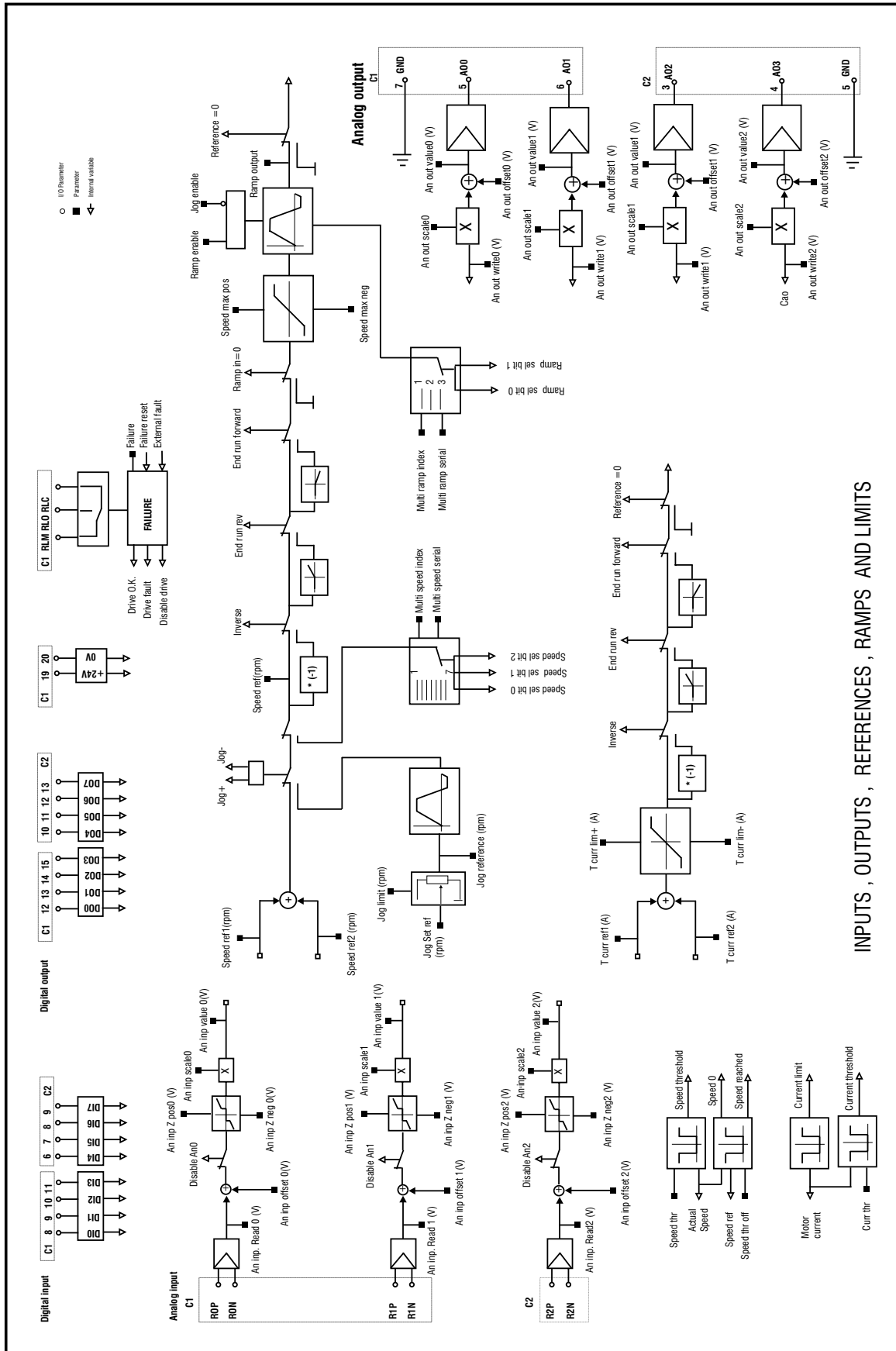
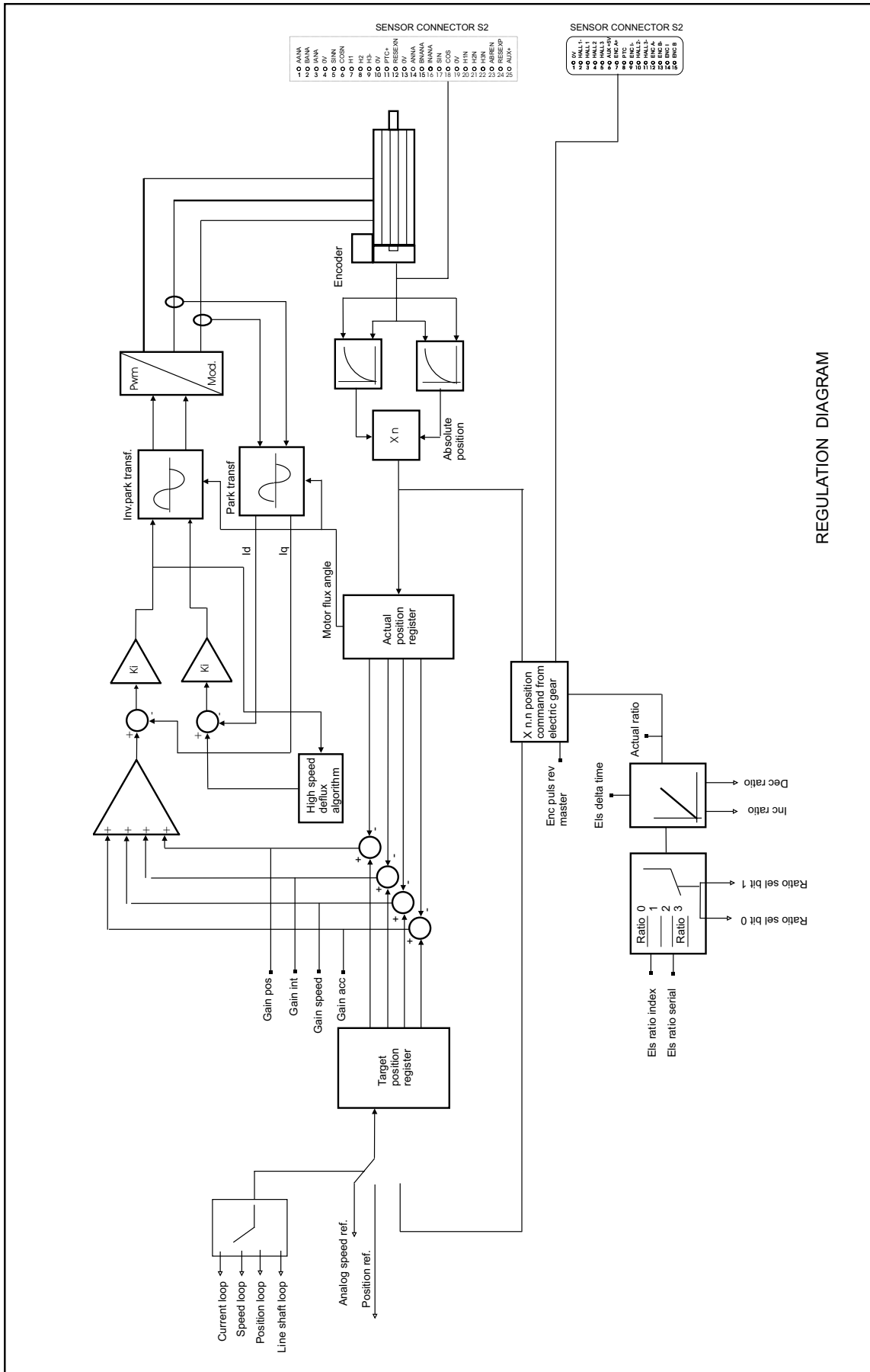


10. BLOCK DIAGRAMS



INPUTS , OUTPUTS , REFERENCES , RAMPS AND LIMITS



REGULATION DIAGRAM

11. PARAMETER LIST

Explanation of tables: **R / W / Z /**

Access possibilities via the serial interface, Bus or RS485 asynchronous communication:

R = Read,

W = Write,

Z = Write only when drive disabled.

* = The enabling is active only after the drive reset command.

Format parameter format

INT = integer signed 16 bits

ENUM = integer signed 16 bits

WORD = integer unsigned 16 bits

LONG = integer signed 32 bits

DWORD = integer unsigned 32 bits

FLOAT = floating point

In order to perform a **SAVE PARAMETER INTO TARGET** or a drive **RESET** command, via the serial line, the number of the parameter index to be brought to a high logic level is:

SAVE PARAMETER = 18011

RESET DRIVE = 18010

PARAMETER	No.	Format	Value			Access via	
			min	max	Factory	RS485	Terminal
MONITOR							
ACTUAL SPEED (rpm)	20040	float	0	10000	-	R	
MOTOR CURRENT (A)	20041	float	0	Drive size	-	R	
DC LINK VOLTAGE (V)	20043	float	0	1000	-	R	
DRIVE TEMPERATURE (°C)	20044	word	0	100	-	R	
DRIVE PARAMETERS							
DRIVE MAXIMUM CURRENT (A)	20000	float	0	Drive size	6	R/Z	
DRIVE ADDRESS	20021	word	0	127	0	R//Z	
DRIVE CONFIGURATION	20023	enum	0	16	Speed	R/W	ID
Current						1	
Speed						2	
Position						4	
els						8	
encoder phasing	16						
DRIVE BAUDRATE	20024	enum	1200	38400	38400	R/W	
1200						1200	
2400						2400	
4800						4800	
9600						9600	
19200						19200	
38400	38400						
DRIVE SERIAL CONFIG	20025	enum	32785	32927	32785	R/W *	
No parity, 8 data bit, 1 stop bit						32785	
Odd parity, 8 data bit, 1 stop bit						36919	
Even parity, 8 data bit, 1 stop bit						32823	
No parity, 8 data bit, 2 stop bit						32793	
Odd parity, 8 data bit, 2 stop bit						36927	
Even parity, 8 data bit, 2 stop bit	32831						
DRIVE SER DELAY TIME	20026	word	0.000	1.000	0.000	R/W	
DRIVE FAST LINK	18110	enum	0	2	0	R/W *	
OFF						0	
Master [X 3]						1	
Slave [X 4]	2						
DRIVE FIRMWARE	20022	float				R	
DRIVE ACTUAL CONFIG	29004	enum	0	17	Speed	R/W	ID
Current						1	
Speed						2	
Position						4	
els						8	
encoder phasing						16	
ATTENTION:encoder phasing	17						

txv0550

FLEXMAX

PARAMETER	No.	Format	Value		Factory	Access via	
			min	max		RS485	Terminal
MOTOR PARAMETERS							
MOTOR NUMBER OF POLES	20002	word	2	8	8	R/Z *	
MOTOR MAXIMUM SPEED (rpm)	20003	float	0	10000	3000	R/Z	
ENCODER PARAMETERS							
ENCODER TYPE	20010	enum	0	6	Sin. 5 traces	R/Z *	
Sincos 5 tracks						1	
Dig + Hall port S2						2	
Dig + Hall port S1						3	
Hall						4	
sincos 2 traks						5	
sincos+ hall						6	
Resolver						8	
ENCODER PULSES	20011	word	0	32767	2048	R/Z	
ENCODER SUPPLY (V)	20012	float	4.8V	14.4V	5,25V	R/W	
RAMP							
RAMP ACC CW (msec/rpm)	21102	float	0	17476/enc pul	0,330	R/W	
RAMP ACC CCW (msec/rpm)	21103	float	0	17476/enc pul	0,330	R/W	
RAMP DEC CW (msec/rpm)	21104	float	0	17476/enc pul	0,330	R/Z	
RAMP DEC CCW (msec/rpm)	21105	float	0	17476/enc pul	0,330	R/W	
RAMP ENABLE	21210	enum	0	1	Enable	R/Z	
Disable						0	
Enable						1	
RAMP OUTPUT (rpm)	21212	float	-10000	10000	0	R	
SPEED							
SPEED REF1 (rpm)	21200	float	-10000	10000	0	R/W	
SPEED REF2 (rpm)	21201	float	-10000	10000	0	R/W	
SPEED MAX POS (rpm)	21204	float	0	10000	3000	R/W	
SPEED MAX NEG (rpm)	21205	float	0	10000	3000	R/W	
SPEED THR (rpm)	21206	float	0	10000	1000	R/W	
SPEED THR OFFSET (rpm)	21207	float	0	10000	10	R/W	
SPEED THR DELAY (sec)	21213	float	0	10	0	R/W	
CURRENT							
T CURR REF1 (A)	22000	float	- drive size	+ drive size	0	R/W	
T CURR REF2 (A)	22001	float	- drive size	+ drive size	0	R/W	
T CURR LIM + (A)	22004	float	0	drive size	6	R/W	
T CURR LIM - (A)	22005	float	0	drive size	6	R/W	
T CURR THR (A)	22007	float	0	drive size	0	R/W	
MAX SPEED CUR LIM (rpm)	22009	float	0	10000	3000	R/W	
CURR THR DELAY (sec)	22010	float	0	10	0	R/W	
SPEED / POSITION GAIN							
GAIN SPEED	23000	int	0	32767	100	R/W	
GAIN POS	23001	int	0	32767	50	R/W	
GAIN INT	23002	int	0	32767	50	R/W	

txv0560

PARAMETER	No.	Format	Value		Factory	Access via	
			min	max		RS485	Terminal
DIGITAL INPUTS							
DIGITAL INPUT 0	20100	enum	0	1	enable	R	
DIGITAL INPUT 1	20100	enum	0	2007	enable	R/Z	
OFF						0	
failure reset						2	
external fault						3	
start/stop						4	
fast stop						5	
jog+						6	
jog-						7	
ramp in=0						8	
inverse						9	
end run reverse						10	
end run forward						11	
reference=0						12	
memo virtual zero						13	
current loop						14	
speed loop						15	
position loop						16	
line shaft loop						17	
disable an inp 0						18	
disable an inp 1						19	
disable an inp 2						20	
speed sel bit 0						21	
speed sel bit 1						22	
speed sel bit 2						23	
ramp sel bit 0						24	
ramp sel bit 1						25	
virtual DI ok						26	
pos-preset 0						1001	
pos-preset 1						1002	
pos-preset 2						1003	
pos-preset 3						1004	
pos-preset 4						1005	
pos-preset 5						1006	
pos-0 search						1007	
pos-start pos						1009	
pos-memo 0						1010	
pos-memo pos						1011	
pos-abs 0 sensor Cw						1012	
pos-abs 0 sensor Ccw						1013	
pos 0 sensor						1015	
els-ratio sel bit0						2001	
els-ratio sel bit1						2002	
els-inc ratio						2003	
els-dec ratio						2004	
els ramp ratio dis						2005	
els bend rec Cw						2006	
els bend rec Ccw						2007	
DIGITAL INPUT 2	20102	enum	0	2007	ramp in=0	R/Z	
(select like input 1)							
DIGITAL INPUT 3	20103	enum	0	2007	inverse	R/Z	
(select like input 1)							
DIGITAL INPUT 4	20104	enum	0	2007	end run rev	R/Z	
(select like input 1)							
DIGITAL INPUT 5	20105	enum	0	2007	end run fwd	R/Z	
(select like input 1)							

txv0570

FLEXMAX

PARAMETER	No.	Format	Value		Factory	Access via	
			min	max		RS485	Terminal
DIGITAL INPUT 6 (select like input 1)	20106	enum	0	2007	exter. Fault	R/Z	
DIGITAL INPUT 7 (select like input 1)	20107	enum	0	2007	failure reset	R/Z	
DIG IN NEG	20162	dword	0H	OFFFFFFFFH	0H	R/Z	
DIG IN STATUS	20163	word	0H	OFFFH	0H	R	
DIGITAL EXPANSION INPUTS							
EXP DIGIT INPUT 0 (select like digital input 1)	20150	enum	0	2007	OFF	R/Z	
EXP DIGIT INPUT 1 (select like digital input 1)	20151	enum	0	2007	OFF	R/Z	
EXP DIGIT INPUT 2 (select like digital input 1)	20152	enum	0	2007	OFF	R/Z	
EXP DIGIT INPUT 3 (select like digital input 1)	20153	enum	0	2007	OFF	R/Z	
EXP DIGIT INPUT 4 (select like digital input 1)	20154	enum	0	2007	OFF	R/Z	
EXP DIGIT INPUT 5 (select like digital input 1)	20155	enum	0	2007	OFF	R/Z	
EXP DIGIT INPUT 6 (select like digital input 1)	20156	enum	0	2007	OFF	R/Z	
EXP DIGIT INPUT 7 (select like digital input 1)	20157	enum	0	2007	OFF	R/Z	
EXP DIG STATUS	20164	word	000H	OFFFH	0H	R	
VIRTUAL DIGITAL INPUTS							
VIRT DIGIT INPUT 0 (select like digital input 1)	20170	enum	0	2007	OFF	R/Z	
VIRT DIGIT INPUT 1 (select like digital input 1)	20171	enum	0	2007	OFF	R/Z	
VIRT DIGIT INPUT 2 (select like digital input 1)	20172	enum	0	2007	OFF	R/Z	
VIRT DIGIT INPUT 3 (select like digital input 1)	20173	enum	0	2007	OFF	R/Z	
VIRT DIGIT INPUT 4 (select like digital input 1)	20174	enum	0	2007	OFF	R/Z	
VIRT DIGIT INPUT 5 (select like digital input 1)	20175	enum	0	2007	OFF	R/Z	
VIRT DIGIT INPUT 6 (select like digital input 1)	20176	enum	0	2007	OFF	R/Z	
VIRT DIGIT INPUT 7 (select like digital input 1)	20177	enum	0	2007	OFF	R/Z	
VIRT DIGIT INPUT 8 (select like digital input 1)	20178	enum	0	2007	OFF	R/Z	
VIRT DIGIT INPUT 9 (select like digital input 1)	20179	enum	0	2007	OFF	R/Z	
VIRT DIGIT INPUT 10 (select like digital input 1)	20180	enum	0	2007	OFF	R/Z	
VIRT DIGIT INPUT 11 (select like digital input 1)	20181	enum	0	2007	OFF	R/Z	
VIRT DIGIT INPUT 12 (select like digital input 1)	20182	enum	0	2007	OFF	R/Z	
VIRT DIGIT INPUT 13 (select like digital input 1)	20183	enum	0	2007	OFF	R/Z	
VIRT DIGIT INPUT 14 (select like digital input 1)	20184	enum	0	2007	OFF	R/Z	
VIRT DIGIT INPUT 15 (select like digital input 1)	20185	enum	0	2007	OFF	R/Z	

txv0580

PARAMETER	No.	Format	Value			Access via	
			min	max	Factory	RS485	Terminal
VIRT DI STATUS	20186	word	0000H	FFFFH	0000H	R/W	
VIRT DI AT START	20187	word	0000H	FFFFH	FFFFH	R/Z	
VIRT DI AT DISABLE	20188	word	0000H	FFFFH	FFFFH	R/Z	
VIRT DI RESET AT FAIL	20189	word	0000H	FFFFH	0000H	R/Z	
DIGITAL OUTPUTS							
DIGITAL OUTPUT 0	20200	enum	0	1008	speed reach.	R/Z	
OFF						0	
drive enable						1	
speed reached						3	
speed 0 threshold						4	
current limit						5	
current thresold						6	
speed thresold						7	
AD index						8	
DI index						9	
position error						10	
fast link Rx						11	
UV actived						12	
UV active						13	
speed not 0 thr						14	
speed thr delayed						15	
curr thr delayed						16	
alarm warning						17	
alarm coming						18	
drive fault						100	
bridge short circuit						101	
overcurrent						102	
dc link overvoltage						103	
heatsink						104	
module junction fault						105	
current Fbk loss						106	
motor overtemp fault						107	
aux power undervoltage						108	
dsp program error						109	
prg 16khz fault						110	
invalid flash parms fault						111	
bad flash fault						112	
brake overtemp fault						113	
power supply fault						114	
brake error fault						115	
lock drive						116	
Di encoder count fault						117	
ad encoder count fault						118	
encoder simulation fault						119	
undervoltage fault						120	
intake air overtemperature						121	
regulation overtemperature						122	
module overtemperature						123	
size not defined						124	
sequence fault						127	
fast link fault						128	
position fault						129	
external fault						131	
pos-0 pos						1001	
pos-pos reached						1002	
pos-pos threshold						1003	
pos-pos abs threshold						1004	
pos zero found						1005	
pos-thr near 1						1006	
pos-thr near 2						1007	
pos-out of limits						1008	

txv0590

FLEXMAX

PARAMETER	No.	Format	Value			Access via	
			min	max	Factory	RS485	Terminal
DIGITAL OUTPUT 1 (select like output 0)	20201	enum	0	1008	speed 0 thr	R/Z	
DIGITAL OUTPUT 2 (select like output 0)	20202	enum	0	1008	curr.limit	R/Z	
DIGITAL OUTPUT 3 (select like output 0)	20203	enum	0	1008	drive fault	R/Z	
DIGITAL OUTPUT 4 (select like output 0)	20204	enum	0	1008	exter.fault	R/Z	
DIGITAL OUTPUT 5 (select like output 0)	20205	enum	0	1008	OFF	R/Z	
DIGITAL OUTPUT 6 (select like output 0)	20206	enum	0	1008	OFF	R/Z	
DIGITAL OUTPUT 7	20207	enum	2	2	DRIVE OK	R/Z	
DIG OUT NEG	20254	dword	0H	OFFFFFFFFH	00H	R/Z	
DIG OUT STATUS	20255	word	00H	OFF	00H	R	
VIRTUAL DIGITAL OUTPUTS							
VIRT DIGIT OUTPUT 0 (select like digital output 0)	20270	enum	0	1008	OFF	R/Z	
VIRT DIGIT OUTPUT 1 (select like digital output 0)	20271	enum	0	1008	OFF	R/Z	
VIRT DIGIT OUTPUT 2 (select like digital output 0)	20272	enum	0	1008	OFF	R/Z	
VIRT DIGIT OUTPUT 3 (select like digital output 0)	20273	enum	0	1008	OFF	R/Z	
VIRT DIGIT OUTPUT 4 (select like digital output 0)	20274	enum	0	1008	OFF	R/Z	
VIRT DIGIT OUTPUT 5 (select like digital output 0)	20275	enum	0	1008	OFF	R/Z	
VIRT DIGIT OUTPUT 6 (select like digital output 0)	20276	enum	0	1008	OFF	R/Z	
VIRT DIGIT OUTPUT 7 (select like digital output 0)	20277	enum	0	1008	OFF	R/Z	
VIRT DIGIT OUTPUT 8 (select like digital output 0)	20278	enum	0	1008	OFF	R/Z	
VIRT DIGIT OUTPUT 9 (select like digital output 0)	20279	enum	0	1008	OFF	R/Z	
VIRT DIGIT OUTPUT 10 (select like digital output 0)	20280	enum	0	1008	OFF	R/Z	
VIRT DIGIT OUTPUT 11 (select like digital output 0)	20281	enum	0	1008	OFF	R/Z	
VIRT DIGIT OUTPUT 12 (select like digital output 0)	20282	enum	0	1008	OFF	R/Z	
VIRT DIGIT OUTPUT 13 (select like digital output 0)	20283	enum	0	1008	OFF	R/Z	
VIRT DIGIT OUTPUT 14 (select like digital output 0)	20284	enum	0	1008	OFF	R/Z	
VIRT DIGIT OUTPUT 15 (select like digital output 0)	20285	enum	0	1008	OFF	R/Z	
VIRT DO RESET AT FAIL	20289	word	0000H	FFFFH	0000H	R/Z	
VIRT DO SET AT FAIL	20290	word	0000H	FFFFH	0000H	R/Z	
VIRT DO STATUS	20286	word	0000H	FFFFH	0000H	R/Z	

txv0600

PARAMETER	No.	Format	Value		Factory	Access via	
			min	max		RS485	Terminal
DIGITAL EXPANSION OUTPUTS							
EXP DIGIT OUTPUT 0 (select like digital output 0)	20250	enum	0	1008	OFF	R/Z	
EXP DIGIT OUTPUT 1 (select like digital output 0)	20251	enum	0	1008	OFF	R/Z	
EXP DIGIT OUTPUT 2 (select like digital output 0)	20252	enum	0	1008	OFF	R/Z	
EXP DIGIT OUTPUT 3 (select like digital output 0)	20253	enum	0	1008	OFF	R/Z	
EXP DIG OUT STATUS	20256	word	00H	0FH	0H	R	
ANALOG INPUTS							
ANALOG INPUT 0	20300	enum	0	24	speed ref 1	R/Z	
OFF						0	
Tcurr ref 1						1	
t curr ref 2						2	
speed ref 1						3	
speed ref 2						4	
speed max pos						5	
speed max neg						6	
speed limit						7	
jog setrefence						8	
t curr lim +						9	
t curr lim -						10	
t current limit						11	
max speed curr lim						12	
pos speed						13	
pos speed ref 0						14	
speed threshold						15	
current threshold						16	
multi speed 1						17	
multi speed 2						18	
multi speed 4						19	
els RB spd ref						20	
els ratio (0)						21	
els ratio (1)						22	
els ratio (2)						23	
els ratio (3)						24	
AN INPUT READ 0 (V)	20310	float	-10V	+10V	0V	R	
AN INPUT OFFSET 0 (V)	20320	float	-10V	+10V	0V	R/W	
AN INPUT ZPOS 0 (V)	20330	float	-10V	+10V	0V	R/W	
AN INPUT ZNEG 0 (V)	20340	float	-10V	+10V	0V	R/W	
AN INPUT SCALE 0	20350	float	-3	+3	1	R/W	
AN INPUT VALUE 0 (V)	20360	float	-10V	+10V	0V	R	
ANALOG INPUT 1 (select like analog input 0)	20301	enum	0	24	t curr ref 1	R/Z	
AN INPUT READ 1 (V)	20311	float	-10V	+10V	0V	R	
AN INPUT OFFSET 1 (V)	20321	float	-10V	+10V	0V	R/W	
AN INPUT ZPOS 1 (V)	20331	float	-10V	+10V	0V	R/W	
AN INPUT ZNEG 1 (V)	20341	float	-10V	+10V	0V	R/W	
AN INPUT SCALE 1	20351	float	-3	+3	1	R/W	
AN INPUT VALUE 1 (V)	20361	float	-10V	+10V	0V	R	

txv0610

FLEXMAX

PARAMETER	No.	Format	Value		Factory	Access via	
			min	max		RS485	Terminal
ANALOG OUTPUTS							
ANALOG OUTPUT 0	20400	enum	0	9	actual speed	R/Z	
OFF						0	
actual speed						1	
motor current						2	
output voltage						3	
dc link voltage						4	
drive temperature						5	
ramp output						6	
+10V						7	
-10V						8	
position error						9	
AN OUTPUT WRITE 0 (V)	20410	float	-10V	+10V	0V	R	
AN OUTPUT SCALE 0	20420	float	-3	+3	1	R/W	
AN OUTPUT OFFSET 0 (V)	20430	float	-10V	+10V	0V	R/W	
AN OUTPUT VALUE 0 (V)	20440	float	-10V	+10V	0V	R	
ANALOG OUTPUT 1	20401	enum	0	9	motor curr	R/Z	
(select like analog output 0)							
AN OUTPUT WRITE 1 (V)	20411	float	-10V	+10V	0V	R	
AN OUTPUT SCALE 1	20421	float	-3	+3	1	R/W	
AN OUTPUT OFFSET 1 (V)	20431	float	-10V	+10V	0V	R/W	
AN OUTPUT VALUE 1 (V)	20441	float	-10V	+10V	0V	R	
ANALOG OUTPUT 2	20402	enum	0	9	+10V	R/Z	
(select like analog output 0)							
AN OUTPUT WRITE 2 (V)	20412	float	-10V	+10V	0V	R	
AN OUTPUT SCALE 2	20422	float	-3	+3	1	R/W	
AN OUTPUT OFFSET 2 (V)	20432	float	-10V	+10V	0V	R/W	
AN OUTPUT VALUE 2 (V)	20442	float	-10V	+10V	0V	R	
ANALOG OUTPUT 3	20403	enum	0	9	+10V	R/Z	
(select like analog output 0)							
AN OUTPUT WRITE 3 (V)	20413	float	-10V	+10V	0V	R	
AN OUTPUT SCALE 3	20423	float	-3	+3	1	R/W	
AN OUTPUT OFFSET 3 (V)	20433	float	-10V	+10V	0V	R/W	
AN OUTPUT VALUE 3 (V)	20443	float	-10V	+10V	0V	R	
ENCODER REPETITION							
ENC PULSES REV	20030	dword	0	131070	1024	R/W	
GAIN INDEX STEP	20032	long	0	131070	1024	R/W	
INDEX OFFSET	20033	long	0	131070	0	R/W	
INDEX OFFSET READ	20034	long	0	131070	0	R	
ENABLE ENC REPETITION	20035	enum	0	3	OFF	R/Z	
OFF						0	
Encoder only						1	
Encoder+index						3	
JOG FUNCTION							
JOG LIMIT (rpm)	21000	float	0	10000	1500	R/W	
JOG SET REFERENCE (%)	21001	float	0	100	0	R/W	
JOG REFERENCE (rpm)	21002	float	0	10000	0	R	
JOG ACC CW (msec/rpm)	21003	float	0	17476/enc pul	0,332	R/W	
JOG ACC CCW (msec/rpm)	21004	float	0	17476/enc pul	0,332	R/W	
JOG DEC CW (msec/rpm)	21005	float	0	17476/enc pul	0,332	R/W	
JOG DEC CCW (msec/rpm)	21006	float	0	17476/enc pul	0,332	R/W	

txv0620

PARAMETER	No.	Format	Value		Factory	Access via	
			min	max		RS485	Terminal
MULTI SPEED FUNCTION							
MULTI SPEED 1 (rpm)	21301	float	-10000	+10000	0	R/W	
MULTI SPEED 2 (rpm)	21302	float	-10000	+10000	0	R/W	
MULTI SPEED 3 (rpm)	21303	float	-10000	+10000	0	R/W	
MULTI SPEED 4 (rpm)	21304	float	-10000	+10000	0	R/W	
MULTI SPEED 5 (rpm)	21305	float	-10000	+10000	0	R/W	
MULTI SPEED 6 (rpm)	21306	float	-10000	+10000	0	R/W	
MULTI SPEED 7 (rpm)	21307	float	-10000	+10000	0	R/W	
MULTI SPEED INDEX	21310	word	0	7	0	R/W	
MULTI SPEED SERIAL	21311	enum	0	1	Dig input	R/W	
Digital input Parameter						0	1
MULTI RAMP FUNCTION							
MULTI RAMP INDEX	21440	word	0	3	0	R/W	
MULTI RAMP SERIAL	21441	enum	0	1	Dig input	R/W	
Digital input Parameter						0	1
MULTI RAMP FUNCTION \ MULTI RAMP 1							
MULTI RAMP ACC CW1 (msec/rpm)	21401	float	0	17476/enc pul	0,332	R/W	
MULTI RAMP ACC CCW 1 (msec/rpm)	21411	float	0	17476/enc pul	0,332	R/W	
MULTI RAMP DEC CW 1 (msec/rpm)	21421	float	0	17476/enc pul	0,332	R/W	
MULTI RAMP DEC CCW 1 (msec/rpm)	21431	float	0	17476/enc pul	0,332	R/W	
MULTI RAMP FUNCTION \ MULTI RAMP 2							
MULTI RAMP ACC CW 2 (msec/rpm)	21402	float	0	17476/enc pul	0,332	R/W	
MULTI RAMP ACC CCW 2 (msec/rpm)	21412	float	0	17476/enc pul	0,332	R/W	
MULTI RAMP DEC CW 2 (msec/rpm)	21422	float	0	17476/enc pul	0,332	R/W	
MULTI RAMP DEC CCW 2 (msec/rpm)	21432	float	0	17476/enc pul	0,332	R/W	
MULTI RAMP FUNCTION \ MULTI RAMP 3							
MULTI RAMP ACC CW 3 (msec/rpm)	21403	float	0	17476/enc pul	0,332	R/W	
MULTI RAMP ACC CCW 3 (msec/rpm)	21413	float	0	17476/enc pul	0,332	R/W	
MULTI RAMP DEC CW 3 (msec/rpm)	21423	float	0	17476/enc pul	0,332	R/W	
MULTI RAMP DEC CCW 3 (msec/rpm)	21433	float	0	17476/enc pul	0,332	R/W	
POSITION PARAMETER							
POS ACC CW (msec/rpm)	30010	float	0	17476/enc pul	0,332	R/W	
POS ACC CCW (msec/rpm)	30011	float	0	17476/enc pul	0,332	R/W	
POS DEC CW (msec/rpm)	30012	float	0	17476/enc pul	0,332	R/W	
POS DEC CCW (msec/rpm)	30013	float	0	17476/enc pul	0,332	R/W	
POS SPEED (rpm)	30014	float	0	10000	3000	R/W	
POS CURRENT (A)	30015	float	0	Drive size	6	R/W	
POS STOP DEC (msec/rpm)	30094	float	0	17476/enc pul	0,332	R/W	
POS ACTUAL POS	30016	float	0	2 ³¹ -1	0	R	

txv0630

FLEXMAX

PARAMETER	No.	Format	Value		Factory	Access via	
			min	max		RS485	Terminal
POSITION PARAMETER \ POS FUNCTION							
MEASURE UNIT PER REV	30000	dword	0	100000	1000	R/W	
POS MINIMUM PRESET	30017	float	-2 ²²	2 ²² -1	-2 ²²	R/W	
POS MAXIMUM PRESET	30018	float	-2 ²²	2 ²² -1	2 ²² -1	R/W	
POS MINIMUM ABS	30055	float	0	2 ³¹ -1	0	R/W	
POS MAXIMUM ABS	30056	float	0	2 ³¹ -1	0	R/W	
POS PRESET INDEX	30090	word	0	63	0	R/W	
POS PRESET SERIAL	30092	enum	0	1	Dig input	R/W	
Digital input Parameter						0	1
POS ABS	30091	enum	0	1	Incremental	R/W	
Incremental Absolute						0	1
POS CONFIGURATION	30093	dword	00000000H	0FFFFFFFH	0H	R/W	
POS DEST REV	30080	long	-2 ²²	2 ²² -1	0	R	
POS DEST POS	30081	long	-2 ²²	2 ²² -1	0	R	
POSITION PARAMETER \ POS THR CONFIG							
POS ABSTHR	30050	float	-2 ²²	2 ²² -1	0	R/W	
POS THR	30051	float	0	2 ²² -1	0	R/W	
POS THROFF	30052	float	0	2 ²² -1	0	R/W	
POS THR NEAR 1	30053	float	0	2 ²² -1	0	R/W	
POS THR NEAR 2	30054	float	0	2 ²² -1	0	R/W	
POSITION PARAMETER \ POS PRESET [0]							
POS PRESET [0]	30100	float	-2 ²²	2 ²² -1	0	R/W	
POS SPEED [0] (rpm)	30200	float	0	10000	0	R/W	
POS ACC [0] (msec/rpm)	30300	float	0	17476/enc pul	0,332	R/W	
POS DEC [0] (msec/rpm)	30400	float	0	17476/enc pul	0,332	R/W	
POSITION PARAMETER \ POS PRESET [1]							
POS PRESET [1]	30101	float	-2 ²²	2 ²² -1	0	R/W	
POS SPEED [1] (rpm)	30201	float	0	10000	0	R/W	
POS ACC [1] (msec/rpm)	30301	float	0	17476/enc pul	0,332	R/W	
POS DEC [1] (msec/rpm)	30401	float	0	17476/enc pul	0,332	R/W	
POSITION PARAMETER \ POS PRESET [2]							
POS PRESET [2]	30102	float	-2 ²²	2 ²² -1	0	R/W	
POS SPEED [2] (rpm)	30202	float	0	10000	0	R/W	
POS ACC [2] (msec/rpm)	30302	float	0	17476/enc pul	0,332	R/W	
POS DEC [2] (msec/rpm)	30402	float	0	17476/enc pul	0,332	R/W	
POSITION PARAMETER \ POS PRESET [3]							
POS PRESET [3]	30103	float	-2 ²²	2 ²² -1	0	R/W	
POS SPEED [3] (rpm)	30203	float	0	10000	0	R/W	
POS ACC [3] (msec/rpm)	30303	float	0	17476/enc pul	0,332	R/W	
POS DEC [3] (msec/rpm)	30403	float	0	17476/enc pul	0,332	R/W	
POSITION PARAMETER \ POS PRESET [4]							
POS PRESET [4]	30104	float	-2 ²²	2 ²² -1	0	R/W	
POS SPEED [4] (rpm)	30204	float	0	10000	0	R/W	
POS ACC [4] (msec/rpm)	30304	float	0	17476/enc pul	0,332	R/W	
POS DEC [4] (msec/rpm)	30404	float	0	17476/enc pul	0,332	R/W	
POSITION PARAMETER \ POS PRESET [5]							
POS PRESET [5]	30105	float	-2 ²²	2 ²² -1	0	R/W	
POS SPEED [5] (rpm)	30205	float	0	10000	0	R/W	
POS ACC [5] (msec/rpm)	30305	float	0	17476/enc pul	0,332	R/W	
POS DEC [5] (msec/rpm)	30405	float	0	17476/enc pul	0,332	R/W	

txv0640

POWERTEC

PARAMETER	No.	Format	Value		Factory	Access via	
			min	max		RS485	Terminal
POSITION PARAMETER \ POS PRESET [6]							
POS PRESET [6]	30106	float	-2 ²²	2 ²² -1	0	R/W	
POS SPEED [6] (rpm)	30206	float	0	10000	0	R/W	
POS ACC [6] (msec/rpm)	30306	float	0	17476/enc pul	0,332	R/W	
POS DEC [6] (msec/rpm)	30406	float	0	17476/enc pul	0,332	R/W	
POSITION PARAMETER \ POS PRESET [7]							
POS PRESET [7]	30107	float	-2 ²²	2 ²² -1	0	R/W	
POS SPEED [7] (rpm)	30207	float	0	10000	0	R/W	
POS ACC [7] (msec/rpm)	30307	float	0	17476/enc pul	0,332	R/W	
POS DEC [7] (msec/rpm)	30407	float	0	17476/enc pul	0,332	R/W	
POSITION PARAMETER \ POS PRESET [8 ... 63]							
POS PRESET [8]	30108	float	-2 ²²	2 ²² -1	0	R/W	
POS PRESET [...]	301...	float	-2 ²²	2 ²² -1	0	R/W	
POS PRESET [63]	30163	float	-2 ²²	2 ²² -1	0	R/W	
POSITION PARAMETER \ ZERO FOUND CONFIG							
POS ACC CW 0 (msec/rpm)	30020	float	0	17476/enc pul	0,332	R/W	
POS ACC CCW 0 (msec/rpm)	30021	float	0	17476/enc pul	0,332	R/W	
POS DEC CW 0 (msec/rpm)	30022	float	0	17476/enc pul	0,332	R/W	
POS DEC CCW 0 (msec/rpm)	30023	float	0	17476/enc pul	0,332	R/W	
POS SPEED MAX 0 (rpm)	30024	float	0	10000	1500	R/W	
POS SPEED REF 0 (%)	30025	float	-100%	+100%	10%	R/W	
POS SPEED FINE 0 (rpm)	30027	float	0	10000	50	R/W	
POS ZPOS	30030	long	0	2 ³¹ -1	0	R/W	
POS 0 FOUND	30031	int	0	1	0	R	
POS ZREV OFFSET	30035	dword	0	10000	0	R/W	
POS ZREV	30029	long	-2 ³¹	2 ³¹ -1	0	R	
POSITION PARAMETER \ ZERO RETURN CONFIG							
POS SPEED RET 0 (rpm)	30026	float	0	10000	1000	R/W	
POS ACC RET 0 (msec/rpm)	30032	float	0	17476/enc pul	0,332	R/W	
POS DEC RET 0 (msec/rpm)	30033	float	0	17476/enc pul	0,332	R/W	
POS DSPEED RET 0 (rpm)	30034	float	0	10000	50	R/W	
ELECTRICAL LINE SHAFT							
ELS PULS REV MAST	32000	word	512	32767	2048	R/W	
ELS DELTA TIME (sec)	32008	float	0	10 sec	1 sec	R/W	
ELS MASTER SEL	32009	enum	0	1	Encoder	R/Z	
Encoder						0	
Fast link	1						
ELS DELTA RATIO	32014	float	10 ⁻⁶	+7.900	1	R/W	
ELS SLIP	32020	enum	0	1	Ratio	R/Z	
Ratio						0	
Slip	1						
ELS POSITION ERROR	19113	long	0	2 ²² -1	0	R	
ELECTRICAL LINE SHAFT \ ELECTRICAL LINE SHAFT RATIO							
ELS RATIO [0]	32001	float	-8.000	+7.900	1.000	R/W	
ELS RATIO [1]	32002	float	-8.000	+7.900	1.000	R/W	
ELS RATIO [2]	32003	float	-8.000	+7.900	1.000	R/W	
ELS RATIO [3]	32004	float	-8.000	+7.900	1.000	R/W	
ELS ACT RATIO	32005	float	-8.000	+7.900	1.000	R	
ELS RATIO INDEX	32006	word	0	3	0	R/W	
ELS RATIO SERIAL	32007	enum	0	1	Dig input	R/W	
Digital input						0	
Parameter	1						

txv0650

FLEXMAX

PARAMETER	No.	Format	Value			Access via	
			min	max	Factory	RS485	Terminal
ELECTRICAL LINE SHAFT \ ELECTRICAL LINE SHAFT BAND							
ELS RB SPEED MAX [rpm]	32100	float	-10000	+10000	1000	R/W	
ELS RB SPEED REF [%]	32104	float	-100	+100	10	R/W	
ELS RB TIME [sec]	32101	float	0	500	500 sec	R/W	
ELS RB ACC [sec]	32102	float	0	10000	1 sec	R/W	
ELS RB DEC [sec]	32103	float	0	10000	1 sec	R/W	
FAILURE REGISTER							
DRIVE FAULT	24000	dword	0	2 ³² -1	0	R	
EXTERNAL FAULT	24001	int	0	1	0	R	
BRIDGE DESATURATION	24002	int	0	1	0	R	
OVERCURRENT	24003	int	0	1	0	R	
DCLINK OVERVOLTAGE	24004	int	0	1	0	R	
HEATSINK OVERTEMP	24005	int	0	1	0	R	
MODULE JUNCTION OVERTEMP	24006	int	0	1	0	R	
BRAKE DESATURATION	24007	int	0	1	0	R	
MOTOR OVERTEMP	24008	int	0	1	0	R	
AUX POWER UNDERVOLT	24009	int	0	1	0	R	
DSP PROG ERROR	24010	int	0	1	0	R	
PRG 16KHZ OVERTIME	24011	int	0	1	0	R	
INVALID FLASH PARMS	24012	int	0	1	0	R	
BAD FLASH DEVICE	24013	int	0	1	0	R	
BRAKE OVERPOWER	24014	int	0	1	0	R	
NTC DISCONNECTED	24015	int	0	1	0	R	
BRAKE ERROR	24016	int	0	1	0	R	
LOCK DRIVE	24017	int	0	1	0	R	
DI ENCODER COUNT	24018	int	0	1	0	R	
AD ENCODER COUNT	24019	int	0	1	0	R	
ENCODER SIMULATION	24020	int	0	1	0	R	
UNDERVOLTAGE	24021	int	0	1	0	R	
INTAKE AIR OVERTEMP	24022	int	0	1	0	R	
REGULATION OVERTEMP	24023	int	0	1	0	R	
IGBT MODULE OVERTEMP	24024	int	0	1	0	R	
SIZE NOT DEFINED	24025	int	0	1	0	R	
EB-BUS LOSS	24026	int	0	1	0	R	
EB-GENERIC FAIL	24027	int	0	1	0	R	
SEQUENCE ERROR	24028	int	0	1	0	R	
FAST LINK ERROR	24029	int	0	1	0	R	
POSITION ERROR	24030	int	0	1	0	R	
FIRST ALARM	24040	word	0	31	0	R	

txv0660

PARAMETER	No.	Format	Value		Factory	Access via	
			min	max		RS485	Terminal
FAILURE REGISTER \ PROGRAM ALARM							
ALARMS TO MASK	24100	dword	0	2 ³² -1	19000000H	R/W	
SYSTEM							
SYS_IC_P_FAK	18100	word	0	32767	256	R/W	
SYS_IC_I_FAK	18101	word	0	32767	256	R/W	
SYS_IC_D_FAK	18102	word	0	32767	256	R/W	
SYSTEM / BRAKING UNIT							
SYS_OV_CLM_LIM	18103	float	0	1250	850		
SYS_OV_MAX_LIM	18104	word	0	1250	0	R/W	
SYSTEM / DIGITAL OUTPUT RESET							
SYS_DO_RESET_AT_FAIL	20005	long	00000000H	FFFFFFFFH	00000000H	R/W	
SYS_DO_SET_AT_FAIL	20006	long	00000000H	FFFFFFFFH	00000000H	R/W	
SYSTEM / UNDERVOLTAGE LIMITS							
SYS_UV_V_MIN	18120	word	0	460	400	R/W	
SYS_UV_P_FAK	18121	word	0	32767	30	R/W	
SERVICE							

txv0680

EC DECLARATION OF CONFORMITY

The possible validity of the EMC directive (89 / 336) applied to PDS

“CE marking” summarizes the presumption of compliance with the Essential Requirements of the EMC Directive, which is formulated in the **EC Declaration of Conformity**

Clauses numbers [...] refer to European Commission document “Guidelines on the Application of Council Directive 89/336/EEC”

Brussels, 25 & 26 Oct. 1993

Validity Field	Description
<p style="text-align: center;">-1-</p> <p style="text-align: center;">Complex component sold “directly to final consumer” [clause 4.7 (4th §) and clause 4.7b]</p> <p style="text-align: center;">A PDS (or CDM/BDM) of the Unrestricted Distribution class</p>	<p>Placed on the market. Free movement based on compliance with the EMC Directive - EC Declaration of conformity required - CE marking required</p> <p>The manufacturer of the PDS (or CDM/BDM) is responsible for the EMC behaviour of the PDS (or CDM/BDM), under specified conditions. Additional EMC measures outside the item are described in an easy to understand fashion and could actually be implemented by a layman. The resulting EMC behaviour is the responsibility of the assembler of the final product, by following the manufacturer’s recommendations and guidelines.</p>
<p style="text-align: center;">-2-</p> <p style="text-align: center;">Complex component only for professional assemblers [clause 4.7 (2nd and 3rd §) and clause 4.7a]</p> <p style="text-align: center;">A PDS (or CDM/BDM) of the Restricted Distribution class sold to be included as part of an apparatus, system or installation</p>	<p>Intended only for professional assemblers who have a level of technical competence to correctly install. Does not have intrinsic function for the end user. - No EC Declaration of conformity - No CE marking - PDS should comply with IEC-22G/21/CDV</p> <p>The manufacturer of the PDS (or CDM/BDM) is responsible for the provision of installation guidelines that will assist the manufacturer of the apparatus, system or installation to achieve compliance. The resulting EMC behaviour is the responsibility of the manufacturer of the apparatus, system, or installation, for which its own standards may apply.</p>
<p style="text-align: center;">-3-</p> <p style="text-align: center;">Installation [clause 4.6]</p> <p>One or more PDSs, possibly of different classes - Restricted or Unrestricted - brought together at a given place, in or with apparatus, system or other components.</p>	<p>Not intended to be placed on the market as a single functional unit. Each apparatus or system included is subject to the provisions of the EMC Directive. - No EC Declaration of conformity - No CE marking of the installation - The PDSs should comply with IEC-22G/21/CDV</p> <p>Resulting EMC behaviour is the responsibility of the installer (e.g. by following an appropriate EMC plan). Essential protection requirements of EMC Directive apply regarding the neighbourhood of the installation.</p>
<p style="text-align: center;">-4-</p> <p style="text-align: center;">Apparatus / system [clause 4.4 and 4.5]</p> <p>(A) PDS(s) or (CDM/BDM) of the Unrestricted Distribution class in finished item(s).</p>	<p>Has an intrinsic function for the final user and placed on the market as a single commercial unit. - EC Declaration of conformity required - CE marking required (for the apparatus or system)</p> <p>Resulting EMC behaviour is the responsibility of the manufacturer of the apparatus or system.</p>

