12 List of connectors and binectors

12.1 Connector list

The values of connectors can be displayed via parameters r041, r042, r043 and P044.

The following numeric representation applies to all connectors:
In the internal software representation, 100% corresponds to the number 4000 hex = 16384 dec. The value range is -200.00% ... +199.99%, corresponding to 8000 hex ... 7FFF hex. The connectors are transferred via the serial interfaces in this internal mode of representation.
100% corresponds to converter rated quantities r072.i02 (currents, armature), r073.i02 (currents, field), P078.i01 (line voltages, armature).

Connector	Description	Normalization	Function diag., Sheet
Fixed values			
K0000	Fixed value 0		G120
K0001	Fixed value 100.00%	16384 ≙ 100%	G120
K0002	Fixed value 200.00%	16384 ≙ 100%	G120
K0003	Fixed value -100.00%	16384 ≙ 100%	G120
K0004	Fixed value -200.00%	16384 ≙ 100%	G120
K0005	Fixed value 50.00%	16384 ≙ 100%	G120
K0006	Fixed value 150.00%	16384 ≙ 100%	G120
K0007	Fixed value -50.00%	16384 ≙ 100%	G120
K0008	Fixed value -150.00%	16384 ≙ 100%	G120
K0009	Fixed value 0 or special function specified in each case		

Analog inputs			
K0010	Analog input, terminal 4 / 5 (main setpoint) Raw value after A/D conversion (unfiltered, not normalized)	16384 ≙ 100%	G113
K0011	Analog input, terminal 4 / 5 (main setpoint) After normalization, offset injection, filtering	16384 ≙ 100%	G113
K0012	Analog input, terminal 103 / 104 (main actual value) Raw value after A/D conversion (unfiltered, not normalized)	16384 ≙ 100%	G113
K0013	Analog input, terminal 103 / 104 (main actual value) After normalization, offset injection, filtering	16384 ≙ 100%	G113
K0014	Analog input, terminal 6 / 7 (analog selectable input 1) Raw value after A/D conversion (unfiltered, not normalized)	16384 ≙ 100%	G113
K0015	Analog input, terminal 6 / 7 (analog selectable input 1) After normalization, offset injection, filtering	16384 ≙ 100%	G113
K0016	Analog input, terminal 8 / 9 (analog selectable input 2) Raw value after A/D conversion (unfiltered, not normalized)	16384 ≙ 100%	G114
K0017	Analog input, terminal 8 / 9 (analog selectable input 2) After normalization, offset injection, filtering	16384 ≙ 100%	G114
K0018	Analog input, terminal 10 / 11 (analog selectable input 3) Raw value after A/D conversion (unfiltered, not normalized)	16384 ≙ 100%	G114
K0019	Analog input, terminal 10 / 11 (analog selectable input 3) After normalization, offset injection, filtering	16384 ≙ 100%	G114

Connector	Description	Normalization	Function diag., Sheet
Binary inputs, binary outputs			
K0020	Binary inputs, terminals 36 to 43 and 211 to 214, E Stop Bit0 = Status of terminal 36 Bit1 = Status of terminal 37 Bit2 = Status of terminal 38 Bit3 = Status of terminal 39 Bit4 = Status of terminal 40 Bit5 = Status of terminal 41 Bit6 = Status of terminal 42 Bit7 = Status of terminal 43 Bit8 = Status of terminal 211 Bit9 = Status of terminal 212 Bit10 = Status of terminal 213 Bit11 = Status of terminal 214 Bit12 = 0 ... E Stop is active 1 ... No E Stop is active	1 ≙ 1	G110
K0021	Binary outputs, terminals 46 to 52 Bit0 = Status of terminal 46 Bit1 = Status of terminal 48 Bit2 = Status of terminal 50 Bit3 = Status of terminal 52	1 ≙ 1	G112

Analog outputs			
K0026	Analog output, terminal 14 / 15	16384 ≙ 100%	G115
K0027	Analog output, terminal 16 / 17	16384 ≙ 100%	G115
K0028	Analog output, terminal 18 / 19	16384 ≙ 100%	G116
K0029	Analog output, terminal 20 / 21	16384 ≙ 100%	G116

Control word, status word			
K0030	Control word 1	1 ≙ 1	G180
K0031	Control word 2	1 ≙ 1	G181
K0032	Status word 1	1 ≙ 1	G182
K0033	Status word 2	1 ≙ 1	G183

Evaluation of the pulse encoder board SBP			[SW 1.6 and later]
K0039	Actual speed value of SBP	16384 ≙ 100%	Z120

Pulse encoder evaluation			
K0040	Actual speed value from pulse encoder	16384 ≙ 100%	G145
K0041	Absolute actual speed value from pulse encoder	16384 ≙ 100%	G145
K0042	Actual position value, LOW word	1 ≙ 1	G145
K0043	Actual position value, HIGH word	1 ≙ 1	G145
K0044	Actual position value, number of zero markers	1 ≙ 1	G145

Heatsink temperature			
K0050	Heatsink temperature	16384 ≙ 100°C	

Motor interface K0050 is always set to 0 when a PTC thermistor or no temperature sensor is connected (P490.x ≠ 1).			
K0051	Motor temperature 1 (from sensor to terminal 22 / 23)	16384 ≙ 100°C	G185
K0052	Motor temperature 2 (from sensor to terminal 204 / 205)	16384 ≙ 100°C	G185

Closed-loop armature current control, auto-reversing stage, armature gating unit			
K0100	Firing angle (armature)	16384 ≙ 0° 0 ≙ 90° -16384 ≙ 180°	G162

Connector	Description	Normalization	Function diag., Sheet
K0101	Firing angle (armature) before limitation	16384 ≙ 0° 0 ≙ 90° -16384 ≙ 180°	G162
K0102	Precontrol value + armature current controller output (gating unit input)	16384 ≙ 0° 0 ≙ 90° -16384 ≙ 180°	G162
K0105	Code of triggered thyristor pair in a thyristor bridge for switching through the corresponding line phase: 0 UV 2 UW 4 VW 6 VU 8 WU 10 WV	1 ≙ 1	
K0106	Selected torque direction	0 = No torque direction 1 = Torque direction I 2 = Torque direction II	G162
K0109	Internal signed actual current value (armature), averaged over the last 6 current peaks in each case	16384 ≙ 100%	G162
K0110	Current controller output (armature)	16384 ≙ 100%	G162
K0111	Current controller output, P component (armature)	16384 ≙ 100%	G162
K0112	Current controller output, I component (armature)	16384 ≙ 100%	G162
K0113	Current controller actual value/setpoint deviation (armature)	16384 ≙ 100%	G162
K0114	Internal signed actual current value (armature), averaged over one firing cycle	16384 ≙ 100%	G162
K0115	Current controller actual value (armature)	16384 ≙ 100%	G162
K0116	Absolute value of internal actual current (armature)	16384 ≙ 100%	G162
K0117	Internal signed actual current value (armature)	16384 ≙ 100%	G162
K0118	Current controller setpoint (armature)	16384 ≙ 100%	G162
K0119	Current controller setpoint (armature) before absolute-value generation	16384 ≙ 100%	G162
K0120	Current setpoint (armature) before reduced gear stressing	16384 ≙ 100%	G161
K0121	Precontrol output (armature)	16384 ≙ 0° 0 ≙ 90° -16384 ≙ 180°	G162
K0122	EMF which is applied as an input value for the armature precontrol (generated from K0123 or K0124 depending on P162, filtered acc. to P163)	16384 ≙ P078.001* $\frac{3\sqrt{2}}{\pi}$	G162
K0123	EMF= $U_a - I_a * R_a - L_a * di_a/dt$, where the <u>measured</u> armature voltage is applied as U_a (Note: K0287 is the result of PT1 filtering with 10ms)	16384 ≙ P078.001* $\frac{3\sqrt{2}}{\pi}$	
K0124	EMF= $U_a - I_a * R_a - L_a * di_a/dt$, where the armature voltage <u>calculated</u> from the delay angle, measured armature conduction interval and mean line voltage is applied as U_a. If this calculation cannot be made or is insufficiently accurate (e.g. with a conduction angle < 10°, average armature current value < 2 % in r072.002), K0124 assumes the value set in K0123.	16384 ≙ P078.001* $\frac{3\sqrt{2}}{\pi}$	
K0125	Armature current setpoint after reduced gearbox stressing or current setpoint integrator		G162

Current limitation			
K0131	Lowest positive current limit (armature)	16384 ≙ 100%	G161
K0132	Highest negative current limit (armature)	16384 ≙ 100%	G161
K0133	Current setpoint (armature) before limitation (incl. additional setpoint)	16384 ≙ 100%	G161
K0134	Current setpoint (armature) before torque limitation	16384 ≙ 100%	G160

Torque limitation, speed limiting controller			
K0136	Speed limiting controller, active torque limit 1	16384 ≙ 100%	G160
K0137	Speed limiting controller, active torque limit 2	16384 ≙ 100%	G160
K0140	Torque setpoint (after speed limiting controller)	16384 ≙ 100%	G160
K0141	Torque setpoint (after torque limitation)	16384 ≙ 100%	G160
K0142	Actual torque value	16384 ≙ 100%	G162

Connector	Description	Normalization	Function diag., Sheet
K0143	Upper torque limit	16384 ≙ 100%	G160
K0144	Lower torque limit	16384 ≙ 100%	G160
K0145	Torque setpoint before limitation (incl. additional setpoint)	16384 ≙ 100%	G160
K0147	Torque setpoint before limitation (without additional setpoint)	16384 ≙ 100%	G160
K0148	Torque setpoint (from speed controller)	16384 ≙ 100%	G152

Compensation of moment of inertia (dv/dt injection)			
K0150	Component of precontrol for speed controller calculated from d(K0168)/dt * P540	16384 ≙ 100%	G153
K0152	Component of precontrol for speed controller calculated from f(K0164) * P541 (= function of speed actual value/setpoint deviation in K0164)	16384 ≙ 100%	G153

Speed controller **Setpoint processing, ramp-function generator, friction and moment of inertia compensation**			
K0160	Speed controller output	16384 ≙ 100%	G152
K0161	P component	16384 ≙ 100%	G152
K0162	I component	16384 ≙ 100%	G152
K0164	Setpoint/actual value deviation	16384 ≙ 100%	G152
K0165	Generation of setpoint/actual value deviation output	16384 ≙ 100%	G152
K0166	Selected actual speed value (absolute value)	16384 ≙ 100%	G152
K0167	Selected actual speed value (signed)	16384 ≙ 100%	G152
K0168	D component output * (-1)	16384 ≙ 100%	G152
K0169	D component output	16384 ≙ 100%	G152
K0170	Speed setpoint from ramp-function generator after limitation	16384 ≙ 100%	G136
K0171	Precontrol for speed controller (friction and moment of inertia compensation)	16384 ≙ 100%	G153
K0172	Component of precontrol determined by friction for speed controller	16384 ≙ 100%	G153
K0173	Filtered component of precontrol determined by moment of inertia for speed controller	16384 ≙ 100%	G153
K0174	Filtering element output for nset filtering	16384 ≙ 100%	G152
K0176	Speed droop	16384 ≙ 100%	G151
K0177	Band-stop output 1	16384 ≙ 100%	G152
K0178	Band-stop output 2	16384 ≙ 100%	G152
K0179	Filtering element output for nact filtering	16384 ≙ 100%	G152
K0181	Lowest positive setpoint limit	16384 ≙ 100%	G136
K0182	Highest negative setpoint limit	16384 ≙ 100%	G136
K0183	Speed setpoint before limitation	16384 ≙ 100%	G136
K0190	Ramp-function generator output (before speed setpoint limitation)	16384 ≙ 100%	G136
K0191	dv/dt (rise in ramp-function generator output in time period set in P542)	16384 ≙ 100%	G136
K0192	Effective ramp-function generator input variable	16384 ≙ 100%	G136
K0193	Setpoint input for ramp-function generator	16384 ≙ 100%	G135
K0194	Total of main setpoint (limited) + additional setpoint	16384 ≙ 100%	G135
K0195	Ramp-function generator input before the setpoint reduction	16384 ≙ 100%	G135
K0196	Effective positive limit for main setpoint	16384 ≙ 100%	G135
K0197	Effective negative limit for main setpoint	16384 ≙ 100%	G135
K0198	Main setpoint before limitation	16384 ≙ 100%	G135

Crawling setpoint, inching setpoint, forcing, oscillation, fixed setpoint			
K0201	Crawling setpoint	16384 ≙ 100%	G130

Connector	Description	Normalization	Function diag., Sheet
K0202	Inching setpoint	16384 ≙ 100%	G129
K0203	Oscillation setpoint	16384 ≙ 100%	G128
K0204	Fixed setpoint	16384 ≙ 100%	G127
K0206	Crawling setpoint: Output value of function block	16384 ≙ 100%	G130
K0207	Inching setpoint: Output value of function block	16384 ≙ 100%	G129
K0208	Forcing, oscillation: Output value of function block	16384 ≙ 100%	G128
K0209	Fixed setpoint: Output value of function block	16384 ≙ 100%	G127

Motorized potentiometer			
K0240	Motorized potentiometer output (setpoint from potentiometer)	16384 ≙ 100%	G126
K0241	dy/dt (rise in ramp-function generator output in time period set in P542 + P465)	16384 ≙ 100%	G126
K0242	Ramp-function generator input in motorized potentiometer (setpoint)	16384 ≙ 100%	G126

Closed-loop field current control, field gating unit			
K0250	Firing angle (field)	16384 ≙ 0° 0 ≙ 90° -16384 ≙ 180°	G166
K0251	Firing angle (field) before limitation	16384 ≙ 0° 0 ≙ 90° -16384 ≙ 180°	G166
K0252	Precontrol value + field current controller output (gating unit input)	16384 ≙ 0° 0 ≙ 90° -16384 ≙ 180°	G166
K0260	Current controller output (field)	16384 ≙ 100%	G166
K0261	Current controller P component (field)	16384 ≙ 100%	G166
K0262	Current controller I component (field)	16384 ≙ 100%	G166
K0263	Current controller setpoint/actual value deviation (field)	16384 ≙ 100%	G166
K0265	Actual value at field current controller input	16384 ≙ 100%	G166
K0266	Absolute internal actual current value (field)	16384 ≙ 100%	G166
K0268	Setpoint at field current controller input	16384 ≙ 100%	G166
K0271	Precontrol output (field)	16384 ≙ 100%	G166

Closed-loop EMF control			
K0273	Lowest positive current limit (field)	16384 ≙ 100%	G165
K0274	Lowest negative current limit (field)	16384 ≙ 100%	G165
K0275	Current controller setpoint (field) before standstill field	16384 ≙ 100%	G165
K0276	Current controller setpoint (field) before limitation	16384 ≙ 100%	G165
K0277	Current controller setpoint (field) before summing stage at limiter input	16384 ≙ 100%	G165
K0278	Precontrol value + EMF controller output	16384 ≙ 100%	G165
K0280	EMF controller output	16384 ≙ 100%	G165
K0281	P component of EMF controller	16384 ≙ 100%	G165
K0282	I component of EMF controller	16384 ≙ 100%	G165
K0283	EMF controller, setpoint/actual value deviation	16384 ≙ 100%	G165
K0284	EMF controller, setpoint/actual value deviation after droop	16384 ≙ 100%	G165
K0285	EMF controller actual value	16384 ≙ P078.001* $\frac{3\sqrt{2}}{\pi}$	G165
K0286	Absolute value of actual EMF	16384 ≙ P078.001* $\frac{3\sqrt{2}}{\pi}$	G165
K0287	Signed actual EMF value	16384 ≙ P078.001* $\frac{3\sqrt{2}}{\pi}$	G165

Connector	Description	Normalization	Function diag., Sheet
K0288	EMF controller setpoint	16384 ≙ P078.001* $\frac{3\sqrt{2}}{\pi}$	G165
K0289	EMF setpoint	16384 ≙ P078.001* $\frac{3\sqrt{2}}{\pi}$	G165
K0290	Motor flux		G166
K0291	Absolute actual armature voltage	16384 ≙ P078.001* $\frac{3\sqrt{2}}{\pi}$	
K0292	Signed actual armature voltage	16384 ≙ P078.001* $\frac{3\sqrt{2}}{\pi}$	
K0293	Precontrol output (EMF)	16384 ≙ 100%	G165

General connectors			
K0301	Line voltage U-V (armature)	16384 ≙ P078.001	
K0302	Line voltage V-W (armature)	16384 ≙ P078.001	
K0303	Line voltage W-U (armature)	16384 ≙ P078.001	
K0304	Line voltage (field)	16384 ≙ 400V	
K0305	Average line voltage (armature), filtered	16384 ≙ P078.001	
K0306	Line frequency	16384 ≙ 50,0Hz	
K0307	Motor power output Normalization: 16384 ≙ P100 * (P101 – P100 * P110)	see Column 2	
K0309	Calculated motor temperature rise Normalization: 16384 ≙ the overtemperature which is reached at a continuous current corresponding to the rated motor armature current	see Column 2	
K0310	Calculated thyristor temperature rise as % of maximum permissible thyristor temperature rise	16384 ≙ 100%	

Fixed setpoints			
K0401	Fixed value 1 (P401)	16384 ≙ 100%	G120
K0402	Fixed value 2 (P402)	16384 ≙ 100%	G120
K0403	Fixed value 3 (P403)	16384 ≙ 100%	G120
K0404	Fixed value 4 (P404)	16384 ≙ 100%	G120
K0405	Fixed value 5 (P405)	16384 ≙ 100%	G120
K0406	Fixed value 6 (P406)	16384 ≙ 100%	G120
K0407	Fixed value 7 (P407)	16384 ≙ 100%	G120
K0408	Fixed value 8 (P408)	16384 ≙ 100%	G120
K0409	Fixed value 9 (P409)	16384 ≙ 100%	G120
K0410	Fixed value 10 (P410)	16384 ≙ 100%	G120
K0411	Fixed value 11 (P411)	16384 ≙ 100%	G120
K0412	Fixed value 12 (P412)	16384 ≙ 100%	G120
K0413	Fixed value 13 (P413)	16384 ≙ 100%	G120
K0414	Fixed value 14 (P414)	16384 ≙ 100%	G120
K0415	Fixed value 15 (P415)	16384 ≙ 100%	G120
K0416	Fixed value 16 (P416)	16384 ≙ 100%	G120

Start pulse for the speed controller			[SW 1.7 and later]
K0451	Fixed setting value 1 for the n controller I component	16384 ≙ 100% of P100	G150
K0452	Setting value 1 for the n controller I component, weighted	16384 ≙ 100% of P100	G150
K0453	Fixed setting value 2 for the n controller I component	16384 ≙ 100% of P100	G150
K0454	Setting value for the n controller I component	16384 ≙ 100% of P100	G150

Connector	Description	Normalization	Function diag., Sheet
4-step master switch			[SW 1.7 and later]
K0510	Setpoint of the 4-step master switch	16384 ≙ 100%	G125

General connectors			
K0800	Operating status (code number) with one decimal place		
K0810	Limiting bits		

K0900	Optimization run, setpoint 0		
K0901	Optimization run, setpoint 1		
K0902	Optimization run, setpoint 2		
K0903	Optimization run, setpoint 3		
K0904	Optimization run, setpoint 4		

K0960	Time interval between averaged line synchronization time reference point and "unfiltered" zero crossing of scanned and software-filtered line voltage in 1.334 µs (when P152 = 1 to 20)	1 ≙ 1,334 µs	
K0970	Positive line zero crossing of phase U-V (as T1 instant)		
K0971	Negative line zero crossing of phase W-U (as T1 instant)		
K0972	Positive line zero crossing of phase V-W (as T1 instant)		
K0973	Negative line zero crossing of phase U-V (as T1 instant)		
K0974	Positive line zero crossing of phase W-U (as T1 instant)		
K0975	Negative line zero crossing of phase V-W (as T1 instant)		
K0976	Positive line zero crossing, field supply		
K0977	Negative line zero crossing, field supply		
K0984	Last line zero crossing used (as T1 instant) (field)		
K0985	Field firing instant (as T1 instant)		
K0986	Last line zero crossing used (as T1 instant) (armature)		
K0987	Armature firing instant (as T1 instant)		
K0988	Firing pulse cycle time (time difference between current and previous armature firing instant) in T1 increments of 1.334 µs each		

Connector	Description	Normalization	Function diag., Sheet
K0989	Information about torque direction and firing angle Nibble 0 .. Torque direction 0 = M0 (--) 1 = MI 2 = MII 9 = The master waits in M0 until all slaves have reached the RUN state Nibble 1 .. Code number for firing angle 1 = Firing angle requested by current controller+precontrol implemented 2 = Firing angle requested by current controller+precontrol was > P151. It has been implemented or limited to 165 ° 3 = Alpha-W pulse at 165° 4 = Alpha-W pulse at P151 angle setting 5 = Firing angle requested by current controller+precontrol could not be implemented due to strong pulse compression 6 = Slave connected in parallel could not adapt its computing cycle to the firing angle of the paralleling master 7 = No firing angle received from paralleling master 8 = The cycle time received from the paralleling master is too long 9 = The firing angle of the paralleling master has been implemented Nibble 2 .. Code number for requested torque direction 0: Not RUN (≥ o1.0) 1: Torque direction acc. to current setpoint K119 (==> M0, MI, MII) 2: Wait for enable from parallel drive [acc. to P165] (==> M0) 3: Firing angle of > 165 degrees requested (==> M0) 4: Additional wait time in auto-reversing stage (==> M0) 5: Output pulse at 165 degrees in old torque direction (==> MI, MII) 6: Output Alpha_W pulse (acc. to P151) in the old torque direction (==> MI, MII) 7: Torque direction request during short-circuit test of thyristor check function (==> MI) 8: Torque direction request during open circuit test of thyristor check function (==> M0, MI, MII) 9: The selected thyristor pair is disabled during thyristor check (==> M0) A: No meaning B: Torque direction of paralleling is being implemented (==> M0, MI, MII) C: Simulation operation (==> MI, MII) D: The command “Fire all thyristors simultaneously“ is being executed (see also under P0176)		
K0990	Current total processor capacity utilization (C167)		
K0991	Projected total processor capacity utilization (C167) for maximum line frequency (65 Hz)		
K0992	Total processor capacity (C167) currently utilized by background routines		
K0993	Total processor capacity (C167) currently utilized by routines synchronized with field firing pulses		
K0994	Total processor capacity (C167) currently utilized by routines synchronized with armature firing pulses		

Serial interface 1 (USS1 on G-SST1)			
K2001	USS1 receive data, word 1	1 ≙ 1	G170
K2002	USS1 receive data, word 2	1 ≙ 1	G170
K2003	USS1 receive data, word 3	1 ≙ 1	G170
K2004	USS1 receive data, word 4	1 ≙ 1	G170
K2005	USS1 receive data, word 5	1 ≙ 1	G170
K2006	USS1 receive data, word 6	1 ≙ 1	G170
K2007	USS1 receive data, word 7	1 ≙ 1	G170
K2008	USS1 receive data, word 8	1 ≙ 1	G170

Connector	Description	Normalization	Function diag., Sheet
K2009	USS1 receive data, word 9	1 ≙ 1	G170
K2010	USS1 receive data, word 10	1 ≙ 1	G170
K2011	USS1 receive data, word 11	1 ≙ 1	G170
K2012	USS1 receive data, word 12	1 ≙ 1	G170
K2013	USS1 receive data, word 13	1 ≙ 1	G170
K2014	USS1 receive data, word 14	1 ≙ 1	G170
K2015	USS1 receive data, word 15	1 ≙ 1	G170
K2016	USS1 receive data, word 16	1 ≙ 1	G170
K2020	Output of binector/connector converter for G-SST1 [SW 1.4 and later]	1 ≙ 1	G170

Process data exchange with 1st CB/TB			
K3001	Receive data from 1st CB/TB, word 1	1 ≙ 1	Z110
K3002	Receive data from 1st CB/TB, word 2	1 ≙ 1	Z110
K3003	Receive data from 1st CB/TB, word 3	1 ≙ 1	Z110
K3004	Receive data from 1st CB/TB, word 4	1 ≙ 1	Z110
K3005	Receive data from 1st CB/TB, word 5	1 ≙ 1	Z110
K3006	Receive data from 1st CB/TB, word 6	1 ≙ 1	Z110
K3007	Receive data from 1st CB/TB, word 7	1 ≙ 1	Z110
K3008	Receive data from 1st CB/TB, word 8	1 ≙ 1	Z110
K3009	Receive data from 1st CB/TB, word 9	1 ≙ 1	Z110
K3010	Receive data from 1st CB/TB, word 10	1 ≙ 1	Z110
K3011	Receive data from 1st CB/TB, word 11	1 ≙ 1	Z110
K3012	Receive data from 1st CB/TB, word 12	1 ≙ 1	Z110
K3013	Receive data from 1st CB/TB, word 13	1 ≙ 1	Z110
K3014	Receive data from 1st CB/TB, word 14	1 ≙ 1	Z110
K3015	Receive data from 1st CB/TB, word 15	1 ≙ 1	Z110
K3016	Receive data from 1st CB/TB, word 16	1 ≙ 1	Z110

Expansion boards		[SW 1.5 and later]	
K5101	1st analog input of 1st plugged EB1		Z112
K5102	2nd analog input of 1st plugged EB1		Z112
K5103	3rd analog input of 1st plugged EB1		Z112
K5104	1st analog output of 1st plugged EB1		Z113
K5105	2nd analog output of 1st plugged EB1		Z113
K5106	Binary inputs and outputs of 1st plugged EB1		Z114
K5111	Analog input of 1st plugged EB2		Z118
K5112	Analog output of 1st plugged EB2		Z118
K5113	Binary inputs and outputs of 1st plugged EB2		Z118
K5201	1st analog input of 2nd plugged EB1		Z115
K5202	2nd analog input of 2nd plugged EB1		Z115
K5203	3rd analog input of 2nd plugged EB1		Z115
K5204	1st analog output of 2nd plugged EB1		Z116
K5205	2nd analog output of 2nd plugged EB1		Z116
K5206	Binary inputs and outputs of 2nd plugged EB1		Z117
K5211	Analog input of 2nd plugged EB2		Z119
K5212	Analog output of 2nd plugged EB2		Z119
K5213	Binary inputs and outputs of 2nd plugged EB2		Z119

Connector	Description	Normalization	Function diag., Sheet
Serial interface 2 (USS2 / Peer-to-peer 2 on G-SST2)			
K6001	USS2 / Peer2 receive data, word 1	1 ≙ 1	G171, G173
K6002	USS2 / Peer2 receive data, word 2	1 ≙ 1	G171, G173
K6003	USS2 / Peer2 receive data, word 3	1 ≙ 1	G171, G173
K6004	USS2 / Peer2 receive data, word 4	1 ≙ 1	G171, G173
K6005	USS2 / Peer2 receive data, word 5	1 ≙ 1	G171, G173
K6006	USS2 receive data, word 6	1 ≙ 1	G171
K6007	USS2 receive data, word 7	1 ≙ 1	G171
K6008	USS2 receive data, word 8	1 ≙ 1	G171
K6009	USS2 receive data, word 9	1 ≙ 1	G171
K6010	USS2 receive data, word 10	1 ≙ 1	G171
K6011	USS2 receive data, word 11	1 ≙ 1	G171
K6012	USS2 receive data, word 12	1 ≙ 1	G171
K6013	USS2 receive data, word 13	1 ≙ 1	G171
K6014	USS2 receive data, word 14	1 ≙ 1	G171
K6015	USS2 receive data, word 15	1 ≙ 1	G171
K6016	USS2 receive data, word 16	1 ≙ 1	G171
K6020	Output of binector/connector converter for G-SST2 [SW 1.4 and later]	1 ≙ 1	G171, G173

Paralleling interface			
K6021	Word 1 from master / Word 1 from slave with address 2	1 ≙ 1	G195
K6022	Word 2 from master / Word 2 from slave with address 2	1 ≙ 1	G195
K6023	Word 3 from master / Word 3 from slave with address 2	1 ≙ 1	G195
K6024	Word 4 from master / Word 4 from slave with address 2	1 ≙ 1	G195
K6025	Word 5 from master / Word 5 from slave with address 2	1 ≙ 1	G195
K6031	Word 1 from slave with address 3	1 ≙ 1	G195
K6032	Word 2 from slave with address 3	1 ≙ 1	G195
K6033	Word 3 from slave with address 3	1 ≙ 1	G195
K6034	Word 4 from slave with address 3	1 ≙ 1	G195
K6035	Word 5 from slave with address 3	1 ≙ 1	G195
K6041	Word 1 from slave with address 4	1 ≙ 1	G195
K6042	Word 2 from slave with address 4	1 ≙ 1	G195
K6043	Word 3 from slave with address 4	1 ≙ 1	G195
K6044	Word 4 from slave with address 4	1 ≙ 1	G195
K6045	Word 5 from slave with address 4	1 ≙ 1	G195
K6051	Word 1 from slave with address 5	1 ≙ 1	G195
K6052	Word 2 from slave with address 5	1 ≙ 1	G195
K6053	Word 3 from slave with address 5	1 ≙ 1	G195
K6054	Word 4 from slave with address 5	1 ≙ 1	G195
K6055	Word 5 from slave with address 5	1 ≙ 1	G195
K6061	Word 1 from slave with address 6	1 ≙ 1	G195
K6062	Word 2 from slave with address 6	1 ≙ 1	G195
K6063	Word 3 from slave with address 6	1 ≙ 1	G195
K6064	Word 4 from slave with address 6	1 ≙ 1	G195
K6065	Word 5 from slave with address 6	1 ≙ 1	G195

Process data exchange with SIMOLINK			[SW 1.5 and later]
K7001	Receive data from SIMOLINK, word 1	1 ≙ 1	Z122
K7002	Receive data from SIMOLINK, word 2	1 ≙ 1	Z122

Connector	Description	Normalization	Function diag., Sheet
K7003	Receive data from SIMOLINK, word 3	1 ≙ 1	Z122
K7004	Receive data from SIMOLINK, word 4	1 ≙ 1	Z122
K7005	Receive data from SIMOLINK, word 5	1 ≙ 1	Z122
K7006	Receive data from SIMOLINK, word 6	1 ≙ 1	Z122
K7007	Receive data from SIMOLINK, word 7	1 ≙ 1	Z122
K7008	Receive data from SIMOLINK, word 8	1 ≙ 1	Z122
K7009	Receive data from SIMOLINK, word 9	1 ≙ 1	Z122
K7010	Receive data from SIMOLINK, word 10	1 ≙ 1	Z122
K7011	Receive data from SIMOLINK, word 11	1 ≙ 1	Z122
K7012	Receive data from SIMOLINK, word 12	1 ≙ 1	Z122
K7013	Receive data from SIMOLINK, word 13	1 ≙ 1	Z122
K7014	Receive data from SIMOLINK, word 14	1 ≙ 1	Z122
K7015	Receive data from SIMOLINK, word 15	1 ≙ 1	Z122
K7016	Receive data from SIMOLINK, word 16	1 ≙ 1	Z122
K7101	Receive data from SIMOLINK, special data word 1	1 ≙ 1	Z122
K7102	Receive data from SIMOLINK, special data word 2	1 ≙ 1	Z122
K7103	Receive data from SIMOLINK, special data word 3	1 ≙ 1	Z122
K7104	Receive data from SIMOLINK, special data word 4	1 ≙ 1	Z122
K7105	Receive data from SIMOLINK, special data word 5	1 ≙ 1	Z122
K7106	Receive data from SIMOLINK, special data word 6	1 ≙ 1	Z122
K7107	Receive data from SIMOLINK, special data word 7	1 ≙ 1	Z122
K7108	Receive data from SIMOLINK, special data word 8	1 ≙ 1	Z122

Process data exchange with 2nd CB			
K8001	Receive data from 2nd CB, word 1	1 ≙ 1	Z111
K8002	Receive data from 2nd CB, word 2	1 ≙ 1	Z111
K8003	Receive data from 2nd CB, word 3	1 ≙ 1	Z111
K8004	Receive data from 2nd CB, word 4	1 ≙ 1	Z111
K8005	Receive data from 2nd CB, word 5	1 ≙ 1	Z111
K8006	Receive data from 2nd CB, word 6	1 ≙ 1	Z111
K8007	Receive data from 2nd CB, word 7	1 ≙ 1	Z111
K8008	Receive data from 2nd CB, word 8	1 ≙ 1	Z111
K8009	Receive data from 2nd CB, word 9	1 ≙ 1	Z111
K8010	Receive data from 2nd CB, word 10	1 ≙ 1	Z111
K8011	Receive data from 2nd CB, word 11	1 ≙ 1	Z111
K8012	Receive data from 2nd CB, word 12	1 ≙ 1	Z111
K8013	Receive data from 2nd CB, word 13	1 ≙ 1	Z111
K8014	Receive data from 2nd CB, word 14	1 ≙ 1	Z111
K8015	Receive data from 2nd CB, word 15	1 ≙ 1	Z111
K8016	Receive data from 2nd CB, word 16	1 ≙ 1	Z111

Serial interface 3 (USS3 / Peer-to-peer 3 on G-SST3)			
K9001	USS3 / Peer3 receive data, word 1	1 ≙ 1	G172, G174
K9002	USS3 / Peer3 receive data, word 2	1 ≙ 1	G172, G174
K9003	USS3 / Peer3 receive data, word 3	1 ≙ 1	G172, G174
K9004	USS3 / Peer3 receive data, word 4	1 ≙ 1	G172, G174
K9005	USS3 / Peer3 receive data, word 5	1 ≙ 1	G172, G174
K9006	USS3 receive data, word 6	1 ≙ 1	G172
K9007	USS3 receive data, word 7	1 ≙ 1	G172

Connector	Description			Normalization	Function diag., Sheet
K9008	USS3 receive data, word 8			1 ≙ 1	G172
K9009	USS3 receive data, word 9			1 ≙ 1	G172
K9010	USS3 receive data, word 10			1 ≙ 1	G172
K9011	USS3 receive data, word 11			1 ≙ 1	G172
K9012	USS3 receive data, word 12			1 ≙ 1	G172
K9013	USS3 receive data, word 13			1 ≙ 1	G172
K9014	USS3 receive data, word 14			1 ≙ 1	G172
K9015	USS3 receive data, word 15			1 ≙ 1	G172
K9016	USS3 receive data, word 16			1 ≙ 1	G172
K9020	Output of binector/connector converter for G-SST3	[SW 1.4 and later]		1 ≙ 1	G172, G174

Technology software S00: Binector/connector converters					
K9113	Output of binector/connector converter 1		FB 13	1 ≙ 1	B121
K9114	Output of binector/connector converter 2		FB 14	1 ≙ 1	B121
K9115	Output of binector/connector converter 3		FB 14	1 ≙ 1	B121

Technology software S00: Adders / Subtracters					
K9120	Output of adder/subtracter 1		FB 20	16384 ≙ 100%	B125
K9121	Output of adder/subtracter 2		FB 21	16384 ≙ 100%	B125
K9122	Output of adder/subtracter 3		FB 22	16384 ≙ 100%	B125
K9123	Output of adder/subtracter 4		FB 23	16384 ≙ 100%	B125
K9124	Output of adder/subtracter 5		FB 24	16384 ≙ 100%	B125
K9125	Output of adder/subtracter 6		FB 25	16384 ≙ 100%	B125
K9126	Output of adder/subtracter 7		FB 26	16384 ≙ 100%	B125
K9127	Output of adder/subtracter 8		FB 27	16384 ≙ 100%	B125
K9128	Output of adder/subtracter 9		FB 28	16384 ≙ 100%	B125
K9129	Output of adder/subtracter 10		FB 29	16384 ≙ 100%	B125
K9130	Output of adder/subtracter 11		FB 30	16384 ≙ 100%	B125
K9131	Output of adder/subtracter 12		FB 31	16384 ≙ 100%	B125
K9132	Output of adder/subtracter 13	[SW 1.8 and later]	FB 32	16384 ≙ 100%	B125
K9133	Output of adder/subtracter 14	[SW 1.8 and later]	FB 33	16384 ≙ 100%	B125
K9134	Output of adder/subtracter 15	[SW 1.8 and later]	FB 34	16384 ≙ 100%	B125

Technology software S00: Sign inverters, switchable sign inverters					
K9135	Output of sign inverter 1		FB 35	16384 ≙ 100%	B125
K9136	Output of sign inverter 2		FB 36	16384 ≙ 100%	B125
K9137	Output of sign inverter 3		FB 37	16384 ≙ 100%	B125
K9138	Output of sign inverter 4		FB 38	16384 ≙ 100%	B125
K9140	Output of switchable sign inverter 1		FB 40	16384 ≙ 100%	B125
K9141	Output of switchable sign inverter 2		FB 41	16384 ≙ 100%	B125

Technology software S00: Dividers, multipliers, high-resolution multipliers/dividers					
K9142	Output of divider 4	[SW 1.8 and later]	FB 42	16384 ≙ 100%	B131
K9143	Output of divider 5	[SW 1.8 and later]	FB 43	16384 ≙ 100%	B131
K9144	Output of divider 6	[SW 1.8 and later]	FB 44	16384 ≙ 100%	B131
K9145	Output of divider 1		FB 45	16384 ≙ 100%	B131
K9146	Output of divider 2		FB 46	16384 ≙ 100%	B131
K9147	Output of divider 3		FB 47	16384 ≙ 100%	B131
K9150	Output of multiplier 1		FB 50	16384 ≙ 100%	B130

Connector	Description		Normalization	Function diag., Sheet
K9151	Output of multiplier 2	FB 51	16384 ≙ 100%	B130
K9152	Output of multiplier 3	FB 52	16384 ≙ 100%	B130
K9153	Output of multiplier 4	FB 53	16384 ≙ 100%	B130
K9155	Output of high-resolution multiplier/divider 1	FB 55	16384 ≙ 100%	B131
K9156	Output of high-resolution multiplier/divider 2	FB 56	16384 ≙ 100%	B131
K9157	Output of high-resolution multiplier/divider 3	FB 57	16384 ≙ 100%	B131

Technology software S00: Absolute-value generator with filter				
K9160	Output of absolute-value generator with filter 1	FB 60	16384 ≙ 100%	B135
K9161	Output of absolute-value generator with filter 2	FB 61	16384 ≙ 100%	B135
K9162	Output of absolute-value generator with filter 3	FB 62	16384 ≙ 100%	B135
K9163	Output of absolute-value generator with filter 4	FB 63	16384 ≙ 100%	B135

Technology software S00: Limiters				
K9165	Limiter 1: Fixed limiting value	FB 65	16384 ≙ 100%	B135
K9166	Limiter 1: Positive limiting value * (-1)	FB 65	16384 ≙ 100%	B135
K9167	Limiter 1: Output	FB 65	16384 ≙ 100%	B135
K9168	Limiter 2: Fixed limiting value	FB 66	16384 ≙ 100%	B135
K9169	Limiter 2: Positive limiting value * (-1)	FB 66	16384 ≙ 100%	B135
K9170	Limiter 2: Output	FB 66	16384 ≙ 100%	B135
K9171	Limiter 3: Fixed limiting value	FB 67	16384 ≙ 100%	B135
K9172	Limiter 3: Positive limiting value * (-1)	FB 67	16384 ≙ 100%	B135
K9173	Limiter 3: Output	FB 67	16384 ≙ 100%	B135

Technology software S00: Limit-value monitor with filter				
K9180	Limit-value monitor with filter 1: Filtered input quantity	FB 70	16384 ≙ 100%	B136
K9181	Limit-value monitor with filter 1: Fixed operating point	FB 70	16384 ≙ 100%	B136
K9182	Limit-value monitor with filter 2: Filtered input quantity	FB 71	16384 ≙ 100%	B136
K9183	Limit-value monitor with filter 2: Fixed operating point	FB 71	16384 ≙ 100%	B136
K9184	Limit-value monitor with filter 3: Filtered input quantity	FB 72	16384 ≙ 100%	B136
K9185	Limit-value monitor with filter 3: Fixed operating point	FB 72	16384 ≙ 100%	B136

Technology software S00: Limit-value monitor without filter				
K9186	Limit-value monitor without filter 1: Fixed operating point	FB 73	16384 ≙ 100%	B137
K9187	Limit-value monitor without filter 2: Fixed operating point	FB 74	16384 ≙ 100%	B137
K9188	Limit-value monitor without filter 3: Fixed operating point	FB 75	16384 ≙ 100%	B137
K9189	Limit-value monitor without filter 4: Fixed operating point	FB 76	16384 ≙ 100%	B137
K9190	Limit-value monitor without filter 5: Fixed operating point	FB 77	16384 ≙ 100%	B138
K9191	Limit-value monitor without filter 6: Fixed operating point	FB 78	16384 ≙ 100%	B138
K9192	Limit-value monitor without filter 7: Fixed operating point	FB 79	16384 ≙ 100%	B138

Technology software S00: Minimum selection, maximum selection				
K9193	Minimum selection output	FB 80	16384 ≙ 100%	B140
K9194	Maximum selection output	FB 81	16384 ≙ 100%	B140

Technology software S00: Tracking/storage elements				
K9195	Output of tracking/storage element 1	FB 82	16384 ≙ 100%	B145
K9196	Output of tracking/storage element 2	FB 83	16384 ≙ 100%	B145

Connector	Description		Normalization	Function diag., Sheet
Technology software S00: Connector memories				
K9197	Output connector memory 1	FB 84	16384 ≙ 100%	B145
K9198	Output connector memory 2	FB 85	16384 ≙ 100%	B145

Technology software S00: Connector changeover switches				
K9210	Output connector changeover switch 1	FB 90	16384 ≙ 100%	B150
K9210	Output connector changeover switch 1	FB 90	16384 ≙ 100%	B150
K9211	Output connector changeover switch 2	FB 91	16384 ≙ 100%	B150
K9212	Output connector changeover switch 3	FB 92	16384 ≙ 100%	B150
K9213	Output connector changeover switch 4	FB 93	16384 ≙ 100%	B150
K9214	Output connector changeover switch 5	FB 94	16384 ≙ 100%	B150
K9215	Output connector changeover switch 6	FB 95	16384 ≙ 100%	B150
K9216	Output connector changeover switch 7	FB 96	16384 ≙ 100%	B150
K9217	Output connector changeover switch 8	FB 97	16384 ≙ 100%	B150
K9218	Output connector changeover switch 9	FB 98	16384 ≙ 100%	B150
K9219	Output connector changeover switch 10	FB 99	16384 ≙ 100%	B150

Technology software S00: Integrators				
K9220	Output of integrator 1	FB 100	16384 ≙ 100%	B155
K9221	Output of integrator 2	FB 101	16384 ≙ 100%	B155
K9222	Output of integrator 3	FB 102	16384 ≙ 100%	B155

Technology software S00: DT1 elements				
K9223	Output of DT1 element 1	FB 103	16384 ≙ 100%	B155
K9224	Output of DT1 element 1, inverted	FB 103	16384 ≙ 100%	B155
K9225	Output of DT1 element 2	FB 104	16384 ≙ 100%	B155
K9226	Output of DT1 element 2, inverted	FB 104	16384 ≙ 100%	B155
K9227	Output of DT1 element 3	FB 105	16384 ≙ 100%	B155
K9228	Output of DT1 element 3, inverted	FB 105	16384 ≙ 100%	B155

Technology software S00: Characteristic blocks				
K9229	Output of characteristic block 1	FB 106	16384 ≙ 100%	B160
K9230	Output of characteristic block 2	FB 107	16384 ≙ 100%	B160
K9231	Output of characteristic block 3	FB 108	16384 ≙ 100%	B160

Technology software S00: Dead zones				
K9232	Output of dead zone 1	FB 109	16384 ≙ 100%	B161
K9233	Output of dead zone 2	FB 110	16384 ≙ 100%	B161
K9234	Output of dead zone 3	FB 111	16384 ≙ 100%	B161

Technology software S00: Setpoint branching				
K9235	Setpoint branching output	FB 112	16384 ≙ 100%	B161

Technology software S00: Simple ramp-function generator				
K9236	Simple ramp-function generator output	FB 113	16384 ≙ 100%	B165

Technology software S00: Technology controller				
K9240	Technology controller, signed actual value	FB 114	16384 ≙ 100%	B170
K9241	Technology controller, absolute actual value	FB 114	16384 ≙ 100%	B170
K9242	D component	FB 114	16384 ≙ 100%	B170

Connector	Description		Normalization	Function diag., Sheet
K9243	Technology controller, setpoint	FB 114	16384 ≙ 100%	B170
K9244	Technology controller, filtered setpoint	FB 114	16384 ≙ 100%	B170
K9245	Setpoint/actual value deviation	FB 114	16384 ≙ 100%	B170
K9246	Setpoint/actual value deviation after droop	FB 114	16384 ≙ 100%	B170
K9247	P component	FB 114	16384 ≙ 100%	B170
K9248	I component	FB 114	16384 ≙ 100%	B170
K9249	Technology controller output before limitation	FB 114	16384 ≙ 100%	B170
K9250	Positive limit for technology controller output	FB 114	16384 ≙ 100%	B170
K9251	Negative limit for technology controller output	FB 114	16384 ≙ 100%	B170
K9252	Positive limit for technology controller output * (-1)	FB 114	16384 ≙ 100%	B170
K9253	Technology controller output after limitation	FB 114	16384 ≙ 100%	B170
K9254	Technology controller output after multiplication with weighting factor	FB 114	16384 ≙ 100%	B170

Technology software S00: Speed/velocity calculator, velocity/speed calculator				
K9256	Speed/velocity calculator: Actual velocity	FB 115	16384 ≙ 100%	B190
K9257	Velocity/speed calculator: Speed setpoint	FB 115	16384 ≙ 100%	B190

Technology software S00: Variable moment of inertia [SW 1.8 and later]			**FB 116**
K9258	Variable moment of inertia (output)	16384 ≙ 100%	B191

Technology software S00: PI controller 1 [SW 1.8 and later]			**FB260**
K9300	Input quantity filtered	16384 ≙ 100%	B180
K9301	P component	16384 ≙ 100%	B180
K9302	I component	16384 ≙ 100%	B180
K9303	Output PI controller before limitation	16384 ≙ 100%	B180
K9304	Output PI controller after limitation	16384 ≙ 100%	B180
K9305	Positive limit for the output of the PI controller	16384 ≙ 100%	B180
K9306	Positive limit for the output of the PI controller (K9305) ∗ -1	16384 ≙ 100%	B180
K9307	Negative limit for the output of the PI controller	16384 ≙ 100%	B180

Technology software S00: PI controller 2 [SW 1.8 and later]			**FB261**
K9310	Input quantity filtered	16384 ≙ 100%	B181
K9311	P component	16384 ≙ 100%	B181
K9312	I component	16384 ≙ 100%	B181
K9313	Output PI controller before limitation	16384 ≙ 100%	B181
K9314	Output PI controller after limitation	16384 ≙ 100%	B181
K9315	Positive limit for the output of the PI controller	16384 ≙ 100%	B181
K9316	Positive limit for the output of the PI controller (K9315) ∗ -1	16384 ≙ 100%	B181
K9317	Negative limit for the output of the PI controller	16384 ≙ 100%	B181

Technology software S00: PI controller 3 [SW 1.8 and later]			**FB262**
K9320	Input quantity filtered	16384 ≙ 100%	B182
K9321	P component	16384 ≙ 100%	B182
K9322	I component	16384 ≙ 100%	B182
K9323	Output PI controller before limitation	16384 ≙ 100%	B182
K9324	Output PI controller after limitation	16384 ≙ 100%	B182
K9325	Positive limit for the output of the PI controller	16384 ≙ 100%	B182
K9326	Positive limit for the output of the PI controller (K9325) ∗ -1	16384 ≙ 100%	B182
K9327	Negative limit for the output of the PI controller	16384 ≙ 100%	B182

Connector	Description	Normalization	Function diag., Sheet
Technology software S00: PI controller 4 [SW 1.8 and later]			**FB263**
K9330	Input quantity filtered	16384 ≙ 100%	B183
K9331	P component	16384 ≙ 100%	B183
K9332	I component	16384 ≙ 100%	B183
K9333	Output PI controller before limitation	16384 ≙ 100%	B183
K9334	Output PI controller after limitation	16384 ≙ 100%	B183
K9335	Positive limit for the output of the PI controller	16384 ≙ 100%	B183
K9336	Positive limit for the output of the PI controller (K9335) ∗ -1	16384 ≙ 100%	B183
K9337	Negative limit for the output of the PI controller	16384 ≙ 100%	B183
Technology software S00: PI controller 5 [SW 1.8 and later]			**FB264**
K9340	Input quantity filtered	16384 ≙ 100%	B184
K9341	P component	16384 ≙ 100%	B184
K9342	I component	16384 ≙ 100%	B184
K9343	Output PI controller before limitation	16384 ≙ 100%	B184
K9344	Output PI controller after limitation	16384 ≙ 100%	B184
K9345	Positive limit for the output of the PI controller	16384 ≙ 100%	B184
K9346	Positive limit for the output of the PI controller (K9345) ∗ -1	16384 ≙ 100%	B184
K9347	Negative limit for the output of the PI controller	16384 ≙ 100%	B184
Technology software S00: PI controller 6 [SW 1.8 and later]			**FB265**
K9350	Input quantity filtered	16384 ≙ 100%	B185
K9351	P component	16384 ≙ 100%	B185
K9352	I component	16384 ≙ 100%	B185
K9353	Output PI controller before limitation	16384 ≙ 100%	B185
K9354	Output PI controller after limitation	16384 ≙ 100%	B185
K9355	Positive limit for the output of the PI controller	16384 ≙ 100%	B185
K9356	Positive limit for the output of the PI controller (K9355) ∗ -1	16384 ≙ 100%	B185
K9357	Negative limit for the output of the PI controller	16384 ≙ 100%	B185
Technology software S00: PI controller 7 [SW 1.8 and later]			**FB266**
K9360	Input quantity filtered	16384 ≙ 100%	B186
K9361	P component	16384 ≙ 100%	B186
K9362	I component	16384 ≙ 100%	B186
K9363	Output PI controller before limitation	16384 ≙ 100%	B186
K9364	Output PI controller after limitation	16384 ≙ 100%	B186
K9365	Positive limit for the output of the PI controller	16384 ≙ 100%	B186
K9366	Positive limit for the output of the PI controller (K9365) ∗ -1	16384 ≙ 100%	B186
K9367	Negative limit for the output of the PI controller	16384 ≙ 100%	B186
Technology software S00: PI controller 8 [SW 1.8 and later]			**FB267**
K9370	Input quantity filtered	16384 ≙ 100%	B187
K9371	P component	16384 ≙ 100%	B187
K9372	I component	16384 ≙ 100%	B187
K9373	Output PI controller before limitation	16384 ≙ 100%	B187
K9374	Output PI controller after limitation	16384 ≙ 100%	B187
K9375	Positive limit for the output of the PI controller	16384 ≙ 100%	B187
K9376	Positive limit for the output of the PI controller (K9375) ∗ -1	16384 ≙ 100%	B187

Connector	Description	Normalization	Function diag., Sheet
K9377	Negative limit for the output of the PI controller	16384 ≙ 100%	B187

Technology software S00: PI controller 9 [SW 1.8 and later]			**FB268**
K9380	Input quantity filtered	16384 ≙ 100%	B188
K9381	P component	16384 ≙ 100%	B188
K9382	I component	16384 ≙ 100%	B188
K9383	Output PI controller before limitation	16384 ≙ 100%	B188
K9384	Output PI controller after limitation	16384 ≙ 100%	B188
K9385	Positive limit for the output of the PI controller	16384 ≙ 100%	B188
K9386	Positive limit for the output of the PI controller (K9385) ∗ -1	16384 ≙ 100%	B188
K9387	Negative limit for the output of the PI controller	16384 ≙ 100%	B188

Technology software S00: PI controller 10 [SW 1.8 and later]			**FB269**
K9390	Input quantity filtered	16384 ≙ 100%	B189
K9391	P component	16384 ≙ 100%	B189
K9392	I component	16384 ≙ 100%	B189
K9393	Output PI controller before limitation	16384 ≙ 100%	B189
K9394	Output PI controller after limitation	16384 ≙ 100%	B189
K9395	Positive limit for the output of the PI controller	16384 ≙ 100%	B189
K9396	Positive limit for the output of the PI controller (K9395) ∗ -1	16384 ≙ 100%	B189
K9397	Negative limit for the output of the PI controller	16384 ≙ 100%	B189

Technology software S00: Derivative/delay elements					
K9400	Derivative/delay element 1 output	[SW 1.8 and later]	FB 270	16384 ≙ 100%	B156
K9401	Derivative/delay element 2 output	[SW 1.8 and later]	FB 271	16384 ≙ 100%	B156
K9402	Derivative/delay element 3 output	[SW 1.8 and later]	FB 272	16384 ≙ 100%	B156
K9403	Derivative/delay element 4 output	[SW 1.8 and later]	FB 273	16384 ≙ 100%	B156
K9404	Derivative/delay element 5 output	[SW 1.8 and later]	FB 274	16384 ≙ 100%	B157
K9405	Derivative/delay element 6 output	[SW 1.8 and later]	FB 275	16384 ≙ 100%	B157
K9406	Derivative/delay element 7 output	[SW 1.8 and later]	FB 276	16384 ≙ 100%	B157
K9407	Derivative/delay element 8 output	[SW 1.8 and later]	FB 277	16384 ≙ 100%	B157
K9408	Derivative/delay element 9 output	[SW 1.8 and later]	FB 278	16384 ≙ 100%	B158
K9409	Derivative/delay element 10 output	[SW 1.8 and later]	FB 279	16384 ≙ 100%	B158

Technology software S00: Characteristic blocks					
K9410	Output characteristic block 4	[SW 1.8 and later]	FB 280	16384 ≙ 100%	B160
K9411	Output characteristic block 5	[SW 1.8 and later]	FB 281	16384 ≙ 100%	B160
K9412	Output characteristic block 6	[SW 1.8 and later]	FB 282	16384 ≙ 100%	B160
K9413	Output characteristic block 7	[SW 1.8 and later]	FB 283	16384 ≙ 100%	B160
K9414	Output characteristic block 8	[SW 1.8 and later]	FB 284	16384 ≙ 100%	B160
K9415	Output characteristic block 9	[SW 1.8 and later]	FB 285	16384 ≙ 100%	B160

Technology software S00: Multiplier					
K9430	Output multiplier 5	[SW 1.8 and later]	FB 290	16384 ≙ 100%	B130
K9431	Output multiplier 6	[SW 1.8 and later]	FB 291	16384 ≙ 100%	B130
K9432	Output multiplier 7	[SW 1.8 and later]	FB 292	16384 ≙ 100%	B130
K9433	Output multiplier 8	[SW 1.8 and later]	FB 293	16384 ≙ 100%	B130
K9434	Output multiplier 9	[SW 1.8 and later]	FB 294	16384 ≙ 100%	B130

Connector	Description			Normalization	Function diag., Sheet
K9435	Output multiplier 10	[SW 1.8 and later]	FB 295	16384 ≙ 100%	B130
K9436	Output multiplier 11	[SW 1.8 and later]	FB 296	16384 ≙ 100%	B130
K9437	Output multiplier 12	[SW 1.8 and later]	FB 297	16384 ≙ 100%	B130

Technology software S00: Multiplexer					
K9450	Output multiplexer 1	[SW 1.8 and later]	FB 86	16384 ≙ 100%	B195
K9451	Output multiplexer 2	[SW 1.8 and later]	FB 87	16384 ≙ 100%	B195
K9452	Output multiplexer 3	[SW 1.8 and later]	FB 88	16384 ≙ 100%	B195

Technology software S00: Averagers					
K9455	Output averager 1	[SW 1.8 and later]	FB 16	16384 ≙ 100%	B139
K9456	Output averager 2	[SW 1.8 and later]	FB 17	16384 ≙ 100%	B139
K9457	Output averager 3	[SW 1.8 and later]	FB 18	16384 ≙ 100%	B139
K9458	Output averager 4	[SW 1.8 and later]	FB 19	16384 ≙ 100%	B139

Technology software S00: Minimum selections, Maximum selections					
K9460	Output Minimum selection 2	[SW 1.8 and later]	FB 174	16384 ≙ 100%	B140
K9461	Output Minimum selection 3	[SW 1.8 and later]	FB 175	16384 ≙ 100%	B140
K9462	Output Minimum selection 4	[SW 1.8 and later]	FB 176	16384 ≙ 100%	B140
K9463	Output Maximum selection 2	[SW 1.8 and later]	FB 177	16384 ≙ 100%	B140
K9464	Output Maximum selection 3	[SW 1.8 and later]	FB 178	16384 ≙ 100%	B140
K9465	Output Maximum selection 4	[SW 1.8 and later]	FB 179	16384 ≙ 100%	B140

Technology software S00: Fixed values				[SW 1.8 and later]
K9501	Fixed value 1 (U099.01)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9502	Fixed value 2 (U099.02)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9503	Fixed value 3 (U099.03)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9504	Fixed value 4 (U099.04)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9505	Fixed value 5 (U099.05)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9506	Fixed value 6 (U099.06)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9507	Fixed value 7 (U099.07)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9508	Fixed value 8 (U099.08)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9509	Fixed value 9 (U099.09)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9510	Fixed value 10 (U099.10)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9511	Fixed value 11 (U099.11)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9512	Fixed value 12 (U099.12)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9513	Fixed value 13 (U099.13)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9514	Fixed value 14 (U099.14)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9515	Fixed value 15 (U099.15)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9516	Fixed value 16 (U099.16)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9517	Fixed value 17 (U099.17)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9518	Fixed value 18 (U099.18)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9519	Fixed value 19 (U099.19)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9520	Fixed value 20 (U099.20)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9521	Fixed value 21 (U099.21)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9522	Fixed value 22 (U099.22)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9523	Fixed value 23 (U099.23)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9524	Fixed value 24 (U099.24)	[SW 1.8 and later]	16384 ≙ 100%	B110
K9525	Fixed value 25 (U099.25)	[SW 1.8 and later]	16384 ≙ 100%	B110

Connector	Description	Normalization	Function diag., Sheet
K9526	Fixed value 26 (U099.26) [SW 1.8 and later]	16384 ≙ 100%	B110
K9527	Fixed value 27 (U099.27) [SW 1.8 and later]	16384 ≙ 100%	B110
K9528	Fixed value 28 (U099.28) [SW 1.8 and later]	16384 ≙ 100%	B110
K9529	Fixed value 29 (U099.29) [SW 1.8 and later]	16384 ≙ 100%	B110
K9530	Fixed value 30 (U099.30) [SW 1.8 and later]	16384 ≙ 100%	B110
K9531	Fixed value 31 (U099.31) [SW 1.8 and later]	16384 ≙ 100%	B110
K9532	Fixed value 32 (U099.32) [SW 1.8 and later]	16384 ≙ 100%	B110
K9533	Fixed value 33 (U099.33) [SW 1.8 and later]	16384 ≙ 100%	B110
K9534	Fixed value 34 (U099.34) [SW 1.8 and later]	16384 ≙ 100%	B110
K9535	Fixed value 35 (U099.35) [SW 1.8 and later]	16384 ≙ 100%	B110
K9536	Fixed value 36 (U099.36) [SW 1.8 and later]	16384 ≙ 100%	B110
K9537	Fixed value 37 (U099.37) [SW 1.8 and later]	16384 ≙ 100%	B110
K9538	Fixed value 38 (U099.38) [SW 1.8 and later]	16384 ≙ 100%	B110
K9539	Fixed value 39 (U099.39) [SW 1.8 and later]	16384 ≙ 100%	B110
K9540	Fixed value 40 (U099.40) [SW 1.8 and later]	16384 ≙ 100%	B110
K9541	Fixed value 41 (U099.41) [SW 1.8 and later]	16384 ≙ 100%	B110
K9542	Fixed value 42 (U099.42) [SW 1.8 and later]	16384 ≙ 100%	B110
K9543	Fixed value 43 (U099.43) [SW 1.8 and later]	16384 ≙ 100%	B110
K9544	Fixed value 44 (U099.44) [SW 1.8 and later]	16384 ≙ 100%	B110
K9545	Fixed value 45 (U099.45) [SW 1.8 and later]	16384 ≙ 100%	B110
K9546	Fixed value 46 (U099.46) [SW 1.8 and later]	16384 ≙ 100%	B110
K9547	Fixed value 47 (U099.47) [SW 1.8 and later]	16384 ≙ 100%	B110
K9548	Fixed value 48 (U099.48) [SW 1.8 and later]	16384 ≙ 100%	B110
K9549	Fixed value 49 (U099.49) [SW 1.8 and later]	16384 ≙ 100%	B110
K9550	Fixed value 50 (U099.50) [SW 1.8 and later]	16384 ≙ 100%	B110
K9551	Fixed value 51 (U099.51) [SW 1.8 and later]	16384 ≙ 100%	B110
K9552	Fixed value 52 (U099.52) [SW 1.8 and later]	16384 ≙ 100%	B110
K9553	Fixed value 53 (U099.53) [SW 1.8 and later]	16384 ≙ 100%	B110
K9554	Fixed value 54 (U099.54) [SW 1.8 and later]	16384 ≙ 100%	B110
K9555	Fixed value 55 (U099.55) [SW 1.8 and later]	16384 ≙ 100%	B110
K9556	Fixed value 56 (U099.56) [SW 1.8 and later]	16384 ≙ 100%	B110
K9557	Fixed value 57 (U099.57) [SW 1.8 and later]	16384 ≙ 100%	B110
K9558	Fixed value 58 (U099.58) [SW 1.8 and later]	16384 ≙ 100%	B110
K9559	Fixed value 59 (U099.59) [SW 1.8 and later]	16384 ≙ 100%	B110
K9560	Fixed value 60 (U099.60) [SW 1.8 and later]	16384 ≙ 100%	B110
K9561	Fixed value 61 (U099.61) [SW 1.8 and later]	16384 ≙ 100%	B110
K9562	Fixed value 62 (U099.62) [SW 1.8 and later]	16384 ≙ 100%	B110
K9563	Fixed value 63 (U099.63) [SW 1.8 and later]	16384 ≙ 100%	B110
K9564	Fixed value 64 (U099.64) [SW 1.8 and later]	16384 ≙ 100%	B110
K9565	Fixed value 65 (U099.65) [SW 1.8 and later]	16384 ≙ 100%	B110
K9566	Fixed value 66 (U099.66) [SW 1.8 and later]	16384 ≙ 100%	B110
K9567	Fixed value 67 (U099.67) [SW 1.8 and later]	16384 ≙ 100%	B110
K9568	Fixed value 68 (U099.68) [SW 1.8 and later]	16384 ≙ 100%	B110
K9569	Fixed value 69 (U099.69) [SW 1.8 and later]	16384 ≙ 100%	B110
K9570	Fixed value 70 (U099.70) [SW 1.8 and later]	16384 ≙ 100%	B110
K9571	Fixed value 71 (U099.71) [SW 1.8 and later]	16384 ≙ 100%	B110
K9572	Fixed value 72 (U099.72) [SW 1.8 and later]	16384 ≙ 100%	B110
K9573	Fixed value 73 (U099.73) [SW 1.8 and later]	16384 ≙ 100%	B110

Connector	Description	Normalization	Function diag., Sheet
K9574	Fixed value 74 (U099.74) [SW 1.8 and later]	16384 ≙ 100%	B110
K9575	Fixed value 75 (U099.75) [SW 1.8 and later]	16384 ≙ 100%	B110
K9576	Fixed value 76 (U099.76) [SW 1.8 and later]	16384 ≙ 100%	B110
K9577	Fixed value 77 (U099.77) [SW 1.8 and later]	16384 ≙ 100%	B110
K9578	Fixed value 78 (U099.78) [SW 1.8 and later]	16384 ≙ 100%	B110
K9579	Fixed value 79 (U099.79) [SW 1.8 and later]	16384 ≙ 100%	B110
K9580	Fixed value 80 (U099.80) [SW 1.8 and later]	16384 ≙ 100%	B110
K9581	Fixed value 81 (U099.81) [SW 1.8 and later]	16384 ≙ 100%	B110
K9582	Fixed value 82 (U099.82) [SW 1.8 and later]	16384 ≙ 100%	B110
K9583	Fixed value 83 (U099.83) [SW 1.8 and later]	16384 ≙ 100%	B110
K9584	Fixed value 84 (U099.84) [SW 1.8 and later]	16384 ≙ 100%	B110
K9585	Fixed value 85 (U099.85) [SW 1.8 and later]	16384 ≙ 100%	B110
K9586	Fixed value 86 (U099.86) [SW 1.8 and later]	16384 ≙ 100%	B110
K9587	Fixed value 87 (U099.87) [SW 1.8 and later]	16384 ≙ 100%	B110
K9588	Fixed value 88 (U099.88) [SW 1.8 and later]	16384 ≙ 100%	B110
K9589	Fixed value 89 (U099.89) [SW 1.8 and later]	16384 ≙ 100%	B110
K9590	Fixed value 90 (U099.90) [SW 1.8 and later]	16384 ≙ 100%	B110
K9591	Fixed value 91 (U099.91) [SW 1.8 and later]	16384 ≙ 100%	B110
K9592	Fixed value 92 (U099.92) [SW 1.8 and later]	16384 ≙ 100%	B110
K9593	Fixed value 93 (U099.93) [SW 1.8 and later]	16384 ≙ 100%	B110
K9594	Fixed value 94 (U099.94) [SW 1.8 and later]	16384 ≙ 100%	B110
K9595	Fixed value 95 (U099.95) [SW 1.8 and later]	16384 ≙ 100%	B110
K9596	Fixed value 96 (U099.96) [SW 1.8 and later]	16384 ≙ 100%	B110
K9597	Fixed value 97 (U099.97) [SW 1.8 and later]	16384 ≙ 100%	B110
K9598	Fixed value 98 (U099.98) [SW 1.8 and later]	16384 ≙ 100%	B110
K9599	Fixed value 99 (U099.99) [SW 1.8 and later]	16384 ≙ 100%	B110
K9600	Fixed value 100 (U099.100) [SW 1.8 and later]	16384 ≙ 100%	B110

General connectors			
K9801	Alarm word 1 (= parameter r953)		
K9802	Alarm word 2 (= parameter r954)		
K9803	Alarm word 3 (= parameter r955)		
K9804	Alarm word 4 (= parameter r956)		
K9805	Alarm word 5 (= parameter r957)		
K9806	Alarm word 6 (= parameter r958)		
K9807	Alarm word 7 (= parameter r959)		
K9808	Alarm word 8 (= parameter r960)		
K9811	Fault number 1 (= parameter r947.01, last fault number)		
K9812	Fault number 2 (= parameter r947.09, second last fault number)		
K9813	Fault number 3 (= parameter r947.17, third last fault number)		
K9814	Fault number 4 (= parameter r947.25, fourth last fault number)		
K9815	Fault number 5 (= parameter r947.33)		
K9816	Fault number 6 (= parameter r947.41)		
K9817	Fault number 7 (= parameter r947.49)		
K9818	Fault number 8 (= parameter r947.57)		

K9990	Current total processor capacity utilization (C163)		
K9991	Projected total processor capacity utilization (C163) for maximum line frequency (65Hz)		

Connector	Description	Normalization	Function diag., Sheet
K9992	Current total processor capacity (C163) utilized by background routines		
K9993	Current total processor capacity (C163) utilized by routines in foreground cycle 4		
K9994	Current total processor capacity (C163) utilized by routines in foreground cycle 2		
K9995	Current total processor capacity (C163) utilized by routines in foreground cycle 1		

12.2 Binector list

The states of binectors can be displayed via parameters r045 and P046.

Binector	Name, description	Function diag., Sheet
Fixed values		
B0000	Fixed value 0	G120
B0001	Fixed value 1	G120

Binary inputs, terminals 36 to 43		
B0010	Status of terminal 36	G110
B0011	Status of terminal 36, inverted	G110
B0012	Status of terminal 37	G110
B0013	Status of terminal 37, inverted	G110
B0014	Status of terminal 38	G110
B0015	Status of terminal 38, inverted	G110
B0016	Status of terminal 39	G110
B0017	Status of terminal 39, inverted	G110
B0018	Status of terminal 40	G111
B0019	Status of terminal 40, inverted	G111
B0020	Status of terminal 41	G111
B0021	Status of terminal 41, inverted	G111
B0022	Status of terminal 42	G111
B0023	Status of terminal 42, inverted	G111
B0024	Status of terminal 43	G111
B0025	Status of terminal 43, inverted	G111

B0032	No meaning	
B0033	No meaning	
B0034	No meaning	
B0035	No meaning	

Binary inputs, terminals 211 to 214 / motor interface		
B0040	Status of terminal 211 / Brush length monitor (binary) (0=fault)	G186
B0041	Status of terminal 211, inverted	G186
B0042	Status of terminal 212 / Bearing condition monitor (binary) (1=fault)	G186
B0043	Status of terminal 212, inverted	G186
B0044	Status of terminal 213 / Motor fan monitor (binary) (0=fault)	G186
B0045	Status of terminal 213, inverted	G186
B0046	Status of terminal 214 / Motor temperature monitor (binary) (0=fault)	G186
B0047	Status of terminal 214, inverted	G186

Analog inputs		
B0050	Analog input, terminal 4: 1 = Open circuit (i ≤ 2 mA)	G113
B0051	Analog input, terminal 6: 1 = Open circuit (i ≤ 2 mA)	G113

Pulse encoder evaluation		
B0052	Fault in digital speed sensing circuit	G145

Status word 1		
B0100	Stat.word 1, bit 0: 0=not ready to switch on, 1=ready to switch on	G182

Binector	Name, description	Function diag., Sheet
B0101	Stat.word 1, bit 0 inverted	G182
B0102	Stat.word 1, bit 1: 0=not ready, 1=ready (pulses disabled)	G182
B0103	Stat.word 1, bit 1 inverted	G182
B0104	Stat.word 1, bit 2: 0=pulses disabled, 1=Run (output terminals energized)	G182
B0105	Stat.word 1, bit 2 inverted	G182
B0106	Stat.word 1, bit 3: 0=no active fault, 1=active fault (pulses disabled)	G182
B0107	Stat.word 1, bit 3 inverted	G182
B0108	Stat.word 1, bit 4: 0=OFF2 active, 1=no active OFF2	G182
B0109	Stat.word 1, bit 4 inverted	G182
B0110	Stat.word 1, bit 5: 0=OFF3 active, 1=no active OFF3	G182
B0111	Stat.word 1, bit 5 inverted	G182
B0112	Stat.word 1, bit 6: 0=no starting lockout (unit can be switched on), 1=starting lockout active	G182
B0113	Stat.word 1, bit 6 inverted	G182
B0114	Stat.word 1, bit 7: 0=no active alarm, 1=alarm active	G182
B0115	Stat.word 1, bit 7 inverted	G182
B0116	Stat.word 1, bit 8: 0=setp./act. val. deviation detected, 1=no setp./act. val. deviation	G182
B0117	Stat.word 1, bit 8 inverted	G182
B0120	Stat.word 1, bit 10: 0=comparison setpoint not reached, 1=comparison setpoint reached	G182
B0121	Stat.word 1, bit 10 inverted	G182
B0122	Stat.word 1, bit 11: 0=undervoltage fault not active, 1=undervoltage fault active	G182
B0123	Stat.word 1, bit11 inverted	G182
B0124	Stat.word 1, bit 12: 0=main contactor request not active, 1=request to energize main contactor active	G182
B0125	Stat.word 1, bit 12 inverted	G182
B0126	Stat.word 1, bit 13: 0=ramp-function generator not active, 1=ramp-function generator active	G182
B0127	Stat.word 1, bit 13 inverted	G182
B0128	Stat.word 1, bit 14: 0=negative speed setpoint, 1=positive speed setpoint	G182
B0129	Stat.word 1, bit 14 inverted	G182

Status word 2		
B0136	Stat.word 2, bit 18: 0=overspeed, 1=no overspeed	G183
B0137	Stat.word 2, bit 18 inverted	G183
B0138	Stat.word 2, bit 19: 0=no external fault 1 active, 1=external fault 1 active	G183
B0139	Stat.word 2, bit 19 inverted	G183
B0140	Stat.word 2, bit 20: 0=no external fault 2 active, 1=external fault 2 active	G183
B0141	Stat.word 2, bit 20 inverted	G183
B0142	Stat.word 2, bit 21: 0=no external alarm active, 1=external alarm active	G183
B0143	Stat.word 2, bit 21 inverted	G183
B0144	Stat.word 2, bit 22: 0=no overload alarm active, 1=overload alarm active	G183
B0145	Stat.word 2, bit 22 inverted	G183
B0146	Stat.word 2, bit 23: 0=no overtemperature fault active, 1=overtemperature fault active	G183
B0147	Stat.word 2, bit 23 inverted	G183
B0148	Stat.word 2, bit 24: 0=no overtemperature alarm active, 1=overtemperature alarm active	G183
B0149	Stat.word 2, bit 24 inverted	G183
B0150	Stat.word 2, bit 25: 0=no motor overtemperature alarm active, 1=motor overtemperature alarm active	G183
B0151	Stat.word 2, bit 25 inverted	G183
B0152	Stat.word 2, bit 26: 0=no motor overtemperature fault active, 1=motor overtemperature fault active	G183
B0153	Stat.word 2, bit 26 inverted	G183
B0156	Stat.word 2, bit 28: 0=no motor blocked fault active, 1=motor blocked fault active	G183
B0157	Stat.word 2, bit 28 inverted	G183

Binector	Name, description	Function diag., Sheet
Messages		
B0160	0=AUS1 or AUS3 active, 1=no AUS1 and no AUS3 is pending	G180
B0161	B0160 inverted	G180
B0164	1 = $n < n_{min}$ [SW 1.4 and later]	G212
B0165	B0164 inverted [SW 1.4 and later]	G212
B0166	1 = Voltage at power section is active [SW 1.4 and later]	
B0167	B0166 inverted [SW 1.4 and later]	
B0168	1 = E-Stop is active [SW 1.4 and later]	
B0169	B0168 inverted [SW 1.4 and later]	
Motor interface		
B0180	1 = Monitoring brush length (Terminal 211=0) has responded, condition for A025 or F025 fulfilled	G186
B0181	1 = Monitoring bearing state (terminal 212=1) has responded, condition for A026 or F026 fulfilled	G186
B0182	1 = Monitoring motor fan (terminal 213=0) has responded, condition for A027 or F027 fulfilled	G186
B0183	1 = Monitoring motor temperature (terminal 213=0) has responded, condition for A028 or F028 fulfilled	G186
Temperature sensor inputs	[SW 1.6 and later]	
B0184	1=Alarm motor temperature 1	G185
B0185	1=Alarm motor temperature 2	G185
Alarms	[SW 1.6 and later]	
B0186	1=Alarm A037 (I2t motor) is pending	
B0187	1=Alarm A039 (I2t power section) is pending	
B0188	1=Alarm A067 (heat sink temperature) is pending	
B0189	1=Alarm A067 (device fan) is pending	
Torque limitation, current limitation, current controller, armature gating unit		
B0192	Speed limitation controller: Positive speed limit reached [SW 1.8 and later]	G160
B0193	Speed limitation controller: Negative speed limit reached [SW 1.8 and later]	G160
B0194	Current limitation: Positive current limit reached [SW 1.8 and later]	G161
B0195	Current limitation: Negative current limit reached [SW 1.8 and later]	G161
B0196	α_G limit reached [SW 1.8 and later]	G162
B0197	α_W limit reached [SW 1.8 and later]	G162
B0200	Current limitation active	G161
B0201	Speed limiting controller active	G160
B0202	Upper torque limitation active	G160
B0203	Lower torque limitation active	G160
B0204	Torque or current limitation active or current controller at limitation	G162
Speed controller		
B0205	Speed controller enabling by sequencing control	G152
Setpoint processing, ramp-function generator		
B0206	Limitation after ramp-function generator (setpoint limitation) has responded	G136
B0207	Ramp-function generator output = 0 (y = 0)	G136
B0208	Ramp-function generator, ramp-up	G136
B0209	Ramp-function generator, ramp-down	G136
B0210	1 = no direction of rotation enabled	G135
B0211	Ramp-function generator: Enable setpoint (1 = setpoint enabled) [SW 1.6 and later]	G136

Binector	Name, description	Function diag., Sheet
Limit-value monitor for field current		
B0215	Limit-value signal $I_f < I_{f\ min}$ (see P394, P395)	G188
B0216	Limit-value signal $I_f < I_{f\ x}$ (see P398, P399)	G188
Armature gating unit		
B0220	Enabled torque direction for parallel drive	G162
Motorized potentiometer		
B0240	Motorized potentiometer output = 0 (y = 0)	G126
B0241	Ramp-up/ramp-down finished (y = x)	G126
Brake control		
B0250	Brake control (1=close brake, 0=release brake)	G140
B0251	1=auxiliaries ON, 0=auxiliaries OFF	s.Chap. 9.10
B0252	1=device fan on, 0=device fan off [SW 1.5 and later]	
B0255	B0250 inverted [SW 1.4 and later]	G140
B0256	B0251 inverted [SW 1.5 and later]	
Field reversal		
B0260	1=Close field contactor 1 (control command for one contactor for connection of positive field direction)	
B0261	1=Close field contactor 2 (control command for one contactor for connection of negative field direction)	
Fixed control bits		
B0421	Control bit 1 (P421)	G120
B0422	Control bit 2 (P422)	G120
B0423	Control bit 3 (P423)	G120
B0424	Control bit 4 (P424)	G120
B0425	Control bit 5 (P425)	G120
B0426	Control bit 6 (P426)	G120
B0427	Control bit 7 (P427)	G120
B0428	Control bit 8 (P428)	G120
Serial interface 1 (USS1 on G-SST1)		
B2030	USS1 telegram monitoring timeout - maintained signal	G170
B2031	USS1 telegram monitoring timeout - 1s pulse	G170
Serial interface 1 (USS1 on G-SST1)		
B2100	USS1 receive data, word 1, bit 0	G170
B2101	USS1 receive data, word 1, bit 1	G170
B2102	USS1 receive data, word 1, bit 2	G170
B2103	USS1 receive data, word 1, bit 3	G170
B2104	USS1 receive data, word 1, bit 4	G170
B2105	USS1 receive data, word 1, bit 5	G170
B2106	USS1 receive data, word 1, bit 6	G170
B2107	USS1 receive data, word 1, bit 7	G170
B2108	USS1 receive data, word 1, bit 8	G170
B2109	USS1 receive data, word 1, bit 9	G170
B2110	USS1 receive data, word 1, bit 10	G170
B2111	USS1 receive data, word 1, bit 11	G170

Binector	Name, description	Function diag., Sheet
B2112	USS1 receive data, word 1, bit 12	G170
B2113	USS1 receive data, word 1, bit 13	G170
B2114	USS1 receive data, word 1, bit 14	G170
B2115	USS1 receive data, word 1, bit 15	G170
B2200	USS1 receive data, word 2, bit 0	G170
B2201	USS1 receive data, word 2, bit 1	G170
B2202	USS1 receive data, word 2, bit 2	G170
B2203	USS1 receive data, word 2, bit 3	G170
B2204	USS1 receive data, word 2, bit 4	G170
B2205	USS1 receive data, word 2, bit 5	G170
B2206	USS1 receive data, word 2, bit 6	G170
B2207	USS1 receive data, word 2, bit 7	G170
B2208	USS1 receive data, word 2, bit 8	G170
B2209	USS1 receive data, word 2, bit 9	G170
B2210	USS1 receive data, word 2, bit 10	G170
B2211	USS1 receive data, word 2, bit 11	G170
B2212	USS1 receive data, word 2, bit 12	G170
B2213	USS1 receive data, word 2, bit 13	G170
B2214	USS1 receive data, word 2, bit 14	G170
B2215	USS1 receive data, word 2, bit 15	G170
B2300	USS1 receive data, word 3, bit 0	G170
B2301	USS1 receive data, word 3, bit 1	G170
B2302	USS1 receive data, word 3, bit 2	G170
B2303	USS1 receive data, word 3, bit 3	G170
B2304	USS1 receive data, word 3, bit 4	G170
B2305	USS1 receive data, word 3, bit 5	G170
B2306	USS1 receive data, word 3, bit 6	G170
B2307	USS1 receive data, word 3, bit 7	G170
B2308	USS1 receive data, word 3, bit 8	G170
B2309	USS1 receive data, word 3, bit 9	G170
B2310	USS1 receive data, word 3, bit 10	G170
B2311	USS1 receive data, word 3, bit 11	G170
B2312	USS1 receive data, word 3, bit 12	G170
B2313	USS1 receive data, word 3, bit 13	G170
B2314	USS1 receive data, word 3, bit 14	G170
B2315	USS1 receive data, word 3, bit 15	G170
B2400	USS1 receive data, word 4, bit 0	G170
B2401	USS1 receive data, word 4, bit 1	G170
B2402	USS1 receive data, word 4, bit 2	G170
B2403	USS1 receive data, word 4, bit 3	G170
B2404	USS1 receive data, word 4, bit 4	G170
B2405	USS1 receive data, word 4, bit 5	G170
B2406	USS1 receive data, word 4, bit 6	G170
B2407	USS1 receive data, word 4, bit 7	G170
B2408	USS1 receive data, word 4, bit 8	G170
B2409	USS1 receive data, word 4, bit 9	G170
B2410	USS1 receive data, word 4, bit 10	G170
B2411	USS1 receive data, word 4, bit 11	G170
B2412	USS1 receive data, word 4, bit 12	G170

Binector	Name, description	Function diag., Sheet
B2413	USS1 receive data, word 4, bit 13	G170
B2414	USS1 receive data, word 4, bit 14	G170
B2415	USS1 receive data, word 4, bit 15	G170
B2500	USS1 receive data, word 5, bit 0	G170
B2501	USS1 receive data, word 5, bit 1	G170
B2502	USS1 receive data, word 5, bit 2	G170
B2503	USS1 receive data, word 5, bit 3	G170
B2504	USS1 receive data, word 5, bit 4	G170
B2505	USS1 receive data, word 5, bit 5	G170
B2506	USS1 receive data, word 5, bit 6	G170
B2507	USS1 receive data, word 5, bit 7	G170
B2508	USS1 receive data, word 5, bit 8	G170
B2509	USS1 receive data, word 5, bit 9	G170
B2510	USS1 receive data, word 5, bit 10	G170
B2511	USS1 receive data, word 5, bit 11	G170
B2512	USS1 receive data, word 5, bit 12	G170
B2513	USS1 receive data, word 5, bit 13	G170
B2514	USS1 receive data, word 5, bit 14	G170
B2515	USS1 receive data, word 5, bit 15	G170
B2600	USS1 receive data, word 6, bit 0	G170
B2601	USS1 receive data, word 6, bit 1	G170
B2602	USS1 receive data, word 6, bit 2	G170
B2603	USS1 receive data, word 6, bit 3	G170
B2604	USS1 receive data, word 6, bit 4	G170
B2605	USS1 receive data, word 6, bit 5	G170
B2606	USS1 receive data, word 6, bit 6	G170
B2607	USS1 receive data, word 6, bit 7	G170
B2608	USS1 receive data, word 6, bit 8	G170
B2609	USS1 receive data, word 6, bit 9	G170
B2610	USS1 receive data, word 6, bit 10	G170
B2611	USS1 receive data, word 6, bit 11	G170
B2612	USS1 receive data, word 6, bit 12	G170
B2613	USS1 receive data, word 6, bit 13	G170
B2614	USS1 receive data, word 6, bit 14	G170
B2615	USS1 receive data, word 6, bit 15	G170
B2700	USS1 receive data, word 7, bit 0	G170
B2701	USS1 receive data, word 7, bit 1	G170
B2702	USS1 receive data, word 7, bit 2	G170
B2703	USS1 receive data, word 7, bit 3	G170
B2704	USS1 receive data, word 7, bit 4	G170
B2705	USS1 receive data, word 7, bit 5	G170
B2706	USS1 receive data, word 7, bit 6	G170
B2707	USS1 receive data, word 7, bit 7	G170
B2708	USS1 receive data, word 7, bit 8	G170
B2709	USS1 receive data, word 7, bit 9	G170
B2710	USS1 receive data, word 7, bit 10	G170
B2711	USS1 receive data, word 7, bit 11	G170
B2712	USS1 receive data, word 7, bit 12	G170
B2713	USS1 receive data, word 7, bit 13	G170

Binector	Name, description	Function diag., Sheet
B2714	USS1 receive data, word 7, bit 14	G170
B2715	USS1 receive data, word 7, bit 15	G170
B2800	USS1 receive data, word 8, bit 0	G170
B2801	USS1 receive data, word 8, bit 1	G170
B2802	USS1 receive data, word 8, bit 2	G170
B2803	USS1 receive data, word 8, bit 3	G170
B2804	USS1 receive data, word 8, bit 4	G170
B2805	USS1 receive data, word 8, bit 5	G170
B2806	USS1 receive data, word 8, bit 6	G170
B2807	USS1 receive data, word 8, bit 7	G170
B2808	USS1 receive data, word 8, bit 8	G170
B2809	USS1 receive data, word 8, bit 9	G170
B2810	USS1 receive data, word 8, bit 10	G170
B2811	USS1 receive data, word 8, bit 11	G170
B2812	USS1 receive data, word 8, bit 12	G170
B2813	USS1 receive data, word 8, bit 13	G170
B2814	USS1 receive data, word 8, bit 14	G170
B2815	USS1 receive data, word 8, bit 15	G170
B2900	USS1 receive data, word 9, bit 0	G170
B2901	USS1 receive data, word 9, bit 1	G170
B2902	USS1 receive data, word 9, bit 2	G170
B2903	USS1 receive data, word 9, bit 3	G170
B2904	USS1 receive data, word 9, bit 4	G170
B2905	USS1 receive data, word 9, bit 5	G170
B2906	USS1 receive data, word 9, bit 6	G170
B2907	USS1 receive data, word 9, bit 7	G170
B2908	USS1 receive data, word 9, bit 8	G170
B2909	USS1 receive data, word 9, bit 9	G170
B2910	USS1 receive data, word 9, bit 10	G170
B2911	USS1 receive data, word 9, bit 11	G170
B2912	USS1 receive data, word 9, bit 12	G170
B2913	USS1 receive data, word 9, bit 13	G170
B2914	USS1 receive data, word 9, bit 14	G170
B2915	USS1 receive data, word 9, bit 15	G170

Process data exchange with 1st CB/TB		
B3030	Message timeout on 1st CB/TB - maintained signal	Z110
B3031	Message timeout on 1st CB/TB - 1s pulse	Z110

Process data exchange with 1st CB/TB		
B3100	Receive data from 1st CB/TB, word 1, bit 0	Z110
B3101	Receive data from 1st CB/TB, word 1, bit 1	Z110
B3102	Receive data from 1st CB/TB, word 1, bit 2	Z110
B3103	Receive data from 1st CB/TB, word 1, bit 3	Z110
B3104	Receive data from 1st CB/TB, word 1, bit 4	Z110
B3105	Receive data from 1st CB/TB, word 1, bit 5	Z110
B3106	Receive data from 1st CB/TB, word 1, bit 6	Z110
B3107	Receive data from 1st CB/TB, word 1, bit 7	Z110
B3108	Receive data from 1st CB/TB, word 1, bit 8	Z110

Binector	Name, description	Function diag., Sheet
B3109	Receive data from 1st CB/TB, word 1, bit 9	Z110
B3110	Receive data from 1st CB/TB, word 1, bit 10	Z110
B3111	Receive data from 1st CB/TB, word 1, bit 11	Z110
B3112	Receive data from 1st CB/TB, word 1, bit 12	Z110
B3113	Receive data from 1st CB/TB, word 1, bit 13	Z110
B3114	Receive data from 1st CB/TB, word 1, bit 14	Z110
B3115	Receive data from 1st CB/TB, word 1, bit 15	Z110
B3200	Receive data from 1st CB/TB, word 2, bit 0	Z110
B3201	Receive data from 1st CB/TB, word 2, bit 1	Z110
B3202	Receive data from 1st CB/TB, word 2, bit 2	Z110
B3203	Receive data from 1st CB/TB, word 2, bit 3	Z110
B3204	Receive data from 1st CB/TB, word 2, bit 4	Z110
B3205	Receive data from 1st CB/TB, word 2, bit 5	Z110
B3206	Receive data from 1st CB/TB, word 2, bit 6	Z110
B3207	Receive data from 1st CB/TB, word 2, bit 7	Z110
B3208	Receive data from 1st CB/TB, word 2, bit 8	Z110
B3209	Receive data from 1st CB/TB, word 2, bit 9	Z110
B3210	Receive data from 1st CB/TB, word 2, bit 10	Z110
B3211	Receive data from 1st CB/TB, word 2, bit 11	Z110
B3212	Receive data from 1st CB/TB, word 2, bit 12	Z110
B3213	Receive data from 1st CB/TB, word 2, bit 13	Z110
B3214	Receive data from 1st CB/TB, word 2, bit 14	Z110
B3215	Receive data from 1st CB/TB, word 2, bit 15	Z110
B3300	Receive data from 1st CB/TB, word 3, bit 0	Z110
B3301	Receive data from 1st CB/TB, word 3, bit 1	Z110
B3302	Receive data from 1st CB/TB, word 3, bit 2	Z110
B3303	Receive data from 1st CB/TB, word 3, bit 3	Z110
B3304	Receive data from 1st CB/TB, word 3, bit 4	Z110
B3305	Receive data from 1st CB/TB, word 3, bit 5	Z110
B3306	Receive data from 1st CB/TB, word 3, bit 6	Z110
B3307	Receive data from 1st CB/TB, word 3, bit 7	Z110
B3308	Receive data from 1st CB/TB, word 3, bit 8	Z110
B3309	Receive data from 1st CB/TB, word 3, bit 9	Z110
B3310	Receive data from 1st CB/TB, word 3, bit 10	Z110
B3311	Receive data from 1st CB/TB, word 3, bit 11	Z110
B3312	Receive data from 1st CB/TB, word 3, bit 12	Z110
B3313	Receive data from 1st CB/TB, word 3, bit 13	Z110
B3314	Receive data from 1st CB/TB, word 3, bit 14	Z110
B3315	Receive data from 1st CB/TB, word 3, bit 15	Z110
B3400	Receive data from 1st CB/TB, word 4, bit 0	Z110
B3401	Receive data from 1st CB/TB, word 4, bit 1	Z110
B3402	Receive data from 1st CB/TB, word 4, bit 2	Z110
B3403	Receive data from 1st CB/TB, word 4, bit 3	Z110
B3404	Receive data from 1st CB/TB, word 4, bit 4	Z110
B3405	Receive data from 1st CB/TB, word 4, bit 5	Z110
B3406	Receive data from 1st CB/TB, word 4, bit 6	Z110
B3407	Receive data from 1st CB/TB, word 4, bit 7	Z110
B3408	Receive data from 1st CB/TB, word 4, bit 8	Z110
B3409	Receive data from 1st CB/TB, word 4, bit 9	Z110

Binector	Name, description	Function diag., Sheet
B3410	Receive data from 1st CB/TB, word 4, bit 10	Z110
B3411	Receive data from 1st CB/TB, word 4, bit 11	Z110
B3412	Receive data from 1st CB/TB, word 4, bit 12	Z110
B3413	Receive data from 1st CB/TB, word 4, bit 13	Z110
B3414	Receive data from 1st CB/TB, word 4, bit 14	Z110
B3415	Receive data from 1st CB/TB, word 4, bit 15	Z110
B3500	Receive data from 1st CB/TB, word 5, bit 0	Z110
B3501	Receive data from 1st CB/TB, word 5, bit 1	Z110
B3502	Receive data from 1st CB/TB, word 5, bit 2	Z110
B3503	Receive data from 1st CB/TB, word 5, bit 3	Z110
B3504	Receive data from 1st CB/TB, word 5, bit 4	Z110
B3505	Receive data from 1st CB/TB, word 5, bit 5	Z110
B3506	Receive data from 1st CB/TB, word 5, bit 6	Z110
B3507	Receive data from 1st CB/TB, word 5, bit 7	Z110
B3508	Receive data from 1st CB/TB, word 5, bit 8	Z110
B3509	Receive data from 1st CB/TB, word 5, bit 9	Z110
B3510	Receive data from 1st CB/TB, word 5, bit 10	Z110
B3511	Receive data from 1st CB/TB, word 5, bit 11	Z110
B3512	Receive data from 1st CB/TB, word 5, bit 12	Z110
B3513	Receive data from 1st CB/TB, word 5, bit 13	Z110
B3514	Receive data from 1st CB/TB, word 5, bit 14	Z110
B3515	Receive data from 1st CB/TB, word 5, bit 15	Z110
B3600	Receive data from 1st CB/TB, word 6, bit 0	Z110
B3601	Receive data from 1st CB/TB, word 6, bit 1	Z110
B3602	Receive data from 1st CB/TB, word 6, bit 2	Z110
B3603	Receive data from 1st CB/TB, word 6, bit 3	Z110
B3604	Receive data from 1st CB/TB, word 6, bit 4	Z110
B3605	Receive data from 1st CB/TB, word 6, bit 5	Z110
B3606	Receive data from 1st CB/TB, word 6, bit 6	Z110
B3607	Receive data from 1st CB/TB, word 6, bit 7	Z110
B3608	Receive data from 1st CB/TB, word 6, bit 8	Z110
B3609	Receive data from 1st CB/TB, word 6, bit 9	Z110
B3610	Receive data from 1st CB/TB, word 6, bit 10	Z110
B3611	Receive data from 1st CB/TB, word 6, bit 11	Z110
B3612	Receive data from 1st CB/TB, word 6, bit 12	Z110
B3613	Receive data from 1st CB/TB, word 6, bit 13	Z110
B3614	Receive data from 1st CB/TB, word 6, bit 14	Z110
B3615	Receive data from 1st CB/TB, word 6, bit 15	Z110
B3700	Receive data from 1st CB/TB, word 7, bit 0	Z110
B3701	Receive data from 1st CB/TB, word 7, bit 1	Z110
B3702	Receive data from 1st CB/TB, word 7, bit 2	Z110
B3703	Receive data from 1st CB/TB, word 7, bit 3	Z110
B3704	Receive data from 1st CB/TB, word 7, bit 4	Z110
B3705	Receive data from 1st CB/TB, word 7, bit 5	Z110
B3706	Receive data from 1st CB/TB, word 7, bit 6	Z110
B3707	Receive data from 1st CB/TB, word 7, bit 7	Z110
B3708	Receive data from 1st CB/TB, word 7, bit 8	Z110
B3709	Receive data from 1st CB/TB, word 7, bit 9	Z110
B3710	Receive data from 1st CB/TB, word 7, bit 10	Z110

Binector	Name, description	Function diag., Sheet
B3711	Receive data from 1st CB/TB, word 7, bit 11	Z110
B3712	Receive data from 1st CB/TB, word 7, bit 12	Z110
B3713	Receive data from 1st CB/TB, word 7, bit 13	Z110
B3714	Receive data from 1st CB/TB, word 7, bit 14	Z110
B3715	Receive data from 1st CB/TB, word 7, bit 15	Z110
B3800	Receive data from 1st CB/TB, word 8, bit 0	Z110
B3801	Receive data from 1st CB/TB, word 8, bit 1	Z110
B3802	Receive data from 1st CB/TB, word 8, bit 2	Z110
B3803	Receive data from 1st CB/TB, word 8, bit 3	Z110
B3804	Receive data from 1st CB/TB, word 8, bit 4	Z110
B3805	Receive data from 1st CB/TB, word 8, bit 5	Z110
B3806	Receive data from 1st CB/TB, word 8, bit 6	Z110
B3807	Receive data from 1st CB/TB, word 8, bit 7	Z110
B3808	Receive data from 1st CB/TB, word 8, bit 8	Z110
B3809	Receive data from 1st CB/TB, word 8, bit 9	Z110
B3810	Receive data from 1st CB/TB, word 8, bit 10	Z110
B3811	Receive data from 1st CB/TB, word 8, bit 11	Z110
B3812	Receive data from 1st CB/TB, word 8, bit 12	Z110
B3813	Receive data from 1st CB/TB, word 8, bit 13	Z110
B3814	Receive data from 1st CB/TB, word 8, bit 14	Z110
B3815	Receive data from 1st CB/TB, word 8, bit 15	Z110
B3900	Receive data from 1st CB/TB, word 9, bit 0	Z110
B3901	Receive data from 1st CB/TB, word 9, bit 1	Z110
B3902	Receive data from 1st CB/TB, word 9, bit 2	Z110
B3903	Receive data from 1st CB/TB, word 9, bit 3	Z110
B3904	Receive data from 1st CB/TB, word 9, bit 4	Z110
B3905	Receive data from 1st CB/TB, word 9, bit 5	Z110
B3906	Receive data from 1st CB/TB, word 9, bit 6	Z110
B3907	Receive data from 1st CB/TB, word 9, bit 7	Z110
B3908	Receive data from 1st CB/TB, word 9, bit 8	Z110
B3909	Receive data from 1st CB/TB, word 9, bit 9	Z110
B3910	Receive data from 1st CB/TB, word 9, bit 10	Z110
B3911	Receive data from 1st CB/TB, word 9, bit 11	Z110
B3912	Receive data from 1st CB/TB, word 9, bit 12	Z110
B3913	Receive data from 1st CB/TB, word 9, bit 13	Z110
B3914	Receive data from 1st CB/TB, word 9, bit 14	Z110
B3915	Receive data from 1st CB/TB, word 9, bit 15	Z110

Optional supplementary boards: 1st expansion board EB1		[SW 1.5 and later]
B5101	Analog input terminal 50 / 51: 1 = wire break (i ≤ 2 mA)	Z112
B5102	Analog input terminal 52 (use as digital input): 1 = input voltage is > 8V (log "1")	Z112
B5103	Analog input terminal 53 (use as digital input): 1 = input voltage is > 8V (log "1")	Z112
B5104	State terminal 43 (bidirectional input/output) inverted	Z114
B5105	State terminal 43 (bidirectional input/output)	Z114
B5106	State terminal 44 (bidirectional input/output) inverted	Z114
B5107	State terminal 44 (bidirectional input/output)	Z114
B5108	State terminal 45 (bidirectional Input/output) inverted	Z114
B5109	State terminal 45 (bidirectional input/output)	Z114
B5110	State terminal 46 (bidirectional input/output) inverted	Z114

Binector	Name, description	Function diag., Sheet
B5111	State terminal 46 (bidirectional Input/output)	Z114
B5112	State terminal 40 (digital input) inverted	Z114
B5113	State terminal 40 (digital input)	Z114
B5114	State terminal 41 (digital input) inverted	Z114
B5115	State terminal 41 (digital input)	Z114
B5116	State terminal 42 (digital input) inverted	Z114
B5117	State terminal 42 (digital input)	Z114

Optional supplementary boards: 1st Expansion board EB2	[SW 1.5 and later]	
B5121	Analog input terminal 49 / 50: 1 = wire break (i ≤ 2 mA)	Z118
B5122	State terminal 53 (digital input) inverted	Z118
B5123	State terminal 53 (digital input)	Z118
B5124	State terminal 54 (digital input) inverted	Z118
B5125	State terminal 54 (digital input)	Z118

Optional supplementary boards: 2nd expansion board EB1	[SW 1.5 and later]	
B5201	Analog input terminal 50 / 51: 1 = wire break (i ≤ 2 mA)	Z115
B5202	Analog input terminal 52 (use as digital input): 1 = input voltage is > 8V (log "1")	Z115
B5203	Analog input terminal 53 (use as digital input): 1 = input voltage is > 8V (log "1")	Z115
B5204	State terminal 43 (bidirectional input/output) inverted	Z117
B5205	State terminal 43 (bidirectional input/output)	Z117
B5206	State terminal 44 (bidirectional input/output) inverted	Z117
B5207	State terminal 44 (bidirectional input/output)	Z117
B5208	State terminal 45 (bidirectional Input/output) inverted	Z117
B5209	State terminal 45 (bidirectional input/output)	Z117
B5210	State terminal 46 (bidirectional input/output) inverted	Z117
B5211	State terminal 46 (bidirectional Input/output)	Z117
B5212	State terminal 40 (digital input) inverted	Z117
B5213	State terminal 40 (digital input)	Z117
B5214	State terminal 41 (digital input) inverted	Z117
B5215	State terminal 41 (digital input)	Z117
B5216	State terminal 42 (digital input) inverted	Z117
B5217	State terminal 42 (digital input)	Z117

Optional supplementary boards: 2nd Expansion board EB2	[SW 1.5 and later]	
B5221	Analog input terminal 49 / 50: 1 = wire break (i ≤ 2 mA)	Z119
B5222	State terminal 53 (digital input) inverted	Z119
B5223	State terminal 53 (digital input)	Z119
B5224	State terminal 54 (digital input) inverted	Z119
B5225	State terminal 54 (digital input)	Z119

Serial interface 2 (USS2 / Peer-to-peer 2 on G-SST2)		
B6030	USS2 / Peer2 - Telegram monitoring timeout - maintained signal	G171, G173
B6031	USS2 / Peer2 - Telegram monitoring timeout - 1s pulse	G171, G173

Paralleling interface		
B6040	Telegram monitoring timeout - maintained signal	G195
B6041	Telegram monitoring timeout - 1s pulse	G195

Binector	Name, description	Function diag., Sheet
Serial interface 2 (USS2 / Peer-to-peer 2 on G-SST2)		
B6100	USS2 / Peer2 receive data, word 1, bit 0	G171, G173
B6101	USS2 / Peer2 receive data, word 1, bit 1	G171, G173
B6102	USS2 / Peer2 receive data, word 1, bit 2	G171, G173
B6103	USS2 / Peer2 receive data, word 1, bit 3	G171, G173
B6104	USS2 / Peer2 receive data, word 1, bit 4	G171, G173
B6105	USS2 / Peer2 receive data, word 1, bit 5	G171, G173
B6106	USS2 / Peer2 receive data, word 1, bit 6	G171, G173
B6107	USS2 / Peer2 receive data, word 1, bit 7	G171, G173
B6108	USS2 / Peer2 receive data, word 1, bit 8	G171, G173
B6109	USS2 / Peer2 receive data, word 1, bit 9	G171, G173
B6110	USS2 / Peer2 receive data, word 1, bit 10	G171, G173
B6111	USS2 / Peer2 receive data, word 1, bit 11	G171, G173
B6112	USS2 / Peer2 receive data, word 1, bit 12	G171, G173
B6113	USS2 / Peer2 receive data, word 1, bit 13	G171, G173
B6114	USS2 / Peer2 receive data, word 1, bit 14	G171, G173
B6115	USS2 / Peer2 receive data, word 1, bit 15	G171, G173
B6200	USS2 / Peer2 receive data, word 2, bit 0	G171, G173
B6201	USS2 / Peer2 receive data, word 2, bit 1	G171, G173
B6202	USS2 / Peer2 receive data, word 2, bit 2	G171, G173
B6203	USS2 / Peer2 receive data, word 2, bit 3	G171, G173
B6204	USS2 / Peer2 receive data, word 2, bit 4	G171, G173
B6205	USS2 / Peer2 receive data, word 2, bit 5	G171, G173
B6206	USS2 / Peer2 receive data, word 2, bit 6	G171, G173
B6207	USS2 / Peer2 receive data, word 2, bit 7	G171, G173
B6208	USS2 / Peer2 receive data, word 2, bit 8	G171, G173
B6209	USS2 / Peer2 receive data, word 2, bit 9	G171, G173
B6210	USS2 / Peer2 receive data, word 2, bit 10	G171, G173
B6211	USS2 / Peer2 receive data, word 2, bit 11	G171, G173
B6212	USS2 / Peer2 receive data, word 2, bit 12	G171, G173
B6213	USS2 / Peer2 receive data, word 2, bit 13	G171, G173
B6214	USS2 / Peer2 receive data, word 2, bit 14	G171, G173
B6215	USS2 / Peer2 receive data, word 2, bit 15	G171, G173

Paralleling interface		
B6220	Word 1 from master / Word 1 from slave with address 2, bit 0	G195
B6221	Word 1 from master / Word 1 from slave with address 2, bit 1	G195
B6222	Word 1 from master / Word 1 from slave with address 2, bit 2	G195
B6223	Word 1 from master / Word 1 from slave with address 2, bit 3	G195
B6224	Word 1 from master / Word 1 from slave with address 2, bit 4	G195
B6225	Word 1 from master / Word 1 from slave with address 2, bit 5	G195
B6226	Word 1 from master / Word 1 from slave with address 2, bit 6	G195
B6227	Word 1 from master / Word 1 from slave with address 2, bit 7	G195
B6228	Word 1 from master / Word 1 from slave with address 2, bit 8	G195
B6229	Word 1 from master / Word 1 from slave with address 2, bit 9	G195
B6230	Word 1 from master / Word 1 from slave with address 2, bit 10	G195
B6231	Word 1 from master / Word 1 from slave with address 2, bit 11	G195
B6232	Word 1 from master / Word 1 from slave with address 2, bit 12	G195
B6233	Word 1 from master / Word 1 from slave with address 2, bit 13	G195

Binector	Name, description	Function diag., Sheet
B6234	Word 1 from master / Word 1 from slave with address 2, bit 14	G195
B6235	Word 1 from master / Word 1 from slave with address 2, bit 15	G195

Serial interface 2 (USS2 / Peer-to-peer 2 on G-SST2)		
B6300	USS2 / Peer2 receive data, word 3, bit 0	G171, G173
B6301	USS2 / Peer2 receive data, word 3, bit 1	G171, G173
B6302	USS2 / Peer2 receive data, word 3, bit 2	G171, G173
B6303	USS2 / Peer2 receive data, word 3, bit 3	G171, G173
B6304	USS2 / Peer2 receive data, word 3, bit 4	G171, G173
B6305	USS2 / Peer2 receive data, word 3, bit 5	G171, G173
B6306	USS2 / Peer2 receive data, word 3, bit 6	G171, G173
B6307	USS2 / Peer2 receive data, word 3, bit 7	G171, G173
B6308	USS2 / Peer2 receive data, word 3, bit 8	G171, G173
B6309	USS2 / Peer2 receive data, word 3, bit 9	G171, G173
B6310	USS2 / Peer2 receive data, word 3, bit 10	G171, G173
B6311	USS2 / Peer2 receive data, word 3, bit 11	G171, G173
B6312	USS2 / Peer2 receive data, word 3, bit 12	G171, G173
B6313	USS2 / Peer2 receive data, word 3, bit 13	G171, G173
B6314	USS2 / Peer2 receive data, word 3, bit 14	G171, G173
B6315	USS2 / Peer2 receive data, word 3, bit 15	G171, G173

Paralleling interface		
B6320	Word 1 from slave with address 3, bit 0	G195
B6321	Word 1 from slave with address 3, bit 1	G195
B6322	Word 1 from slave with address 3, bit 2	G195
B6323	Word 1 from slave with address 3, bit 3	G195
B6324	Word 1 from slave with address 3, bit 4	G195
B6325	Word 1 from slave with address 3, bit 5	G195
B6326	Word 1 from slave with address 3, bit 6	G195
B6327	Word 1 from slave with address 3, bit 7	G195
B6328	Word 1 from slave with address 3, bit 8	G195
B6329	Word 1 from slave with address 3, bit 9	G195
B6330	Word 1 from slave with address 3, bit 10	G195
B6331	Word 1 from slave with address 3, bit 11	G195
B6332	Word 1 from slave with address 3, bit 12	G195
B6333	Word 1 from slave with address 3, bit 13	G195
B6334	Word 1 from slave with address 3, bit 14	G195
B6335	Word 1 from slave with address 3, bit 15	G195

Serial interface 2 (USS2 / Peer-to-peer 2 on G-SST2)		
B6400	USS2 / Peer2 receive data, word 4, bit 0	G171, G173
B6401	USS2 / Peer2 receive data, word 4, bit 1	G171, G173
B6402	USS2 / Peer2 receive data, word 4, bit 2	G171, G173
B6403	USS2 / Peer2 receive data, word 4, bit 3	G171, G173
B6404	USS2 / Peer2 receive data, word 4, bit 4	G171, G173
B6405	USS2 / Peer2 receive data, word 4, bit 5	G171, G173
B6406	USS2 / Peer2 receive data, word 4, bit 6	G171, G173
B6407	USS2 / Peer2 receive data, word 4, bit 7	G171, G173
B6408	USS2 / Peer2 receive data, word 4, bit 8	G171, G173

Binector	Name, description	Function diag., Sheet
B6409	USS2 / Peer2 receive data, word 4, bit 9	G171, G173
B6410	USS2 / Peer2 receive data, word 4, bit 10	G171, G173
B6411	USS2 / Peer2 receive data, word 4, bit 11	G171, G173
B6412	USS2 / Peer2 receive data, word 4, bit 12	G171, G173
B6413	USS2 / Peer2 receive data, word 4, bit 13	G171, G173
B6414	USS2 / Peer2 receive data, word 4, bit 14	G171, G173
B6415	USS2 / Peer2 receive data, word 4, bit 15	G171, G173

Paralleling interface		
B6420	Word 1 from slave with address 4, bit 0	G195
B6421	Word 1 from slave with address 4, bit 1	G195
B6422	Word 1 from slave with address 4, bit 2	G195
B6423	Word 1 from slave with address 4, bit 3	G195
B6424	Word 1 from slave with address 4, bit 4	G195
B6425	Word 1 from slave with address 4, bit 5	G195
B6426	Word 1 from slave with address 4, bit 6	G195
B6427	Word 1 from slave with address 4, bit 7	G195
B6428	Word 1 from slave with address 4, bit 8	G195
B6429	Word 1 from slave with address 4, bit 9	G195
B6430	Word 1 from slave with address 4, bit 10	G195
B6431	Word 1 from slave with address 4, bit 11	G195
B6432	Word 1 from slave with address 4, bit 12	G195
B6433	Word 1 from slave with address 4, bit 13	G195
B6434	Word 1 from slave with address 4, bit 14	G195
B6435	Word 1 from slave with address 4, bit 15	G195

Serial interface 2 (USS2 / Peer-to-peer 2 on G-SST2)		
B6500	USS2 / Peer2 receive data, word 5, bit 0	G171, G173
B6501	USS2 / Peer2 receive data, word 5, bit 1	G171, G173
B6502	USS2 / Peer2 receive data, word 5, bit 2	G171, G173
B6503	USS2 / Peer2 receive data, word 5, bit 3	G171, G173
B6504	USS2 / Peer2 receive data, word 5, bit 4	G171, G173
B6505	USS2 / Peer2 receive data, word 5, bit 5	G171, G173
B6506	USS2 / Peer2 receive data, word 5, bit 6	G171, G173
B6507	USS2 / Peer2 receive data, word 5, bit 7	G171, G173
B6508	USS2 / Peer2 receive data, word 5, bit 8	G171, G173
B6509	USS2 / Peer2 receive data, word 5, bit 9	G171, G173
B6510	USS2 / Peer2 receive data, word 5, bit 10	G171, G173
B6511	USS2 / Peer2 receive data, word 5, bit 11	G171, G173
B6512	USS2 / Peer2 receive data, word 5, bit 12	G171, G173
B6513	USS2 / Peer2 receive data, word 5, bit 13	G171, G173
B6514	USS2 / Peer2 receive data, word 5, bit 14	G171, G173
B6515	USS2 / Peer2 receive data, word 5, bit 15	G171, G173

Paralleling interface		
B6520	Word 1 from slave with address 5, bit 0	G195
B6521	Word 1 from slave with address 5, bit 1	G195
B6522	Word 1 from slave with address 5, bit 2	G195
B6523	Word 1 from slave with address 5, bit 3	G195

Binector	Name, description	Function diag., Sheet
B6524	Word 1 from slave with address 5, bit 4	G195
B6525	Word 1 from slave with address 5, bit 5	G195
B6526	Word 1 from slave with address 5, bit 6	G195
B6527	Word 1 from slave with address 5, bit 7	G195
B6528	Word 1 from slave with address 5, bit 8	G195
B6529	Word 1 from slave with address 5, bit 9	G195
B6530	Word 1 from slave with address 5, bit 10	G195
B6531	Word 1 from slave with address 5, bit 11	G195
B6532	Word 1 from slave with address 5, bit 12	G195
B6533	Word 1 from slave with address 5, bit 13	G195
B6534	Word 1 from slave with address 5, bit 14	G195
B6535	Word 1 from slave with address 5, bit 15	G195

Serial interface 2 (USS2 / Peer-to-peer 2 on G-SST2)		
B6600	USS2 receive data, word 6, bit 0	G171
B6601	USS2 receive data, word 6, bit 1	G171
B6602	USS2 receive data, word 6, bit 2	G171
B6603	USS2 receive data, word 6, bit 3	G171
B6604	USS2 receive data, word 6, bit 4	G171
B6605	USS2 receive data, word 6, bit 5	G171
B6606	USS2 receive data, word 6, bit 6	G171
B6607	USS2 receive data, word 6, bit 7	G171
B6608	USS2 receive data, word 6, bit 8	G171
B6609	USS2 receive data, word 6, bit 9	G171
B6610	USS2 receive data, word 6, bit 10	G171
B6611	USS2 receive data, word 6, bit 11	G171
B6612	USS2 receive data, word 6, bit 12	G171
B6613	USS2 receive data, word 6, bit 13	G171
B6614	USS2 receive data, word 6, bit 14	G171
B6615	USS2 receive data, word 6, bit 15	G171

Paralleling interface		
B6620	Word 1 from slave with address 6, bit 0	G195
B6621	Word 1 from slave with address 6, bit 1	G195
B6622	Word 1 from slave with address 6, bit 2	G195
B6623	Word 1 from slave with address 6, bit 3	G195
B6624	Word 1 from slave with address 6, bit 4	G195
B6625	Word 1 from slave with address 6, bit 5	G195
B6626	Word 1 from slave with address 6, bit 6	G195
B6627	Word 1 from slave with address 6, bit 7	G195
B6628	Word 1 from slave with address 6, bit 8	G195
B6629	Word 1 from slave with address 6, bit 9	G195
B6630	Word 1 from slave with address 6, bit 10	G195
B6631	Word 1 from slave with address 6, bit 11	G195
B6632	Word 1 from slave with address 6, bit 12	G195
B6633	Word 1 from slave with address 6, bit 13	G195
B6634	Word 1 from slave with address 6, bit 14	G195
B6635	Word 1 from slave with address 6, bit 15	G195

Binector	Name, description	Function diag., Sheet
Serial interface 2 (USS2 / Peer-to-peer 2 on G-SST2)		
B6700	USS2 receive data, word 7, bit 0	G171
B6701	USS2 receive data, word 7, bit 1	G171
B6702	USS2 receive data, word 7, bit 2	G171
B6703	USS2 receive data, word 7, bit 3	G171
B6704	USS2 receive data, word 7, bit 4	G171
B6705	USS2 receive data, word 7, bit 5	G171
B6706	USS2 receive data, word 7, bit 6	G171
B6707	USS2 receive data, word 7, bit 7	G171
B6708	USS2 receive data, word 7, bit 8	G171
B6709	USS2 receive data, word 7, bit 9	G171
B6710	USS2 receive data, word 7, bit 10	G171
B6711	USS2 receive data, word 7, bit 11	G171
B6712	USS2 receive data, word 7, bit 12	G171
B6713	USS2 receive data, word 7, bit 13	G171
B6714	USS2 receive data, word 7, bit 14	G171
B6715	USS2 receive data, word 7, bit 15	G171
B6800	USS2 receive data, word 8, bit 0	G171
B6801	USS2 receive data, word 8, bit 1	G171
B6802	USS2 receive data, word 8, bit 2	G171
B6803	USS2 receive data, word 8, bit 3	G171
B6804	USS2 receive data, word 8, bit 4	G171
B6805	USS2 receive data, word 8, bit 5	G171
B6806	USS2 receive data, word 8, bit 6	G171
B6807	USS2 receive data, word 8, bit 7	G171
B6808	USS2 receive data, word 8, bit 8	G171
B6809	USS2 receive data, word 8, bit 9	G171
B6810	USS2 receive data, word 8, bit 10	G171
B6811	USS2 receive data, word 8, bit 11	G171
B6812	USS2 receive data, word 8, bit 12	G171
B6813	USS2 receive data, word 8, bit 13	G171
B6814	USS2 receive data, word 8, bit 14	G171
B6815	USS2 receive data, word 8, bit 15	G171
B6900	USS2 receive data, word 9, bit 0	G171
B6901	USS2 receive data, word 9, bit 1	G171
B6902	USS2 receive data, word 9, bit 2	G171
B6903	USS2 receive data, word 9, bit 3	G171
B6904	USS2 receive data, word 9, bit 4	G171
B6905	USS2 receive data, word 9, bit 5	G171
B6906	USS2 receive data, word 9, bit 6	G171
B6907	USS2 receive data, word 9, bit 7	G171
B6908	USS2 receive data, word 9, bit 8	G171
B6909	USS2 receive data, word 9, bit 9	G171
B6910	USS2 receive data, word 9, bit 10	G171
B6911	USS2 receive data, word 9, bit 11	G171
B6912	USS2 receive data, word 9, bit 12	G171
B6913	USS2 receive data, word 9, bit 13	G171
B6914	USS2 receive data, word 9, bit 14	G171
B6915	USS2 receive data, word 9, bit 15	G171

Binector	Name, description	Function diag., Sheet
Optional supplementary boards: SBP pulse encoder evaluation		[SW 1.5 and later]
B7001	State terminal 65 (coarse pulse 1)	Z120
B7002	State terminal 66 (coarse pulse 2)	Z120
B7003	State terminal 67 (fine pulse 2)	Z120
B7004	State terminal 74 / 75 (check track)	Z120
Optional supplementary boards: SIMOLINK board		[SW 1.5 and later]
B7030	1 = Telegram failure	Z121
B7040	1 = Time out	Z121
B7050	1 = Alarm start-up	Z121
B7100	Receive data from the SIMOLINK board, word 1 bit 0	Z122
B7101	Receive data from the SIMOLINK board, word 1 bit 1	Z122
B7102	Receive data from the SIMOLINK board, word 1 bit 2	Z122
B7103	Receive data from the SIMOLINK board, word 1 bit 3	Z122
B7104	Receive data from the SIMOLINK board, word 1 bit 4	Z122
B7105	Receive data from the SIMOLINK board, word 1 bit 5	Z122
B7106	Receive data from the SIMOLINK board, word 1 bit 6	Z122
B7107	Receive data from the SIMOLINK board, word 1 bit 7	Z122
B7108	Receive data from the SIMOLINK board, word 1 bit 8	Z122
B7109	Receive data from the SIMOLINK board, word 1 bit 9	Z122
B7110	Receive data from the SIMOLINK board, word 1 bit 10	Z122
B7111	Receive data from the SIMOLINK board, word 1 bit 11	Z122
B7112	Receive data from the SIMOLINK board, word 1 bit 12	Z122
B7113	Receive data from the SIMOLINK board, word 1 bit 13	Z122
B7114	Receive data from the SIMOLINK board, word 1 bit 14	Z122
B7115	Receive data from the SIMOLINK board, word 1 bit 15	Z122
B7200	Receive data from the SIMOLINK board, word 2 bit 0	Z122
B7201	Receive data from the SIMOLINK board, word 2 bit 1	Z122
B7202	Receive data from the SIMOLINK board, word 2 bit 2	Z122
B7203	Receive data from the SIMOLINK board, word 2 bit 3	Z122
B7204	Receive data from the SIMOLINK board, word 2 bit 4	Z122
B7205	Receive data from the SIMOLINK board, word 2 bit 5	Z122
B7206	Receive data from the SIMOLINK board, word 2 bit 6	Z122
B7207	Receive data from the SIMOLINK board, word 2 bit 7	Z122
B7208	Receive data from the SIMOLINK board, word 2 bit 8	Z122
B7209	Receive data from the SIMOLINK board, word 2 bit 9	Z122
B7210	Receive data from the SIMOLINK board, word 2 bit 10	Z122
B7211	Receive data from the SIMOLINK board, word 2 bit 11	Z122
B7212	Receive data from the SIMOLINK board, word 2 bit 12	Z122
B7213	Receive data from the SIMOLINK board, word 2 bit 13	Z122
B7214	Receive data from the SIMOLINK board, word 2 bit 14	Z122
B7215	Receive data from the SIMOLINK board, word 2 bit 15	Z122
B7300	Receive data from the SIMOLINK board, word 3 bit 0	Z122
B7301	Receive data from the SIMOLINK board, word 3 bit 1	Z122
B7302	Receive data from the SIMOLINK board, word 3 bit 2	Z122
B7303	Receive data from the SIMOLINK board, word 3 bit 3	Z122
B7304	Receive data from the SIMOLINK board, word 3 bit 4	Z122

Binector	Name, description	Function diag., Sheet
B7305	Receive data from the SIMOLINK board, word 3 bit 5	Z122
B7306	Receive data from the SIMOLINK board, word 3 bit 6	Z122
B7307	Receive data from the SIMOLINK board, word 3 bit 7	Z122
B7308	Receive data from the SIMOLINK board, word 3 bit 8	Z122
B7309	Receive data from the SIMOLINK board, word 3 bit 9	Z122
B7310	Receive data from the SIMOLINK board, word 3 bit 10	Z122
B7311	Receive data from the SIMOLINK board, word 3 bit 11	Z122
B7312	Receive data from the SIMOLINK board, word 3 bit 12	Z122
B7313	Receive data from the SIMOLINK board, word 3 bit 13	Z122
B7314	Receive data from the SIMOLINK board, word 3 bit 14	Z122
B7315	Receive data from the SIMOLINK board, word 3 bit 15	Z122
B7400	Receive data from the SIMOLINK board, word 4 bit 0	Z122
B7401	Receive data from the SIMOLINK board, word 4 bit 1	Z122
B7402	Receive data from the SIMOLINK board, word 4 bit 2	Z122
B7403	Receive data from the SIMOLINK board, word 4 bit 3	Z122
B7404	Receive data from the SIMOLINK board, word 4 bit 4	Z122
B7405	Receive data from the SIMOLINK board, word 4 bit 5	Z122
B7406	Receive data from the SIMOLINK board, word 4 bit 6	Z122
B7407	Receive data from the SIMOLINK board, word 4 bit 7	Z122
B7408	Receive data from the SIMOLINK board, word 4 bit 8	Z122
B7409	Receive data from the SIMOLINK board, word 4 bit 9	Z122
B7410	Receive data from the SIMOLINK board, word 4 bit 10	Z122
B7411	Receive data from the SIMOLINK board, word 4 bit 11	Z122
B7412	Receive data from the SIMOLINK board, word 4 bit 12	Z122
B7413	Receive data from the SIMOLINK board, word 4 bit 13	Z122
B7414	Receive data from the SIMOLINK board, word 4 bit 14	Z122
B7415	Receive data from the SIMOLINK board, word 4 bit 15	Z122
B7500	Receive data from the SIMOLINK board, word 5 bit 0	Z122
B7501	Receive data from the SIMOLINK board, word 5 bit 1	Z122
B7502	Receive data from the SIMOLINK board, word 5 bit 2	Z122
B7503	Receive data from the SIMOLINK board, word 5 bit 3	Z122
B7504	Receive data from the SIMOLINK board, word 5 bit 4	Z122
B7505	Receive data from the SIMOLINK board, word 5 bit 5	Z122
B7506	Receive data from the SIMOLINK board, word 5 bit 6	Z122
B7507	Receive data from the SIMOLINK board, word 5 bit 7	Z122
B7508	Receive data from the SIMOLINK board, word 5 bit 8	Z122
B7509	Receive data from the SIMOLINK board, word 5 bit 9	Z122
B7510	Receive data from the SIMOLINK board, word 5 bit 10	Z122
B7511	Receive data from the SIMOLINK board, word 5 bit 11	Z122
B7512	Receive data from the SIMOLINK board, word 5 bit 12	Z122
B7513	Receive data from the SIMOLINK board, word 5 bit 13	Z122
B7514	Receive data from the SIMOLINK board, word 5 bit 14	Z122
B7515	Receive data from the SIMOLINK board, word 5 bit 15	Z122
B7600	Receive data from the SIMOLINK board, word 6 bit 0	Z122
B7601	Receive data from the SIMOLINK board, word 6 bit 1	Z122
B7602	Receive data from the SIMOLINK board, word 6 bit 2	Z122
B7603	Receive data from the SIMOLINK board, word 6 bit 3	Z122
B7604	Receive data from the SIMOLINK board, word 6 bit 4	Z122
B7605	Receive data from the SIMOLINK board, word 6 bit 5	Z122

Binector	Name, description	Function diag., Sheet
B7606	Receive data from the SIMOLINK board, word 6 bit 6	Z122
B7607	Receive data from the SIMOLINK board, word 6 bit 7	Z122
B7608	Receive data from the SIMOLINK board, word 6 bit 8	Z122
B7609	Receive data from the SIMOLINK board, word 6 bit 9	Z122
B7610	Receive data from the SIMOLINK board, word 6 bit 10	Z122
B7611	Receive data from the SIMOLINK board, word 6 bit 11	Z122
B7612	Receive data from the SIMOLINK board, word 6 bit 12	Z122
B7613	Receive data from the SIMOLINK board, word 6 bit 13	Z122
B7614	Receive data from the SIMOLINK board, word 6 bit 14	Z122
B7615	Receive data from the SIMOLINK board, word 6 bit 15	Z122
B7700	Receive data from the SIMOLINK board, word 7 bit 0	Z122
B7701	Receive data from the SIMOLINK board, word 7 bit 1	Z122
B7702	Receive data from the SIMOLINK board, word 7 bit 2	Z122
B7703	Receive data from the SIMOLINK board, word 7 bit 3	Z122
B7704	Receive data from the SIMOLINK board, word 7 bit 4	Z122
B7705	Receive data from the SIMOLINK board, word 7 bit 5	Z122
B7706	Receive data from the SIMOLINK board, word 7 bit 6	Z122
B7707	Receive data from the SIMOLINK board, word 7 bit 7	Z122
B7708	Receive data from the SIMOLINK board, word 7 bit 8	Z122
B7709	Receive data from the SIMOLINK board, word 7 bit 9	Z122
B7710	Receive data from the SIMOLINK board, word 7 bit 10	Z122
B7711	Receive data from the SIMOLINK board, word 7 bit 11	Z122
B7712	Receive data from the SIMOLINK board, word 7 bit 12	Z122
B7713	Receive data from the SIMOLINK board, word 7 bit 13	Z122
B7714	Receive data from the SIMOLINK board, word 7 bit 14	Z122
B7715	Receive data from the SIMOLINK board, word 7 bit 15	Z122
B7800	Receive data from the SIMOLINK board, word 8 bit 0	Z122
B7801	Receive data from the SIMOLINK board, word 8 bit 1	Z122
B7802	Receive data from the SIMOLINK board, word 8 bit 2	Z122
B7803	Receive data from the SIMOLINK board, word 8 bit 3	Z122
B7804	Receive data from the SIMOLINK board, word 8 bit 4	Z122
B7805	Receive data from the SIMOLINK board, word 8 bit 5	Z122
B7806	Receive data from the SIMOLINK board, word 8 bit 6	Z122
B7807	Receive data from the SIMOLINK board, word 8 bit 7	Z122
B7808	Receive data from the SIMOLINK board, word 8 bit 8	Z122
B7809	Receive data from the SIMOLINK board, word 8 bit 9	Z122
B7810	Receive data from the SIMOLINK board, word 8 bit 10	Z122
B7811	Receive data from the SIMOLINK board, word 8 bit 11	Z122
B7812	Receive data from the SIMOLINK board, word 8 bit 12	Z122
B7813	Receive data from the SIMOLINK board, word 8 bit 13	Z122
B7814	Receive data from the SIMOLINK board, word 8 bit 14	Z122
B7815	Receive data from the SIMOLINK board, word 8 bit 15	Z122
B7900	Receive data from the SIMOLINK board, word 9 bit 0	Z122
B7901	Receive data from the SIMOLINK board, word 9 bit 1	Z122
B7902	Receive data from the SIMOLINK board, word 9 bit 2	Z122
B7903	Receive data from the SIMOLINK board, word 9 bit 3	Z122
B7904	Receive data from the SIMOLINK board, word 9 bit 4	Z122
B7905	Receive data from the SIMOLINK board, word 9 bit 5	Z122
B7906	Receive data from the SIMOLINK board, word 9 bit 6	Z122

Binector	Name, description	Function diag., Sheet
B7907	Receive data from the SIMOLINK board, word 9 bit 7	Z122
B7908	Receive data from the SIMOLINK board, word 9 bit 8	Z122
B7909	Receive data from the SIMOLINK board, word 9 bit 9	Z122
B7910	Receive data from the SIMOLINK board, word 9 bit 10	Z122
B7911	Receive data from the SIMOLINK board, word 9 bit 11	Z122
B7912	Receive data from the SIMOLINK board, word 9 bit 12	Z122
B7913	Receive data from the SIMOLINK board, word 9 bit 13	Z122
B7914	Receive data from the SIMOLINK board, word 9 bit 14	Z122
B7915	Receive data from the SIMOLINK board, word 9 bit 15	Z122

Process data exchange with 2nd CB		
B8030	Message timeout on 2nd CB - maintained signal	Z111
B8031	Message timeout on 2nd CB - 1s pulse	Z111

Process data exchange with 2nd CB		
B8100	Receive data from 2nd CB, word 1, bit 0	Z111
B8101	Receive data from 2nd CB, word 1, bit 1	Z111
B8102	Receive data from 2nd CB, word 1, bit 2	Z111
B8103	Receive data from 2nd CB, word 1, bit 3	Z111
B8104	Receive data from 2nd CB, word 1, bit 4	Z111
B8105	Receive data from 2nd CB, word 1, bit 5	Z111
B8106	Receive data from 2nd CB, word 1, bit 6	Z111
B8107	Receive data from 2nd CB, word 1, bit 7	Z111
B8108	Receive data from 2nd CB, word 1, bit 8	Z111
B8109	Receive data from 2nd CB, word 1, bit 9	Z111
B8110	Receive data from 2nd CB, word 1, bit 10	Z111
B8111	Receive data from 2nd CB, word 1, bit 11	Z111
B8112	Receive data from 2nd CB, word 1, bit 12	Z111
B8113	Receive data from 2nd CB, word 1, bit 13	Z111
B8114	Receive data from 2nd CB, word 1, bit 14	Z111
B8115	Receive data from 2nd CB, word 1, bit 15	Z111
B8200	Receive data from 2nd CB, word 2, bit 0	Z111
B8201	Receive data from 2nd CB, word 2, bit 1	Z111
B8202	Receive data from 2nd CB, word 2, bit 2	Z111
B8203	Receive data from 2nd CB, word 2, bit 3	Z111
B8204	Receive data from 2nd CB, word 2, bit 4	Z111
B8205	Receive data from 2nd CB, word 2, bit 5	Z111
B8206	Receive data from 2nd CB, word 2, bit 6	Z111
B8207	Receive data from 2nd CB, word 2, bit 7	Z111
B8208	Receive data from 2nd CB, word 2, bit 8	Z111
B8209	Receive data from 2nd CB, word 2, bit 9	Z111
B8210	Receive data from 2nd CB, word 2, bit 10	Z111
B8211	Receive data from 2nd CB, word 2, bit 11	Z111
B8212	Receive data from 2nd CB, word 2, bit 12	Z111
B8213	Receive data from 2nd CB, word 2, bit 13	Z111
B8214	Receive data from 2nd CB, word 2, bit 14	Z111
B8215	Receive data from 2nd CB, word 2, bit 15	Z111
B8300	Receive data from 2nd CB, word 3, bit 0	Z111
B8301	Receive data from 2nd CB, word 3, bit 1	Z111

Binector	Name, description	Function diag., Sheet
B8302	Receive data from 2nd CB, word 3, bit 2	Z111
B8303	Receive data from 2nd CB, word 3, bit 3	Z111
B8304	Receive data from 2nd CB, word 3, bit 4	Z111
B8305	Receive data from 2nd CB, word 3, bit 5	Z111
B8306	Receive data from 2nd CB, word 3, bit 6	Z111
B8307	Receive data from 2nd CB, word 3, bit 7	Z111
B8308	Receive data from 2nd CB, word 3, bit 8	Z111
B8309	Receive data from 2nd CB, word 3, bit 9	Z111
B8310	Receive data from 2nd CB, word 3, bit 10	Z111
B8311	Receive data from 2nd CB, word 3, bit 11	Z111
B8312	Receive data from 2nd CB, word 3, bit 12	Z111
B8313	Receive data from 2nd CB, word 3, bit 13	Z111
B8314	Receive data from 2nd CB, word 3, bit 14	Z111
B8315	Receive data from 2nd CB, word 3, bit 15	Z111
B8400	Receive data from 2nd CB, word 4, bit 0	Z111
B8401	Receive data from 2nd CB, word 4, bit 1	Z111
B8402	Receive data from 2nd CB, word 4, bit 2	Z111
B8403	Receive data from 2nd CB, word 4, bit 3	Z111
B8404	Receive data from 2nd CB, word 4, bit 4	Z111
B8405	Receive data from 2nd CB, word 4, bit 5	Z111
B8406	Receive data from 2nd CB, word 4, bit 6	Z111
B8407	Receive data from 2nd CB, word 4, bit 7	Z111
B8408	Receive data from 2nd CB, word 4, bit 8	Z111
B8409	Receive data from 2nd CB, word 4, bit 9	Z111
B8410	Receive data from 2nd CB, word 4, bit 10	Z111
B8411	Receive data from 2nd CB, word 4, bit 11	Z111
B8412	Receive data from 2nd CB, word 4, bit 12	Z111
B8413	Receive data from 2nd CB, word 4, bit 13	Z111
B8414	Receive data from 2nd CB, word 4, bit 14	Z111
B8415	Receive data from 2nd CB, word 4, bit 15	Z111
B8500	Receive data from 2nd CB, word 5, bit 0	Z111
B8501	Receive data from 2nd CB, word 5, bit 1	Z111
B8502	Receive data from 2nd CB, word 5, bit 2	Z111
B8503	Receive data from 2nd CB, word 5, bit 3	Z111
B8504	Receive data from 2nd CB, word 5, bit 4	Z111
B8505	Receive data from 2nd CB, word 5, bit 5	Z111
B8506	Receive data from 2nd CB, word 5, bit 6	Z111
B8507	Receive data from 2nd CB, word 5, bit 7	Z111
B8508	Receive data from 2nd CB, word 5, bit 8	Z111
B8509	Receive data from 2nd CB, word 5, bit 9	Z111
B8510	Receive data from 2nd CB, word 5, bit 10	Z111
B8511	Receive data from 2nd CB, word 5, bit 11	Z111
B8512	Receive data from 2nd CB, word 5, bit 12	Z111
B8513	Receive data from 2nd CB, word 5, bit 13	Z111
B8514	Receive data from 2nd CB, word 5, bit 14	Z111
B8515	Receive data from 2nd CB, word 5, bit 15	Z111
B8600	Receive data from 2nd CB, word 6, bit 0	Z111
B8601	Receive data from 2nd CB, word 6, bit 1	Z111
B8602	Receive data from 2nd CB, word 6, bit 2	Z111

Binector	Name, description	Function diag., Sheet
B8603	Receive data from 2nd CB, word 6, bit 3	Z111
B8604	Receive data from 2nd CB, word 6, bit 4	Z111
B8605	Receive data from 2nd CB, word 6, bit 5	Z111
B8606	Receive data from 2nd CB, word 6, bit 6	Z111
B8607	Receive data from 2nd CB, word 6, bit 7	Z111
B8608	Receive data from 2nd CB, word 6, bit 8	Z111
B8609	Receive data from 2nd CB, word 6, bit 9	Z111
B8610	Receive data from 2nd CB, word 6, bit 10	Z111
B8611	Receive data from 2nd CB, word 6, bit 11	Z111
B8612	Receive data from 2nd CB, word 6, bit 12	Z111
B8613	Receive data from 2nd CB, word 6, bit 13	Z111
B8614	Receive data from 2nd CB, word 6, bit 14	Z111
B8615	Receive data from 2nd CB, word 6, bit 15	Z111
B8700	Receive data from 2nd CB, word 7, bit 0	Z111
B8701	Receive data from 2nd CB, word 7, bit 1	Z111
B8702	Receive data from 2nd CB, word 7, bit 2	Z111
B8703	Receive data from 2nd CB, word 7, bit 3	Z111
B8704	Receive data from 2nd CB, word 7, bit 4	Z111
B8705	Receive data from 2nd CB, word 7, bit 5	Z111
B8706	Receive data from 2nd CB, word 7, bit 6	Z111
B8707	Receive data from 2nd CB, word 7, bit 7	Z111
B8708	Receive data from 2nd CB, word 7, bit 8	Z111
B8709	Receive data from 2nd CB, word 7, bit 9	Z111
B8710	Receive data from 2nd CB, word 7, bit 10	Z111
B8711	Receive data from 2nd CB, word 7, bit 11	Z111
B8712	Receive data from 2nd CB, word 7, bit 12	Z111
B8713	Receive data from 2nd CB, word 7, bit 13	Z111
B8714	Receive data from 2nd CB, word 7, bit 14	Z111
B8715	Receive data from 2nd CB, word 7, bit 15	Z111
B8800	Receive data from 2nd CB, word 8, bit 0	Z111
B8801	Receive data from 2nd CB, word 8, bit 1	Z111
B8802	Receive data from 2nd CB, word 8, bit 2	Z111
B8803	Receive data from 2nd CB, word 8, bit 3	Z111
B8804	Receive data from 2nd CB, word 8, bit 4	Z111
B8805	Receive data from 2nd CB, word 8, bit 5	Z111
B8806	Receive data from 2nd CB, word 8, bit 6	Z111
B8807	Receive data from 2nd CB, word 8, bit 7	Z111
B8808	Receive data from 2nd CB, word 8, bit 8	Z111
B8809	Receive data from 2nd CB, word 8, bit 9	Z111
B8810	Receive data from 2nd CB, word 8, bit 10	Z111
B8811	Receive data from 2nd CB, word 8, bit 11	Z111
B8812	Receive data from 2nd CB, word 8, bit 12	Z111
B8813	Receive data from 2nd CB, word 8, bit 13	Z111
B8814	Receive data from 2nd CB, word 8, bit 14	Z111
B8815	Receive data from 2nd CB, word 8, bit 15	Z111
B8900	Receive data from 2nd CB, word 9, bit 0	Z111
B8901	Receive data from 2nd CB, word 9, bit 1	Z111
B8902	Receive data from 2nd CB, word 9, bit 2	Z111
B8903	Receive data from 2nd CB, word 9, bit 3	Z111

Binector	Name, description	Function diag., Sheet
B8904	Receive data from 2nd CB, word 9, bit 4	Z111
B8905	Receive data from 2nd CB, word 9, bit 5	Z111
B8906	Receive data from 2nd CB, word 9, bit 6	Z111
B8907	Receive data from 2nd CB, word 9, bit 7	Z111
B8908	Receive data from 2nd CB, word 9, bit 8	Z111
B8909	Receive data from 2nd CB, word 9, bit 9	Z111
B8910	Receive data from 2nd CB, word 9, bit 10	Z111
B8911	Receive data from 2nd CB, word 9, bit 11	Z111
B8912	Receive data from 2nd CB, word 9, bit 12	Z111
B8913	Receive data from 2nd CB, word 9, bit 13	Z111
B8914	Receive data from 2nd CB, word 9, bit 14	Z111
B8915	Receive data from 2nd CB, word 9, bit 15	Z111

Serial interface 3 (USS2 / Peer-to-peer 3 on G-SST3)		
B9030	USS3 / Peer3 - Telegram monitoring timeout - maintained signal	G172, G174
B9031	USS3 / Peer3 - Telegram monitoring timeout - 1s pulse	G172, G174

Technology software S00: Voltage monitor for electronics power supply			
B9050	Power ON (100ms pulse on connection of voltage)	FB 1	B110
B9051	Power OFF (10ms pulse on disconnection of voltage)	FB 1	B110

Technology software S00: Connector/binector converters			
B9052	Connector/binector converter 1, bit 0	FB 10	B120
B9053	Connector/binector converter 1, bit 1	FB 10	B120
B9054	Connector/binector converter 1, bit 2	FB 10	B120
B9055	Connector/binector converter 1, bit 3	FB 10	B120
B9056	Connector/binector converter 1, bit 4	FB 10	B120
B9057	Connector/binector converter 1, bit 5	FB 10	B120
B9058	Connector/binector converter 1, bit 6	FB 10	B120
B9059	Connector/binector converter 1, bit 7	FB 10	B120
B9060	Connector/binector converter 1, bit 8	FB 10	B120
B9061	Connector/binector converter 1, bit 9	FB 10	B120
B9062	Connector/binector converter 1, bit 10	FB 10	B120
B9063	Connector/binector converter 1, bit 11	FB 10	B120
B9064	Connector/binector converter 1, bit 12	FB 10	B120
B9065	Connector/binector converter 1, bit 13	FB 10	B120
B9066	Connector/binector converter 1, bit 14	FB 10	B120
B9067	Connector/binector converter 1, bit 15	FB 10	B120
B9068	Connector/binector converter 2, bit 0	FB 11	B120
B9069	Connector/binector converter 2, bit 1	FB 11	B120
B9070	Connector/binector converter 2, bit 2	FB 11	B120
B9071	Connector/binector converter 2, bit 3	FB 11	B120
B9072	Connector/binector converter 2, bit 4	FB 11	B120
B9073	Connector/binector converter 2, bit 5	FB 11	B120
B9074	Connector/binector converter 2, bit 6	FB 11	B120
B9075	Connector/binector converter 2, bit 7	FB 11	B120
B9076	Connector/binector converter 2, bit 8	FB 11	B120
B9077	Connector/binector converter 2, bit 9	FB 11	B120
B9078	Connector/binector converter 2, bit 10	FB 11	B120

Binector	Name, description		Function diag., Sheet
B9079	Connector/binector converter 2, bit 11	FB 11	B120
B9080	Connector/binector converter 2, bit 12	FB 11	B120
B9081	Connector/binector converter 2, bit 13	FB 11	B120
B9082	Connector/binector converter 2, bit 14	FB 11	B120
B9083	Connector/binector converter 2, bit 15	FB 11	B120
B9084	Connector/binector converter 3, bit 0	FB 12	B120
B9085	Connector/binector converter 3, bit 1	FB 12	B120
B9086	Connector/binector converter 3, bit 2	FB 12	B120
B9087	Connector/binector converter 3, bit 3	FB 12	B120
B9088	Connector/binector converter 3, bit 4	FB 12	B120
B9089	Connector/binector converter 3, bit 5	FB 12	B120
B9090	Connector/binector converter 3, bit 6	FB 12	B120
B9091	Connector/binector converter 3, bit 7	FB 12	B120
B9092	Connector/binector converter 3, bit 8	FB 12	B120
B9093	Connector/binector converter 3, bit 9	FB 12	B120
B9094	Connector/binector converter 3, bit 10	FB 12	B120
B9095	Connector/binector converter 3, bit 11	FB 12	B120
B9096	Connector/binector converter 3, bit 12	FB 12	B120
B9097	Connector/binector converter 3, bit 13	FB 12	B120
B9098	Connector/binector converter 3, bit 14	FB 12	B120
B9099	Connector/binector converter 3, bit 15	FB 12	B120

Serial interface 3 (USS2 / Peer-to-peer 3 on G-SST3)		
B9100	USS3 / Peer3 receive data, word 1, bit 0	G172, G174
B9101	USS3 / Peer3 receive data, word 1, bit 1	G172, G174
B9102	USS3 / Peer3 receive data, word 1, bit 2	G172, G174
B9103	USS3 / Peer3 receive data, word 1, bit 3	G172, G174
B9104	USS3 / Peer3 receive data, word 1, bit 4	G172, G174
B9105	USS3 / Peer3 receive data, word 1, bit 5	G172, G174
B9106	USS3 / Peer3 receive data, word 1, bit 6	G172, G174
B9107	USS3 / Peer3 receive data, word 1, bit 7	G172, G174
B9108	USS3 / Peer3 receive data, word 1, bit 8	G172, G174
B9109	USS3 / Peer3 receive data, word 1, bit 9	G172, G174
B9110	USS3 / Peer3 receive data, word 1, bit 10	G172, G174
B9111	USS3 / Peer3 receive data, word 1, bit 11	G172, G174
B9112	USS3 / Peer3 receive data, word 1, bit 12	G172, G174
B9113	USS3 / Peer3 receive data, word 1, bit 13	G172, G174
B9114	USS3 / Peer3 receive data, word 1, bit 14	G172, G174
B9115	USS3 / Peer3 receive data, word 1, bit 15	G172, G174

Technology software S00: Limiters			
B9150	Limiter 1: Positive limitation has responded	FB 65	B135
B9151	Limiter 1: Negative limitation has responded	FB 65	B135
B9152	Limiter 2: Positive limitation has responded	FB 66	B135
B9153	Limiter 2: Negative limitation has responded	FB 66	B135
B9154	Limiter 3: Positive limitation has responded	FB 67	B135
B9155	Limiter 3: Negative limitation has responded	FB 67	B135

Binector	Name, description		Function diag., Sheet
Technology software S00: Limit-value monitor with filter			
B9160	Limit-value monitor with filter 1: |A| < B has responded	FB 70	B136
B9161	Limit-value monitor with filter 1: A < B has responded	FB 70	B136
B9162	Limit-value monitor with filter 1: A = B has responded	FB 70	B136
B9163	Limit-value monitor with filter 2: |A| < B has responded	FB 71	B136
B9164	Limit-value monitor with filter 2: A < B has responded	FB 71	B136
B9165	Limit-value monitor with filter 2: A = B has responded	FB 71	B136
B9166	Limit-value monitor with filter 3: |A| < B has responded	FB 72	B136
B9167	Limit-value monitor with filter 3: A < B has responded	FB 72	B136
B9168	Limit-value monitor with filter 3: A = B has responded	FB 72	B136

Technology software S00: Limit-value monitor without filter			
B9169	Limit-value monitor without filter 1: |A| < B has responded	FB 73	B137
B9170	Limit-value monitor without filter 1: A < B has responded	FB 73	B137
B9171	Limit-value monitor without filter 1: A = B has responded	FB 73	B137
B9172	Limit-value monitor without filter 2: |A| < B has responded	FB 74	B137
B9173	Limit-value monitor without filter 2: A < B has responded	FB 74	B137
B9174	Limit-value monitor without filter 2: A = B has responded	FB 74	B137
B9175	Limit-value monitor without filter 3: |A| < B has responded	FB 75	B137
B9176	Limit-value monitor without filter 3: A < B has responded	FB 75	B137
B9177	Limit-value monitor without filter 3: A = B has responded	FB 75	B137
B9178	Limit-value monitor without filter 4: |A| < B has responded	FB 76	B137
B9179	Limit-value monitor without filter 4: A < B has responded	FB 76	B137
B9180	Limit-value monitor without filter 4: A = B has responded	FB 76	B137
B9181	Limit-value monitor without filter 5: |A| < B has responded	FB 77	B138
B9182	Limit-value monitor without filter 5: A < B has responded	FB 77	B138
B9183	Limit-value monitor without filter 5: A = B has responded	FB 77	B138
B9184	Limit-value monitor without filter 6: |A| < B has responded	FB 78	B138
B9185	Limit-value monitor without filter 6: A < B has responded	FB 78	B138
B9186	Limit-value monitor without filter 6: A = B has responded	FB 78	B138
B9187	Limit-value monitor without filter 7: |A| < B has responded	FB 79	B138
B9188	Limit-value monitor without filter 7: A < B has responded	FB 79	B138
B9189	Limit-value monitor without filter 7: A = B has responded	FB 79	B138

Technology software S00: Simple ramp-function generator			
B9190	Ramp-function generator output = ramp-function generator input (y = x)	FB 113	B165
B9191	0 = ramp-function generator initial run	FB 113	B165

Technology software S00: EXCLUSIVE OR elements with 2 inputs each			
B9195	Output of EXCLUSIVE OR element 1	FB 170	B206
B9196	Output of EXCLUSIVE OR element 2	FB 171	B206
B9197	Output of EXCLUSIVE OR element 3	FB 172	B206
B9198	Output of EXCLUSIVE OR element 4	FB 173	B206

Serial interface 3 (USS2 / Peer-to-peer 3 on G-SST3)		
B9200	USS3 / Peer3 receive data, word 2, bit 0	G172, G174
B9201	USS3 / Peer3 receive data, word 2, bit 1	G172, G174
B9202	USS3 / Peer3 receive data, word 2, bit 2	G172, G174
B9203	USS3 / Peer3 receive data, word 2, bit 3	G172, G174

Binector	Name, description	Function diag., Sheet
B9204	USS3 / Peer3 receive data, word 2, bit 4	G172, G174
B9205	USS3 / Peer3 receive data, word 2, bit 5	G172, G174
B9206	USS3 / Peer3 receive data, word 2, bit 6	G172, G174
B9207	USS3 / Peer3 receive data, word 2, bit 7	G172, G174
B9208	USS3 / Peer3 receive data, word 2, bit 8	G172, G174
B9209	USS3 / Peer3 receive data, word 2, bit 9	G172, G174
B9210	USS3 / Peer3 receive data, word 2, bit 10	G172, G174
B9211	USS3 / Peer3 receive data, word 2, bit 11	G172, G174
B9212	USS3 / Peer3 receive data, word 2, bit 12	G172, G174
B9213	USS3 / Peer3 receive data, word 2, bit 13	G172, G174
B9214	USS3 / Peer3 receive data, word 2, bit 14	G172, G174
B9215	USS3 / Peer3 receive data, word 2, bit 15	G172, G174

Technology software S00: Decoders / demultiplexers, binary to 1 of 8			
B9250	Decoder / demultiplexer 1: Q0	FB 118	B200
B9251	Decoder / demultiplexer 1: Q1	FB 118	B200
B9252	Decoder / demultiplexer 1: Q2	FB 118	B200
B9253	Decoder / demultiplexer 1: Q3	FB 118	B200
B9254	Decoder / demultiplexer 1: Q4	FB 118	B200
B9255	Decoder / demultiplexer 1: Q5	FB 118	B200
B9256	Decoder / demultiplexer 1: Q6	FB 118	B200
B9257	Decoder / demultiplexer 1: Q7	FB 118	B200
B9260	Decoder / demultiplexer 1: /Q0	FB 118	B200
B9261	Decoder / demultiplexer 1: /Q1	FB 118	B200
B9262	Decoder / demultiplexer 1: /Q2	FB 118	B200
B9263	Decoder / demultiplexer 1: /Q3	FB 118	B200
B9264	Decoder / demultiplexer 1: /Q4	FB 118	B200
B9265	Decoder / demultiplexer 1: /Q5	FB 118	B200
B9266	Decoder / demultiplexer 1: /Q6	FB 118	B200
B9267	Decoder / demultiplexer 1: /Q7	FB 118	B200
B9270	Decoder / demultiplexer 2: Q0	FB 119	B200
B9271	Decoder / demultiplexer 2: Q1	FB 119	B200
B9272	Decoder / demultiplexer 2: Q2	FB 119	B200
B9273	Decoder / demultiplexer 2: Q3	FB 119	B200
B9274	Decoder / demultiplexer 2: Q4	FB 119	B200
B9275	Decoder / demultiplexer 2: Q5	FB 119	B200
B9276	Decoder / demultiplexer 2: Q6	FB 119	B200
B9277	Decoder / demultiplexer 2: Q7	FB 119	B200
B9280	Decoder / demultiplexer 2: /Q0	FB 119	B200
B9281	Decoder / demultiplexer 2: /Q1	FB 119	B200
B9282	Decoder / demultiplexer 2: /Q2	FB 119	B200
B9283	Decoder / demultiplexer 2: /Q3	FB 119	B200
B9284	Decoder / demultiplexer 2: /Q4	FB 119	B200
B9285	Decoder / demultiplexer 2: /Q5	FB 119	B200
B9286	Decoder / demultiplexer 2: /Q6	FB 119	B200
B9287	Decoder / demultiplexer 2: /Q7	FB 119	B200

Serial interface 3 (USS2 / Peer-to-peer 3 on G-SST3)		
B9300	USS3 / Peer3 receive data, word 3, bit 0	G172, G174

Binector	Name, description	Function diag., Sheet
B9301	USS3 / Peer3 receive data, word 3, bit 1	G172, G174
B9302	USS3 / Peer3 receive data, word 3, bit 2	G172, G174
B9303	USS3 / Peer3 receive data, word 3, bit 3	G172, G174
B9304	USS3 / Peer3 receive data, word 3, bit 4	G172, G174
B9305	USS3 / Peer3 receive data, word 3, bit 5	G172, G174
B9306	USS3 / Peer3 receive data, word 3, bit 6	G172, G174
B9307	USS3 / Peer3 receive data, word 3, bit 7	G172, G174
B9308	USS3 / Peer3 receive data, word 3, bit 8	G172, G174
B9309	USS3 / Peer3 receive data, word 3, bit 9	G172, G174
B9310	USS3 / Peer3 receive data, word 3, bit 10	G172, G174
B9311	USS3 / Peer3 receive data, word 3, bit 11	G172, G174
B9312	USS3 / Peer3 receive data, word 3, bit 12	G172, G174
B9313	USS3 / Peer3 receive data, word 3, bit 13	G172, G174
B9314	USS3 / Peer3 receive data, word 3, bit 14	G172, G174
B9315	USS3 / Peer3 receive data, word 3, bit 15	G172, G174

Technology software S00: AND elements with 3 inputs each			
B9350	Output of AND element 1	FB 120	B205
B9351	Output of AND element 2	FB 121	B205
B9352	Output of AND element 3	FB 122	B205
B9353	Output of AND element 4	FB 123	B205
B9354	Output of AND element 5	FB 124	B205
B9355	Output of AND element 6	FB 125	B205
B9356	Output of AND element 7	FB 126	B205
B9357	Output of AND element 8	FB 127	B205
B9358	Output of AND element 9	FB 128	B205
B9359	Output of AND element 10	FB 129	B205
B9360	Output of AND element 11	FB 130	B205
B9361	Output of AND element 12	FB 131	B205
B9362	Output of AND element 13	FB 132	B205
B9363	Output of AND element 14	FB 133	B205
B9364	Output of AND element 15	FB 134	B205
B9365	Output of AND element 16	FB 135	B205
B9366	Output of AND element 17	FB 136	B205
B9367	Output of AND element 18	FB 137	B205
B9368	Output of AND element 19	FB 138	B205
B9369	Output of AND element 20	FB 139	B205
B9370	Output of AND element 21	FB 140	B205
B9371	Output of AND element 22	FB 141	B205
B9372	Output of AND element 23	FB 142	B205
B9373	Output of AND element 24	FB 143	B205
B9374	Output of AND element 25	FB 144	B205
B9375	Output of AND element 26	FB 145	B205
B9376	Output of AND element 27	FB 146	B205
B9377	Output of AND element 28	FB 147	B205

Technology software S00: OR elements with 3 inputs each			
B9380	Output of OR element 1	FB 150	B206
B9381	Output of OR element 2	FB 151	B206

Binector	Name, description		Function diag., Sheet
B9382	Output of OR element 3	FB 152	B206
B9383	Output of OR element 4	FB 153	B206
B9384	Output of OR element 5	FB 154	B206
B9385	Output of OR element 6	FB 155	B206
B9386	Output of OR element 7	FB 156	B206
B9387	Output of OR element 8	FB 157	B206
B9388	Output of OR element 9	FB 158	B206
B9389	Output of OR element 10	FB 159	B206
B9390	Output of OR element 11	FB 160	B206
B9391	Output of OR element 12	FB 161	B206
B9392	Output of OR element 13	FB 162	B206
B9393	Output of OR element 14	FB 163	B206
B9394	Output of OR element 15	FB 164	B206
B9395	Output of OR element 16	FB 165	B206
B9396	Output of OR element 17	FB 166	B206
B9397	Output of OR element 18	FB 167	B206
B9398	Output of OR element 19	FB 168	B206
B9399	Output of OR element 20	FB 169	B206

Serial interface 3 (USS2 / Peer-to-peer 3 on G-SST3)		
B9400	USS3 / Peer3 receive data, word 4, bit 0	G172, G174
B9401	USS3 / Peer3 receive data, word 4, bit 1	G172, G174
B9402	USS3 / Peer3 receive data, word 4, bit 2	G172, G174
B9403	USS3 / Peer3 receive data, word 4, bit 3	G172, G174
B9404	USS3 / Peer3 receive data, word 4, bit 4	G172, G174
B9405	USS3 / Peer3 receive data, word 4, bit 5	G172, G174
B9406	USS3 / Peer3 receive data, word 4, bit 6	G172, G174
B9407	USS3 / Peer3 receive data, word 4, bit 7	G172, G174
B9408	USS3 / Peer3 receive data, word 4, bit 8	G172, G174
B9409	USS3 / Peer3 receive data, word 4, bit 9	G172, G174
B9410	USS3 / Peer3 receive data, word 4, bit 10	G172, G174
B9411	USS3 / Peer3 receive data, word 4, bit 11	G172, G174
B9412	USS3 / Peer3 receive data, word 4, bit 12	G172, G174
B9413	USS3 / Peer3 receive data, word 4, bit 13	G172, G174
B9414	USS3 / Peer3 receive data, word 4, bit 14	G172, G174
B9415	USS3 / Peer3 receive data, word 4, bit 15	G172, G174

Technology software S00: Inverters			
B9450	Output of inverter 1	FB 180	B207
B9451	Output of inverter 2	FB 181	B207
B9452	Output of inverter 3	FB 182	B207
B9453	Output of inverter 4	FB 183	B207
B9454	Output of inverter 5	FB 184	B207
B9455	Output of inverter 6	FB 185	B207
B9456	Output of inverter 7	FB 186	B207
B9457	Output of inverter 8	FB 187	B207
B9458	Output of inverter 9	FB 188	B207
B9459	Output of inverter 10	FB 189	B207
B9460	Output of inverter 11	FB 190	B207

Binector	Name, description		Function diag., Sheet
B9461	Output of inverter 12	FB 191	B207
B9462	Output of inverter 13	FB 192	B207
B9463	Output of inverter 14	FB 193	B207
B9464	Output of inverter 15	FB 194	B207
B9465	Output of inverter 16	FB 195	B207

Technology software S00: NAND elements with 3 inputs each			
B9470	Output of NAND element 1	FB 200	B207
B9471	Output of NAND element 2	FB 201	B207
B9472	Output of NAND element 3	FB 202	B207
B9473	Output of NAND element 4	FB 203	B207
B9474	Output of NAND element 5	FB 204	B207
B9475	Output of NAND element 6	FB 205	B207
B9476	Output of NAND element 7	FB 206	B207
B9477	Output of NAND element 8	FB 207	B207
B9478	Output of NAND element 9	FB 208	B207
B9479	Output of NAND element 10	FB 209	B207
B9480	Output of NAND element 11	FB 210	B207
B9481	Output of NAND element 12	FB 211	B207

Technology software S00: Binary signal selector switches			
B9482	Output of binary signal selector switch 1	FB 250	B216
B9483	Output of binary signal selector switch 2	FB 251	B216
B9484	Output of binary signal selector switch 3	FB 252	B216
B9485	Output of binary signal selector switch 4	FB 253	B216
B9486	Output of binary signal selector switch 5	FB 254	B216

Technology software S00: D flipflops			
B9490	D flipflop 1: Output Q	FB 230	B211
B9491	D flipflop 1: Output /Q	FB 230	B211
B9492	D flipflop 2: Output Q	FB 231	B211
B9493	D flipflop 2: Output /Q	FB 231	B211
B9494	D flipflop 3: Output Q	FB 232	B211
B9495	D flipflop 3: Output /Q	FB 232	B211
B9496	D flipflop 4: Output Q	FB 233	B211
B9497	D flipflop 4: Output /Q	FB 233	B211

Technology software S00: Technology controller			
B9499	Ramp-function generator output = ramp-function generator input (y = x)	FB 113	B170

Serial interface 3 (USS2 / Peer-to-peer 3 on G-SST3)		
B9500	USS3 / Peer3 receive data, word 5, bit 0	G172, G174
B9501	USS3 / Peer3 receive data, word 5, bit 1	G172, G174
B9502	USS3 / Peer3 receive data, word 5, bit 2	G172, G174
B9503	USS3 / Peer3 receive data, word 5, bit 3	G172, G174
B9504	USS3 / Peer3 receive data, word 5, bit 4	G172, G174
B9505	USS3 / Peer3 receive data, word 5, bit 5	G172, G174
B9506	USS3 / Peer3 receive data, word 5, bit 6	G172, G174
B9507	USS3 / Peer3 receive data, word 5, bit 7	G172, G174
B9508	USS3 / Peer3 receive data, word 5, bit 8	G172, G174

Binector	Name, description	Function diag., Sheet
B9509	USS3 / Peer3 receive data, word 5, bit 9	G172, G174
B9510	USS3 / Peer3 receive data, word 5, bit 10	G172, G174
B9511	USS3 / Peer3 receive data, word 5, bit 11	G172, G174
B9512	USS3 / Peer3 receive data, word 5, bit 12	G172, G174
B9513	USS3 / Peer3 receive data, word 5, bit 13	G172, G174
B9514	USS3 / Peer3 receive data, word 5, bit 14	G172, G174
B9515	USS3 / Peer3 receive data, word 5, bit 15	G172, G174

Technology software S00: RS flipflops			
B9550	RS flipflop 1: Output Q	FB 215	B210
B9551	RS flipflop 1: Output /Q	FB 215	B210
B9552	RS flipflop 2: Output Q	FB 216	B210
B9553	RS flipflop 2: Output /Q	FB 216	B210
B9554	RS flipflop 3: Output Q	FB 217	B210
B9555	RS flipflop 3: Output /Q	FB 217	B210
B9556	RS flipflop 4: Output Q	FB 218	B210
B9557	RS flipflop 4: Output /Q	FB 218	B210
B9558	RS flipflop 5: Output Q	FB 219	B210
B9559	RS flipflop 5: Output /Q	FB 219	B210
B9560	RS flipflop 6: Output Q	FB 220	B210
B9561	RS flipflop 6: Output /Q	FB 220	B210
B9562	RS flipflop 7: Output Q	FB 221	B210
B9563	RS flipflop 7: Output /Q	FB 221	B210
B9564	RS flipflop 8: Output Q	FB 222	B210
B9565	RS flipflop 8: Output /Q	FB 222	B210
B9566	RS flipflop 9: Output Q	FB 223	B210
B9567	RS flipflop 9: Output /Q	FB 223	B210
B9568	RS flipflop 10: Output Q	FB 224	B210
B9569	RS flipflop 10: Output /Q	FB 224	B210
B9570	RS flipflop 11: Output Q	FB 225	B210
B9571	RS flipflop 11: Output /Q	FB 225	B210
B9572	RS flipflop 12: Output Q	FB 226	B210
B9573	RS flipflop 12: Output /Q	FB 226	B210
B9574	RS flipflop 13: Output Q	FB 227	B210
B9575	RS flipflop 13: Output /Q	FB 227	B210
B9576	RS flipflop 14: Output Q	FB 228	B210
B9577	RS flipflop 14: Output /Q	FB 228	B210

Technology software S00: Timers			
B9580	Timer 1: Output	FB 240	B215
B9581	Timer 1: Output inverted	FB 240	B215
B9582	Timer 2: Output	FB 241	B215
B9583	Timer 2: Output inverted	FB 241	B215
B9584	Timer 3: Output	FB 242	B215
B9585	Timer 3: Output inverted	FB 242	B215
B9586	Timer 4: Output	FB 243	B215
B9587	Timer 4: Output inverted	FB 243	B215
B9588	Timer 5: Output	FB 244	B215
B9589	Timer 5: Output inverted	FB 244	B215

Binector	Name, description		Function diag., Sheet
B9590	Timer 6: Output	FB 245	B215
B9591	Timer 6: Output inverted	FB 245	B215
B9592	Timer 7: Output	FB 246	B216
B9593	Timer 7: Output inverted	FB 246	B216
B9594	Timer 8: Output	FB 247	B216
B9595	Timer 8: Output inverted	FB 247	B216
B9596	Timer 9: Output	FB 248	B216
B9597	Timer 9: Output inverted	FB 248	B216
B9598	Timer 10: Output	FB 249	B216
B9599	Timer 10: Output inverted	FB 249	B216

Serial interface 3 (USS2 / Peer-to-peer 3 on G-SST3)		
B9600	USS3 receive data, word 6, bit 0	G172
B9601	USS3 receive data, word 6, bit 1	G172
B9602	USS3 receive data, word 6, bit 2	G172
B9603	USS3 receive data, word 6, bit 3	G172
B9604	USS3 receive data, word 6, bit 4	G172
B9605	USS3 receive data, word 6, bit 5	G172
B9606	USS3 receive data, word 6, bit 6	G172
B9607	USS3 receive data, word 6, bit 7	G172
B9608	USS3 receive data, word 6, bit 8	G172
B9609	USS3 receive data, word 6, bit 9	G172
B9610	USS3 receive data, word 6, bit 10	G172
B9611	USS3 receive data, word 6, bit 11	G172
B9612	USS3 receive data, word 6, bit 12	G172
B9613	USS3 receive data, word 6, bit 13	G172
B9614	USS3 receive data, word 6, bit 14	G172
B9615	USS3 receive data, word 6, bit 15	G172

Technology software S00: PI controller		[SW 1.8 and later]
B9650	PI controller 1: Controller at output limitation	FB 260	B180
B9652	PI controller 3: Controller at output limitation	FB 262	B182
B9653	PI controller 4: Controller at output limitation	FB 263	B183
B9654	PI controller 5: Controller at output limitation	FB 264	B184
B9655	PI controller 6: Controller at output limitation	FB 265	B185
B9656	PI controller 7: Controller at output limitation	FB 266	B186
B9657	PI controller 8: Controller at output limitation	FB 267	B187
B9658	PI controller 9: Controller at output limitation	FB 268	B188
B9659	PI controller 10: Controller at output limitation	FB 269	B189
B9660	PI controller 1: Controller at positive output limitation	FB 260	B180
B9661	PI controller 2: Controller at positive output limitation	FB 261	B181
B9662	PI controller 3: Controller at positive output limitation	FB 262	B182
B9663	PI controller 4: Controller at positive output limitation	FB 263	B183
B9664	PI controller 5: Controller at positive output limitation	FB 264	B184
B9665	PI controller 6: Controller at positive output limitation	FB 265	B185
B9666	PI controller 7: Controller at positive output limitation	FB 266	B186
B9667	PI controller 8: Controller at positive output limitation	FB 267	B187
B9668	PI controller 9: Controller at positive output limitation	FB 268	B188
B9669	PI controller 10: Controller at positive output limitation	FB 269	B189

Binector	Name, description		Function diag., Sheet
B9670	PI controller 1: Controller at negative output limitation	FB 260	B180
B9671	PI controller 2: Controller at negative output limitation	FB 261	B181
B9672	PI controller 3: Controller at negative output limitation	FB 262	B182
B9673	PI controller 4: Controller at negative output limitation	FB 263	B183
B9674	PI controller 5: Controller at negative output limitation	FB 264	B184
B9675	PI controller 6: Controller at negative output limitation	FB 265	B185
B9676	PI controller 7: Controller at negative output limitation	FB 266	B186
B9677	PI controller 8: Controller at negative output limitation	FB 267	B187
B9678	PI controller 9: Controller at negative output limitation	FB 268	B188
B9679	PI controller 10: Controller at negative output limitation	FB 269	B189

Serial interface 3 (USS2 / Peer-to-peer 3 on G-SST3)		
B9700	USS3 receive data, word 7, bit 0	G172
B9701	USS3 receive data, word 7, bit 1	G172
B9702	USS3 receive data, word 7, bit 2	G172
B9703	USS3 receive data, word 7, bit 3	G172
B9704	USS3 receive data, word 7, bit 4	G172
B9705	USS3 receive data, word 7, bit 5	G172
B9706	USS3 receive data, word 7, bit 6	G172
B9707	USS3 receive data, word 7, bit 7	G172
B9708	USS3 receive data, word 7, bit 8	G172
B9709	USS3 receive data, word 7, bit 9	G172
B9710	USS3 receive data, word 7, bit 10	G172
B9711	USS3 receive data, word 7, bit 11	G172
B9712	USS3 receive data, word 7, bit 12	G172
B9713	USS3 receive data, word 7, bit 13	G172
B9714	USS3 receive data, word 7, bit 14	G172
B9715	USS3 receive data, word 7, bit 15	G172
B9800	USS3 receive data, word 8, bit 0	G172
B9801	USS3 receive data, word 8, bit 1	G172
B9802	USS3 receive data, word 8, bit 2	G172
B9803	USS3 receive data, word 8, bit 3	G172
B9804	USS3 receive data, word 8, bit 4	G172
B9805	USS3 receive data, word 8, bit 5	G172
B9806	USS3 receive data, word 8, bit 6	G172
B9807	USS3 receive data, word 8, bit 7	G172
B9808	USS3 receive data, word 8, bit 8	G172
B9809	USS3 receive data, word 8, bit 9	G172
B9810	USS3 receive data, word 8, bit 10	G172
B9811	USS3 receive data, word 8, bit 11	G172
B9812	USS3 receive data, word 8, bit 12	G172
B9813	USS3 receive data, word 8, bit 13	G172
B9814	USS3 receive data, word 8, bit 14	G172
B9815	USS3 receive data, word 8, bit 15	G172
B9900	USS3 receive data, word 9, bit 0	G172
B9901	USS3 receive data, word 9, bit 1	G172
B9902	USS3 receive data, word 9, bit 2	G172
B9903	USS3 receive data, word 9, bit 3	G172
B9904	USS3 receive data, word 9, bit 4	G172

Binector	Name, description	Function diag., Sheet
B9905	USS3 receive data, word 9, bit 5	G172
B9906	USS3 receive data, word 9, bit 6	G172
B9907	USS3 receive data, word 9, bit 7	G172
B9908	USS3 receive data, word 9, bit 8	G172
B9909	USS3 receive data, word 9, bit 9	G172
B9910	USS3 receive data, word 9, bit 10	G172
B9911	USS3 receive data, word 9, bit 11	G172
B9912	USS3 receive data, word 9, bit 12	G172
B9913	USS3 receive data, word 9, bit 13	G172
B9914	USS3 receive data, word 9, bit 14	G172
B9915	USS3 receive data, word 9, bit 15	G172