Pos Cam3	Function parameter for entering the OFF-position of cam 3.	index1: 0 Min: - 2147483647 Max: 2147483647 Unit: - Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2163			

Parameter	Description	Data	Read/write
U164 ON-Pos Cam4	Function parameters for entering the ON-position of cam 4.	index1: 0 Min: - 2147483647 Max: 2147483647 Unit: - Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2164			
U165 OFF-Pos Cam4	Function parameters for entering the OFF-position of cam 4.	index1: 0 Min: - 2147483647 Max: 2147483647 Unit: - Indices: 4 ,FDS Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2165			
U166* Src1 ConnCh1	BICO parameter for selecting the binector for the analog-signal changeover switch 1 (1 word).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2166			
U167* Src2 ConnCh1	BICO parameter for selecting the connectors for analog-signal changeover switch 1 (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2167			
U168* Src1 ConnCh2	BICO parameter for selecting the binector for analog-signal changeover switch 2 (1 word).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2168			
U169* Src2 ConnCh2	BICO parameter for selecting the connectors for analog-signal changeover switch 2 (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2169			
U170* Src1 ConnCh3	BICO parameter for selecting the binector for analog-signal changeover switch 3 (1 word).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2170			
U171* Src2 ConnCh3	BICO parameter for selecting the connectors for analog-signal changeover switch 3 (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2171			
U172* Src1 ConnCh4	BICO parameter for selecting the binector for analog-signal changeover switch 4 (1 word).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2172			

Parameter	Description	Data	Read/write
U173* Src2 ConnCh4 2173	BICO parameter for selecting the connectors for analog-signal changeover switch 4 (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U174* Src1 ConnCh5 2174	BICO parameter for selecting the binector for analog-signal changeover switch 5 (1 word).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U175* Src2 ConnCh5 2175	BICO parameter for selecting the connectors for analog-signal changeover switch 5 (1 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U176* Src1DconnCh1 2176	BICO parameter for selecting the binector for analog-signal changeover switch 1 (2 word).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U177* Src2DConnCh1 2177	BICO parameter for selecting the connectors for analog-signal changeover switch 1 (2 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks + Technology + Positioning - Uread/free access Changeable in: - Drive setting
U178* Src1DConnCh2 2178	BICO parameter for selecting the binector for analog-signal changeover switch 2 (2 word).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U179* Src2DConnCh2 2179	BICO parameter for selecting the connectors for analog-signal changeover switch 2 (2 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U180* Src1DConnCh3 2180	BICO parameter for selecting the binector for analog-signal changeover switch 3 (2 word).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U181* Src2DConnCh3 2181	BICO parameter for selecting the connectors for analog-signal changeover switch 3 (2 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
U182* Src1DConnCh4 2182	BICO parameter for selecting the binector for analog-signal changeover switch 4 (2 word).	Init: - Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U183* Src2DConnCh4 2183	BICO parameter for selecting the connectors for analog-signal changeover switch 4 (2 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U184* Src1DConnCh5 2184	BICO parameter for selecting the binector for analog-signal changeover switch 5 (2 word).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U185* Src2DConnCh5 2185	BICO parameter for selecting the connectors for analog-signal changeover switch 5 (2 word).	index1: 0 Unit: - Indices: 2 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U186* Src1 Multiplex 2186	Source for the binectors of the multiplexer with 8 channels: Index 1 : Signal selection Bit 0 Index 2 : Signal selection Bit 1 Index 3 : Signal selection Bit 2 Index 4 : Enable signal selection	index1: 0 Unit: - Indices: 4 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U187* Src 2 Multiplex 2187	The parameter defines the connector inputs of the multiplexer with 8 channels: Index 1 : Input 1 to Index 8 : Input 8	index1: 0 Unit: - Indices: 8 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U188* Src1 Demultiplex 2188	BICO for selecting the binectors for the demultiplexer with 8 channels (2 word).	index1: 0 Unit: - Indices: 5 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U189* Src2 Demultiplex 2189	BICO parameter for selecting the connectors for the demultiplexer with 8 channels (2 word).	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U190* Src Char1 2190	BICO parameter for selecting the connectors for characteristic block 1 (1 word).	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U191 X-Vals Char1 2191	Function parameters for entering the X-values for characteristic block 1 (1 word).	index1: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: 10 Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U192 Y-Vals Char1	Function parameters for entering the Y-values for characteristic block 1 (1 word).	index1: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: 10 Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2192			
U193* Src Char2	BICO parameter for selecting the connectors for characteristic block 2 (1 word).	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2193			
U194 X-Vals Char2	Function parameters for entering the X-values for characteristic block 2 (1 word).	index1: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: 10 Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2194			
U195 Y-Vals Char2	Function parameters for entering the Y-values for characteristic block 2 (1 word).	index1: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: 10 Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2195			
U196* Src Char3	BICO parameter for selecting the connectors for the characteristic block 3 (1 word).	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2196			
U197 X-Vals Char3	Function parameters for entering the X-values for characteristic block 2 (1 word).	index1: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: 10 Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2197			
U198 Y-Vals Char3	Function parameters for entering the Y-values for characteristic block 3 (1 word).	index1: 0,00 Min: -200,00 Max: 200,00 Unit: % Indices: 10 Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2198			
U199* Src DeadZone	BICO parameter for selecting the connectors for the dead zone (1 word).	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2199			
U200 Neutral Zone	Function parameter for entering the neutral zone for the dead zone (1 word).	Init: 0,00 Min: 0,00 Max: 100,00 Unit: % Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2200			

Parameter	Description	Data	Read/write
U201* SrcMaxSel 2201	BICO parameter for selecting the connectors for maximum selection (2 word).	index1: 0 Unit: - Indices: 3 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U202* SrcMinSel 2202	BICO parameter for selecting the connectors for minimum selection (2 word).	index1: 0 Unit: - Indices: 3 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U203* Src1 Tra/Stor1 2203	BICO parameter for selecting the binectors for the control inputs of the tracking/storage element. Index 1: Track Index 2: Store Index 3: Reset	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U204* Src2 Tra/Stor1 2204	BICO parameter for selecting the connector for tracking/storage element 1 (2 word).	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U205* Mode Tra/Stor1 2205	Function parameter for selecting the mode of the tracking/storage element (2 word). Parameter value 0 = non-volatile memory off 1 = non-volatile memory on	Init: 0 Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U206* Src1 Tra/Stor2 2206	BICO parameter for selecting the binectors for the control inputs of the tracking/storage element. Index 1: Track Index 2: Store Index 3: Reset	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U207* Src2 Tra/Stor2 2207	BICO parameter for selecting the connectors for tracking/storage element 2 (2 word).	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U208* Mode Tra/Stor2 2208	Function parameter for selecting the mode of the tracking/storage element (2 word). Parameter value 0 = non-volatile memory off 1 = non-volatile memory on	Init: 0 Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U209* Src1 Store 1 2209	BICO parameter for selecting the connectors for analog-signal storage 1 (2 word).	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U210* Src2 Store 1 2210	BICO parameter for selecting the binector for analog-signal storage 1 (2 word).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
U211* Src1 Store 2 2211	BICO parameter for selecting the connectors for analog-signal storage 2 (2 word).	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U212* Src2 Store 2 2212	BICO parameter for selecting the binector for analog-signal storage 2 (2 word).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U221* Src AND1 2221	BICO parameter for selecting the binectors for AND element index1: 1 (Output = B601).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U222* Src AND2 2222	BICO parameter for selecting the binectors for AND element index1: 2 (Output = B602).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U223* Src AND3 2223	BICO parameter for selecting the binectors for AND element index1: 3 (Output = B603).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U224* Src AND4 2224	BICO parameter for selecting the binectors for AND element index1: 4 (Output = B604).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U225* Src AND5 2225	BICO parameter for selecting the binectors for AND element index1: 5 (Output = B605).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U226* Src AND6 2226	BICO parameter for selecting the binectors for AND element index1: 6 (Output = B606).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U227* Src AND7 2227	BICO parameter for selecting the binectors for AND element index1: 7 (Output = B607).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U228* Src AND8 2228	BICO parameter for selecting the binectors for AND element index1: 8 (Output = B608).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
U229* Src AND9	BICO parameter for selecting the binectors for AND element index1: 1 9 (Output = B609).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2229			
U230* Src AND10	BICO parameter for selecting the binectors for AND element index1: 1 10 (Output = B610).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2230			
U231* Src AND11	BICO parameter for selecting the binectors for AND element index1: 1 11 (Output = B611).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2231			
U232* Src AND12	BICO parameter for selecting the binectors for AND element index1: 1 12 (Output = B612).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2232			
U233* Src AND13	BICO parameter for selecting the binectors for AND element index1: 1 13 (Output = B613).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2233			
U234* Src AND14	BICO parameter for selecting the binectors for AND element index1: 1 14 (Output = B614).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2234			
U235* Src AND15	BICO parameter for selecting the binectors for AND element index1: 1 15 (Output = B615).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2235			
U236* Src AND16	BICO parameter for selecting the binectors for AND element index1: 1 16 (Output = B616).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2236			
U237* Src AND17	BICO parameter for selecting the binectors for AND element index1: 1 17 (Output = B617).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2237			
U238* Src AND18	BICO parameter for selecting the binectors for AND element index1: 1 18 (Output = B618).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2238			

Parameter	Description	Data	Read/write
U239* Src OR1 2239	BICO parameter for selecting the binectors for OR element 1index1: 0 (Output = B619).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U240* Src OR2 2240	BICO parameter for selecting the binectors for OR element 2index1: 0 (Output = B620).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U241* Src OR3 2241	BICO parameter for selecting the binectors for OR element 3index1: 0 (Output = B621).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U242* Src OR4 2242	BICO parameter for selecting the binectors for OR element 4index1: 0 (Output = B622).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U243* Src OR5 2243	BICO parameter for selecting the binectors for OR element 5index1: 0 (Output = B623).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U244* Src OR6 2244	BICO parameter for selecting the binectors for OR element 6index1: 0 (Output = B624).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U245* Src OR7 2245	BICO parameter for selecting the binectors for OR element 7index1: 0 (Output = B625).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U246* Src OR8 2246	BICO parameter for selecting the binectors for OR element 8index1: 0 (Output = B626).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U247* Src OR9 2247	BICO parameter for selecting the binectors for OR element 9index1: 0 (Output = B627).	Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U248* Src OR10 2248	BICO parameter for selecting the binectors for OR element 10 (Output = B628).	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
U249* Src OR11 2249	BICO parameter for selecting the binectors for OR element 11 (Output = B629).	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U250* Src OR12 2250	BICO parameter for selecting the binectors for OR element 12 (Output = B630).	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U251* Src BinInv1 2251	BICO parameter for selecting the binector for inverter 1 (Output = B641).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U252* Src BinInv2 2252	BICO parameter for selecting the binector for inverter 2 (Output = B642).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U253* Src BinInv3 2253	BICO parameter for selecting the binector for inverter 3 (Output = B643).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U254* Src BinInv4 2254	BICO parameter for selecting the binector for inverter 4 (Output = B644).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U255* Src BinInv5 2255	BICO parameter for selecting the binector for inverter 5 (Output = B645).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U256* Src BinInv6 2256	BICO parameter for selecting the binector for inverter 6 (Output = B646).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U257* Src BinInv7 2257	BICO parameter for selecting the binector for inverter 7 (Output = B647).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U258* Src BinInv8 2258	BICO parameter for selecting the binector for inverter 8 (Output = B648).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
U259* Src BinInv9 2259	BICO parameter for selecting the binector for inverter 9 (Output = B649).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U260* Src BinInv10 2260	BICO parameter for selecting the binector for inverter 10 (Output = B650).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U261* Src NAND1 2261	BICO parameter for selecting the binectors for NAND element 1 (Output = B681).	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U262* Src NAND2 2262	BICO parameter for selecting the binectors for NAND element 2 (Output = B682).	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U263* Src NAND3 2263	BICO parameter for selecting the binectors for NAND element 3 (Output = B683).	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U264* Src NAND4 2264	BICO parameter for selecting the binectors for NAND element 4 (Output = B684).	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U265* Src NAND5 2265	BICO parameter for selecting the binectors for NAND element 5 (Output = B685).	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U266* Src NAND6 2266	BICO parameter for selecting the binectors for NAND element 6 (Output = B686).	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U267* Src NAND7 2267	BICO parameter for selecting the binectors for NAND element 7 (Output = B687).	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U268* Src NAND8 2268	BICO parameter for selecting the binectors for NAND element 8 (Output = B688).	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
U269* Src SH2 B 2269	Sample&Hold module Input parameter for binectors	index1: 0 Unit: - Indices: 8 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U270* SH2 Time Slot 2270	Sample&Hold element Parameter for entering the slower time slot	Init: 2 Min: 2 Max: 10 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U271* Src BinCh1 2271	BICO parameter for selecting the binectors for binary-signal changeover switch 1 (Output= B661).	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U272* Src BinCh2 2272	BICO parameter for selecting the binectors for binary-signal changeover switch 2 (Output= B662).	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U273* Src BinCh3 2273	BICO parameter for selecting the binectors for binary-signal changeover switch 3 (Output= B663).	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U274* Src BinCh4 2274	BICO parameter for selecting the binectors for binary-signal changeover switch 4 (Output= B664).	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U275* Src BinCh5 2275	BICO parameter for selecting the binectors for binary-signal changeover switch 5 (Output= B665).	index1: 0 Unit: - Indices: 3 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U276* Src EXOR1 2276	BICO parameter for selecting the binectors for EXOR (exclusive or) element 1 (Output = B666).	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U277* Src EXOR2 2277	BICO parameter for selecting the binectors for EXOR element 2 (Output = B667).	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U278* Src EXOR3 2278	BICO parameter for selecting the binectors for EXOR element 3 (Output = B668).	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
U279* Src D-FlipFlop1 2279	BICO parameter for selecting the binectors for D flipflop element 1 (Outputs: Q = B525, \bar{Q} = B526).	index1: 0 Unit: - Indices: 4 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U280* Src D-FlipFlop2 2280	BICO parameter for selecting the binectors for D flipflop 2 (Outputs: Q = B527, \bar{Q} = B528).	index1: 0 Unit: - Indices: 4 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U281* Src RS-FlipFlop1 2281	BICO parameter for selecting the binectors for RS flipflop 1 (Outputs: Q = B501, \bar{Q} = B502).	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U282* Src RS-FlipFlop2 2282	BICO parameter for selecting the binectors for RS flipflop 2 (Outputs: Q = B503, \bar{Q} = B504).	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U283* Src RS-FlipFlop3 2283	BICO parameter for selecting the binectors for RS flipflop 3 (Outputs: Q = B505, \bar{Q} = B506).	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U284* Src RS-FlipFlop4 2284	BICO parameter for selecting the binectors for RS flipflop 4 (Outputs: Q = B507, \bar{Q} = B508).	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U285* Src RS-FlipFlop5 2285	BICO parameter for selecting the binectors for RS flipflop 5 (Outputs: Q = B509, \bar{Q} = B510).	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U286* Src RS-FlipFlop6 2286	BICO parameter for selecting the binectors for RS flipflop 6 (Outputs: Q = B511, \bar{Q} = B512).	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U287* Src RS-FlipFlop7 2287	BICO parameter for selecting the binectors for RS flipflop 7 (Outputs: Q = B513, \bar{Q} = B514).	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U288* Src RS-FlipFlop8 2288	BICO parameter for selecting the binectors for RS flipflop 8 (Outputs: Q = B515, \bar{Q} = B516).	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
U289* Src RS-FlipFlop9	BICO parameter for selecting the binectors for RS flipflop 9 (Outputs: Q = B517, \bar{Q} = B518).	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2289			
U290* SrcRS-FlipFlop10	BICO parameter for selecting the binectors for RS flipflop 10 (Outputs: Q = B519, \bar{Q} = B520).	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2290			
U291* SrcRS-FlipFlop11	BICO parameter for selecting the binectors for RS flipflop 11 (Outputs: Q = B521, \bar{Q} = B522).	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2291			
U292* SrcRS-FlipFlop12	BICO parameter for selecting the binectors for RS flipflop 12 (Outputs: Q = B523, \bar{Q} = B524).	index1: 0 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2292			
U293* Src Timer1	BICO parameter for selecting the binector for the 1st timer (0Init: 0 to 60,000 s).	Index: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2293			
U294 Time Timer1	Function parameter for entering the time for the 1st timer (1 to 60,000 s).	index1: 0,000 Min: 0,000 Max: 60,000 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2294			
U295* Mode Timer1	Function parameter for entering the mode for the 1st timer (1Init: 0 to 60,000 s).	Init: 0 Min: 0 Max: 3 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2295			
U296* Src Timer2	BICO parameter for selecting the binector for the 2nd timer (1 to 60,000 s).	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
2296			
U297 Time Timer2	Function parameter for entering the time for the 2nd timer (1 to 60,000 s). FDS	index1: 0,000 Min: 0,000 Max: 60,000 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
2297			

Parameter	Description	Data	Read/write
U298* Mode Timer2 2298	Function parameter for entering the mode for the 2nd timer(1Init: 0 to 60,000 s). BICO parameter for selecting the binector for the 3rd timer (1Init: 0 to 60,000 s).	Min: 0 Max: 3 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U299* Src Timer3 2299	BICO parameter for selecting the binector for the 3rd timer (1Init: 0 to 60,000 s).	Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U300 Time Timer3 2300	Function parameter for entering the time for the 3rd timer 1 t index1: 0,000 60,000 s). FDS	Min: 0,000 Max: 60,000 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U301* Mode Timer3 2301	Function parameter for entering the mode for the 3rd timer (1Init: 0 to 60,000 s).	Min: 0 Max: 3 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U302* Src Timer4 2302	BICO parameter for selecting the binector for the 4th timer (1Init: 0 to 60,000 s).	Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U303 Time Timer4 2303	Function parameter for entering the time for the 4th timer (1 index1: 0,000 to 60,000 s). FDS	Min: 0,000 Max: 60,000 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U304* Mode Timer4 2304	Function parameter for entering the mode for the 4th timer (1Init: 0 to 600,000 s).	Min: 0 Max: 3 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U305* Src Timer5 2305	BICO parameter for selecting the binector for the 5th timer (0Init: 0 to 600,000 s).	Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U306 Time Timer5 2306	Function parameter for entering the time for the 5th timer (0 index1: 0,00 to 600,000s). FDS	Min: 0,00 Max: 600,00 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U307* Mode Timer5 2307	Function parameter for entering the mode for the 5th timer(0 to 600,000s).	Init: 0 Min: 0 Max: 3 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U308* Src Timer6 2308	BICO parameter for selecting the binector for the 6th timer (0Init: 0 to 600,000s).	Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U309 Time Timer6 2309	Function parameter for entering the time for the 6th timer (0 to 600,000s). FDS	index1: 0,00 Min: 0,00 Max: 600,00 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U310* Mode Timer6 2310	Function parameter for entering the mode for the 6th timer (0Init: 0 to 600,00s).	Min: 0 Max: 3 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U311* Src1 Timer7 2311	BICO parameter for selecting the binector for the 7th timer (1Init: 0 to 60 000 s) with adaptation.	Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U312* Src2 Timer7 2312	BICO parameter for selecting the connectors for the 7th timer (1 to 60 000 s) with adaptation.	Init: 1 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U313 Time Timer7 2313	Function parameter for entering the time for the 7th timer (1 to 60 000 s) with adaptation.	index1: 0,000 Min: 0,000 Max: 60,000 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U314* Mode Timer7 2314	Function parameter for entering the mode for the 7th timer (1Init: 0 to 60 000 s) with adaptation.	Min: 0 Max: 3 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U315 Param Counter 2315	Function parameter for entering the fixed setpoints for the 16bit software counter.	index1: 0 Min: 0 Max: 65535 Unit: - Indices: 4 Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U316* Src ParamCounter 2316	BICO parameter for selecting the connectors for the 16 bit software counter.	index1: 561 Unit: - Indices: 4 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U317* Src Bin Counter 2317	BICO parameter for selecting the binectors for the 16 bit software counter.	index1: 0 Unit: - Indices: 5 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
n318 Counter Output 2318	Visualization parameter for counter output of the 16 bit software counter.	Dec.Plc.: 0 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access
U320* SrcComfRGen In 2320	BICO parameter for selecting the connector for the input of the comfort ramp-function generator.	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U321* SrcComfRGen Stop 2321	BICO parameter for selecting the binector for stopping of the comfort ramp-function generator.	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U322* SrcComfRGen SD 2322	BICO parameter for selecting the binector for shutdown of the comfort ramp-function generator.	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U323* SrcComfRGenSetV 2323	BICO parameter for selecting the connector for the setting value of the comfort ramp-function generator.	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U324* Src Set ComfRGen 2324	BICO parameter for selecting the binector for setting the comfort ramp-function generator.	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U325* Src Rel ComfRGen 2325	BICO parameter for selecting the binector for releasing the comfort ramp-function generator.	Init: 1 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
n326 ComfRGen Input 2326	Visualization parameter input of comfort ramp-function generator.	Dec.Plc.: 2 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access

Parameter	Description	Data	Read/write
U327 ComfRGen Round 2327	Operating mode for rounding of the comfort ramp-function generator. 0 = Rounding does not act upon sudden reduction of input value during acceleration process 1 = Rounding acts at all times. At a sudden reduction of the input value, overshoot can occur.	Init: 0 Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U328* SrcComfRGenBridg 2328	BICO parameter for selecting the binector for bridging the comfort ramp-function generator.	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U329* SrcComfRGenAdap 2329	BICO parameter for selecting the connector for adaptation of the comfort ramp-function generator.	Init: 1 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U330 ComfRGenAccelT 2330	Function parameter for input of the acceleration time of the comfort ramp-function generator. The unit of the acceleration time is set in U331.	index1: 10,0 Min: 0,0 Max: 999,9 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U331 ComfRGenUnitAT 2331	Function parameter for entering the unit of the acceleration time of the comfort ramp-function generator. 0 = seconds 1 = minutes 2 = hours	index1: 0 Min: 0 Max: 2 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U332 ComfRGenDecelT 2332	Function parameter for entering the deceleration time of the comfort ramp-function generator. The unit of the deceleration time is set in U333.	index1: 10,0 Min: 0,0 Max: 999,9 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U333 ComfRGenUnitDT 2333	Function parameter for entering the unit of the deceleration time of the comfort ramp-function generator. 0 = seconds 1 = minutes 2 = hours	index1: 0 Min: 0 Max: 2 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U334 ComfRGenInitRd 2334	Function parameter for input of the initial rounding time of the comfort ramp-function generator.	index1: 0,00 Min: 0,00 Max: 10,00 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U335 ComfRGenEndRd 2335	Function parameter for input of the final rounding time of the comfort ramp-function generator.	index1: 0,00 Min: 0,00 Max: 10,00 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U336 ComfRGenRtdAT 2336	Parameter for entering the rated acceleration time of the comfort ramp-function generator. The following applies: Acceleration time = rated acceleration time $\rightarrow dy/dt = 100\%$	Init: 0,01 Min: 0,01 Max: 300,00 Unit: s Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U337 ComfRGenQSTime 2337	Parameter for entering the quick stop time of the comfort ramp-function generator.	Init: 10,0 Min: 0,0 Max: 999,9 Unit: s Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U338* SrcComfRGen QS 2338	BICO parameter for selecting the binector for quick stop of the comfort ramp-function generator.	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
n339 ComfRGen EffTime 2339	Visualization parameter for the effective acceleration/deceleration time of the comfort ramp-function generator: Index 0: effective acceleration time Index 1: effective deceleration time	Dec.Plc.: 1 Unit: s Indices: 2 Type: O4	Menus: - Parameter menu + Free blocks - Uread/free access
n340 ComfRGen Output 2340	Visualization parameter for output of the comfort ramp-function generator.	Dec.Plc.: 2 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access
n341 ComfRGen dy/dt 2341	Visualization parameter dy/dt of the comfort ramp-function generator.	Dec.Plc.: 2 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access
U342 ComfRGen IntLmt 2342	Parameter for input of the internal limitation of the comfort ramp-function generator.	Init: 100,00 Min: 0,00 Max: 200,00 Unit: % Indices: - Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U343* SrcComfRGenPosL 2343	BICO parameter for selecting the connector for the positive internal limitation of the comfort ramp-function generator.	Init: 573 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U344* SrcComfRGenNegL 2344	BICO parameter for selecting the connector for the negative internal limitation of the comfort ramp-function generator.	Init: 574 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U345* Src FDS.CoRFG 2345	The parameter makes it possible to disconnect function dataset switchover for the comfort ramp function generator. This permits independent changeover of the ramp generator parameter.	index1: 92 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
U346* Src SH3 KK 2346	Sample&Hold element Input parameter for the double word connectors	index1: 0 Unit: - Indices: 4 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U347* Src SH3 K 2347	Sample&Hold element Input parameter for connectors	index1: 0 Unit: - Indices: 8 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U348* Src SH3 B 2348	Sample&Hold module Input parameter for binectors	index1: 0 Unit: - Indices: 8 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U349* SH3 Time Slot 2349	Sample&Hold element Parameter for entering the slower time slot	Init: 2 Min: 2 Max: 10 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U350* Src TeCntr Rel 2350	BICO parameter for selecting the binector for enabling the technology controller.	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U351 TeCntr RegType 2351	Parameter for entering the controller type of the technology controller. 0 = Normal PID controller 1 = PI controller with D component in actual-value channel	Init: 1 Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U352* Src TeCntr Setp 2352	BICO parameter for selecting the connector for the setpoint of the technology controller.	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U353 TeCntr SetpSmth 2353	Parameter for entering the setpoint smoothing time constant of the technology controller.	Init: 0,00 Min: 0,00 Max: 60,00 Unit: s Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
n354 TeCntr Setp 2354	Visualization parameter, smoothed setpoint of the technology controller.	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access
U355* Src TeCntr ActV 2355	BICO parameter for selecting the connector for the actual value of the technology controller.	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
n356 TeCntr ActV 2356	Visualization parameter, actual-value of the technology controller.	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access
n357 TeCntr Deviation 2357	Visualization parameter, set/actual value deviation of the technology controller with the "PID controller" type. The inverted actual value is displayed on the "PI controller with component in actual-value channel" controller type.	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access
U358 TeCntr ActVSmth 2358	Parameter for entering the actual-value smoothing time constants of the technology controller.	Init: 0,00 Min: 0,00 Max: 60,00 Unit: s Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
n359 TeCntr Input 2359	Visualization parameter, input of the technology controller.	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access
U360* SrcTeCntr I Set 2360	BICO parameter for selecting the binector for setting the I component of the technology controller.	Init: 556 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U361* Src TeCntr ISetV 2361	BICO parameter for selecting the connector for the setting value of the technology controller's I component.	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U362* Src TeCntr Droop 2362	BICO parameter for selecting the connector for the droop of the technology controller.	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U363* Src TeCntrGainAd 2363	BICO parameter for selecting the connector for the gain adaption of the technology controller.	Init: 1 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U364 TeCntr BasicGain 2364	Function parameter for entering the basic gain of the technology controller.	index1: 3,00 Min: 0,00 Max: 125,00 Unit: - Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
n365 TeCntr Eff.Gain 2365	Visualization parameter, effective gain of the technology controller.	Dec.Plc.: 2 Unit: - Indices: - Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access

Parameter	Description	Data	Read/write
U366 TeCntr Time 2366	Function parameter for entering the integral time of the technology controller.	index1: 3,00 Min: 0,00 Max: 100,00 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U367 TeCntrDerivation 2367	Function parameter for entering the derivative time of the technology controller.	index1: 0,00 Min: 0,00 Max: 60,00 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U368* Src TeCntr PRE 2368	BICO parameter for selecting the connector for the pre-control signal of the technology controller.	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U369 TeCntrFStpOutLim 2369	Parameter for entering a fixed setpoint value for the output limitation ramp-function generator of the technology controller	Init: 100,0 Min: 0,0 Max: 200,0 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U370* Src TeCntrOutLim 2370	BICO parameter for selecting the connectors for the output limitation of the technology controller. Index 1: Connector for upper output limitation (B+) Index 2: Connector for lower output limitation (B-)	index1: 586 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U371 TeCntrOutLimTime 2371	Parameter for entering the acceleration/deceleration time for the output limitation of the technology controller.	Init: 0,00 Min: 0,00 Max: 100,00 Unit: s Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
n372 TeCntr Output 2372	Visualization parameter, output of the technology controller after output limitation.	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access
U380* Src SimpRGen In 2380	BICO parameter for selecting the connector for the input of the simple ramp-function generator.	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U381* Src Set SimpRGen 2381	BICO parameter for selecting the binector for setting the simple ramp-function generator.	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U382* Src SetVSimpRGen 2382	BICO parameter for selecting the connector for the setting value of the simple ramp-function generator.	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
U383 SimpRG Ac/DcTime 2383	Parameter for entering the acceleration and deceleration time index1: 10,00 of the simple ramp-function generator. Index 1: Acceleration time Index 2: Deceleration time	Min: 0,00 Max: 100,00 Unit: s Indices: 2 Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U390* SrcWobbSetp Unwo 2390	BICO parameter for selecting the connector for the input of the wobble generator	Init: 0 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U391* Src Wobb SyncInp 2391	BICO parameter for selecting the binector for the master synchronizing signal of the wobble generator	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U392* Src Wobb Rel 2392	BICO parameter for selecting the binector for wobble release init: 0	Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting
U393 Wobb Amplitude 2393	Function parameter for entering the wobble amplitude as a relation to the input signal amount (setpoint)	index1: 0,00 Min: 0,00 Max: 20,00 Unit: % Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U394 Wobb Freq 2394	Function parameter for entering the frequency of the wobble signal	index1: 60,0 Min: 0,1 Max: 120,0 Unit: 1/min Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U395 Wobb Phase Shift 2395	Function parameter for entering the phase shift of the wobble signal compared to the master synchronizing signal. At a value of 360°, the synchronizing signal is not observed; coasting wobbling takes place.	index1: 360 Min: 0 Max: 360 Unit: ° (alt) Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U396 Wobb P-Step 2396	Function parameter for entering the amount of the negative step as a percentage of the wobble amplitude	Index1: 0,00 Min: 0,00 Max: 100,00 Unit: % Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U397 Wobb P-Step 2397	Function parameter for entering the amount of the positive step as a percentage of the wobble amplitude.	Index1: 0,00 Min: 0,00 Max: 100,00 Unit: % Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U398 Wobb Sampl Ratio 2398	Function parameter for entering the time portion of the increasing edge of the wobble signal	index1: 50 Min: 0 Max: 100 Unit: % Indices: 4 ,FDS Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
n399 Wobb Gen Outp 2399	Visualization parameter for displaying the wobble signal.	Dec.Plc.: 1 Unit: % Indices: - Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access
U400* SrcConnAnaDel_1 2400	Parameter for selecting the double word connector for the 1st analog delay element.	1sInit: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U401* AnaDelayEl_1_T 2401	Parameter for entering the delay cycles of the 1st analog delay element	Init: 0 Min: 0 Max: 32 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U402* SrcConnAnaDE_2 2402	Parameter for selecting the double word connector for the 2nd analog delay element	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U403* AnaDE_2_T 2403	Parameter for entering the delay cycles of the 2nd analog delay element	Init: 0 Min: 0 Max: 32 Unit: - Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U404* SrcSampTChange 2404	Parameter array for selecting the binectors for the 6 sampling time changeover contacts	index1: 0 Unit: - Indices: 6 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U405* SrcMulDiv32_1_32 2405	Parameter for selecting the 32-bit connector for the high-resolution multiplier/divider 1 (2-word)	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U406* SrcMulDiv32_1_16 2406	Parameter for selecting the 16-bit connectors for the high-resolution multiplier/divider 1 (2-word)	index1: 0 Unit: - Indices: 2 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U407* SrcPulsGenTp 2407	Parameter for selecting a connector as input for determination of the period of the 1st pulse generator	Init: 613 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U408* Src Integr32_1 2408	Parameter array for selecting the double-word connectors fo index1: 0 the 1st 32-bit integrator: Index 1: Current input value Index 2: Upper limit Index 3: Lower limit Index 4: Set value	Unit: - Indices: 4 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U409* Src Integr32_1_t 2409	Parameter for selecting the integral time constant for the 1st 32-bit integrator.	Init: 611 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U410* Src Integr32_1_s 2410	Parameter for selecting a binector as setting command for the 1st 32-bit integrator.	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U411* Src Integr32_2 2411	Parameter arry for selecting the double-word connectors for index1: 0 the 2nd 32-bit integrator. Index 1: Current input value Index 2: Upper limit Index 3: Lower limit Index 4: Set value	Unit: - Indices: 4 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U412* Src Integr32_2_t 2412	Parameter for selecting the integral time constant for the 2nd 32-bit integrator.	Init: 612 Unit: - Indices: - Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U413* Src Integr32_2_s 2413	Parameter for selecting a binector as setting command for the 2nd 32-bit integrator.	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U414* Src PT1GI32_1 2414	Parameter for selecting a double-word connector as input value for the 1st 32-bit PT1 element.	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U415* PT1Element32_1_t 2415	Parameter for entering the filtering time for the 1st 32-bit PT1Init: 0 element. Min: 0 Max: 10000 Unit: ms Indices: - Type: O2	Init: 0 Min: 0 Max: 10000 Unit: ms Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U416* SrcPT1Elem32_1_s 2416	Parameter for selecting a binector as setting command for the 1st 32-bit PT1 element. Init: 0 Unit: - Indices: - Type: L2 ,B	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U417* Src PT1Elem32_2 2417	Parameter for selecting a double-word connector as input value for the 2nd 32-bit PT1 element Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U418* PT1Elem32_2_t 2418	Parameter for entering the filtering time for the 2nd 32-bit PT1 element. Init: 0 Min: 0 Max: 10000 Unit: ms Indices: - Type: O2	Init: 0 Min: 0 Max: 10000 Unit: ms Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U419* Src PT1El32_2_s 2419	Parameter for selecting a binector as the setting command for the 2nd 32-bit PT1 element. Init: 0 Unit: - Indices: - Type: L2 ,B	Init: 0 Unit: - Indices: - Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U420* Src DElem32_1 2420	Parameter for selecting a double-word connector as input value for the 1st 32-bit D element. Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Init: 0 Unit: - Indices: - Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U421* Src DElem32_1_t 2421	Parameter for entering the time constant for the 1st 32-bit D element Init: 0,01 Min: 0,01 Max: 300,00 Unit: s Indices: - Type: O2	Init: 0,01 Min: 0,01 Max: 300,00 Unit: s Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U433* Integr32_1_Ti 2433	Parameter for entering the integral time constant of the 1st 32-bit integrator. Init: 0,000 Min: 0,000 Max: 60,000 Unit: s Indices: - Type: O2	Init: 0,000 Min: 0,000 Max: 60,000 Unit: s Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U434* Integr32_2_Ti 2434	Parameter for entering the integral time constant of the 2nd 32-bit integrator.	Init: 0,000 Min: 0,000 Max: 60,000 Unit: s Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U435* ImpGen_1_Tp 2435	Parameter for entering the period of the 1st pulse generator.	Init: 0 Min: 0 Max: 60000 Unit: ms Indices: - Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U438* Src ConnToPar # 2438	BICO parameter for selecting the connector whose value supplies the parameter number for the connector-to-parameter converter.	index1: 479 Unit: - Indices: 5 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U439* SrcConnToPar Ind 2439	BICO parameter for selecting the connector whose value supplies the parameter index for the connector-to-parameter converter.	index1: 480 Unit: - Indices: 5 Type: L2 ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U440* P-Ampf Gain 2440	Kp for the P amplifier/multiplier (2-word) Figure range: -999.99 bis 999.99 Index 1: for 1st P amplifier/multiplier Index 2: for 2nd P amplifier/multiplier	index1: 1,00 Min: -1000,00 Max: 1000,00 Unit: - Indices: 2 Type: I4	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U441* Src P-Amplifier 2441	Parameter for selecting 32-bit connectors for the P amplifier/multiplier (2-word) Index 1: 1st P amplifier/multiplier Index 2: 2nd P amplifier/multiplier	index1: 0 Unit: - Indices: 2 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U442* Shift 32_number 2442	Number of shift steps for the shift multiplier/divider. Figure range: -31 to 31 Index 1: for 1st shift multiplier/divider Index 2: for 2nd shift multiplier/divider Index 3: for 3rd shift multiplier/divider Index 4: for 4th shift multiplier/divider	index1: 0 Min: -31 Max: 31 Unit: - Indices: 4 Type: I2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U443* Src Shift32 2443	Parameter for selecting 32-bit connectors for the shift multipliers/dividers (2-word) Index 1: 1st shift multiplier/divider Index 2: 2nd shift multiplier/divider Index 3: 3rd shift multiplier/divider Index 4: 4th shift multiplier/divider	index1: 0 Unit: - Indices: 4 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U444* Src ConnToPar V 2444	BICO parameter for selecting the connector whose value is to be stored on the parameter. IMPORTANT. If there is a change of softwiring during the "Operation" drive status, the trigger condition must always be softwired and be at 0, as otherwise unintentional parameter changes may occur.	index1: 0 Unit: - Indices: 5 Type: L2 ,K ,K	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U445* ConnToPar Par# 2445	Function parameter whose value contains the parameter number for the connector-to- parameter converter. 0 = no parameter selected.	index1: 0 Min: 0 Max: 2999 Unit: - Indices: 5 Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U446* ConnToPar Index 2446	Function parameter whose value contains the index of the parameter for the connector-to- parameter converter. 0 = no index parameter.	index1: 0 Min: 0 Max: 255 Unit: - Indices: 5 Type: O2	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U447* SrcConnToPar Trg 2447	BICO parameter for selecting the binector for the trigger signal which results in storage of the connector value on the parameter. IMPORTANT: If the softwiring is changed during the "Operation" drive status, the trigger condition must always be softwired and be at 0, as otherwise unintentional parameter changes may occur.	index1: 0 Unit: - Indices: 5 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U448* SrcConnToParEEPR 2448	BICO parameter for selecting the binector which determines the memory area for the connector-to-parameter conversion 0 = RAM 1 = EEPROM IMPORTANT. If the EEPROM is continually written with different values, this will reduce the service life of the component.	index1: 0 Unit: - Indices: 5 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U449* SrcParToConnRd 2449	BICO parameter for selecting the binector which determines the type of access for the connector-to-parameter conversion 0 = write 1 = read	index1: 0 Unit: - Indices: 5 Type: L2 ,B	Menus: - Parameter menu + Free blocks - Uread/free access Changeable in: - Drive setting - Ready
U480* SrcTraceInput 2480	BICO parameter for selecting the connectors to be recorded by the trace function. Indices: Index = channel number	index1: 0 Unit: - Indices: 8 Type: L2 ,K ,K	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U481* Trace DoubleWord 2481	Function parameter for entering the word length of the connector indicated in U2480 to be recorded by the trace function. It is only possible to change the parameter if the trace function is not active (U488 = 0). If the parameter is changed, an output of previously recorded values for concerned channels is no longer possible. Parameter values: 0 = Word (16 bit) 1 = Double word (32 bit)	index1: 0 Min: 0 Max: 1 Unit: - Indices: 8 Type: O2	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access Changeable in: - Drive setting - Ready
	Indices: Index = channel number		
U482* TraceSampleTime 2482	Function parameter for entering the sampling time with which the trace values are to be recorded in integral multiples of the basic sampling time of the trace function. Indices: Index = channel number	index1: 1 Min: 1 Max: 200 Unit: - Indices: 8 Type: O2	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access Changeable in: - Drive setting - Ready
U483* SrcTriggerInput 2483	BICO parameter for selecting the connector to be used by the trace function as a trigger Indices: Index = channel number	index1: 0 Unit: - Indices: 8 Type: L2 ,K ,K	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access Changeable in: - Drive setting - Ready
U484 TriggerThresh 2484	Function parameter for entering the trigger threshold. The parameter value has to be entered in the format of a double-word connector. If bit trigger (U485 <> 16) is set, only the parameter values 0 and 1 are permissible. Indices: Index = channel number	index1: 0 Min: - 2147483647 Max: 2147483647 Unit: - Indices: 8 Type: I4	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access Changeable in: - Drive setting - Ready
U485* TriggerBitNo. 2485	Function parameter for entering the position of the bit to be triggered (in the case of bit trigger). A bit trigger can only be set if the trigger threshold (U484) has the values 0 or 1. If a bit trigger is set, the trigger condition (U486) is automatically adjusted to 1 (trigger if trigger input = trigger threshold). Parameter values: 0 to 15: Position of the bit (bit trigger) 16: No bit trigger Indices: Index = channel number	index1: 16 Min: 0 Max: 16 Unit: - Indices: 8 Type: O2	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U486* TriggerCondition 2486	<p>Function parameter for entering the trigger condition</p> <p>If a bit trigger (U485) is set, only parameter value 1 is permissible. If parameter values 3, 5 and 6 are set, parameters U483, U484 are not significant. In the case of parameter values 5 and 6, parameter U489 is used for the trigger condition.</p> <p>Parameter value</p> <ul style="list-style-type: none"> 0 = Trigger if trigger input < trigger threshold 1 = Trigger if trigger input = trigger threshold 2 = Trigger if trigger input > trigger threshold 3 = Trigger if fault 4 = Trigger if trigger input <> trigger threshold 5 = Trigger if binector trigger input = 1 6 = Trigger if binector trigger input = 0 <p>Indices: Index = channel number</p>	index1: 0 Min: 0 Max: 6 Unit: - Indices: 8 Type: O2	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access Changeable in: - Drive setting - Ready
U487* PreTrigger 2487	<p>Function parameter for entering the size of the pretrigger.</p> <p>Parameter value:</p> <p>Relation of the number of data recorded before the trigger event to the total number as a percentage. Example: 40 % means that 40% of the data in the trace buffer were recorded before the trigger event and 60% after the trigger event.</p> <p>Indices: Index = channel number</p>	index1: 0 Min: 0 Max: 100 Unit: % Indices: 8 Type: O2	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access Changeable in: - Drive setting - Drive setting - Ready
U488* TraceStatusStart 2488	<p>Function/visualization parameter of the trace status.</p> <p>The trace consists of a maximum of 8 channels corresponding to Indices 1 to 8. The trace memory is dynamically distributed according to the number of channels activated.</p> <p>Only parameter values 0 and 1 can be set.</p> <p>If the parameter value is set from 0 to 1, all recorded data of all channels are lost (because the whole trace memory is erased) and the trace is activated for this channel. If the trigger condition is satisfied and another channel is in the process of recording (parameter value 2), no further channel can be activated (parameter value 1).</p> <p>Parameter values:</p> <ul style="list-style-type: none"> 0 = Trace not active/recording finished 1 = Trace active/trace is waiting for trigger event 2 = Trace is recording <p>Indices: Index = channel number</p>	index1: 0 Min: 0 Max: 2 Unit: - Indices: 8 Type: O2	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access Changeable in: - Drive setting - Ready
U489* SrcBTriggerInput 2489	<p>BICO parameter for selection of trace as trigger to binectors used.</p> <p>Indices: Index = channel number</p>	index1: 0 Unit: - Indices: 8 Type: L2 ,B	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access Changeable in: - Drive setting - Ready
U490 Trace D-BlockNo. 2490	<p>Function parameter for entering the number of the trace data index1: 0 block for each trace channel. The trace data block can be read out via visualization parameters n491 to n498.</p> <p>Parameter value:</p> <ul style="list-style-type: none"> 0 - 254: Output of corresponding data block 255: Output of trigger index <p>Indices: Index = channel number</p>	Min: 0 Max: 255 Unit: - Indices: 8 Type: O2	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
n491 TraceData Ch1 2491	Visualization parameter for displaying a data block of the trace data of channel 1. The block number of the trace data is set in parameter U490.01. If all values of the array are requested with one task via an automation interface (SCom1 Type: O2 SCom2, SCP, DPR), the parameter U490.01 is automatically increased by 1 when output in order to enable optimum read out of the trace data. Indices: 1: Block ID High byte: Data block number (U490) Low byte: Number of trace data in data block 2-100: Trace data When recording double-word connectors first the high word appears and then the low word.	Dec.Plc.: 0 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access
n492 TraceData Ch2 2492	Description see n491	Dec.Plc.: 0 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access
n493 TraceData Ch3 2493	Description see n491	Dec.Plc.: 0 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access
n494 TraceData Ch4 2494	Description see n491	Dec.Plc.: 0 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access
n495 TraceData Ch5 2495	Description see n491	Dec.Plc.: 0 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access
n496 TraceData Ch6 2496	Description see n491	Dec.Plc.: 0 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access
n497 TraceData Ch7 2497	Description see n491	Dec.Plc.: 0 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access
n498 TraceData Ch8 2498	Description see n491	Dec.Plc.: 0 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Diagnostics + Trace - Uread/free access
U800* Application 2800	Selection parameter for sector-specific applications. Parameter values: 0: Standard 1: Lifts Note: activates parameter P2801...P2848	Init: 0 Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Drive setting - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
U801* Ref Speed 2801	System reference speed in m/s. Setting of the reference quantity of the speed setpoints which are preset via the permissible sources of the process data connection. Accordingly, this reference quantity is also applicable for speed actual-values. If a speed setpoint of 4000H is set via the automation, the lift travels with the value set here. Note: Only relevant for P2800 = 1	Init: 1,000 Min: 0,010 Max: 15,000 Unit: m/s Indices: - Type: O2	Menus: - Parameter menu - Drive setting - Uread/free access Changeable in: - Drive setting
U802* Gear Ratio 2802	Gear transmission ratio: Example: 40 : 1 Index 1 = 40 (motor-side) Index 2 = 1 (elevator side) Notes: The value in Index 1 must be greater than the value in Index 2. Only relevant if setpoints are indicated in m/s (P2810... P2817).	index1: 30 Min: 1 Max: 1000 Unit: - Indices: 2 Type: O2	Menus: - Parameter menu - Drive setting - Uread/free access Changeable in: - Drive setting
U803* RopePulleyDia 2803	Rope pulley diameter in mm: from 100 mm to 3000 mm Note: Only relevant if setpoints are indicated in m/s (P2810 ... P2817).	Init: 500 Min: 100 Max: 3000 Unit: mm Indices: - Type: O2	Menus: - Parameter menu - Drive setting - Uread/free access Changeable in: - Drive setting
U804* Suspension 2804	Suspension of the lift cage: 0 = 1:1 Suspension 1 = 1:1 Suspension 2 = 2:1 Suspension i.e. with one deflection roll 3 = 3:1 Suspension, i.e. with two deflection rolls 4 = 4:1 Suspension, i.e. with three deflection rolls ... etc. max: 16:1 Note: Only relevant if setpoints are indicated in m/s (P2810.. P2817).	Init: 1 Min: 0 Max: 16 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Drive setting - Uread/free access Changeable in: - Drive setting
U805* Max Speed 2805	Maximum speed for clockwise rotation and counter-clockwise rotation. Limitation of the setpoint. Note: Only active for P2800 = 1, otherwise parameters P452 and P453 apply	Init: 1500 Min: 0 Max: 6000 Unit: 1/min Indices: - Type: O2	Menus: - Parameter menu - Drive setting - Uread/free access Changeable in: - Drive setting - Drive setting
U806* SrcSpeedConn 2806	BICO parameter for selecting a double connector (e.g. of the index 1: 0 setpoint channel) which is displayed in m/s in parameter r2807.	index1: 0 Unit: - Indices: 5 Type: L2 ,K ,K	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting
n807 Disp Speed 2807	Display of the connector indicated in P2806 in m/s	Dec.Plc.: 3 Unit: m/s Indices: 5 Type: I2	Menus: - Parameter menu - Uread/free access
n808 v(set) 2808	Speed setpoint for closed-loop control in m/s	Dec.Plc.: 3 Unit: m/s Indices: - Type: I2	Menus: - Parameter menu - Uread/free access
n809 v(act) 2809	Speed actual-value in m/s. Note: Use for display in the case of a noise-corrupted actual signal P2848 (smoothed variable)	Dec.Plc.: 3 Unit: m/s Indices: - Type: I2	Menus: - Parameter menu - Uread/free access

Parameter	Description	Data	Read/write
U810* FSetp 1 2810	Speed fixed setpoint 1. Fixed setpoint in m/s, which is selected as indicated in P2822. Note: Must not be greater than double the value of the system reference speed (P2801). Precondition: Lift operation (P2800 = 1)	index1: 0,000 Min: 0,000 Max: 0,500 Unit: m/s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U811* FSetp 2 2811	Speed fixed setpoint 2 Fixed setpoint in m/s which is selected as indicated in P2822 Note: Must not be greater than double the value of the system reference speed (P2801). Precondition: Lift operation (P2800 = 1)	index1: 0,000 Min: 0,000 Max: 30,000 Unit: m/s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U812* FSetp 3 2812	Speed fixed setpoint 3 Fixed setpoint in m/s which is selected as indicated in P2822 Note: Must not be greater than double the value of the system reference speed (P2801). Precondition: Lift operation (P2800 = 1)	index1: 0,000 Min: 0,000 Max: 30,000 Unit: m/s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U813* FSetp 4 2813	Speed fixed setpoint 4 Fixed setpoint in m/s which is selected as indicated in P2822 Note: Must not be greater than double the value of the system reference speed (P2801). Precondition: Lift operation (P2800 = 1)	index1: 0,000 Min: 0,000 Max: 30,000 Unit: m/s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U814* FSetp 5 2814	Speed fixed setpoint 5 Fixed setpoint in m/s which is selected as indicated in P2822 Note: Must not be greater than double the value of the system reference speed (P2801). Precondition: Lift operation (P2800 = 1)	index1: 0,000 Min: 0,000 Max: 30,000 Unit: m/s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U815* FSetp 6 2815	Speed fixed setpoint 6 Fixed setpoint in m/s which is selected as indicated in P2822 Note: Must not be greater than double the value of the system reference speed (P2801). Precondition: Lift operation (P2800 = 1)	index1: 0,000 Min: 0,000 Max: 30,000 Unit: m/s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U816* FSetp 7 2816	Speed fixed setpoint 7 Fixed setpoint in m/s which is selected as indicated in P2822 Note: Must not be greater than double the value of the system reference speed (P2801). Precondition: Lift operation (P2800 = 1)	index1: 0,000 Min: 0,000 Max: 30,000 Unit: m/s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U817* FSetp 8 2817	Speed fixed setpoint 8 Fixed setpoint in m/s which is selected as indicated in P2822 Note: Must not be greater than double the value of the system reference speed (P2801). Precondition: Lift operation (P2800 = 1)	index1: 0,000 Min: 0,000 Max: 30,000 Unit: m/s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U818* Src FSetp Bit4 2818	BICO parameter for selecting the binector from which bit 4 for selecting (1 out of n) fixed setpoint 6 is to be read in. Dependence: P2822	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
U819* Src FSetp Bit5 2819	BICO parameter for selecting the binector from which bit 5 for selecting (1 out of n) fixed setpoint 7 is to be read in. Dependence: P2822	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
U820* Src FSetp Bit6 2820	BICO parameter for selecting the binector from which bit 6 for selecting (1 out of n) fixed setpoint 8 is to be read in. Dependence: P2822	index1: 0 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
U821* Src BCD Trigger 2821	BICO parameter for selecting a binector from which the trigger signal for acceptance of the fixed setpoint is to be read in. Dependence: P2822 = 2	index1: 1 Unit: - Indices: 2 ,BDS Type: L2 ,B	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
U822* FSetp Select 2822	Selection of the fixed setpoints. The fixed setpoints can be selected '1 out of n' or bit-coded (BCD). In the setting "BCD with trigger", the fixed setpoint is only transferred for a positive edge (trigger) via BICO source P2821. Parameter values: 0: '1 out of n' Selection via (P580,P581,P417,P418,P2818, P2819, P2820 1: 'BCD' Selection via (P580,P581,P417). 2: 'BCD with trigger' Selection via (P580,P581,P417, trigger = P2821).	Init: 1 Min: 0 Max: 2 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting
n823 Travel Command 2823	The travel command (FK) is calculated from the selected fixed setpoints. Parameter values: 0: For selection of FSetp1 (power down) 1: For selection of FSetp 2 to FSetp3, FSetp7 and Fsetp8 (standard travel) 2: For selection of FSetp5 (approach) 3: For selection of FSetp6 (correction)	Dec.Plc.: 0 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access
U824* ThrPulseEnable 2824	Threshold which, when surpassed by the setpoint of binecto B857, is set to 0. Value in % reference speed (P2801). e.g. for automatic pulse enable via braking control.	Init: 0,00 Min: 0,00 Max: 100,00 Unit: % Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U825* Funct AddSetp1 2825	Function of additional setpoint 1. The additional setpoint 1 (r437) can alternatively be added to the main setpoint (r447) or also can limit the main setpoint. Parameter values: 0: Additional setpoint 1 is added to main setpoint. 1: Additional setpoint 1 acts as a limitation for the main setpoint. Precondition: only active during lift operation (P2800 = 1)	Init: 0 toMin: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
U826* Sel FDS Rgen 2826	Selection of the ramp-function generator function data set. The function data set can be selected for the ramp-function generator parameters via the present travel command (r2823). The FDS control word bits (P576, P577) are then not effective for the ramp-function generator parameters. Parameter values: 0: Selection as for FDS control word bits (P576, P577) 1: FDS1 for RGen parameter at r2823 = 0 FDS2 for RGen parameter at r2823 = 1 FDS3 for RGen parameter at r2823 = 2 FDS4 is not selected	Init: 0 Min: 0 Max: 1 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U827* Acceleration 2827	Acceleration of the ramp-function generator during ramp-up. index1: 1,000 FDS(4) parameter. Values: 0.1 m/s ² to 10 m/s ² Note: the value 10 m/s ² bypasses the ramp-function generator	index1: 1,000 Min: 0,010 Max: 10,000 Unit: m/s ² Indices: 4 ,FDS Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U828* Deceleration 2828	Deceleration of the ramp-function generator during ramp-down. FDS(4) parameter. Values: 0.1m/s ² to 10 m/s ² Note: the value 10 m/s ² bypasses the ramp-function generator	index1: 1,000 Min: 0,010 Max: 10,000 Unit: m/s ² Indices: 4 ,FDS Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U829* Init Jerk 2829	Initial jerk of the ramp-function generator during acceleration and deceleration. FDS(4) parameter. Values: 0.1m/s ² to 10 m/s ² Note: the value 10 m/s ² de-energizes the jerk limitation of the ramp-function generator (endless jerk)	index1: 0,800 Min: 0,010 Max: 10,000 Unit: m/s ³ Indices: 4 ,FDS Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U830* Final Jerk 2830	Final jerk of the ramp-function generator during acceleration and deceleration. FDS(4) parameter. Values: 0.1m/s ² to 10 m/s ² Note: the value 10 m/s ² de-energizes the jerk limitation of the ramp-function generator (endless jerk)	index1: 0,800 Min: 0,010 Max: 10,000 Unit: m/s ³ Indices: 4 ,FDS Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U831* V1 Comp 2831	Comparison speed 1. Threshold for the message 'V < V1' (binector B851) Dependences: P2835 smoothing V(act), P2836 Hysteresis maximum possible value: 2 * P2801 (system-V m/s)	Init: 0,000 Min: 0,000 Max: 30,000 Unit: m/s Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U832* V2 Comp 2832	Comparison speed 2: Threshold for the message 'V < V2' (binector B852) Dependences: P2835 smoothing V(act), P2836 Hysteresis maximum possible value: 2 * P2801 (system-V m/s)	Init: 0,000 Min: 0,000 Max: 30,000 Unit: m/s Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U833* V3 Comp 2833	Comparison speed 3. Threshold for the message 'V < V3' (binector B853) Dependences: P2835 smoothing V(act), P2836 Hysteresis maximum possible value: 2 * P2801 (system-V m/s)	Init: 0,000 Min: 0,000 Max: 30,000 Unit: m/s Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U834* V4 Comp 2834	Comparison speed 4. Threshold for the message 'V < V4' (binector B854) Dependences: P2835 smoothing V(act), P2836 Hysteresis maximum possible value: 2 * P2801 (system-V m/s)	Init: 0,000 Min: 0,000 Max: 30,000 Unit: m/s Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U835* Smoothing V(act) 2835	Smoothing time constant (PT1) in ms for the speed actual-value during calculation of the speed comparison messages (B851 to B854). Correlation: P2831, P2832, P2833, P2834 (comparison speeds)	Init: 100 Min: 10 Max: 1000 Unit: ms Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting
U836* Compare Hyst 2836	Hysteresis for the comparison speed messages. Indicated in % (referred to the respective comparison speed actual-value). Applicable for all 4 comparison speeds. Correlation: P2831, P2832, P2833, P2834	Init: 3,0 Min: 0,0 Max: 100,0 Unit: % Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U837* EmergOper Vd 2837	DC link voltage range Vd under emergency operating conditions (power failure). If the DC link voltage lies between the minimum and maximum emergency operating voltage at the end of pre-charging (= battery voltage), the system internally changes over to emergency operation. The fault message F002 (pre-charging) is suppressed for this voltage range. If the DC link voltage is less than the value parameterized in Index 2, binector B856 High is set. Index 1 = minimum Vd in emergency operation Index 2 = maximum Vd in emergency operation. The value in Index 2 must always be greater than or equal to the value in Index 1.	index1: 380 Min: 10 Max: 400 Unit: V Indices: 2 Type: O2	Menus: - Parameter menu - Drive setting - Uread/free access Changeable in: - Drive setting
Emergency operation function only at U800 =1			
U838* EmergOperMDS 2838	Motor data set for emergency operation (power failure). If the control mode is to be changed automatically during emergency operation (e.g. to V/f characteristic due to low DC link voltage), the motor data set can then be specified here in which the control mode has been set. All parameters of this motor data set must be set accordingly.	Init: 1 Min: 1 Max: 4 Unit: - Indices: - Type: O2	Menus: - Parameter menu - Drive setting - Uread/free access Changeable in: - Drive setting
U839* EmergOper V 2839	Speed setpoint for emergency operation (power failure). The emergency speed setpoint is approached in emergency operation instead of fixed setpoints 2 to 8.	Init: 0,200 Min: 0,010 Max: 2,000 Unit: m/s Indices: - Type: O2	Menus: - Parameter menu - Drive setting - Uread/free access Changeable in: - Drive setting - Drive setting - Ready
U840* I(max) Brake 2840	Threshold for the maximum absolute current value to monitor the brake. If the absolute output current of the converter exceeds this threshold for longer than one second, then the fault message F0957 "Brake not open" is output. The rated motor current is the reference quantity (P102). The threshold must lie a minimum of 10% above the maximum possible acceleration current (e.g. current at overload). Values: 100% to 500%	Init: 500 Min: 100 Max: 500 Unit: % Indices: - Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U841* Smooth AddSetp2 2841	Smoothing time constant (PT1) for the additional setpoint 2. 4 ms to 100 ms. Precondition: Smoothing only active when P2800 = 1	index1: 50 Min: 4 Max: 1000 Unit: ms Indices: 4 Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready

Parameter	Description	Data	Read/write
U842* Start Pulse 2842	Setting value for the start pulse (gearbox pulse) in %. The start pulse is added to the speed setpoint after the ramp-function generator. This brief additional setpoint is injected into the speed controller. This thus prevents the load briefly sagging (dropping). The nominal system speed (P2801) is the reference quantity. Correlation: P2843 (Smooth Start Pulse) P2844 (Source Start Pulse) Precondition: P2800 = 1	index1: 0,0 Min: -100,0 Max: 100,0 Unit: % Indices: 4 Type: I2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U843* SmoothStartPulse 2843	Smoothing time constant (PT1) for the start pulse (gearbox pulse) 50 ms to 100 ms Correlation: P2842 (start pulse)	index1: 100 Min: 50 Max: 1000 Unit: ms Indices: 4 Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U844* Src StartPulse 2844	BICO parameter for selecting the source for the start pulse trip Precondition: Trip only after inverter disable and for lift operation (P2800 = ,BDS 1)	index1: 275 Unit: - Indices: 2 Type: L2 ,B	Menus: - Parameter menu + Setpoint channel - Uread/free access Changeable in: - Drive setting - Ready
U845* Approach Delay 2845	Time for to delay the 1st approach point. Change over to the approach setpoint (FSetp5, P2814) is delayed by this time. This prevents the need to modify the limit switches. Values: 0 s 10 s	index1: 0,00 Min: 0,00 Max: 10,00 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U846* Time Short Run 2846	Delay time for the short run calculation. The acceleration phase is extended by this time if the ramp-function generator has not stabilized but has already run through the brake point (select FSetp5, P2823) Values: 0 s ... 10 s	index1: 0,00 Min: 0,00 Max: 10,00 Unit: s Indices: 4 ,FDS Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U847* Src t-short run 2847	BICO parameter from which the time of the short run is to be read in. Normalization: $T(\text{short run}) = T(\text{sample}) * \text{connector value}$	index1: 650 Unit: - Indices: 2 ,BDS Type: L2 ,K	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting
n848 Disp V-act Sm'th 2848	Speed actual-value in m/s (as 2809, but smoothed)	Dec.Plc.: 3 Unit: m/s Indices: - Type: I2	Menus: - Parameter menu - Uread/free access - Drive setting
n900 ObjectData 2900	Service parameter, only for Siemens personnel Visualization parameter for interconnecting connectors and binectors according to the setting in P2905. The connector and binector parameters and the respective index are listed with which the connector or binector is linked in P2905.2.	Dec.Plc.: 0 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu - Uread/free access
	Index 1 Function number of the first interconnection Index 2 Parameter number Index 3 Index		
	Index 4 Function number of the second interconnection Index 5 Parameter number Index 6 Index		

Parameter	Description	Data	Read/write
n901 ObjectData 2901	Service parameter, only for Siemens service personnel	Dec.Plc.: 0 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu - Uread/free access
U905* ObjectDataBeg 2905	Service parameter, only for Siemens service personnel Parameter for interrogating a connector or binector interconnection. The result can be read out in r2900. Index 1 =2 (read connector); =3 (read binector) Index 2 Connector/binector number (decimal) Index 3 No meaning Index 4 No meaning Index 5 No meaning Note: All connector or binector numbers are hexadecimal values. These have to be converted into decimal values for interrogation.	index1: 0 Min: 0 Max: 65535 Unit: - Indices: 5 Type: O2	Menus: - Parameter menu - Uread/free access Changeable in: - Drive setting - Ready
U910* SlotDeselect 2910 Compact PLUS only	Parameter to deselect option boards in the slots Index 1: Basic board Index 2: Deselect slot A Index 3: Deselect slot B	index1: 0 Min: 0 Max: 1 Unit: - Indices: 3 Type: O2	Menus: - Parameter menu - Board configuration - Uread/free access Changeable in: - Board configuration
U910* SlotDeselect 2910 not Compact PLUS	Parameter for deselecting the optional boards in the slots Index 1: Basic board Index 2: Deselection of slot A Index 3: Deselection of slot B Index 4: Deselection of slot C Index 5: Deselection of slot D Index 6: Deselection of slot E Index 7: Deselection of slot F Index 8: Deselection of slot G	index1: 0 Min: 0 Max: 1 Unit: - Indices: 8 Type: O2	Menus: - Parameter menu - Board configuration - Uread/free access Changeable in: - Board configuration
n911 Board ID 2911 not Compact PLUS	Visualization parameter for displaying the board ID. This ID enables various hardware statuses of the installed electronic boards to be determined. Index 1: Basic board Index 2: Optional board on slot A Index 3: Optional board on slot B Index 4: Optional board on slot C Index 5: Optional board on slot D Index 6: Optional board on slot E Index 7: Optional board on slot F Index 8: Optional board on slot G	Dec.Plc.: 0 Unit: - Indices: 8 Type: O2	Menus: - Parameter menu - Fixed settings - Quick parameterization - Board configuration - Drive setting - Download - Uread/free access - Power section definition
n911 Board ID 2911 Compact PLUS only	Visualization parameter for displaying the board code. This code enables the hardware status of the installed electronic boards to be determined. Index 1: Basic board Index 2: Optional board in slot A Index 3: Optional board in slot B	Dec.Plc.: 0 Unit: - Indices: 3 Type: O2	Menus: - Parameter menu + Diagnostics + Messages/displays - Uread/free access
n912 VCS SW Inform 2912	Information on the software version of the gating unit processor Index 1: Software version Index 2: Software ID Index 3: Generation date year Index 4: Generation date month Index 5: Generation date day	Dec.Plc.: 0 Unit: - Indices: 5 Type: O2	Menus: - Parameter menu - Fixed settings - Quick parameterization - Board configuration - Drive setting - Download - Uread/free access - Power section definition

Parameter	Description	Data	Read/write
U950* Sampling Times1 2950	Parameter for setting the sampling time of the functions with function numbers 1 to 100.	index1: 20 Min: 2 Max: 20 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Releases - Uread/free access Changeable in: - Drive setting
U951* Sampling Times2 2951	Parameter for setting the sampling time of the functions with function numbers 101 to 200.	index1: 20 Min: 2 Max: 20 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Releases - Uread/free access Changeable in: - Drive setting
U952* Sampling Times3 2952	Parameter for setting the sampling time of the function with function numbers 201 to 300.	index1: 20 Min: 2 Max: 20 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Releases - Uread/free access Changeable in: - Drive setting
U953* Sampling Times4 2953	Parameter for setting the sampling time of the functions with function numbers 301 to 400.	index1: 20 Min: 2 Max: 20 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Releases - Uread/free access Changeable in: - Drive setting
n957 Sampling Times 7 2957	Parameter for visualizing the sampling time of the internal functions with function numbers 701 ... 800	Dec.Plc.: 0 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Releases - Uread/free access
n958 AutomaticRecord 2958	Parameter for visualization of the sampling time of internal functions with function numbers 801 ... 900	Dec.Plc.: 0 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Releases - Uread/free access
n959 SamplingTimes9 2959	Parameter for visualization of the sampling time of internal functions with function numbers 901 ... 1000	Dec.Plc.: 0 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Releases - Uread/free access
U960* Func Sequence 2960	Parameterizing of the processing sequence for functions 1 to 100.	index1: 10 Min: 0 Max: 9999 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Releases - Uread/free access Changeable in: - Drive setting
U961 Func Sequence 2961	Parameterizing of the processing sequence for functions 101 to 200.	index1: 1010 Min: 0 Max: 9999 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Releases - Uread/free access Changeable in: - Drive setting
U962* Func Sequence 2962	Parameterizing of the processing sequence for functions 201 to 300.	index1: 2010 Min: 0 Max: 9999 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Releases - Uread/free access Changeable in: - Drive setting
U963* Func Sequence 2963	Parameterizing of the processing sequence for functions 301 to 400.	index1: 3010 Min: 0 Max: 9999 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Releases - Uread/free access Changeable in: - Drive setting

Parameter	Description	Data	Read/write
n967 Function Seq 7 2967	Parameter for visualizing the processing sequence of the internal functions with function numbers 701 ... 800	Dec.Plc.: 0 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Releases - Uread/free access
n968 Function Seq 8 2968	Parameter for visualizing the processing sequence of the internal functions with function numbers 801 ... 900	Dec.Plc.: 0 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Releases - Uread/free access
n969 Function Seq 9 2969	Parameter for visualizing the processing sequence of the internal functions with function number 901 .. 1000	Dec.Plc.: 0 Unit: - Indices: 100 Type: O2	Menus: - Parameter menu + Releases - Uread/free access
n979 PWE Checksum 2979	Checksum of the value of all setting parameters The following parameters are ignored: U720 to U769, U976, U977	Dec.Plc.: 0 Unit: - Indices: - Type: O4	Menus: - Parameter menu - Uread/free access
n980 Par # List pt11 2980		Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
n981 Par # List pt12 2981		Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
n982 Par # List pt13 2982		Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
n983 Par # List pt14 2983		Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
n984 Par # List pt15 2984		Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
n985 Par # List pt16 2985		Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
n986 Par # List pt17 2986		Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
n987 Par # List pt18 2987		Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
n988 Par # List pt19 2988		Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
n989 Par # List pt20 2989		Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access

Parameter	Description	Data	Read/write
n990 Par # List chg4		Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
2990			
n991 Par # List chg5		Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
2991			
n992 Par # List chg6		Dec.Plc.: 0 Unit: - Indices: 101 Type: O2	Menus: - Parameter menu - Uread/free access
2992			