Option for TA-BL/P Series

Profibus-DP

Operating Manual and Set-up Instructions

Valid only for item No.:29553-0F

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Table of Content

1 Safety Information

1.1 Info

The Profibus communication is an accessory unit for the TA-BL/P... driver unit series.
It is therefore subject to the same safety conditions. When commissioning a control unit, it absolutely mandatory that the relevant Operating Instructions be used. These Profibus Operating Instructions are no replacement for the proper one.

Relevant Operating Instructions:

[1] TA-BL/P Commissioning and Set-up Instructions from TAE
[2] TAE "Drive Administrator" PC user software for brushless direct current motors
[3] Profibus, Profibus profile, profile for speed-variable drives, PROFIDRIVE Order No. from Profibus user organisation.

In principle, electronic devices are not failure-proof. The user is responsible for ensuring that the drive unit is maintained in a safe condition in the event of a device failure.

1.2 Specifications and regulations

Please observe the general installation information for electrical installations:

VDE0100 Specification for the installation of power systems with a nominal voltage of up to 1000V.

VDE0113 Specification for electrical equipment on machining and processing systems.

VDE0160 Equipping power systems with electronic devices.

If the control unit is used in special areas of application, then the required Accident Prevention Guidelines and standards must be observed.

2 General

Following production, all units undergo a full functional test as well as a 200 hour endurance test. These units are subjected to another complete functional test prior to delivery.
These measures are used to ensure that only perfect units are shipped out to customers.
Under normal circumstances no malfunctions are expected, provided the drive dimensioning is correct and the information contained in the Operating Instructions are followed. However, if a defect should be discovered, please contact one of our representatives or get in touch with us directly.

2.1 Target group

These Operating Instructions are directed at the user with the appropriate qualification to ensure this unit is handled properly and professionally.

2.2 Liability

The user should not attempt to rectify any faults within the unit. Non-authorised interventions will lead to all guarantee claims against TAE becoming null and void.

Unser intervention, e.g. for repair purposes, lead to an exclusion of all liability on behalf of TAE.

If you have any doubts concerning the cause of the fault or its rectification, please notify TAE, to avoid further damages.

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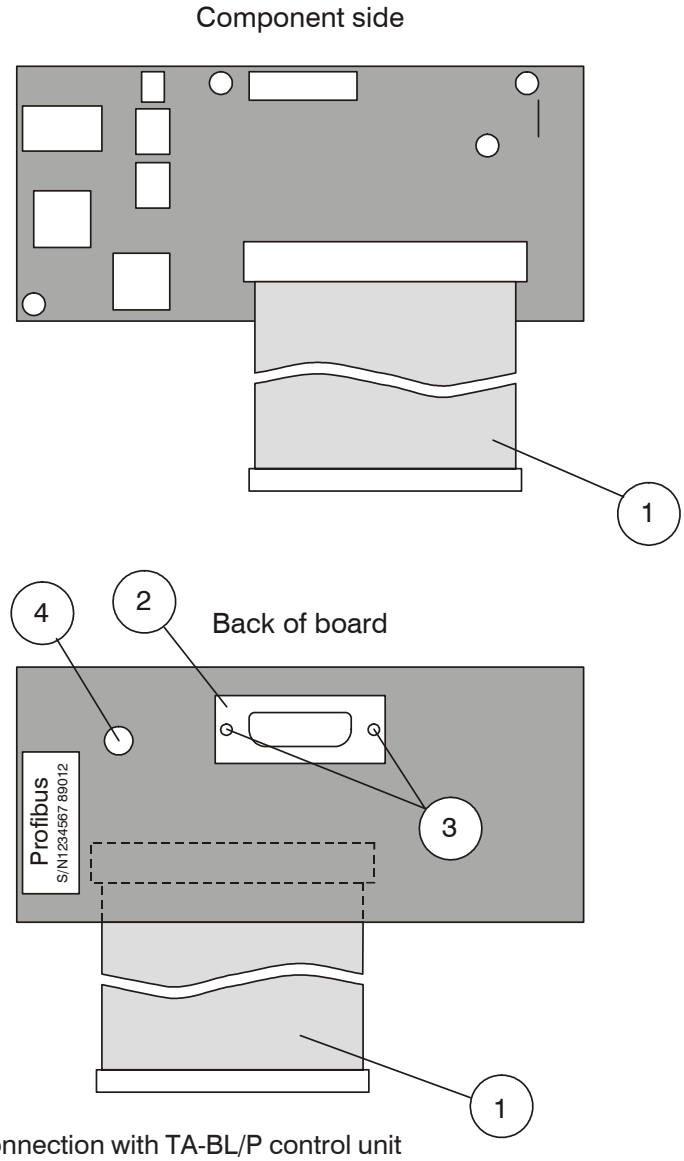
2.3 Identification

The Profibus board is an expansion board which is used for brushless, type TA-BL/P direct current motors in control units.

Item number of the Profibus optional board:

	TA-BL 1.2 to 6.2
29553-2F	TA-BL 4.1 to 6.1
29553-3F	TA-BL 8.1 to 10.1
29553-4F	TA-BL 15.1 to 300.1



① Ribbon cable for connection with TA-BL/P control unit
② 9 core Sub-D jack to connect Profibus
③ Fastening point
④ Data-LED: Communikation OK

3 Product description

3.1 Introduction

The PROFIBUS field bus standard, EN 50170, covers a wide range of applications within automation technology, and ranges from the control and command level to the field level. For use with the speed-variable TA-BL/P drives, only one subset is required, namely the special profile for speed-variable drives. This special Profibus profile was approved by Expert Committee 5 (Profidrive) of the Profibus Nutzerorganisation e.V. (Profibus User Organisation) in September 1997 and is based on the Profibus-DP protocol.

3.2 Purpose of application

The options board makes it possible to interlink the programmable type TA-BL/P control unit with a Profibus-DP network. Control units can be controlled and programmed with the help of the option board.

Interfacing to a Profibus-DP network occurs via a 9 core Sub-D jack.

The Profibus option board supports the following functions:

- Transmission speeds from 9.6 kBaud to 12 MBaud
- Changing the transmission speed via the Master (Auto-Baud funktion)
- Freeze and Sync Modes
- Repeater Control Signal

If the options board is addressed a data transfer takes place, then this is displayed by the yellow “data“ LED on the Profibus board.

3.3 Description of function

The Profibus options board allows the operation of TA-BL/P control units on a Profibus-DP communication bus. The entire data exchange between the Profibus board and an external controller is based on Profibus user organisation conventions (Profibus Nutzerorganisation).
Detailed information concerning the profile for speed-variable drives is supplied in Section 1.1, Item[3].
A total of five various PPO types (PPO = Parameter - Process data - Objects) has been defined by the Profibus user organisation. PPO types 1 to 5 are supported.

The best type for you to use depends on the available address range (e.g. the SPC), the maximum permitted cycle times, the number of stations and naturally your control concept.

With all PPO types, the control word (STW), the main rated value (HSW), the status word (STW) and the main actual value (HIW) are transmitted with every cycle. This data is also called the Process Data (PZD). The process data is used to control the drive. Every word has a length of 16 bits = 2 Bytes.

In PPO types 1, 2 and 5, four additional words are also transmitted which are used for programming. These are the parameter identifier (PKE), the subindex (IND) and the parameter value (PWE). The parameter identifier (PKE) establishes which action is to be performed (z.B. read or write parameters) and which parameter (parameter number) is involved. This data is known as the Parameter Identifier Values (PKW).

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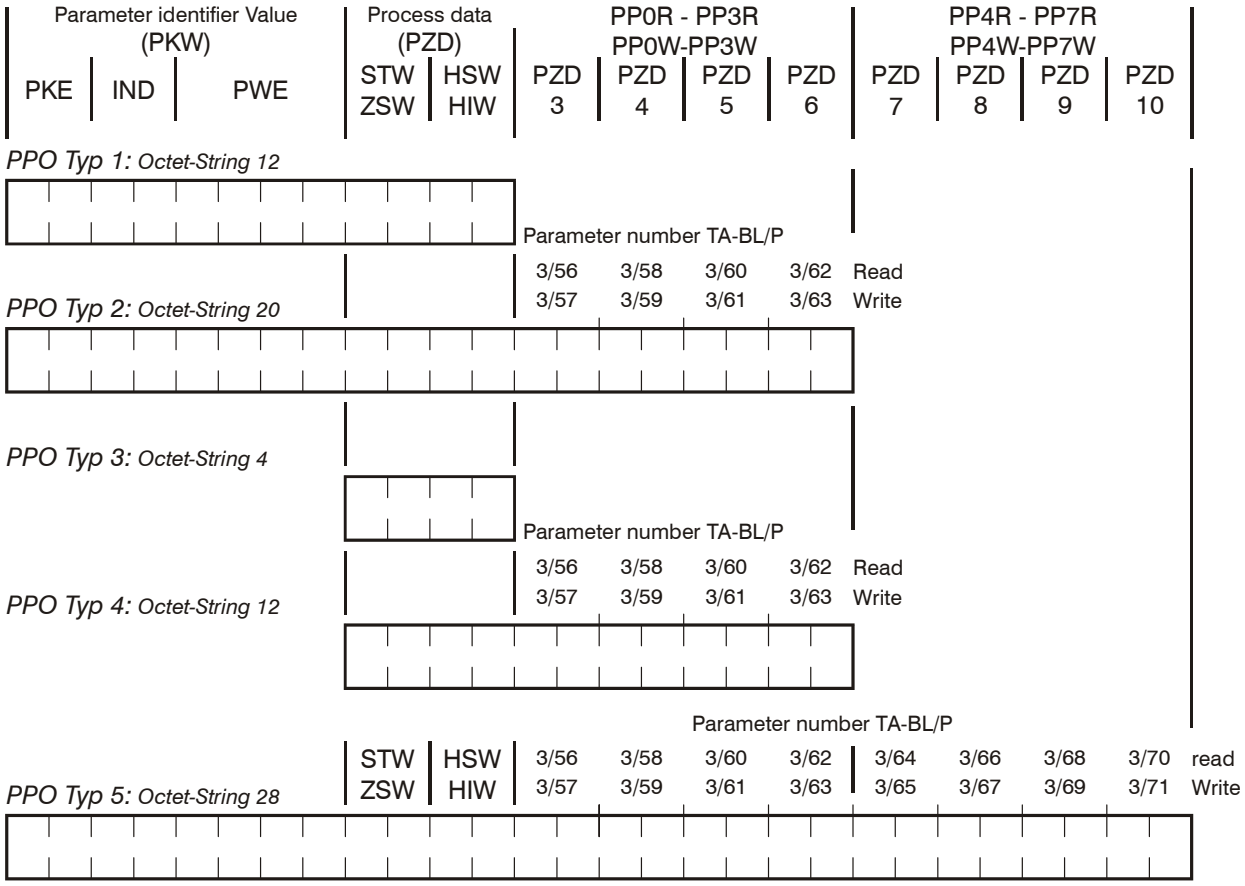
Type 3 and 4 PPO are strictly process data objects (PZDO) for applications that will not work without cyclic parameter editing.
The parameter identifier value (PKW) is used for parameterisation and for reading off actual parameter values. This can also take place on-line during the operation.

In type 2, 4 and 5 PPO, the process data (PZD) is also transforted to and from the drive. In PPO types 2 and 4, the process data are transmitted via PP0W/PP0R to PP3W/PP3R and via PP0W/PP0R to PP7W/PP7R in process type 5.

The following shows a diagram of the structure of PPOs of types 1 to 5:



PKW: Parameter Identifier Value
PZD: Process data
PKE: Parameter identifier (1st and 2nd Octet)
IND: Subindex (3rd Octet), 4th Octet is reserved
PWE: Parameter value (5th to 8th Octet)
STW: Control word
ZSW: Status word
HSW: Main rated value
HIW: Main actual value

The following table shows the assigned control word (STW) and the status word (ZSW), which form process data (PZD) together with the main set point (HSW) and the main actual value (HIW).

Control word: (STW)

Bit	Description	Comment
0	On	0: Stop
1	N_AUS2	not supported, must be 1
2	N_AUS3	not supported, must be 1
3	Enable operation	0: Run down as programmed
4	restrict_N_HLG	0: Set ramp generator output to 0
5	stop_N_HLG	not supported, must be 1
6	Approve set point	0: Set ramp generator input to 0
7	Acknowledge	Fault, reset
8	Inching 1	not in use
9	Inching 2	not in use
10	Controlled by Profibus	1: Controlled by Profibus
11-15	not in use	

Status word (ZSW)

Bit	Description	Comment
0	Unit is ready to switch on	Electronic voltage present
1	Unit is ready to operate	Intermediate circuit loaded
2	Approve operation	Approve final stage
3	Error	0: no fault
4	No AUS2	not in use
5	No AUS3	not in use
6	Start-up lock-out	not in use
7	Warning	0: no warning
8	n_{soll}/n_{ist} is within tolerance range	within tolerance range
9	Controlled through Profibus	0: Operation via control terminals
10	Req'd speed attained	0: Actual speed does not match set point speed
11-15	not in use	

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The structure of the Parameter Identifier Value, which is used for parameterisation via the Profibus, is described below.
The parameter identifier value (PKW) is derived from the job or response identifier (AK) and the parameter number (PNU). The job identifier identifies the action to be performed, e.g. read or write parameters, and the parameter number of the Profibus parameter number for the parameter. A list of all Profibus parameter numbers can be found in the Parameter Table for Profibus Addresses contained in Section 5.2.

The following is a listing of common job identifiers and list of posible error identifiers in the event of incorrect transmission that would be indicated in the event of a fault instead of the parameter value (PWE).

Job identifier

Job Identifier	Function	Response identifier	
		Positive	Negative
1	Request parameter	1	7
2	change parameter	1	7

Response identifier in an event of a fault *(Message during PWE)*

Error No.	Cause of error
0	unauthorised parameter number (PNU)
12	Access not permitted, incorrect password for acess to Group 5
103	Request not supported

4 Commissioning of the Profibus options board

The device address for the Profibus adapter must be manually set using the "PG3000" Operator unit or the "Drive Administrator" PC operator software within the "ADR" parameter (Mode 4, Parameter 6) of the TA-BL/P control unit. The Master is now notified that there is a new participant on the Profibus. The GSD file must be installed to operate the Profibus board.
The GSD file is a driver file containing information about the Profibus adapter.

You can obtain the GSD file from one of the following sources.

- Through the Internet via our Homepage
- On-Line via the mailbox for the Profibus Interface Center in Fürth (Germany) via telephone number (+49 911/737972)
- By mail on disk from our Head Office. The address can be found on Page 2 of these Operating Instructions.

You must now decide upon one of the types of Parameter - Process data - Object (PPO) types 1 to 5 (also refer to Section 3.3, Description of function). The Master will then be able to communicate with the control unit. The yellow "data LED" will signalise a proper exchange of data.

5 Communikation with the Profibus-DP

The parameters for Group 4 may only be changed by specialist personnel. Paraeter group 5 may only be changed by TAE personnel (TAE in-house password).

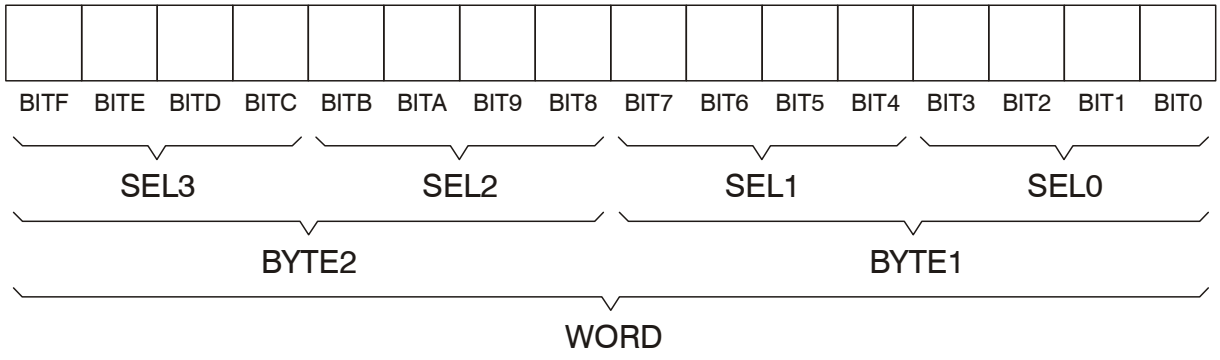
5.1 Description of the Parameter Table

- ❍ The parameters for Group 0 are ‘read only‘.
- ❍ The parameters for Groups 1 to 5 are to be used to parameterise the TAE TA-BL/P controller series.
- ❍ The parameters for Groups 8 and 9 can only be accessed via a PROFIBUS.

- ❑ Parameter groups 0 through 5, 8 and 9 can only be changed or requested via your Profibus number (Parameter address for the PROFIBUS).
- ❑ The following control data has been defined with regard to the word lengths:

Represented values:

1 bit word = 1BIT
4 bit word = 1SEL
8 bit word = 1BYTE
16 bit word = 1WORD



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5.2 List of Parameters

5.2.1 Sorting after TAE Parameter-No.

Profibus-No. Adress	Data size	TAE Parameter-No.	Display	Parameter name	Value Range	Initial Value	at Firmware Version
82	WORD	0/01	Speed	Actual Speed	0 - 9999	0 min^{-1}	300
84	WORD	0/02	Curr	Actual Current 30000 ≙ 3000.0A	0 - 30000	0	300
79	WORD	0/03	LSpd	Actual Line Speed	0 - 30000	0	300
95	WORD	0/04	LSpd1	Actual Line Speed 30000 ≙ 3000.0	0 - 30000	0	300
96	WORD	0/05	LSpd2	Actual Line Speed 30000 ≙ 300.00	0 - 30000	0	300
24	WORD	0/06	PosLo	Actual Position (low)	0 - 65535	0	300
25	WORD	0/07	PosHi	Actual Position (high) x65536	0 - 65535	0	300
27	WORD	0/08	Lead	Leading Speed	0 - 9999	0 min^{-1}	300
37	WORD	0/09	SW	Software Version	0 - 64000	0	300
40	WORD	0/10	BusV	BusVoltage	0 - 9999	0 V	300
32	WORD	0/11	ARVSP	Actual speed rated value	0 - 9999	0 min^{-1}	300
64	WORD	1/02	MAXS	Maximum Speed	100 - 6000	1000 min^{-1}	300
66	WORD	1/03	MINS	Minimum Speed	0 - 6000	0 min^{-1}	300
2	WORD	1/04	PRST1	Preset Speed (or Ratio) 1	0 - 64000	0	300
3	WORD	1/05	PRST2	Preset Speed (or Ratio) 2	0 - 64000	0	300
4	WORD	1/06	PRST3	Preset Speed (or Ratio) 3	0 - 64000	0	300
60	WORD	1/07	IL1Q	Current Limit 1st Quadrant (100 ≙ 10.0A)	1 - Imax [1)]	Imax [1)]	300
74	BIT 0	1/08	4Qen	4Q Operation Enabled	0 or 1	0	300
62	WORD	1/09	IL4Q	Current Limit 4th Quadrant (100 ≙ 10.0A)	1 - Imax [1)]	Imax [1)]	300
48	WORD	1/10	RAMP	Select Ramp Mode (Jump, Lin., s)	0 - 2	1	315
56	WORD	1/11	ACCEL	Acceleration Time 5999 ≙ 599,9s	1 - 5999	100	300
58	WORD	1/12	DECEL	Deceleration Time 5999 ≙ 599,9s	1 - 5999	100	300
74	BIT 5	1/13	LeaDe	Leaded Deceleration	0 or 1	1	300
74	BIT 4	1/14	BraDe	Wait With HOLD for 0.5s Using a Brake	0 or 1	0	300
74	BIT 6	1/15	DelOf	Turn Regulator off if Analog Input is 0	0 or 1	0	300
50	WORD	1/16	P_AMP	Proportional Amplifier for Speed	0 - 100	3%	300
52	WORD	1/17	I_AMP	Integral Amplifier for Speed	0 - 100	2%	300
47	WORD	1/18	YI0P	Limit Integral Part for Speed	1 - 255	255 min^{-1}	300
76	BIT 1	1/19	Save	Save Parameter to EEPROM	0 or 1	0	300
76	BIT 2	2/02	Stdrd	Load Standard Parameter	0 or 1	0	300
166	WORD	2/03	RATSP	Motor rated Speed (BL-N-motors lower Speed)	0 - 6000	0 min^{-1}	300
164	WORD	2/04	POLES	Poles of Motor	2 - 32	0	300
72	WORD	2/05	PPR	Pulses per Revolution x4	1 - 9999	0	300
160	WORD	2/06	MRACU	Motor Rated Current 30000 ≙ 3000.0A	1 - 30000	0	300
161	WORD	2/07	MPECU	Motor Peak Current (Limits IL1Q/IL4Q) 30000 ≙ 3000.0A	1 - 30000	0	300
67	WORD	2/08	OCTIM	Over current time (for n < 300 rpm)	0 - 200	80 s	300
120	WORD	2/09	SETAB	Select Ramp A or B	0 - 15	0	300
10	WORD	2/10	ACC_B	Acceleration Time B 5999 ≙ 599.9s	1 - 5999	1800	300
11	WORD	2/11	DEC_B	Deceleration Time B 5999 ≙ 599.9s	1 - 5999	1800	300
74	BIT E	2/12	PhAdv	Phase Advance	0 or 1	0	300
165	WORD	2/13	PHADR	Phase Advance at Rated Speed	0 - 99	30%	300
167	WORD	2/14	PHADM	Phase Advance at Max Speed	0 - 99	50%	300
135	WORD	2/15	INCR	Speed + Increase Speed	0 - 9999	0	300
136	WORD	2/16	DECR	Speed - Decrease Speed	0 - 9999	0	300
12	WORD	2/17	FINE	Fine Adjustment, 1/4 RPM	0 - 3	0	300
59	WORD	2/18	SWTR	Switch at this Speed	10 - 9999	100 min^{-1}	300
61	WORD	2/19	IL20	Signalize Current Limit after this time (9999 ≙ 999.9s)	0 - 9999	1	300
74	BIT 7	2/20	CodO	Fixed Function for Digital Outputs	0 or 1	0	300
74	BIT 2	2/21	DirAn	Select Revers by Negative rated value	0 or 1	0	300
74	BIT A	2/22	4mA	Analoginput 1: 0-20mA / 4-20mA	0 or 1	0	300
54	WORD	2/23	CLT1	Torque Limit Time Constant 30000 ≙ 300.00s	1 - 30000	1	321
63	WORD	2/24	UVTIM	Undervoltage Time 30000 ≙ 3000.0s	0 - 30000	1	325
69	WORD	2/25	OV_4Q	Overvoltage 4Q	100 - 1000	900V	325
216	WORD	2/26	PTQL	Programable Torque limit 1000 ≙ 100.0%	0 - 1000	1000	412
219	WORD	2/27	MPTUL	Motorpoti transmission limit (UP)	0 - 100	0%	414
220	WORD	2/28	MPTDL	Motorpoti transmission limit (DOWN)	0 - 100	0%	414
224	WORD	2/29	DEC_C	Deceleration Time C 5999 ≙ 599.9s	1 - 5999	1800	417
6	WORD	2/30	PHMAX	Maximum rated-Position x10000	0 - 65535	0	417
7	WORD	2/31	PLMAX	Maximum rated-Position x1	0 - 65535	0	417
8	WORD	2/32	PHIGH	Rated-Position x10000	0 - 65535	0	417
9	WORD	2/33	PLOW	Rated-Position x1	0 - 65535	0	417
221	WORD	2/34	MPOSP	Position maximum speed	0 - 6000	100 min^{-1}	417

Sorting after TAE Parameter-No.

Profibus-No. Adress	Data size	TAE Parameter-No.	Display	Parameter name	Value Range	Initial Value	at Firmware Version
222	WORD	2/35	WINPO	position window (pulses/revolution x4)	1 - 255	30	417
223	WORD	2/36	KPP_P	proportional Amplifier for Positioning	0 - 255	75	417
225	WORD	2/37	ADJBC	Adjust start of breaking curve 1000 ≙ 100.0s	1 - 1000	10	417
183	WORD	3/02	SRES	Input Selection Reset	0 - 13	2	300
170	WORD	3/03	SRUN	Input Selection Run	0 - 13	3	300
174	WORD	3/04	SPRS1	Input Selection Preset 1	0 - 13	4	300
171	WORD	3/05	SDIR	Input Selection Direction (Master)	0 - 13	5	300
172	WORD	3/06	SHOLD	Input Selection Hold	0 - 13	6	300
175	WORD	3/07	SPRS2	Input Selection Preset 2	0 - 13	7	300
178	WORD	3/08	SMOT	Input Selection Motorpoti	0 - 13	8	300
176	WORD	3/09	SUP	Input Selection Motorpoti Up	0 - 13	9	300
177	WORD	3/10	SDOWN	Input Selection Motorpoti Down	0 - 13	10	300
180	WORD	3/11	SINC	Input Selection Increase	0 - 13	11	300
181	WORD	3/12	SDEC	Input Selection Decrease	0 - 13	12	300
182	WORD	3/13	SSLAV	Input Selection Slave	0 - 13	13	300
184	WORD	3/14	SSPER	Input Selection Suppress speed error	0 - 13	0	300
185	WORD	3/15	SSYNC	Input Selection Synchron, Angle or Speed	0 - 13	1	300
189	WORD	3/16	SANG	Input Selection Angle Correction	0 - 13	0	300
186	WORD	3/17	SICW	Input Selection Inhibit cw	0 - 13	0	300
187	WORD	3/18	SICCW	Input Selection Inhibit ccw	0 - 13	0	300
188	WORD	3/19	SSETB	Input Selection Set Ramp B	0 - 13	0	300
190	WORD	3/20	SLDIR	Input Selection Slave Direction	0 - 13	0	300
191	WORD	3/21	STQL	Input Selection Torque limit	0 - 13	0	333
192	WORD	3/22	SSER	Input Selection Set External Error	0 - 13	0	333
193	WORD	3/23	SSDC	Input Selection Set Disable Controller	0 - 13	0	300
194	WORD	3/24	STLAP	Input Selection T-Limit Ana/Prog	0 - 13	0	300
108	BIT 2	3/25	IPL2	Input Polarity TE. 2	0 or 1	1	300
108	BIT 3	3/26	IPL3	Input Polarity TE. 3	0 or 1	1	300
108	BIT 4	3/27	IPL4	Input Polarity TE. 4	0 or 1	1	300
108	BIT 5	3/28	IPL5	Input Polarity TE. 5	0 or 1	1	300
108	BIT 6	3/29	IPL6	Input Polarity TE. 6	0 or 1	1	300
108	BIT 7	3/30	IPL7	Input Polarity TE. 7	0 or 1	1	300
108	BIT 8	3/31	IPL8	Input Polarity TE. 8	0 or 1	1	300
108	BIT 9	3/32	IPL9	Input Polarity TE. 9	0 or 1	1	300
108	BIT A	3/33	IPL10	Input Polarity TE. 10	0 or 1	1	300
108	BIT B	3/34	IPL11	Input Polarity TE. 11	0 or 1	1	300
108	BIT C	3/35	IPL12	Input Polarity TE. 12	0 or 1	1	300
108	BIT D	3/36	IPL13	Input Polarity TE. 13	0 or 1	1	300
100	WORD	3/37	SD48	Output Selection Terminal 48	0 - 13	4	300
102	WORD	3/38	SD47	Output Selection Terminal 47	0 - 13	1	300
103	WORD	3/39	SOK45	Output Selection Terminal 45	0 - 13	7	300
105	WORD	3/40	SOK44	Output Selection Terminal 44	0 - 13	2	300
101	WORD	3/41	SOK43	Output Selection Terminal 43	0 - 13	6	300
107	BIT 2	3/42	PD48	Output Polarity Te.48	0 or 1	1	300
107	BIT 4	3/43	PD47	Output Polarity Te.47	0 or 1	1	300
107	BIT 5	3/44	POK45	Output Polarity Te.45	0 or 1	1	300
107	BIT 6	3/45	POK44	Output Polarity Te.44	0 or 1	0	300
107	BIT 3	3/46	POK43	Output Polarity Te.43	0 or 1	1	300
121	WORD	3/47	AOSEL	Source of Analog Output	0 - 15	1	300
122	WORD	3/48	RSEL1	Src. of Ref. Value with Ramp	0 - 15	1	300
123	WORD	3/49	RSEL2	Src. of Ref. Value without Ramp	0 - 15	0	300
124	WORD	3/50	RSEL3	Rated value, Torque limit	0 - 15	0	300
125	WORD	3/51	RSEL4	Source of Position maximum speed	0 - 15	0	300
126	WORD	3/52	RSEL5	Source of Reference (Reserved)	0 - 15	0	300
127	WORD	3/53	RSEL6	Source of Reference (Reserved)	0 - 15	0	300
74	BIT 3	3/54	TRQEN	Enable Torque regulation	0 or 1	0	402
74	BIT B	3/55	KLXEN	Motor Klixon active	0 or 1	0	402
200	BYTE 1	3/56	PP0R	Profibus Parameter 0 read	0 - 255	0	402
201	BYTE 2	3/57	PP0W	Profibus Parameter 0 write	0 - 255	0	402
202	BYTE 1	3/58	PP1R	Profibus Parameter 1 read	0 - 255	0	402
203	BYTE 2	3/59	PP1W	Profibus Parameter 1 write	0 - 255	0	402
204	BYTE 1	3/60	PP2R	Profibus Parameter 2 read	0 - 255	0	402

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Sorting after TAE Parameter-No.

Profibus-No. Adress	Data size	TAE Parameter-No.	Display	Parameter name	Value Range	Initial Value	at Firmware Version
205	BYTE 2	3/61	PP2W	Profibus Parameter 2 write	0 - 255	0	402
206	BYTE 1	3/62	PP3R	Profibus Parameter 3 read	0 - 255	0	402
207	BYTE 2	3/63	PP3W	Profibus Parameter 3 write	0 - 255	0	402
208	BYTE 1	3/64	PP4R	Profibus Parameter 4 read	0 - 255	0	402
209	BYTE 2	3/65	PP4W	Profibus Parameter 4 write	0 - 255	0	402
210	BYTE 1	3/66	PP5R	Profibus Parameter 5 read	0 - 255	0	402
211	BYTE 2	3/67	PP5W	Profibus Parameter 5 write	0 - 255	0	402
212	BYTE 1	3/68	PP6R	Profibus Parameter 6 read	0 - 255	0	402
213	BYTE 2	3/69	PP6W	Profibus Parameter 6 write	0 - 255	0	402
214	BYTE 1	3/70	PP7R	Profibus Parameter 7 read	0 - 255	0	402
215	BYTE 2	3/71	PP7W	Profibus Parameter 7 write	0 - 255	0	402
74	BIT 1	3/72	CAOP1	Change analog output polarity	0 or 1	0	406
74	BIT 8	3/73	POSEN	Enable position sensor	0 or 1	0	406
217	BIT 8	3/74	STPOS	Go to 1st position (Command)	0 - 13	0	417
217	BIT 9	3/75	BRCUR	Type of Break curve Ramp/Scurve (Command)	0 - 13	0	417
217	BIT C	3/76	REPOS	Reset Position (Command)	0 - 13	0	417
217	BIT D	3/77	REFPO	Define direction of position (Command)	0 - 13	0	417
217	BIT E	3/78	GSPOS	Go to Start position (Command)	0 - 13	0	417
217	BIT 7	3/79	ENPOS	Enable positioning (Command)	0 - 13	0	417
217	BIT 5	3/80	INVCD	Invert Counter dir when Pos-Off (Command)	0 - 13	0	423
86	BIT 5	3/81	F_Jog	Dig. Speed Rated Value enable	0 - 13	0	417
75	BIT E	3/82	SMPOT	Save Motorpoti value by Power down	0 - 13	0	431
53	WORD	4/02	CFMAX	Maximum Current Frequency	500 - 18000	6500Hz	300
55	WORD	4/03	CFMIN	Starting Current Frequency	300 - 2500	1000Hz	300
57	WORD	4/04	CREND	Reaching Maximum Frequency here	100 - 800	300 min^{-1}	300
74	BIT C	4/05	Servo	Servo Mode	0 or 1	0	300
51	WORD	4/06	ADR	Device Address for Ser. Interface	1 - 127	1	300
90	WORD	4/07	PW_PA	Password for Changing of Parameters	0 - 999	0	300
91	WORD	4/08	PW_CN	Password for Controlling from PG	0 - 999	111	300
92	WORD	4/09	C_DSP	Select Continuous Display on PG	0 - 15	1	300
93	WORD	4/10	B_DSP	Select Bargraph Display on PG	0 - 15	2	300
94	WORD	4/11	DSP_F	Linespeed Factor/Motor Speed	1 - 9999	1000	300
130	WORD	4/12	TRAN1	Transmission Factor n x Value	1 - 64000	1000	300
131	WORD	4/13	TRAN2	Transmission Factor n / Value	1 - 64000	1000	300
75	BIT 4	4/14	Limit	Limiter (No Accumulation while IL)	0 or 1	1	300
75	BIT D	4/15	AB_CD	Signal AB or Clock/Direction	0 or 1	0	300
132	WORD	4/16	ANCOR	Angle Adjustment	0 - 65535	0	300
133	WORD	4/17	PPR_M	Pulses per Revolution of Master x4	1 - 9999	120	300
134	WORD	4/18	KPSLV	Amp. of Sync. Velocity Regulator	0 - 100	1%	300
138	WORD	4/19	KPAM	Amplifier of Master Accelleration	0 - 100	0	300
137	WORD	4/20	SMOD	Select Slave Mode	0 - 2	1	300
162	WORD	4/21	PULSE	Pulses to end position	1 - 64000	1	300
163	WORD	4/22	CORR	Compensate Sensor Dead Time	0 - 9999	0	300
44	WORD	5/02	ADJRC	Adjust Rated Current	1100 - 2000	1350	325
70	WORD	5/03	RCUR	Rated Current (30000 ≙ 3000.0A)	20 - 30000	1000	300
168	WORD	5/04	COBRE	Commutation Break	10 - 50	10	300
65	WORD	5/05	LINE	Line Voltage	0 - 560	0V	311
42	WORD	5/06	DEVTY	Device Type 3001≙ 300.1	1 - 20000	0	300
43	WORD	5/07	SERNO	Series Number	100 - 65535	0	300
140	BYTE 1	5/08	AI1OF	Offset of Analog Input 1	0 - 255	0	300
141	BYTE 2	5/09	AI1GA	Gain of Analog Input 1	0 - 255	0	300
142	BYTE 1	5/10	AI2OF	Offset of Analog Input 2	0 - 255	0	300
143	BYTE 2	5/11	AI2GA	Gain of Analog Input 2	0 - 255	0	300
144	BYTE 1	5/12	AO_OF	Offset of Analog Output	0 - 255	0	300
145	BYTE 2	5/13	AO_GA	Gain of Analog Output	0 - 255	0	300
146	BYTE 1	5/14	ID_OF	Offset of Current Display	0 - 255	0	300
147	BYTE 2	5/15	ID_GA	Gain of Current Display	0 - 255	0	300
226	WORD	5/16	AJTRC	Adjust Torque regulation curve	0 - 1000	10	422
36	WORD	5/17	W_Hour	Workin Hours	0 - 65535	0h	300
217	WORD	5/18	CONT2	Control2	0 - 65535	0	300
76	WORD	5/19	ADR76	Command_Exec	0 - 65535	0	300
78	WORD	5/20	ADR78	Dat-Command	0 - 65535	0	300

Sorting after TAE Parameter-No.

Profibus-No. Adress	Data size	TAE Parameter-No.	Display	Parameter name	Value Range	Initial Value	at Firmware Version
86	WORD	5/21	ADR86	Command1	0 - 65535	0	300
87	WORD	5/22	ADR87	Pos-Command	0 - 65535	0	300
81	BIT 1	8/02	Klix	Klixon, Overtemp. in Power Stage	0 or 1	0	300
81	BIT 2	8/03	OverV	Overvoltage	0 or 1	0	300
81	BIT 3	8/04	IGBTE	Error in Power Stage Transistor	0 or 1	0	300
81	BIT 4	8/05	UV	Undervoltage	0 or 1	0	300
81	BIT 5	8/06	RiCur	Ripple Current	0 or 1	0	300
81	BIT 6	8/07	MoTmp	Motor Temperatur	0 or 1	0	300
81	BIT 8	8/08	IL20	Current Limit after Preset Time	0 or 1	0	300
81	BIT A	8/09	Hall	Hall Sensor Error (Position)	0 or 1	0	300
81	BIT C	8/10	MoWrn	Motor Temperature Warning	0 or 1	0	300
81	BIT E	8/11	Feedb	Feedback Error	0 or 1	0	300
81	BIT F	8/12	ExtEr	External Error	0 or 1	0	300
83	BIT 0	8/13	OverC	Overcurrent Error	0 or 1	0	300
83	BIT 1	8/14	Speed	Speed > 0	0 or 1	0	300
83	BIT 2	8/15	Error	Common fault	0 or 1	0	300
83	BIT 3	8/16	Msg	Message available	0 or 1	0	300
83	BIT 6	8/17	Charg	BUSS Charging process	0 or 1	0	300
83	BIT 8	8/18	I-Lim	Current Limit	0 or 1	0	300
83	BIT 9	8/19	4Q	4Q, Generator operation	0 or 1	0	300
83	BIT C	8/20	BUSS	BUSS Error (OV, UV, Temp. Ripple)	0 or 1	0	300
83	BIT D	8/21	enabl	Powerstage Enabled (run with ref. speed)	0 or 1	0	300
83	BIT E	8/22	Ready	Ready (BUSS Charged, no Error, Running)	0 or 1	0	300
89	BIT 8	8/23	PLEr	Data in Memory out of Range	0 or 1	0	300
89	BIT B	8/24	ConEr	EEPROM not Connected	0 or 1	0	300
89	BIT D	8/25	R3Er	Cannot Read Data from EEPROM	0 or 1	0	300
89	BIT E	8/26	VerEr	Data not Equal to Data in EPROM	0 or 1	0	300
89	BIT F	8/27	P3Er	Cannot Write Data to EEPROM	0 or 1	0	300
83	BIT B	8/28	MoOvC	Motor Over Current	0 or 1	0	319
76	BIT 0	9/02	Read	Read EEPROM	0 or 1	0	300
68	WORD	9/03	JOGS	Dig. Speed Rated Value	0 - 9999	0 min^{-1}	300
106	BIT 2	9/04	STD1	Output Status of terminal 48	0 or 1	0	300
106	BIT 3	9/05	STOK1	Output Status of terminal 43	0 or 1	0	300
106	BIT 4	9/06	STD2	Output Status of terminal 47	0 or 1	0	300
106	BIT 5	9/07	STOK2	Output Status of terminal 45	0 or 1	0	300
106	BIT 6	9/08	STOK3	Output Status of terminal 44	0 or 1	0	300
109	BIT 2	9/09	IST2	Input Status of terminal 2	0 or 1	0	300
109	BIT 3	9/10	IST3	Input Status of terminal 3	0 or 1	0	300
109	BIT 4	9/11	IST4	Input Status of terminal 4	0 or 1	0	300
109	BIT 5	9/12	IST5	Input Status of terminal 5	0 or 1	0	300
109	BIT 6	9/13	IST6	Input Status of terminal 6	0 or 1	0	300
109	BIT 7	9/14	IST7	Input Status of terminal 7	0 or 1	0	300
109	BIT 8	9/15	IST8	Input Status of terminal 8	0 or 1	0	300
109	BIT 9	9/16	IST9	Input Status of terminal 9	0 or 1	0	300
109	BIT A	9/17	IST10	Input Status of terminal 10	0 or 1	0	300
109	BIT B	9/18	IST11	Input Status of terminal 11	0 or 1	0	300
109	BIT C	9/19	IST12	Input Status of terminal 12	0 or 1	0	300
109	BIT D	9/20	IST13	Input Status of terminal 13	0 or 1	0	300
41	WORD	9/21	CRaCu	Rated Current on Card	0 - 30000	0A	300
86	BIT 0	9/22	Hold	Quick Stop (Command)	0 or 1	0	300
86	BIT 1	9/23	Reset	Error Reset (Command)	0 or 1	0	300
86	BIT 4	9/24	Dir	Coun.clockw.direction (Command)	0 or 1	0	300
86	BIT 5	9/25	Jog	Enable digital rated value (Command)	0 or 1	0	300
86	BIT 6	9/26	Run	Start (Command)	0 or 1	0	300
86	BIT 8	9/27	SER	Set External Error (Command)	0 or 1	0	300
88	BIT 0	9/28	Hold	Quick Stop (Status)	0 or 1	0	300
88	BIT 1	9/29	Reset	Error Reset (Status)	0 or 1	0	300
88	BIT 4	9/30	Dir	Coun.clockw.direction (Status)	0 or 1	0	300
88	BIT 5	9/31	Jog	Digital rated value enabled (Status)	0 or 1	0	300
88	BIT 6	9/32	Run	Start (Status)	0 or 1	0	300
88	BIT 8	9/33	SER	Set External Error (Status)	0 or 1	0	300
87	BIT 0	9/34	Inc	Increase (Command)	0 or 1	0	300

Profibus-DP

Sorting after TAE Parameter-No.

Profibus-No. Adress	Data size	TAE Parameter-No.	Display	Parameter name	Value Range	Initial Value	at Firmware Version
87	BIT 1	9/35	Dec	Decrease (Command)	0 or 1	0	300
87	BIT 2	9/36	Sfber	Suppress feedback error (Command)	0 or 1	0	300
87	BIT 3	9/37	Set_B	Select Accel/Decel B (Command)	0 or 1	0	300
87	BIT 4	9/38	Pres1	Input Preset 1 (Command)	0 or 1	0	300
87	BIT 5	9/39	Pres2	Input Preset 2 (Command)	0 or 1	0	300
87	BIT 6	9/40	Slave	Slave operation (Command)	0 or 1	0	300
87	BIT 7	9/41	TQL	Torque Limit (Command)	0 or 1	0	300
87	BIT 8	9/42	Sync	Syncronise (Command)	0 or 1	0	300
87	BIT 9	9/43	Motpo	Motor potentiometer (Command)	0 or 1	0	300
87	BIT A	9/44	CWIh	cw Rotation Inhibited (Command)	0 or 1	0	300
87	BIT B	9/45	LDir	Reverse Leading Dir (Command)	0 or 1	0	300
87	BIT C	9/46	Up	Up (Motorpoti) (Command)	0 or 1	0	300
87	BIT D	9/47	Down	Down (Motorpoti) (Command)	0 or 1	0	300
87	BIT E	9/48	CCWIh	ccw Rotation Inhibited (Command)	0 or 1	0	300
87	BIT F	9/49	Ang	Angle Correction (Command)	0 or 1	0	300
80	BIT 0	9/50	Inc	Increase (Status)	0 or 1	0	300
80	BIT 1	9/51	Dec	Decrease (Status)	0 or 1	0	300
80	BIT 2	9/52	Sfber	Suppress feedback error (Status)	0 or 1	0	300
80	BIT 3	9/53	Set_B	Select Accel/Decel B (Status)	0 or 1	0	300
80	BIT 4	9/54	Pres1	Input Preset 1 (Status)	0 or 1	0	300
80	BIT 5	9/55	Pres2	Input Preset 2 (Status)	0 or 1	0	300
80	BIT 6	9/56	Slave	Slave operation (Status)	0 or 1	0	300
80	BIT 7	9/57	TQL	Torque Limit (Status)	0 or 1	0	300
80	BIT 8	9/58	Sync	Syncronise (Status)	0 or 1	0	300
80	BIT 9	9/59	Motpo	Motor potentiometer (Status)	0 or 1	0	300
80	BIT A	9/60	CWIh	cw Rotation Inhibited (Status)	0 or 1	0	300
80	BIT B	9/61	LDir	Reverse Leading Dir (Status)	0 or 1	0	300
80	BIT C	9/62	Up	Up (Motorpoti) (Status)	0 or 1	0	300
80	BIT D	9/63	Down	Down (Motorpoti) (Status)	0 or 1	0	300
80	BIT E	9/64	CCWIh	ccw Rotation Inhibited (Status)	0 or 1	0	300
80	BIT F	9/65	Ang	Angle Correction (Status)	0 or 1	0	300
217	BIT 0	9/66	DICON	Set Disable Controller (Command)	0 or 1	0	413
217	BIT 1	9/67	TLAP	Set T-Limit Analog/Prog (Command)	0 or 1	0	413
218	BIT 0	9/68	DICON	Set Disable Controller (Status)	0 or 1	0	413
218	BIT 1	9/69	TLAP	Set T-Limit Analog/Prog (Status)	0 or 1	0	413
218	BIT 2	9/70	POLSR	Leadspeed is reached (Status)	0 or 1	0	417
218	BIT 3	9/71	POSNO	Position is Not Ok (Over) (Status)	0 or 1	0	417
218	BIT 4	9/72	RPOSR	Reference position is reached (Status)	0 or 1	0	417
218	BIT 6	9/73	HLPOS	Hold position in Position controller (Status)	0 or 1	0	417
218	BIT A	9/74	POSOK	Position is Ok (Status)	0 or 1	0	417
218	BIT B	9/75	DMFRQ	Block mater frequence (Status)	0 or 1	0	417
218	BIT 5	9/76	INVCD	Invert Counter dir when Pos-Off (Status)	0 or 1	0	423
74	WORD	9/77	ADR74	Control1	0 - 65535	0	300
75	WORD	9/78	ADR75	Pos Control 1	0 - 65535	0	300
80	WORD	9/79	ADR80	Pos Status 1	0 - 65535	0	300
81	WORD	9/80	ADR81	Error 1	0 - 65535	0	300
83	WORD	9/81	ADR83	Status 2	0 - 65535	0	300
88	WORD	9/82	ADR88	Status 1	0 - 65535	0	300
89	WORD	9/83	ADR89	Error 2	0 - 65535	0	300
106	WORD	9/84	AD106	Dig. Output Status	0 - 65535	0	300
107	WORD	9/85	AD107	Dig. Out Polarity	0 - 65535	0	300
108	WORD	9/86	AD108	Dig. Input Polarity	0 - 65535	0	300
109	WORD	9/87	AD109	Dig. Input Status	0 - 65535	0	300
218	WORD	9/88	AD218	Control2 Status	0 - 65535	0	413
29	WORD	9/89	TEST1	O_TEST 1	0 - 65535	0	300
30	WORD	9/90	TEST2	O_TEST 2	0 - 65535	0	300
33	WORD	9/91	TEST3	O_TEST 3	0 - 65535	0	300
34	WORD	9/92	TEST4	O_TEST 4	0 - 65535	0	300
35	WORD	9/93	R_HOUR	Operation time since Power UP	0 - 65535	0	300
13	WORD	9/94	ADAPT1	N_Soll_Adapt 1	0 - 65535	0	417
14	WORD	9/95	ADAPT2	N_Soll_Adapt 2	0 - 65535	0	417

5.2.2 Sorting after Profibus-No.

Profibus-No. Adress	Data size	TAE Parameter-No.	Display	Parameter name	Value Range	Initial Value	at Firmware Version
2	WORD	1/04	PRST1	Preset Speed (or Ratio) 1	0 - 64000	0	300
3	WORD	1/05	PRST2	Preset Speed (or Ratio) 2	0 - 64000	0	300
4	WORD	1/06	PRST3	Preset Speed (or Ratio) 3	0 - 64000	0	300
6	WORD	2/30	PHMAX	Maximum rated-Position x10000	0 - 65535	0	417
7	WORD	2/31	PLMAX	Maximum rated-Position x1	0 - 65535	0	417
8	WORD	2/32	PHIGH	Rated-Position x10000	0 - 65535	0	417
9	WORD	2/33	PLOW	Rated-Position x1	0 - 65535	0	417
10	WORD	2/10	ACC_B	Acceleration Time B 5999 ≙ 599.9s	1 - 5999	1800	300
11	WORD	2/11	DEC_B	Deceleration Time B 5999 ≙ 599.9s	1 - 5999	1800	300
12	WORD	2/17	FINE	Fine Adjustment, 1/4 RPM	0 - 3	0	300
13	WORD	9/94	ADAPT1	N_Soll_Adapt 1	0 - 65535	0	417
14	WORD	9/95	ADAPT2	N_Soll_Adapt 2	0 - 65535	0	417
24	WORD	0/06	PosLo	Actual Position (low)	0 - 65535	0	300
25	WORD	0/07	PosHi	Actual Position (high) x65536	0 - 65535	0	300
27	WORD	0/08	Lead	Leading Speed	0 - 9999	0 min^{-1}	300
29	WORD	9/89	TEST1	O_TEST 1	0 - 65535	0	300
30	WORD	9/90	TEST2	O_TEST 2	0 - 65535	0	300
32	WORD	0/11	ARVSP	Actual speed rated value	0 - 9999	0 min^{-1}	300
33	WORD	9/91	TEST3	O_TEST 3	0 - 65535	0	300
34	WORD	9/92	TEST4	O_TEST 4	0 - 65535	0	300
35	WORD	9/93	R_HOUR	Operation time since Power UP	0 - 65535	0	300
36	WORD	5/17	W_Hour	Workin Hours	0 - 65535	0h	300
37	WORD	0/09	SW	Software Version	0 - 64000	0	300
40	WORD	0/10	BusV	BusVoltage	0 - 9999	0 V	300
41	WORD	9/21	CRaCu	Rated Current on Card	0 - 30000	0A	300
42	WORD	5/06	DEVTY	Device Type 3001≙ 300.1	1 - 20000	0	300
43	WORD	5/07	SERNO	Series Number	100 - 65535	0	300
44	WORD	5/02	ADJRC	Adjust Rated Current	1100 - 2000	1350	325
47	WORD	1/18	YI0P	Limit Integral Part for Speed	1 - 255	255 min^{-1}	300
48	WORD	1/10	RAMP	Select Ramp Mode (Jump, Lin., s)	0 - 2	1	315
50	WORD	1/16	P_AMP	Proportional Amplifier for Speed	0 - 100	3%	300
51	WORD	4/06	ADR	Device Address for Ser. Interface	1 - 127	1	300
52	WORD	1/17	I_AMP	Integral Amplifier for Speed	0 - 100	2%	300
53	WORD	4/02	CFMAX	Maximum Current Frequency	500 - 18000	6500Hz	300
54	WORD	2/23	CLT1	Torque Limit Time Constant 30000 ≙ 300.00s	1 - 30000	1	321
55	WORD	4/03	CFMIN	Starting Current Frequency	300 - 2500	1000Hz	300
56	WORD	1/11	ACCEL	Acceleration Time 5999 ≙ 599,9s	1 - 5999	100	300
57	WORD	4/04	CREND	Reaching Maximum Frequency here	100 - 800	300 min^{-1}	300
58	WORD	1/12	DECEL	Deceleration Time 5999 ≙ 599,9s	1 - 5999	100	300
59	WORD	2/18	SWTR	Switch at this Speed	10 - 9999	100 min^{-1}	300
60	WORD	1/07	IL1Q	Current Limit 1st Quadrant (100 ≙ 10.0A)	1 - Imax [1)]	Imax [1)]	300
61	WORD	2/19	IL20	Signalize Current Limit after this time (9999 ≙ 999.9s)	0 - 9999	1	300
62	WORD	1/09	IL4Q	Current Limit 4th Quadrant (100 ≙ 10.0A)	1 - Imax [1)]	Imax [1)]	300
63	WORD	2/24	UVTIM	Undervoltage Time 30000 ≙ 3000.0s	0 - 30000	1	325
64	WORD	1/02	MAXS	Maximum Speed	100 - 6000	1000 min^{-1}	300
65	WORD	5/05	LINE	Line Voltage	0 - 560	0V	311
66	WORD	1/03	MINS	Minimum Speed	0 - 6000	0 min^{-1}	300
67	WORD	2/08	OCTIM	Over current time (for n < 300 rpm)	0 - 200	80 s	300
68	WORD	9/03	JOGS	Dig. Speed Rated Value	0 - 9999	0 min^{-1}	300
69	WORD	2/25	OV_4Q	Overvoltage 4Q	100 - 1000	900V	325
70	WORD	5/03	RCUR	Rated Current (30000 ≙ 3000.0A)	20 - 30000	1000	300
72	WORD	2/05	PPR	Pulses per Revolution x4	1 - 9999	0	300
74	BIT 0	1/08	4Qen	4Q Operation Enabled	0 or 1	0	300
74	BIT 5	1/13	LeaDe	Leaded Deceleration	0 or 1	1	300
74	BIT 4	1/14	BraDe	Wait With HOLD for 0.5s Using a Brake	0 or 1	0	300
74	BIT 6	1/15	DelOf	Turn Regulator off if Analog Input is 0	0 or 1	0	300
74	BIT E	2/12	PhAdv	Phase Advance	0 or 1	0	300
74	BIT 7	2/20	CodO	Fixed Function for Digital Outputs	0 or 1	0	300
74	BIT 2	2/21	DirAn	Select Revers by Negative rated value	0 or 1	0	300
74	BIT A	2/22	4mA	Analoginput 1: 0-20mA / 4-20mA	0 or 1	0	300
74	BIT 3	3/54	TRQEN	Enable Torque regulation	0 or 1	0	402
74	BIT B	3/55	KLXEN	Motor Klixon active	0 or 1	0	402

Profibus-DP

Sorting after Profibus-No.

Profibus-No. Adress	Data size	TAE Parameter-No.	Display	Parameter name	Value Range	Initial Value	at Firmware Version
74	BIT 1	3/72	CAOP1	Change analog output polarity	0 or 1	0	406
74	BIT 8	3/73	POSEN	Enable position sensor	0 or 1	0	406
74	BIT C	4/05	Servo	Servo Mode	0 or 1	0	300
74	WORD	9/77	ADR74	Control1	0 - 65535	0	300
75	BIT E	3/82	SMPOT	Save Motorpoti value by Power down	0 - 13	0	431
75	BIT 4	4/14	Limit	Limiter (No Accumulation while IL)	0 or 1	1	300
75	BIT D	4/15	AB_CD	Signal AB or Clock/Direction	0 or 1	0	300
75	WORD	9/78	ADR75	Pos Control 1	0 - 65535	0	300
76	BIT 1	1/19	Save	Save Parameter to EEPROM	0 or 1	0	300
76	BIT 2	2/02	Stdrd	Load Standard Parameter	0 or 1	0	300
76	WORD	5/19	ADR76	Command_Exec	0 - 65535	0	300
76	BIT 0	9/02	Read	Read EEPROM	0 or 1	0	300
78	WORD	5/20	ADR78	Dat-Command	0 - 65535	0	300
79	WORD	0/03	LSpd	Actual Line Speed	0 - 30000	0	300
80	BIT 0	9/50	Inc	Increase (Status)	0 or 1	0	300
80	BIT 1	9/51	Dec	Decrease (Status)	0 or 1	0	300
80	BIT 2	9/52	Sfber	Suppress feedback error (Status)	0 or 1	0	300
80	BIT 3	9/53	Set_B	Select Accel/Decel B (Status)	0 or 1	0	300
80	BIT 4	9/54	Pres1	Input Preset 1 (Status)	0 or 1	0	300
80	BIT 5	9/55	Pres2	Input Preset 2 (Status)	0 or 1	0	300
80	BIT 6	9/56	Slave	Slave operation (Status)	0 or 1	0	300
80	BIT 7	9/57	TQL	Torque Limit (Status)	0 or 1	0	300
80	BIT 8	9/58	Sync	Syncronise (Status)	0 or 1	0	300
80	BIT 9	9/59	Motpo	Motor potentiometer (Status)	0 or 1	0	300
80	BIT A	9/60	CWlh	cw Rotation Inhibited (Status)	0 or 1	0	300
80	BIT B	9/61	LDir	Reverse Leading Dir (Status)	0 or 1	0	300
80	BIT C	9/62	Up	Up (Motorpoti) (Status)	0 or 1	0	300
80	BIT D	9/63	Down	Down (Motorpoti) (Status)	0 or 1	0	300
80	BIT E	9/64	CCWlh	ccw Rotation Inhibited (Status)	0 or 1	0	300
80	BIT F	9/65	Ang	Angle Correction (Status)	0 or 1	0	300
80	WORD	9/79	ADR80	Pos Status 1	0 - 65535	0	300
81	BIT 1	8/02	Klix	Klixon, Overtemp. in Power Stage	0 or 1	0	300
81	BIT 2	8/03	OverV	Overvoltage	0 or 1	0	300
81	BIT 3	8/04	IGBTE	Error in Power Stage Transistor	0 or 1	0	300
81	BIT 4	8/05	UV	Undervoltage	0 or 1	0	300
81	BIT 5	8/06	RiCur	Ripple Current	0 or 1	0	300
81	BIT 6	8/07	MoTmp	Motor Temperatur	0 or 1	0	300
81	BIT 8	8/08	IL20	Current Limit after Preset Time	0 or 1	0	300
81	BIT A	8/09	Hall	Hall Sensor Error (Position)	0 or 1	0	300
81	BIT C	8/10	MoWrn	Motor Temperature Warning	0 or 1	0	300
81	BIT E	8/11	Feedb	Feedback Error	0 or 1	0	300
81	BIT F	8/12	ExtEr	External Error	0 or 1	0	300
81	WORD	9/80	ADR81	Error 1	0 - 65535	0	300
82	WORD	0/01	Speed	Actual Speed	0 - 9999	0 min^{-1}	300
83	BIT 0	8/13	OverC	Overcurrent Error	0 or 1	0	300
83	BIT 1	8/14	Speed	Speed > 0	0 or 1	0	300
83	BIT 2	8/15	Error	Common fault	0 or 1	0	300
83	BIT 3	8/16	Msg	Message available	0 or 1	0	300
83	BIT 6	8/17	Charg	BUSS Charging process	0 or 1	0	300
83	BIT 8	8/18	I-Lim	Current Limit	0 or 1	0	300
83	BIT 9	8/19	4Q	4Q, Generator operation	0 or 1	0	300
83	BIT C	8/20	BUSS	BUSS Error (OV, UV, Temp. Ripple)	0 or 1	0	300
83	BIT D	8/21	enabl	Powerstage Enabled (run with ref. speed)	0 or 1	0	300
83	BIT E	8/22	Ready	Ready (BUSS Charged, no Error, Running)	0 or 1	0	300
83	BIT B	8/28	MoOvC	Motor Over Current	0 or 1	0	319
83	WORD	9/81	ADR83	Status 2	0 - 65535	0	300
84	WORD	0/02	Curr	Actual Current 30000 ≙ 3000.0A	0 - 30000	0	300
86	BIT 5	3/81	F_Jog	Dig. Speed Rated Value enable	0 - 13	0	417
86	WORD	5/21	ADR86	Command1	0 - 65535	0	300
86	BIT 0	9/22	Hold	Quick Stop (Command)	0 or 1	0	300
86	BIT 1	9/23	Reset	Error Reset (Command)	0 or 1	0	300
86	BIT 4	9/24	Dir	Coun.clockw.direction (Command)	0 or 1	0	300

Sorting after Profibus-No.

Profibus-No. Adress	Data size	TAE Parameter-No.	Display	Parameter name	Value Range	Initial Value	at Firmware Version
86	BIT 5	9/25	Jog	Enable digital rated value (Command)	0 or 1	0	300
86	BIT 6	9/26	Run	Start (Command)	0 or 1	0	300
86	BIT 8	9/27	SER	Set External Error (Command)	0 or 1	0	300
87	WORD	5/22	ADR87	Pos-Command	0 - 65535	0	300
87	BIT 0	9/34	Inc	Increase (Command)	0 or 1	0	300
87	BIT 1	9/35	Dec	Decrease (Command)	0 or 1	0	300
87	BIT 2	9/36	Sfber	Suppress feedback error (Command)	0 or 1	0	300
87	BIT 3	9/37	Set_B	Select Accel/Decel B (Command)	0 or 1	0	300
87	BIT 4	9/38	Pres1	Input Preset 1 (Command)	0 or 1	0	300
87	BIT 5	9/39	Pres2	Input Preset 2 (Command)	0 or 1	0	300
87	BIT 6	9/40	Slave	Slave operation (Command)	0 or 1	0	300
87	BIT 7	9/41	TQL	Torque Limit (Command)	0 or 1	0	300
87	BIT 8	9/42	Sync	Syncronise (Command)	0 or 1	0	300
87	BIT 9	9/43	Motpo	Motor potentiometer (Command)	0 or 1	0	300
87	BIT A	9/44	CWIh	cw Rotation Inhibited (Command)	0 or 1	0	300
87	BIT B	9/45	LDir	Reverse Leading Dir (Command)	0 or 1	0	300
87	BIT C	9/46	Up	Up (Motorpoti) (Command)	0 or 1	0	300
87	BIT D	9/47	Down	Down (Motorpoti) (Command)	0 or 1	0	300
87	BIT E	9/48	CCWIh	ccw Rotation Inhibited (Command)	0 or 1	0	300
87	BIT F	9/49	Ang	Angle Correction (Command)	0 or 1	0	300
88	BIT 0	9/28	Hold	Quick Stop (Status)	0 or 1	0	300
88	BIT 1	9/29	Reset	Error Reset (Status)	0 or 1	0	300
88	BIT 4	9/30	Dir	Coun.clockw.direction (Status)	0 or 1	0	300
88	BIT 5	9/31	Jog	Digital rated value enabled (Status)	0 or 1	0	300
88	BIT 6	9/32	Run	Start (Status)	0 or 1	0	300
88	BIT 8	9/33	SER	Set External Error (Status)	0 or 1	0	300
88	WORD	9/82	ADR88	Status 1	0 - 65535	0	300
89	BIT 8	8/23	PLEr	Data in Memory out of Range	0 or 1	0	300
89	BIT B	8/24	ConEr	EEPROM not Connected	0 or 1	0	300
89	BIT D	8/25	R3Er	Cannot Read Data from EEPROM	0 or 1	0	300
89	BIT E	8/26	VerEr	Data not Equal to Data in EPROM	0 or 1	0	300
89	BIT F	8/27	P3Er	Cannot Write Data to EEPROM	0 or 1	0	300
89	WORD	9/83	ADR89	Error 2	0 - 65535	0	300
90	WORD	4/07	PW_PA	Password for Changing of Parameters	0 - 999	0	300
91	WORD	4/08	PW_CN	Password for Controlling from PG	0 - 999	111	300
92	WORD	4/09	C_DSP	Select Continuous Display on PG	0 - 15	1	300
93	WORD	4/10	B_DSP	Select Bargraph Display on PG	0 - 15	2	300
94	WORD	4/11	DSP_F	Linespeed Factor/Motor Speed	1 - 9999	1000	300
95	WORD	0/04	LSpd1	Actual Line Speed 30000 ≙ 3000.0	0 - 30000	0	300
96	WORD	0/05	LSpd2	Actual Line Speed 30000 ≙ 300.00	0 - 30000	0	300
100	WORD	3/37	SD48	Output Selection Terminal 48	0 - 13	4	300
101	WORD	3/41	SOK43	Output Selection Terminal 43	0 - 13	6	300
102	WORD	3/38	SD47	Output Selection Terminal 47	0 - 13	1	300
103	WORD	3/39	SOK45	Output Selection Terminal 45	0 - 13	7	300
105	WORD	3/40	SOK44	Output Selection Terminal 44	0 - 13	2	300
106	BIT 2	9/04	STD1	Output Status of terminal 48	0 or 1	0	300
106	BIT 3	9/05	STOK1	Output Status of terminal 43	0 or 1	0	300
106	BIT 4	9/06	STD2	Output Status of terminal 47	0 or 1	0	300
106	BIT 5	9/07	STOK2	Output Status of terminal 45	0 or 1	0	300
106	BIT 6	9/08	STOK3	Output Status of terminal 44	0 or 1	0	300
106	WORD	9/84	AD106	Dig. Output Status	0 - 65535	0	300
107	BIT 2	3/42	PD48	Output Polarity Te.48	0 or 1	1	300
107	BIT 4	3/43	PD47	Output Polarity Te.47	0 or 1	1	300
107	BIT 5	3/44	POK45	Output Polarity Te.45	0 or 1	1	300
107	BIT 6	3/45	POK44	Output Polarity Te.44	0 or 1	0	300
107	BIT 3	3/46	POK43	Output Polarity Te.43	0 or 1	1	300
107	WORD	9/85	AD107	Dig. Out Polarity	0 - 65535	0	300
108	BIT 2	3/25	IPL2	Input Polarity TE. 2	0 or 1	1	300
108	BIT 3	3/26	IPL3	Input Polarity TE. 3	0 or 1	1	300
108	BIT 4	3/27	IPL4	Input Polarity TE. 4	0 or 1	1	300
108	BIT 5	3/28	IPL5	Input Polarity TE. 5	0 or 1	1	300
108	BIT 6	3/29	IPL6	Input Polarity TE. 6	0 or 1	1	300

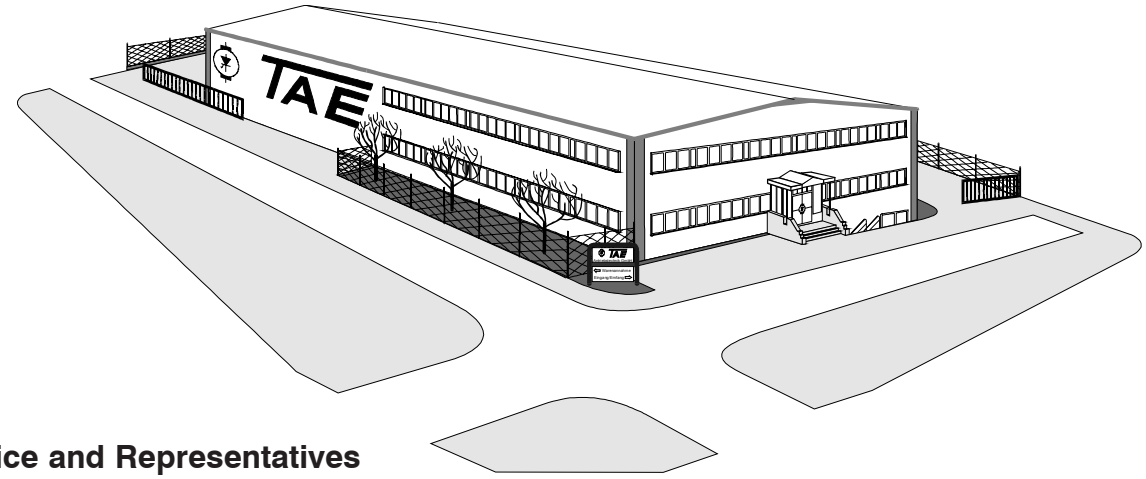
Profibus-DP

Sorting after Profibus-No.

Profibus-No. Adress	Data size	TAE Parameter-No.	Display	Parameter name	Value Range	Initial Value	at Firmware Version
108	BIT 7	3/30	IPL7	Input Polarity TE. 7	0 or 1	1	300
108	BIT 8	3/31	IPL8	Input Polarity TE. 8	0 or 1	1	300
108	BIT 9	3/32	IPL9	Input Polarity TE. 9	0 or 1	1	300
108	BIT A	3/33	IPL10	Input Polarity TE. 10	0 or 1	1	300
108	BIT B	3/34	IPL11	Input Polarity TE. 11	0 or 1	1	300
108	BIT C	3/35	IPL12	Input Polarity TE. 12	0 or 1	1	300
108	BIT D	3/36	IPL13	Input Polarity TE. 13	0 or 1	1	300
108	WORD	9/86	AD108	Dig. Input Polarity	0 - 65535	0	300
109	BIT 2	9/09	IST2	Input Status of terminal 2	0 or 1	0	300
109	BIT 3	9/10	IST3	Input Status of terminal 3	0 or 1	0	300
109	BIT 4	9/11	IST4	Input Status of terminal 4	0 or 1	0	300
109	BIT 5	9/12	IST5	Input Status of terminal 5	0 or 1	0	300
109	BIT 6	9/13	IST6	Input Status of terminal 6	0 or 1	0	300
109	BIT 7	9/14	IST7	Input Status of terminal 7	0 or 1	0	300
109	BIT 8	9/15	IST8	Input Status of terminal 8	0 or 1	0	300
109	BIT 9	9/16	IST9	Input Status of terminal 9	0 or 1	0	300
109	BIT A	9/17	IST10	Input Status of terminal 10	0 or 1	0	300
109	BIT B	9/18	IST11	Input Status of terminal 11	0 or 1	0	300
109	BIT C	9/19	IST12	Input Status of terminal 12	0 or 1	0	300
109	BIT D	9/20	IST13	Input Status of terminal 13	0 or 1	0	300
109	WORD	9/87	AD109	Dig. Input Status	0 - 65535	0	300
120	WORD	2/09	SETAB	Select Ramp A or B	0 - 15	0	300
121	WORD	3/47	AOSEL	Source of Analog Output	0 - 15	1	300
122	WORD	3/48	RSEL1	Src. of Ref. Value with Ramp	0 - 15	1	300
123	WORD	3/49	RSEL2	Src. of Ref. Value without Ramp	0 - 15	0	300
124	WORD	3/50	RSEL3	Rated value, Torque limit	0 - 15	0	300
125	WORD	3/51	RSEL4	Source of Position maximum speed	0 - 15	0	300
126	WORD	3/52	RSEL5	Source of Reference (Reserved)	0 - 15	0	300
127	WORD	3/53	RSEL6	Source of Reference (Reserved)	0 - 15	0	300
130	WORD	4/12	TRAN1	Transmission Factor n x Value	1 - 64000	1000	300
131	WORD	4/13	TRAN2	Transmission Factor n / Value	1 - 64000	1000	300
132	WORD	4/16	ANCOR	Angle Adjustment	0 - 65535	0	300
133	WORD	4/17	PPR_M	Pulses per Revolution of Master x4	1 - 9999	120	300
134	WORD	4/18	KPSLV	Amp. of Sync. Velocity Regulator	0 - 100	1%	300
135	WORD	2/15	INCR	Speed + Increase Speed	0 - 9999	0	300
136	WORD	2/16	DECR	Speed - Decrease Speed	0 - 9999	0	300
137	WORD	4/20	SMOD	Select Slave Mode	0 - 2	1	300
138	WORD	4/19	KPAM	Amplifier of Master Accelleration	0 - 100	0	300
140	BYTE 1	5/08	AI1OF	Offset of Analog Input 1	0 - 255	0	300
141	BYTE 2	5/09	AI1GA	Gain of Analog Input 1	0 - 255	0	300
142	BYTE 1	5/10	AI2OF	Offset of Analog Input 2	0 - 255	0	300
143	BYTE 2	5/11	AI2GA	Gain of Analog Input 2	0 - 255	0	300
144	BYTE 1	5/12	AO_OF	Offset of Analog Output	0 - 255	0	300
145	BYTE 2	5/13	AO_GA	Gain of Analog Output	0 - 255	0	300
146	BYTE 1	5/14	ID_OF	Offset of Current Display	0 - 255	0	300
147	BYTE 2	5/15	ID_GA	Gain of Current Display	0 - 255	0	300
160	WORD	2/06	MRACU	Motor Rated Current 30000 ≙ 3000.0A	1 - 30000	0	300
161	WORD	2/07	MPECU	Motor Peak Current (Limits IL1Q/IL4Q) 30000 ≙ 3000.0A	1 - 30000	0	300
162	WORD	4/21	PULSE	Pulses to end position	1 - 64000	1	300
163	WORD	4/22	CORR	Compensate Sensor Dead Time	0 - 9999	0	300
164	WORD	2/04	POLES	Poles of Motor	2 - 32	0	300
165	WORD	2/13	PHADR	Phase Advance at Rated Speed	0 - 99	30%	300
166	WORD	2/03	RATSP	Motor rated Speed (BL-N-motors lower Speed)	0 - 6000	0 min^{-1}	300
167	WORD	2/14	PHADM	Phase Advance at Max Speed	0 - 99	50%	300
168	WORD	5/04	COBRE	Commutation Break	10 - 50	10	300
170	WORD	3/03	SRUN	Input Selection Run	0 - 13	3	300
171	WORD	3/05	SDIR	Input Selection Direction (Master)	0 - 13	5	300
172	WORD	3/06	SHOLD	Input Selection Hold	0 - 13	6	300
174	WORD	3/04	SPRS1	Input Selection Preset 1	0 - 13	4	300
175	WORD	3/07	SPRS2	Input Selection Preset 2	0 - 13	7	300
176	WORD	3/09	SUP	Input Selection Motorpoti Up	0 - 13	9	300
177	WORD	3/10	SDOWN	Input Selection Motorpoti Down	0 - 13	10	300

Sorting after Profibus-No.

Profibus-No. Adress	Data size	TAE Parameter-No.	Display	Parameter name	Value Range	Initial Value	at Firmware Version
178	WORD	3/08	SMOT	Input Selection Motorpoti	0 - 13	8	300
180	WORD	3/11	SINC	Input Selection Increase	0 - 13	11	300
181	WORD	3/12	SDEC	Input Selection Decrease	0 - 13	12	300
182	WORD	3/13	SSLAV	Input Selection Slave	0 - 13	13	300
183	WORD	3/02	SRES	Input Selection Reset	0 - 13	2	300
184	WORD	3/14	SSPER	Input Selection Suppress speed error	0 - 13	0	300
185	WORD	3/15	SSYNC	Input Selection Synchron, Angle or Speed	0 - 13	1	300
186	WORD	3/17	SICW	Input Selection Inhibit cw	0 - 13	0	300
187	WORD	3/18	SICCW	Input Selection Inhibit ccw	0 - 13	0	300
188	WORD	3/19	SSETB	Input Selection Set Ramp B	0 - 13	0	300
189	WORD	3/16	SANG	Input Selection Angle Correction	0 - 13	0	300
190	WORD	3/20	SLDIR	Input Selection Slave Direction	0 - 13	0	300
191	WORD	3/21	STQL	Input Selection Torque limit	0 - 13	0	333
192	WORD	3/22	SSER	Input Selection Set External Error	0 - 13	0	333
193	WORD	3/23	SSDC	Input Selection Set Disable Controller	0 - 13	0	300
194	WORD	3/24	STLAP	Input Selection T-Limit Ana/Prog	0 - 13	0	300
200	BYTE 1	3/56	PP0R	Profibus Parameter 0 read	0 - 255	0	402
201	BYTE 2	3/57	PP0W	Profibus Parameter 0 write	0 - 255	0	402
202	BYTE 1	3/58	PP1R	Profibus Parameter 1 read	0 - 255	0	402
203	BYTE 2	3/59	PP1W	Profibus Parameter 1 write	0 - 255	0	402
204	BYTE 1	3/60	PP2R	Profibus Parameter 2 read	0 - 255	0	402
205	BYTE 2	3/61	PP2W	Profibus Parameter 2 write	0 - 255	0	402
206	BYTE 1	3/62	PP3R	Profibus Parameter 3 read	0 - 255	0	402
207	BYTE 2	3/63	PP3W	Profibus Parameter 3 write	0 - 255	0	402
208	BYTE 1	3/64	PP4R	Profibus Parameter 4 read	0 - 255	0	402
209	BYTE 2	3/65	PP4W	Profibus Parameter 4 write	0 - 255	0	402
210	BYTE 1	3/66	PP5R	Profibus Parameter 5 read	0 - 255	0	402
211	BYTE 2	3/67	PP5W	Profibus Parameter 5 write	0 - 255	0	402
212	BYTE 1	3/68	PP6R	Profibus Parameter 6 read	0 - 255	0	402
213	BYTE 2	3/69	PP6W	Profibus Parameter 6 write	0 - 255	0	402
214	BYTE 1	3/70	PP7R	Profibus Parameter 7 read	0 - 255	0	402
215	BYTE 2	3/71	PP7W	Profibus Parameter 7 write	0 - 255	0	402
216	WORD	2/26	PTQL	Programable Torque limit 1000 ≙ 100.0%	0 - 1000	1000	412
217	BIT 8	3/74	STPOS	Go to 1st position (Command)	0 - 13	0	417
217	BIT 9	3/75	BRCUR	Type of Break curve Ramp/Scurve (Command)	0 - 13	0	417
217	BIT C	3/76	REPOS	Reset Position (Command)	0 - 13	0	417
217	BIT D	3/77	REFPO	Define direction of position (Command)	0 - 13	0	417
217	BIT E	3/78	GSPOS	Go to Start position (Command)	0 - 13	0	417
217	BIT 7	3/79	ENPOS	Enable positioning (Command)	0 - 13	0	417
217	BIT 5	3/80	INVCD	Invert Counter dir when Pos-Off (Command)	0 - 13	0	423
217	WORD	5/18	CONT2	Control2	0 - 65535	0	300
217	BIT 0	9/66	DICON	Set Disable Controller (Command)	0 or 1	0	413
217	BIT 1	9/67	TLAP	Set T-Limit Analog/Prog (Command)	0 or 1	0	413
218	BIT 0	9/68	DICON	Set Disable Controller (Status)	0 or 1	0	413
218	BIT 1	9/69	TLAP	Set T-Limit Analog/Prog (Status)	0 or 1	0	413
218	BIT 2	9/70	POLSR	Leadspeed is reached (Status)	0 or 1	0	417
218	BIT 3	9/71	POSNO	Position is Not Ok (Over) (Status)	0 or 1	0	417
218	BIT 4	9/72	RPOSR	Reference position is reached (Status)	0 or 1	0	417
218	BIT 6	9/73	HLPOS	Hold position in Position controller (Status)	0 or 1	0	417
218	BIT A	9/74	POSOK	Position is Ok (Status)	0 or 1	0	417
218	BIT B	9/75	DMFRQ	Block mater frequence (Status)	0 or 1	0	417
218	BIT 5	9/76	INVCD	Invert Counter dir when Pos-Off (Status)	0 or 1	0	423
218	WORD	9/88	AD218	Control2 Status	0 - 65535	0	413
219	WORD	2/27	MPTUL	Motorpoti transmission limit (UP)	0 - 100	0%	414
220	WORD	2/28	MPTDL	Motorpoti transmission limit (DOWN)	0 - 100	0%	414
221	WORD	2/34	MPOSP	Position maximum speed	0 - 6000	100 min^{-1}	417
222	WORD	2/35	WINPO	position window (pulses/revolution x4)	1 - 255	30	417
223	WORD	2/36	KPP_P	proportional Amplifier for Positioning	0 - 255	75	417
224	WORD	2/29	DEC_C	Deceleration Time C 5999 ≙ 599.9s	1 - 5999	1800	417
225	WORD	2/37	ADJBC	Adjust start of breaking curve 1000 ≙ 100.0s	1 - 1000	10	417
226	WORD	5/16	AJTRC	Adjust Torque regulation curve	0 - 1000	10	422



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