



CONTROL UNIT

STU4116

for one 400Vac or 230Vac Three-Phase Motor or a 230Vac Single Phase Motor

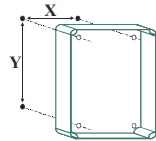
QUICK INSTALLATION INSTRUCTIONS



NOT416-R-GB-5

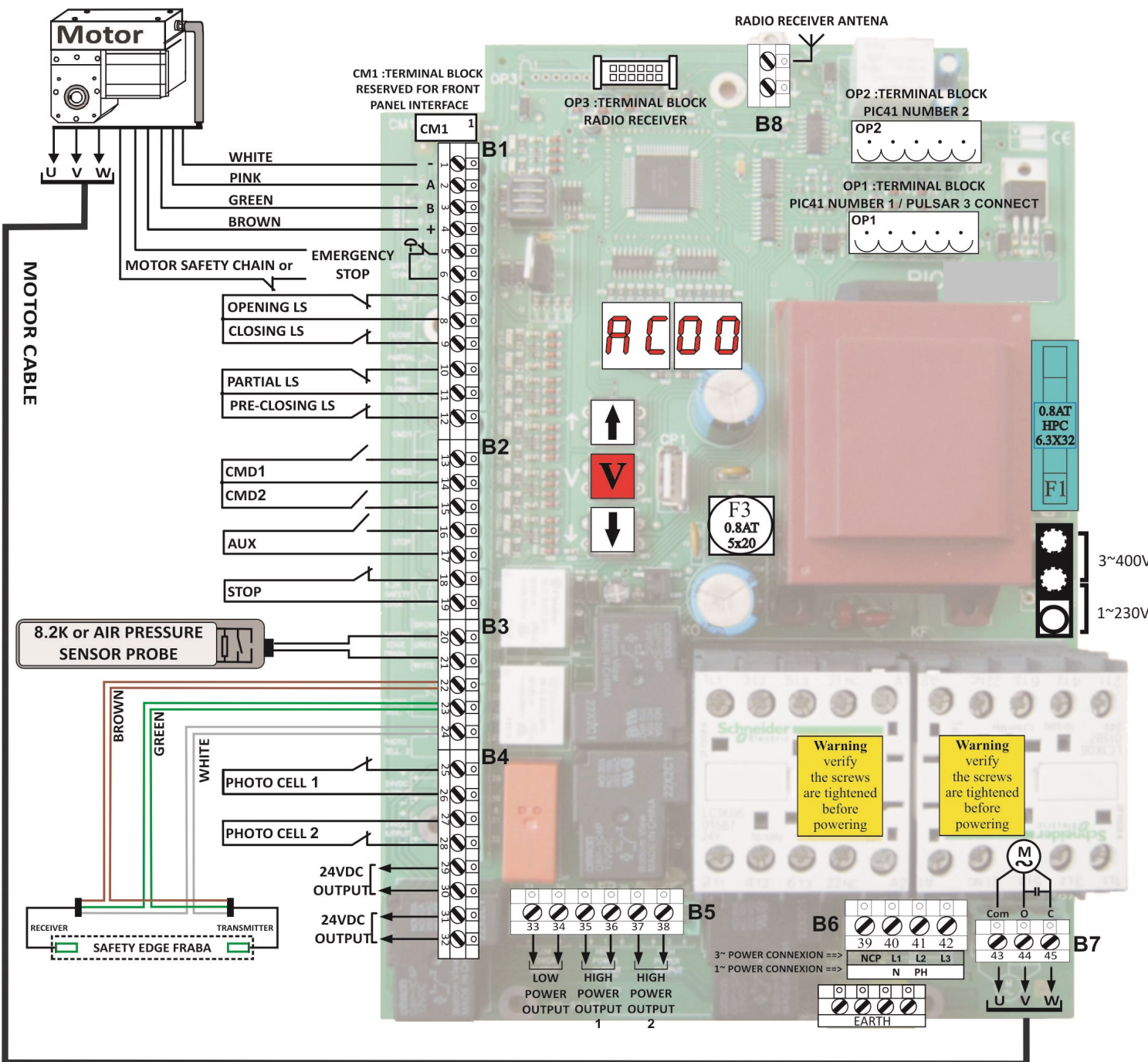
This quick start guide concern one product, STU4116 . This guide applies to an installation with motor equipped with electronic or mechanical limit switches and is used for first installation power up procedure. Any other settings, specials configurations, peripheral connection or standards compliancy details, are in the A5 size technical instructions .

1 - ASSEMBLY



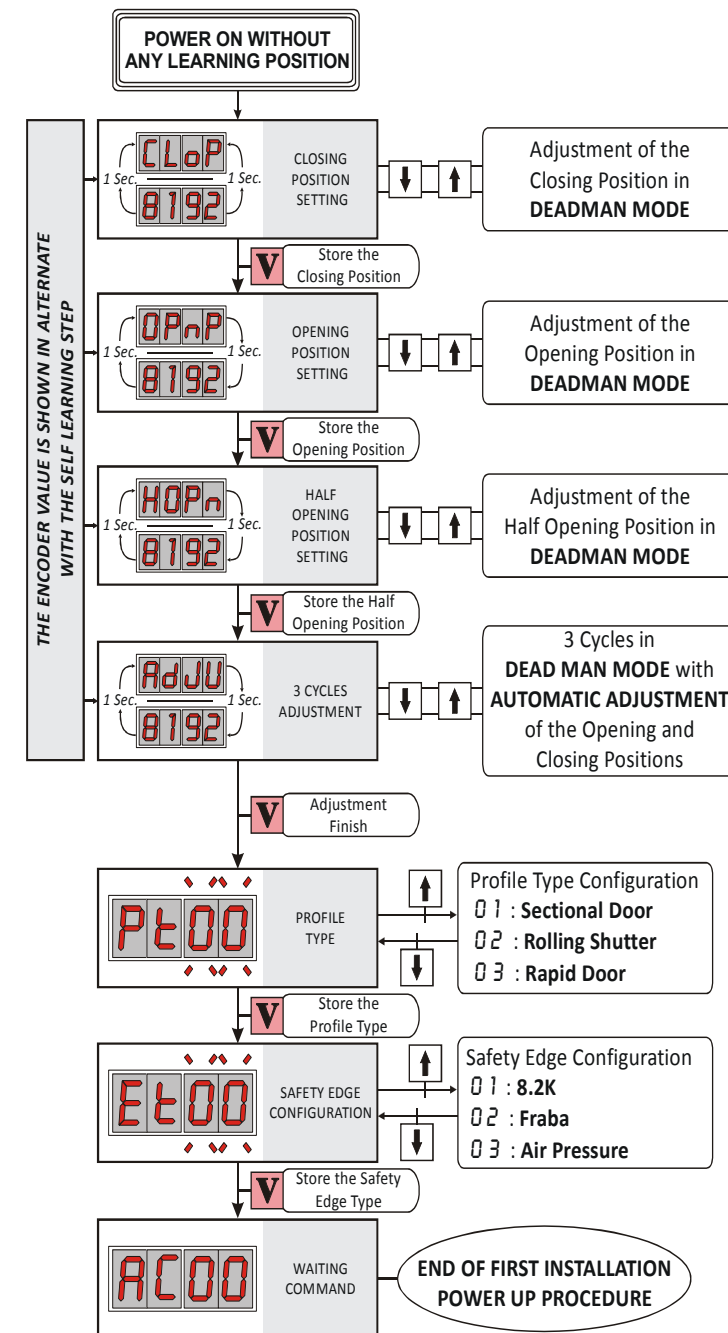
Type of IP54 enclosure External dimensions	Mechanical Fastening		No. Sliding Gland	No. Normal Gland	
	X in mm	Y in mm		M16	M20
Vertical Leak proof Plastic 280 x 192 x110	142	254	3	2	2

2 - PCB CONNECTION

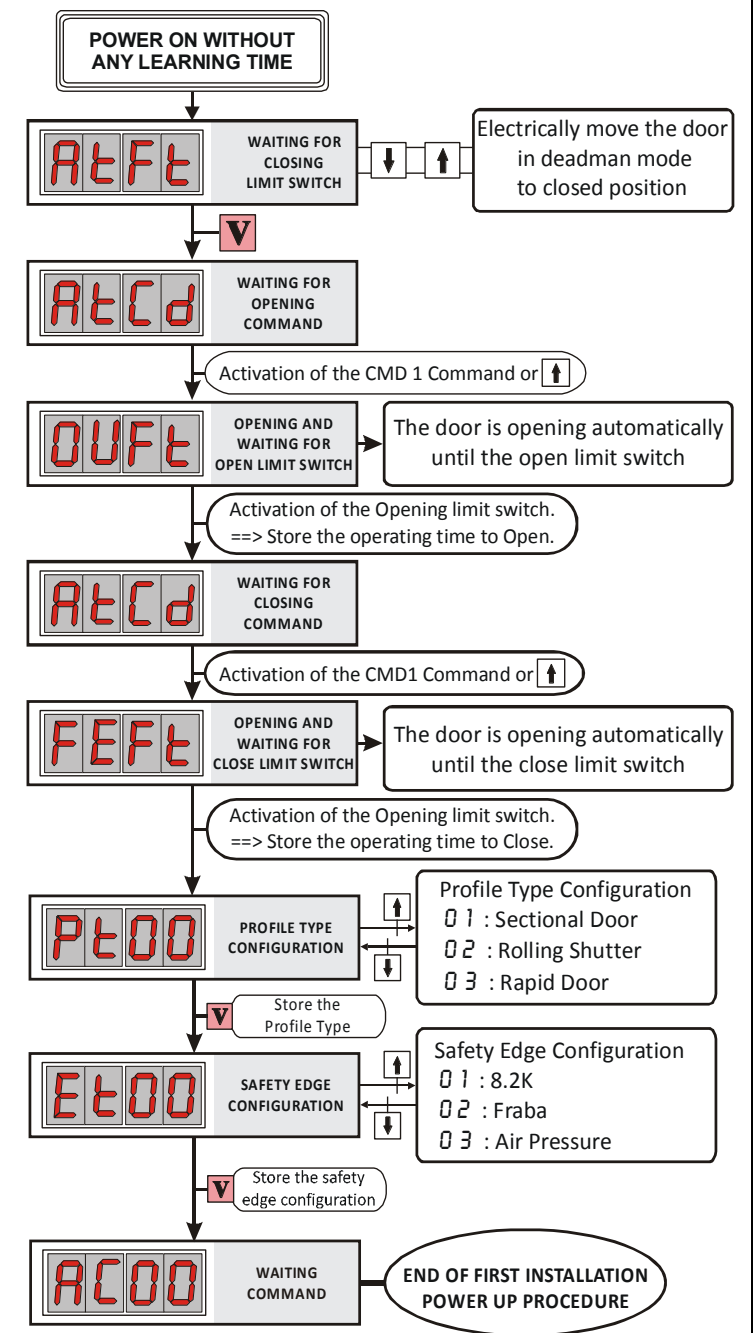


3 - FIRST INSTALLATION POWER UP PROCEDURE

ELECTRONIC LIMIT SWITCH

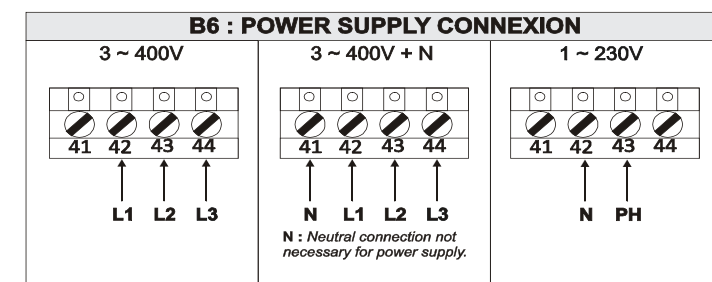


MECHANICAL LIMIT SWITCH



- THE ELECTRONIC BOARD IS READY TO GO IN LEVEL 1

Command description			
	01 Sectional Door	02 Rolling Shutter	03 Rapid Door
CMD1	1 Push : Partial Open (↑) 2 Push : Total Open (↑)	Open (↑)	1 Push : Partial Open (↑) 2 Push : Total Open (↑)
CMD2	Close (↓)	Close (↓)	Close (↓)
AUX	Step By Step command	Partial open command	Input photocell blanking



STU4116 - AVAILABLE PARAMETERS FOR LEVEL 1 AFTER THE END OF THE FIRST INSTALLATION POWER UP PROCEDURE

d0		GENERIC PARAMETERS			Sectional Door	Rolling Shutter	Rapid Door	
Parameters		Display	Value		01	02	03	
d1	Operating mode	00	Deadman					P.27
		01	Impulse Open / Deadman close			X		P.27
		02	Automatic		X		X	P.27
d2	AUX command configuration	00	Step by step command		X			P.28
		01	Partial/complete selection for CMD1					P.28
		02	Partial open command			X		P.29
		03	Traffic management external command					P.29
		04	Input photocell blanking				X	P.29
		05	Automatic interlocking input					P.29
d3	Closing on Photo-cell activation	0n	Closing after Photo-cell Activation				X	P.30
		0F	Not closing after photo-cell activation		X	X		P.30
d4	Closing on timer end	0n	Closing after end of the timer					P.30
		0F	Not closing after end of the timer		X	X	X	P.30
d5	With or without Clock system	0n	With clock system					P.30
		0F	Without clock system		X	X	X	P.30
d6	Number of closing attempts	00 to 50	Closure Attempts		03	00	03	P.30
E0					Sectional Door	Rolling Shutter	Rapid Door	
Parameters		Display	Value		01	02	03	
E3	Safety edge input configuration	00	Inactive		Set during the first installation			P.32
		01	8.2k safety edge only					P.32
		02	Air pressure safety edge without 8.2k					P.32
		03	Air pressure safety edge with 8.2k					P.32
		04	Pass-door function					P.32
E4	Safety edge function	01	Close safety input with complete reopen		X	X	X	P.32
		02	Close safety input with 2 seconds reopen					P.32
E5	Fraba safety edge function	00	Inactive		Set during the first installation			P.31
		01	Close safety input with complete reopen					P.31
		02	Close safety input with 2 sec reopen					P.31
E6	Limit switch type	00	Mechanical limit switch		Set in function of the limit switch connected			P.32
		01	Electronic limit switch					P.32
		02	Without limit switch					P.32
EH	Pulsar 3 CONNECT Channel 1	00	Inactive					P.32
		01	OPEN safety input with COMPLETE reclosing					P.32
		02	OPEN safety input with 2 SEC reclosing					P.32
		03	CLOSE safety input with complete reopening		X	X	X	P.32
		04	CLOSE safety input with 2 seconds reopening					P.32
		05	Safety input : OPEN→STOP,CLOSE→COMPLETE reopen					P.32
		06	Safety input : OPEN → STOP, CLOSE → 2 SEC reopen					P.32
		07	CLOSE safety input : COMPLETE reopening with blanking					P.32
		08	CLOSE safety input : 2 SEC reopening with blanking					P.32
		09	Pass-door function					P.32
EU	Pulsar 3 CONNECT Channel 2	00	Inactive		X	X	X	P.32
		01	OPEN safety input with COMPLETE reclosing					P.32
		02	OPEN safety input with 2 SEC reclosing					P.32
		03	CLOSE safety input with complete reopening					P.32
		04	CLOSE safety input with 2 seconds reopening					P.32
		05	Safety input : OPEN→STOP,CLOSE→COMPLETE reopen					P.32
		06	Safety input : OPEN → STOP, CLOSE → 2 SEC reopen					P.32
		07	CLOSE safety input:COMPLETE reopen with BLANKING					P.32
		08	CLOSE safety input : 2 SEC reopening with BLANKING					P.32
		09	Pass-door function					P.32
r0 RADIO MANAGEMENT (ETME RADIO RECEIVER)					NOTE : 01 = Sectional Door 02 = Rolling Shutter 03 = Rapid Door = Page of the A5 size guide			
Parameters		Value						
r1	Radio Transmitter addition	rr	Add transmitter	P.63				
r2	Radio Transmitter suppression	rr	Delete transmitter	P.63				
r3	Memory Deletion (VALIDATE during 5s)	0n : Yes 0F : No		P.63				

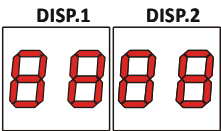
J0						Sectional Door	Rolling Shutter	Rapid Door	
Parameters		Display	Value			01	02	03	
J1	High power output 1 function	00	Electric Strike Door Release						P.38
		01	Electromagnetic door lock						P.38
		02	Brake contact NO			X	X	X	P.38
		03	Brake contact NC						P.38
		04	Flashing output						P.38
		05	Door close indication						P.38
J2	High power output 2 function	00	Electric Strike Door Release						P.38
		01	Electromagnetic door lock			X			P.38
		02	Brake contact NO						P.38
		03	Brake contact NC						P.38
		04	Flashing output				X	X	P.38
J3	Brake type	05	Door close indication						P.38
		01	Brake type 1			X	X	X	P.38
		02	Brake type 2						P.38
		03	Brake type 3						P.39
		04	Brake type 4						P.39
J5	Flashing warning before starting	05	Brake type 5						P.39
		00	No warning before starting					X	P.40
		01	Warning before start closing only						P.40
		02	Warning before start opening and closing			X	X		P.40
J6	Low power output 1 function	00	Alarm						P.40
		01	Timer						P.40
		02	Door position			X			P.40
		03	Autotest output NC						P.40
		04	Autotest output NO						P.40
		05	Automatic interlocking output						P.40
		06	Buzzer output						P.40
		07	Service point output						P.40
		08	Service point output + dead man operating						P.40
		09	Door open indication				X	X	P.40
		10	Door close indication						P.40
		11	Pulsar 3 CONNECT Alarm						P.40
		12	Activation on L3 position						P.40

t0						Sectional Door	Rolling Shutter	Rapid Door	
Parameters		Value				01	02	03	
tF	Open/Close Timer	00 Sec. to 4.0 Min				1.0	1.0	30	P.49
tA	Re-closing Timer	00 Sec. to 4H00				10	10	05	P.49
tU	Warning timer before starting	00 Sec. to 10 Sec.				03	03	03	P.49

L0						Sectional Door	Rolling Shutter	Rapid Door	
Parameters		Value				01	02	03	
L1	Partial open position	0000 to 8192							P.51
L2	Closing Pre-detection Position	0000 to 8192							P.51
L3	Indication Position	0000 to 8192							P.51
L4	Photocell blanking position	0000 to 8192							P.51

PRESET FUNCTIONS FOR THE THREE PROFILES	Sectional Door	Rolling Shutter	Rapid Door	
Functions	01	02	03	
Photo-cell 1 input	CLOSE safety input COMPLETE reopen	Inactive	CLOSE safety input COMPLETE reopen	P.33
Photo-cell 2 input				P.33
Radio input configuration	External command			P.33
Radio channel reaction during opening	Reverse	Inactive	Reverse	P.36
Radio channel reaction during closing	Reverse	Inactive	Reverse	P.36
Open command reaction during closing	Reverse			P.36
Flashing type	Normal speed	Normal speed	High speed	P.46
Flashing warning before starting	Before start opening and closing		Before start closing only	P.47
Reverse on safety edge action timer	0,2 seconds			P.50

DISPLAY



OPERATING PHASE DISPLAY		DOOR POSITION DISPLAY	
Waiting for command	RC		Door is open
Total internal opening (complete opening phase in progress with priority to inside panel)	OU		Door is neither open or closed
Total external opening (complete opening phase in progress with priority to outside panel)	OE		Door is closed
Closing (Closing phase in progress)	FE		
Waiting to close (Door open, on standby for closing)	AF		
Reopening after safety close detection	LO		
Re-closing after safety open detection	LF		

ERROR MESSAGE CONTROL

ERROR MESSAGE					
Error Description	Code			Dead man	Actions And Consequences
	Display	Memorization	Alarm		
No error	00	None	No	—	
Permanent command	10	None	No	—	
Opening command during Closing phase	11	None	No	—	
Stop command	12	12	No	—	
Photo Cell 1 : Opening safety control active	20	None	No	Yes	Stay in dead man on the opening phase
Photo Cell 1 : Closing safety control active	21	None	No	Yes	Stay in dead man on the closing phase
Photo Cell 2 : Opening safety control active	22	None	No	Yes	Stay in dead man on the opening phase
Photo Cell 2 : Closing safety control active	23	None	No	Yes	Stay in dead man on the closing phase
8.2k safety edge : Opening safety control active	24	None	Yes	Yes	Stay in dead man on the opening phase
8.2k safety edge : Closing safety control active	25	None	No	Yes	Stay in dead man on the closing phase
Fraba safety edge : opening safety control active	26	None	Yes	Yes	Stay in dead man on the opening phase
Fraba Safety edge : closing safety control active	27	None	No	Yes	Stay in dead man on the closing phase
Pass door opened (input 8.2k)	28	None	No	No	Block all operating function
Pulsar 3 CONNECT pass-door input activated	29	None	No	No	
Self-Testing Photo Cell 1 Error	30	30	Yes	Yes	Stay in dead man on the phase where photocell is active until next self test
Self-Testing Photo Cell 2 Error	31	31	Yes	Yes	
Air Pressure Safety Edge Diagnostic Error	33	33	Yes	Yes	A new safety auto test is realized during a dead man closing
Pass door failure (8.2k)	34	34	Yes	No	Block all operating function - Reset needed
Blanking area too long	35	35	Yes	Yes	
Pulsar 3 CONNECT self-test error	36	36	Yes	Yes	
Reset or Power On	None	40	Yes	—	
DDP: Out of time	41	41	Yes	—	
Interlocking in progress	44	None	No	No	
Buzzer	45	None	No	—	
Locking system monitor error	46	46	No	—	
Radio receiver : memory is full	50	None	No	—	
Radio receiver : missing memory	51	None	No	—	
Internal Control Error: Internal Board default.	60	60	Yes	No	Block all operating function - Change control unit
Encoder communication error.	62	62	Yes	No	
Opening/Closing Position error: The door is out of the memorized positions	63	63	Yes	No	Block all operating function Replace the door manually and repeat self-learning
Motor direction error	64	64	Yes	No	Block all operating function - Change direction of motor wiring
Counter Cycle Overflow	65	None	No	No	Change the control unit
Channel 1 Pulsar 3 CONNECT opening activated	70	None	No	Yes	
Channel 1 Pulsar 3 CONNECT closing activated	71	None	No	Yes	
Channel 2 Pulsar 3 CONNECT opening activated	72	None	No	Yes	
Channel 2 Pulsar 3 CONNECT closing activated	73	None	No	Yes	
Pulsar 3 CONNECT low battery	74	None	No	Yes	
Pulsar 3 CONNECT radio communication error	75	None	No	Yes	
Pulsar 3 CONNECT pairing error	76	None	No	Yes	
Pulsar 3 CONNECT PIC line communication error	77	None	No	Yes	