Unidrive Automation B.V.
Oliemolenweg 3B
7944 HX Meppel
The Nederlands
Tel: +31 (0)522 245713
E-mail: info@unidrive-automation.nl

Company / customer	Sitetec B.V.
Project description	P2000EG650
Job number	2230097
Commission	Sitetec B.V.

Manufacturer (company)	Unidrive Automation B.V.
Project name	2230097 - P2000EG650-Rev 1
Make	
Type	
Place of installation	
Control cabinet name	A1

Created on	2-3-2023	Prepared by	JY
Project status	Revisie 1	Edit date	

Applied Wire Colors

U > 50VAC	
L1	Black
L2	Black
L3	Black
N*1	Blue
Earth	Yellow / green

U < 50VDC	
Plus	Darkblue
Switch wire	Darkblue
Min	Darkblue / white
Earth	Yellow / green

Analog signals	
Plus	Gray
Min	Gray
Earth	Yellow / green

U < 50VAC	
Plus	Gray
Min	Gray
Earth	Yellow / green

Safety circuits	
All	Yellow

External supplies	
All*2	Orange or Black

1 * = If AC voltage is not from a transformer
in the control cabinet itself the corresponding zero is light blue.
2 * = depending on the situation.

UNIDRIVE AUTOMATION

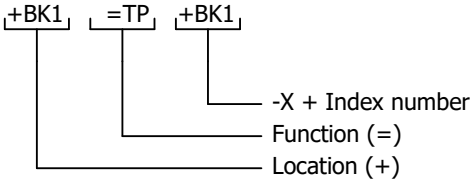
Sitetec B.V.
P2000EG650
Revisie 1

+A1	Distribution panel
&AAA1	Title page / cover sheet
=	

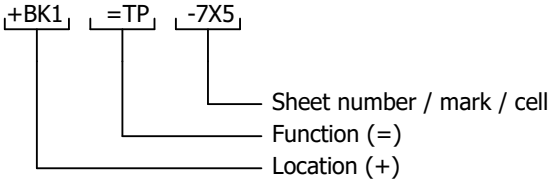
Wire colors

Project number: 2230097
Designed: JY Date: 2-3-2023
Changed: JY Date:
Page: 2

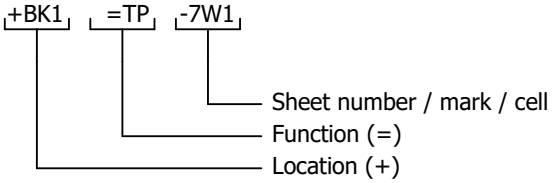
TERMINAL NUMBERING



Component coding



Cable numbering



Normal cable

Shielded cable

Structure

+	Location
&	Document type
=	Function

Component coding (internal)

A	Assemblies, cabinets (Cabinet, PCB, PLC, amplifier, laser)
T	Inverters, from non-electric to electric or vice versa (Pt100, proximity switch, photoelectric cell)
C	Capacitors
E	Several (Heating appliance, lighting appliance, appliances not mentioned elsewhere)
F	Protection devices (Fuse, circuit breaker, surge arrester)
G	Generator
P	Signaling (signal lamp, buzzer)
K	Relays & contactors
R	Coils, reactors
M	Motors
P	Measuring device, test device (Indicator, writer, integrating measuring device, signal generator, clock)
Q	Switching device for power circuits (motor protection, starter, breaker)
R	Resistance (Potentiometer, adjustable resistance, rheostat, shunt resistor, thermistor)
S	Control circuit switch, selector (push button, cam switch, limit switch, selector contact)
T	Transformer (Voltage transformer, current transformer)
T	Modulator, inverter (frequency converter, DC power supply, coder decoder, inverter, signal converter)
W	Cable
X	Terminals, sockets, plugs
Y	Electrically operated mechanical device (Brake, clutch, pneumatic valve)

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A1	Distribution panel
&AAA1	Title page / cover sheet
=	

Explanatory documents

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	3		

RATED CURRENTS FOR COPPER CONDUCTORS

IN ACCORDANCE WITH
NEN-EN-IEC 61439-1 : 2011 TABLE 11

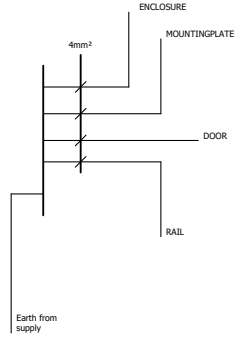
Cross-sectional mm2	Current
1	8
1,5	12
2,5	20
4	25
6	32
10	50
16	65
25	85
35	115
50	150
70	175
95	225
120	250
150	275
185	350
240	400

Enclosure earthing

Remark:

ALL PARTS WHERE 230V COMPONENTS
TO BE MOUNTED MUST BE EARTHED
WITH MINIMUM 4mm²

EARTH WIRES MUST NOT BE LOOPED.
ALL EARTH POINTS TO A CENTRAL EARTH POINT



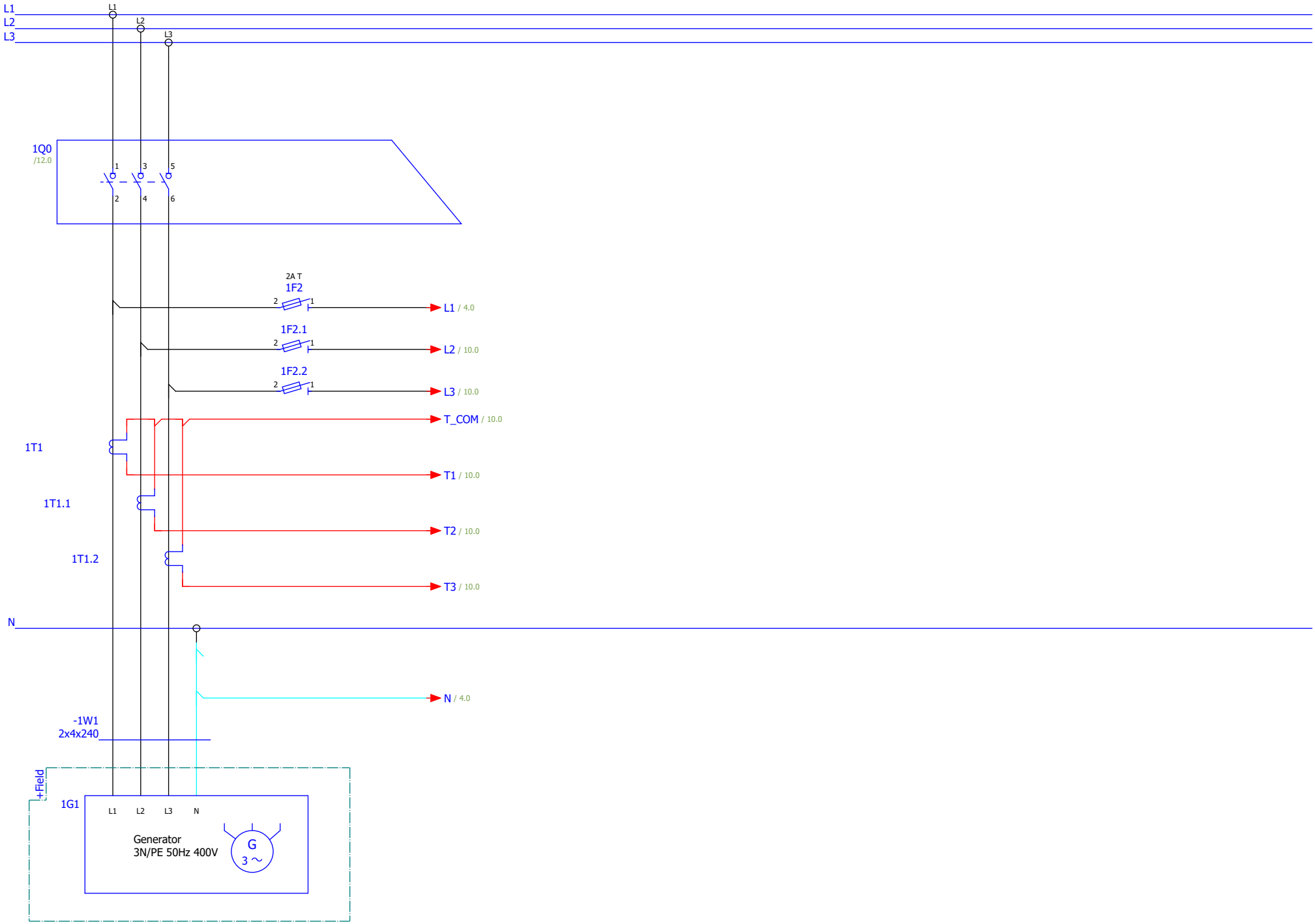
UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A1	Distribution panel
&AAA1	Title page / cover sheet
=	

Explanatory documents

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	4		

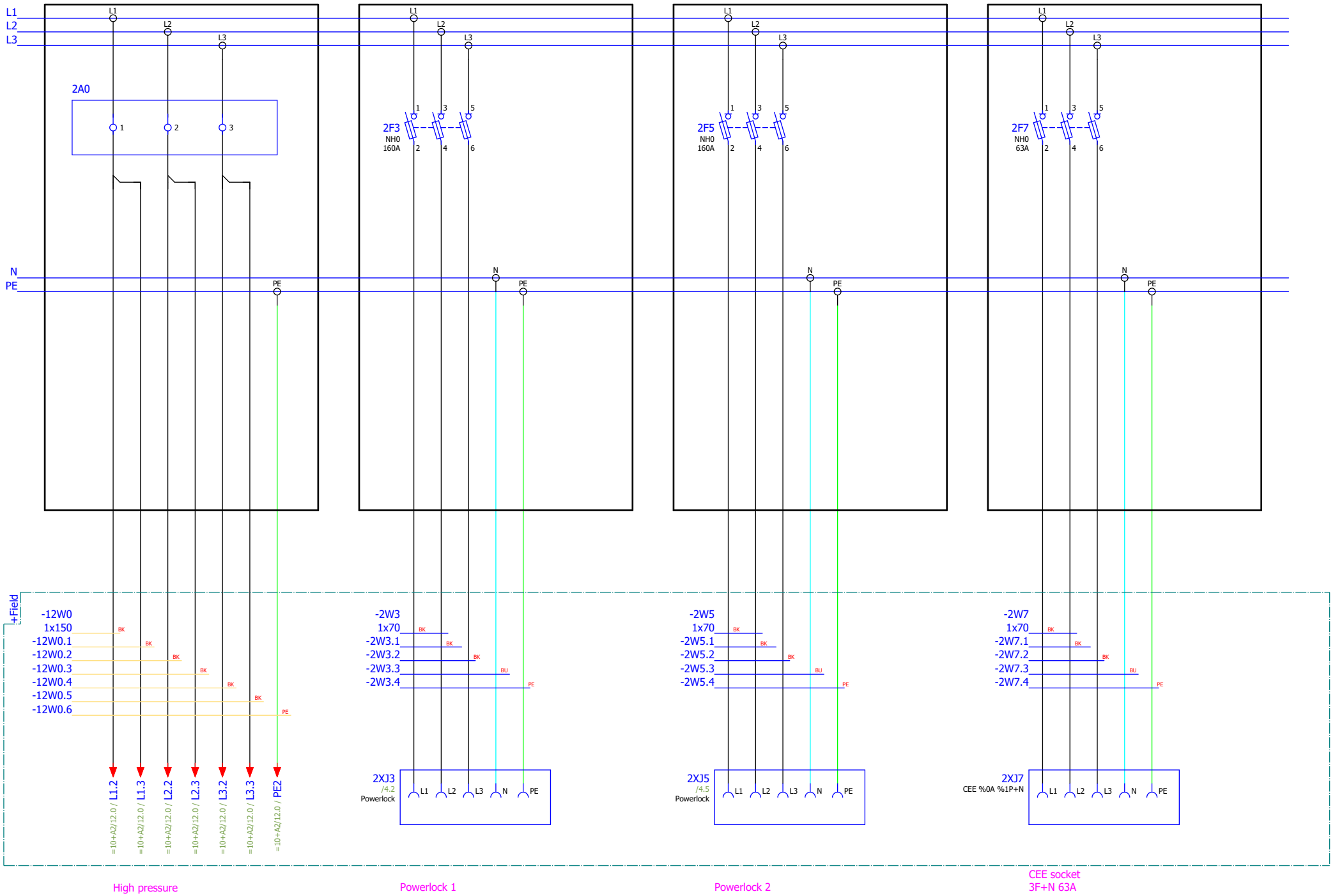


&AAA1/4

2

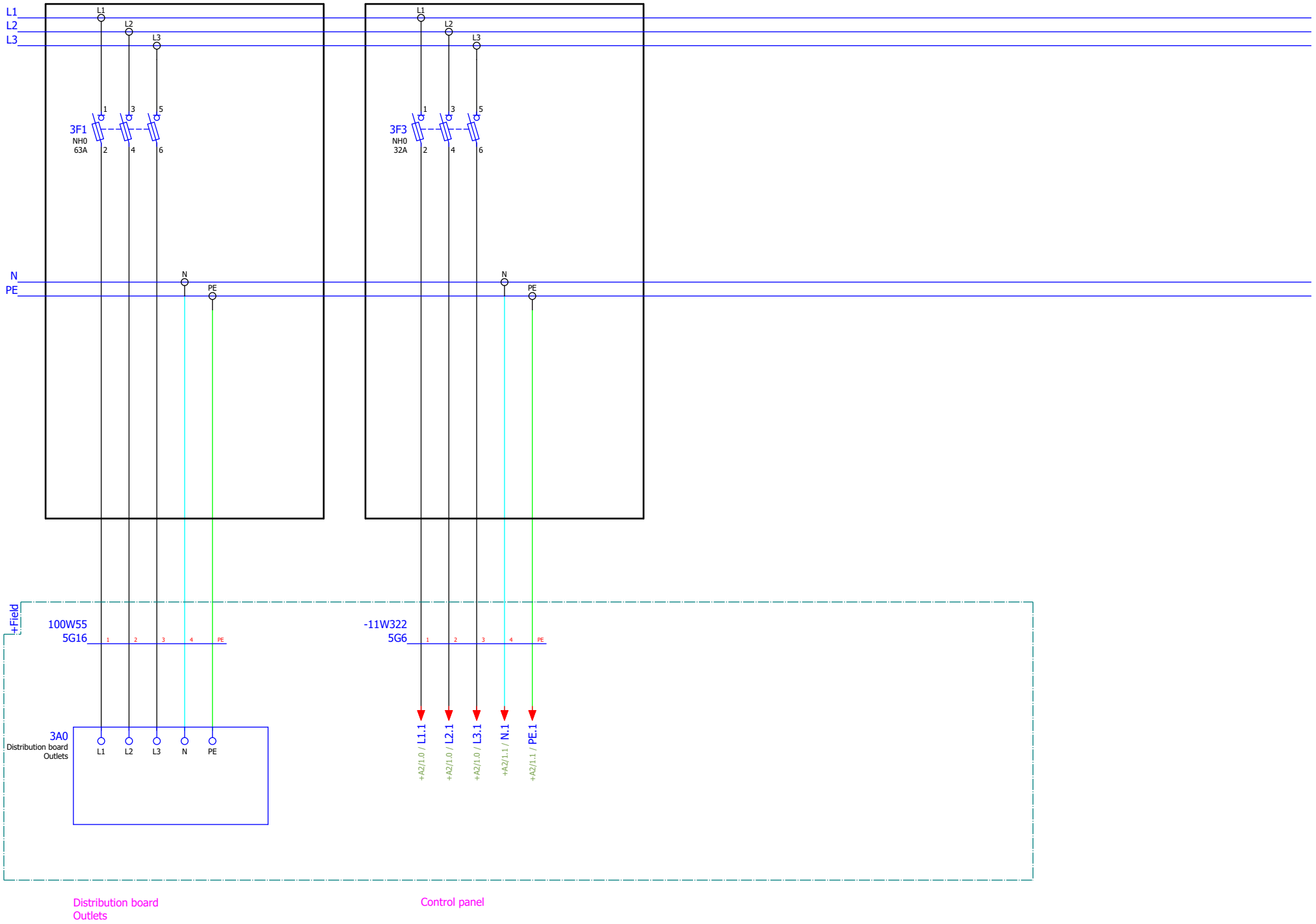
UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A1 &EFS1 =	Distribution panel Electrical engineering schematic	Power distribution Incoming power from generator

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	1		



UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A1 &EFS1 =	Distribution panel Electrical engineering schematic	Power distribution Outgoing fields

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	2		



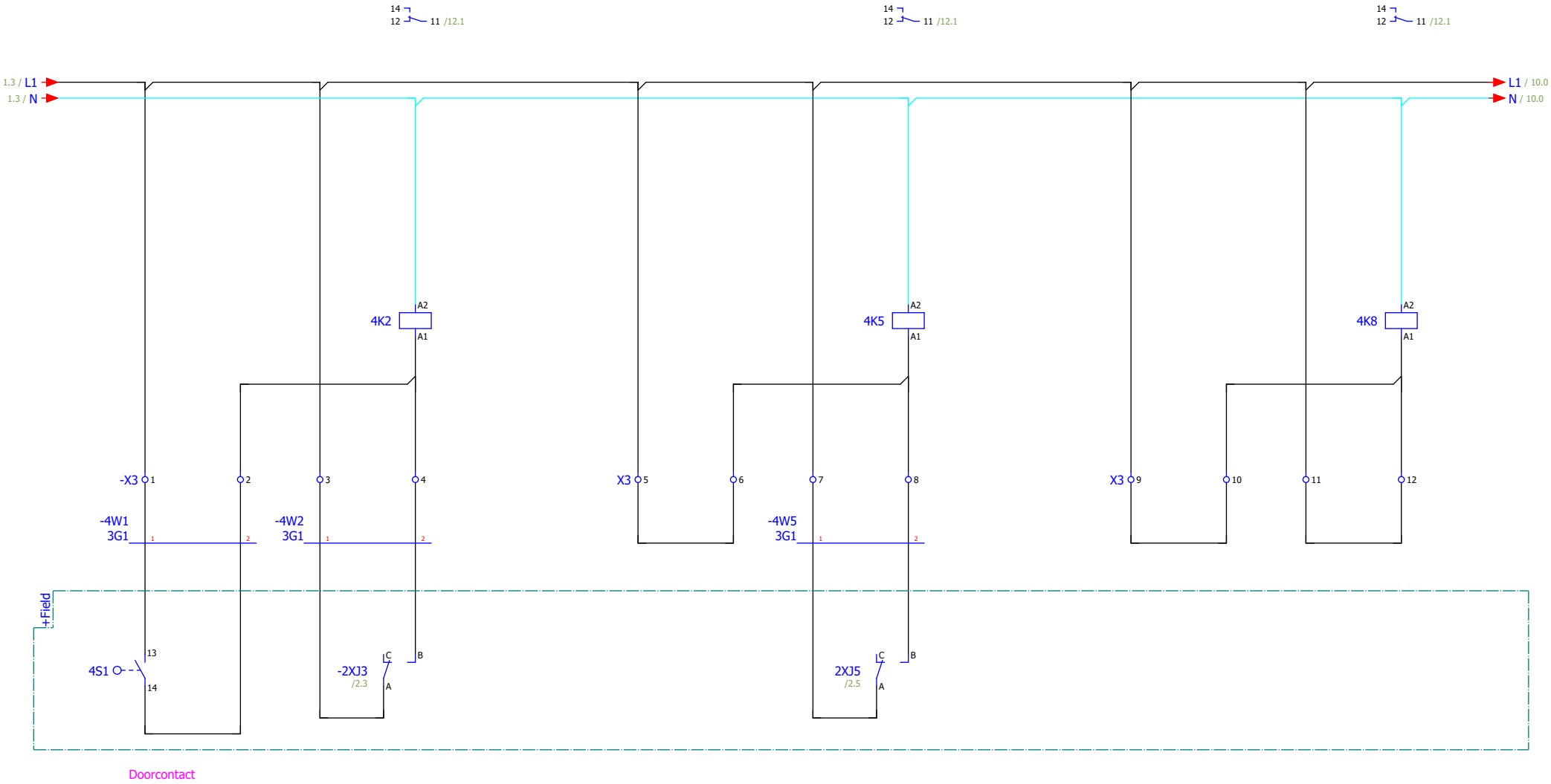
UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A1	Distribution panel
&EFS1	Electrical engineering schematic
=	

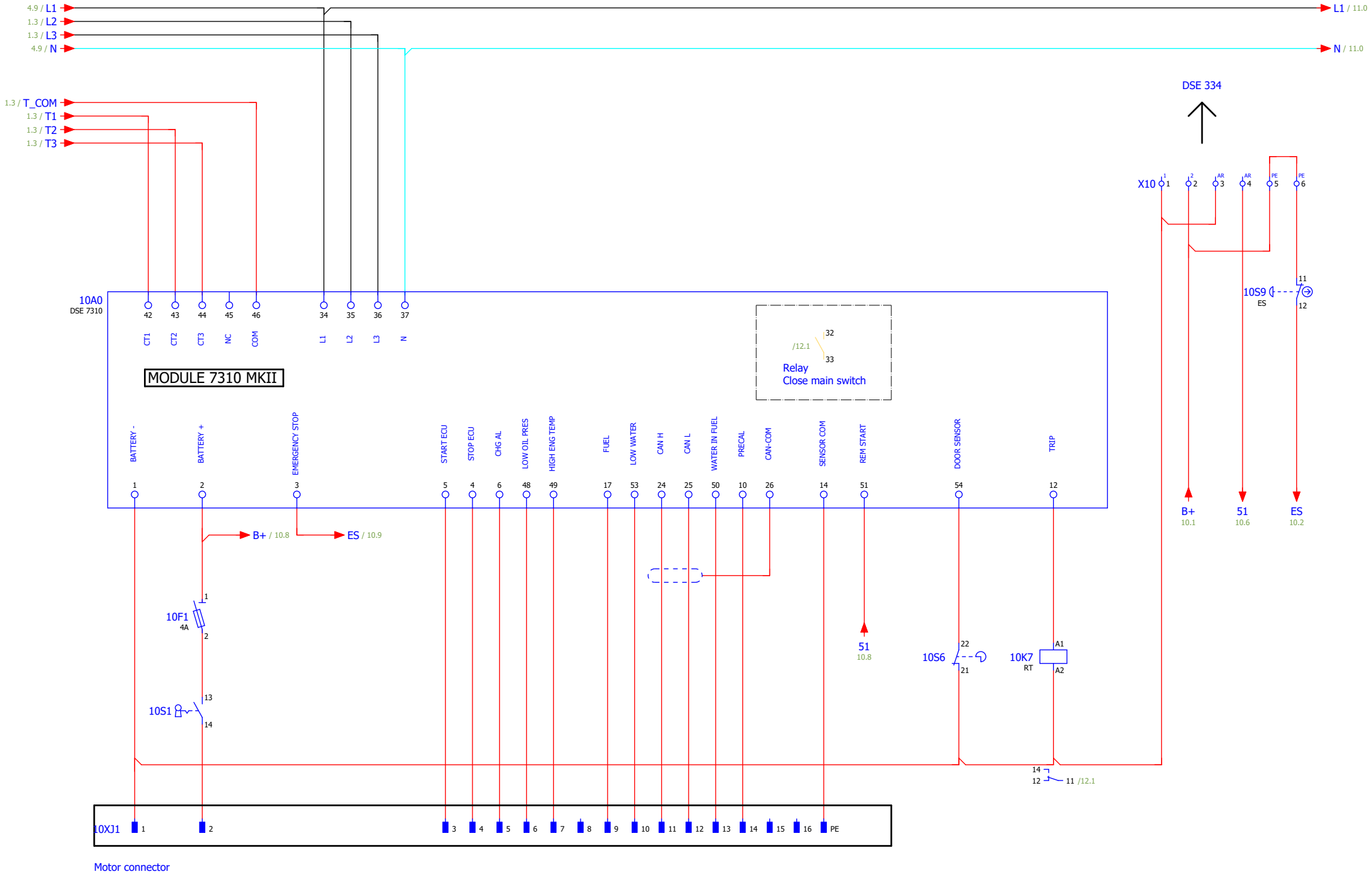
Power distribution
Outgoing fields

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	3		



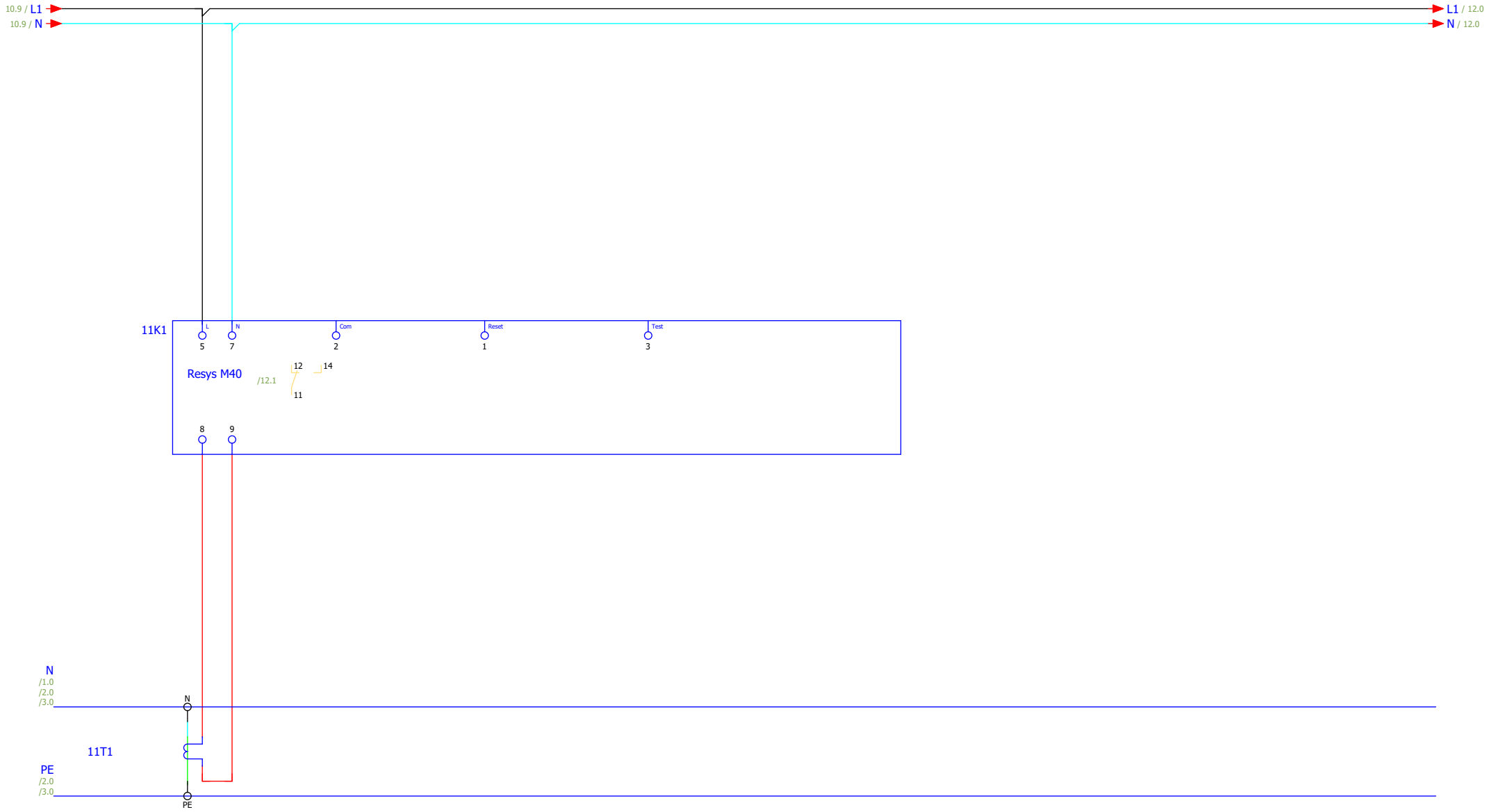
UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A1 &EFS1 =	Distribution panel Electrical engineering schematic	Control circuit Door interlock powerlocks

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	4		



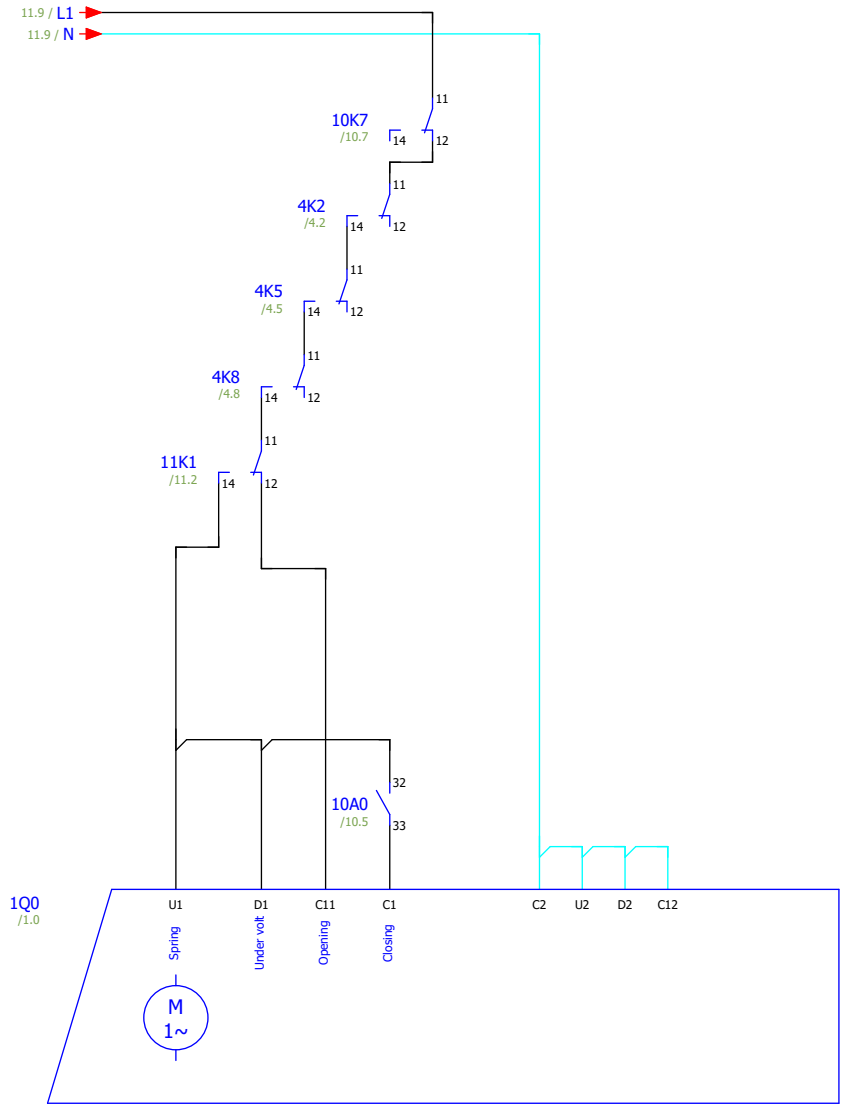
UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A1 &EFS1 =	Distribution panel Electrical engineering schematic	Control circuit Engine controller

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	**10**		



UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A1 &EFS1 =	Distribution panel Electrical engineering schematic	Control circuit Earth-leakage relay

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	**11**		



UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A1	Distribution panel
&EFS1	Electrical engineering schematic
=	

Control circuit
Main switch signals

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	**12**		

Parts list

F01_UDA_V00

Device tag	Quantity	Designation	Type number	Supplier	Part number
-4K2	1	Relay Socket (Base) For ETS Relays, Slim, 6mm Input 230V AC	SRSI-230AC/DC	IMO Precision Controls	IMO.SRSI-230AC/DC
-4K2	1	IMO Subminiature Power Relay SPCO, 6A, 60VDC, 210mW	ETS-1CN-SL-60VDC	IMO Precision Controls	IMO.ETS-1CN-SL-60VDC
-4K5	1	Relay Socket (Base) For ETS Relays, Slim, 6mm Input 230V AC	SRSI-230AC/DC	IMO Precision Controls	IMO.SRSI-230AC/DC
-4K5	1	IMO Subminiature Power Relay SPCO, 6A, 60VDC, 210mW	ETS-1CN-SL-60VDC	IMO Precision Controls	IMO.ETS-1CN-SL-60VDC
-4K8	1	Relay Socket (Base) For ETS Relays, Slim, 6mm Input 230V AC	SRSI-230AC/DC	IMO Precision Controls	IMO.SRSI-230AC/DC
-4K8	1	IMO Subminiature Power Relay SPCO, 6A, 60VDC, 210mW	ETS-1CN-SL-60VDC	IMO Precision Controls	IMO.ETS-1CN-SL-60VDC
-10K7	1	Relay Socket (Base) For ETS Relays, Slim, 6mm Input 12-24V AC/DC	SRSI-24AC/DC	IMO Precision Controls	IMO.SRSI-24AC/DC
-10K7	1	IMO Subminiature Power Relay SPCO, 6A, 24VDC, 170mW	ETS-1CN-SL-24VDC	IMO Precision Controls	IMO.ETS-1CN-SL-24VDC

Cable overview

Cable name	Source (from)	Target (to)	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text	Graphical page of cable diagram
-1W1	-1Q0	+Field-1G1		2x4x	3	240			
-4W1	-X3	+Field-4S1		3G	2	1		Doorcontact	
-4W2	-X3	+Field-2XJ3		3G	2	1		=	
-4W5	-X3	+Field-2XJ5		3G	2	1		=	

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A1	Distribution panel
&EMB1	Cable overview
=	

Cable overview : +A1-1W1 - +A1-4W5

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	1		

Terminal diagram

Function text						-4W5	-4W2	-4W1	Cable name	Strip +A1-X3					Cable name					Page / column
									Cable type	Target designation	Connection point	Terminal	Jumper	Target designation	Connection point	Cable type				
Doorcontact								1		+Field-4S1	13	1		-1F2	1					EFS1/4.1
=								2		+Field-4S1	14	2		-4K2	A1					EFS1/4.1
=							1			+Field-2XJ3	A	3								EFS1/4.2
=							2			+Field-2XJ3	B	4		-4K2	A1					EFS1/4.2
=												5								EFS1/4.4
=												6		-4K5	A1					EFS1/4.4
=						1				+Field-2XJ5	A	7								EFS1/4.5
=						2				+Field-2XJ5	B	8		-4K5	A1					EFS1/4.5
=												9								EFS1/4.7
=												10		-4K8	A1					EFS1/4.7
=												11		-10A0	34					EFS1/4.8
=												12		-4K8	A1					EFS1/4.8

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A1	Distribution panel
&EMA2	Terminal diagram
=	

Terminal diagram +A1-X3

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	1		

Terminal diagram

Function text	Cable name	Cable type	Target designation	Connection point	Terminal	Jumper	Target designation	Connection point	Cable type	Cable name	Page / column
			Strip +A1-X10								
			-10K7	A2	1						EFS1/10.8
			-10F1	1	2						EFS1/10.8
					3						EFS1/10.8
			-10A0	51	4						EFS1/10.8
					5						EFS1/10.9
			-10S9	11	6						EFS1/10.9

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A1	Distribution panel
&EMA2	Terminal diagram
=	

Terminal diagram +A1-X10

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	2		

Unidrive Automation B.V.
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E-mail: info@unidrive-automation.nl

Company / customer	Sitetec B.V.
Project description	P2000EG650
Job number	2230097
Commission	Sitetec B.V.

Manufacturer (company)	Unidrive Automation B.V.
Project name	2230097 - P2000EG650-Rev 1
Make	Rittal
Type	AX1055.000
Place of installation	
Control cabinet name	A2

Created on	2-3-2023	Prepared by	JY
Project status	Revisie 1	Edit date	

Applied Wire Colors

U > 50VAC	
L1	Black
L2	Black
L3	Black
N*1	Blue
Earth	Yellow / green

U < 50VDC	
Plus	Darkblue
Switch wire	Darkblue
Min	Darkblue / white
Earth	Yellow / green

Analog signals	
Plus	Gray
Min	Gray
Earth	Yellow / green

U < 50VAC	
Plus	Gray
Min	Gray
Earth	Yellow / green

Safety circuits	
All	Yellow

External supplies	
All*2	Orange or Black

1 * = If AC voltage is not from a transformer
in the control cabinet itself the corresponding zero is light blue.
2 * = depending on the situation.

UNIDRIVE AUTOMATION

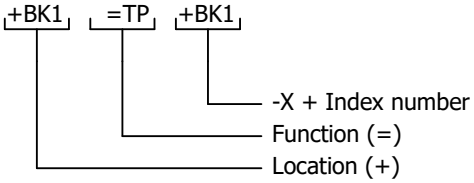
Sitetec B.V.
P2000EG650
Revisie 1

+A2	Control panel
&AAA1	Title page / cover sheet
=	

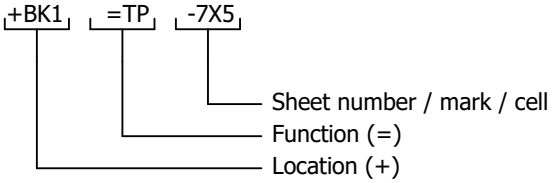
Wire colors

Project number: 2230097
Designed: JY Date: 2-3-2023
Changed: JY Date:
Page: 2

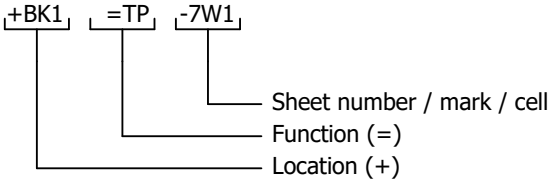
TERMINAL NUMBERING



Component coding



Cable numbering



Normal cable

Shielded cable

Structure

+	Location
&	Document type
=	Function

Component coding (internal)

A	Assemblies, cabinets (Cabinet, PCB, PLC, amplifier, laser)
T	Inverters, from non-electric to electric or vice versa (Pt100, proximity switch, photoelectric cell)
C	Capacitors
E	Several (Heating appliance, lighting appliance, appliances not mentioned elsewhere)
F	Protection devices (Fuse, circuit breaker, surge arrester)
G	Generator
P	Signaling (signal lamp, buzzer)
K	Relays & contactors
R	Coils, reactors
M	Motors
P	Measuring device, test device (Indicator, writer, integrating measuring device, signal generator, clock)
Q	Switching device for power circuits (motor protection, starter, breaker)
R	Resistance (Potentiometer, adjustable resistance, rheostat, shunt resistor, thermistor)
S	Control circuit switch, selector (push button, cam switch, limit switch, selector contact)
T	Transformer (Voltage transformer, current transformer)
T	Modulator, inverter (frequency converter, DC power supply, coder decoder, inverter, signal converter)
W	Cable
X	Terminals, sockets, plugs
Y	Electrically operated mechanical device (Brake, clutch, pneumatic valve)

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A2	Control panel
&AAA1	Title page / cover sheet
=	

Explanatory documents

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	3		

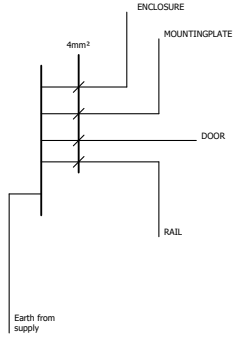
RATED CURRENTS FOR COPPER CONDUCTORS IN ACCORDANCE WITH NEN-EN-IEC 61439-1 : 2011 TABLE 11	
Cross-sectional mm2	Current
1	8
1,5	12
2,5	20
4	25
6	32
10	50
16	65
25	85
35	115
50	150
70	175
95	225
120	250
150	275
185	350
240	400

Enclosure earthing

Remark:

ALL PARTS WHERE 230V COMPONENTS
TO BE MOUNTED MUST BE EARTHED
WITH MINIMUM 4mm²

EARTH WIRES MUST NOT BE LOOPED.
ALL EARTH POINTS TO A CENTRAL EARTH POINT



UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A2	Control panel
&AAA1	Title page / cover sheet
=	

Explanatory documents

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	4		

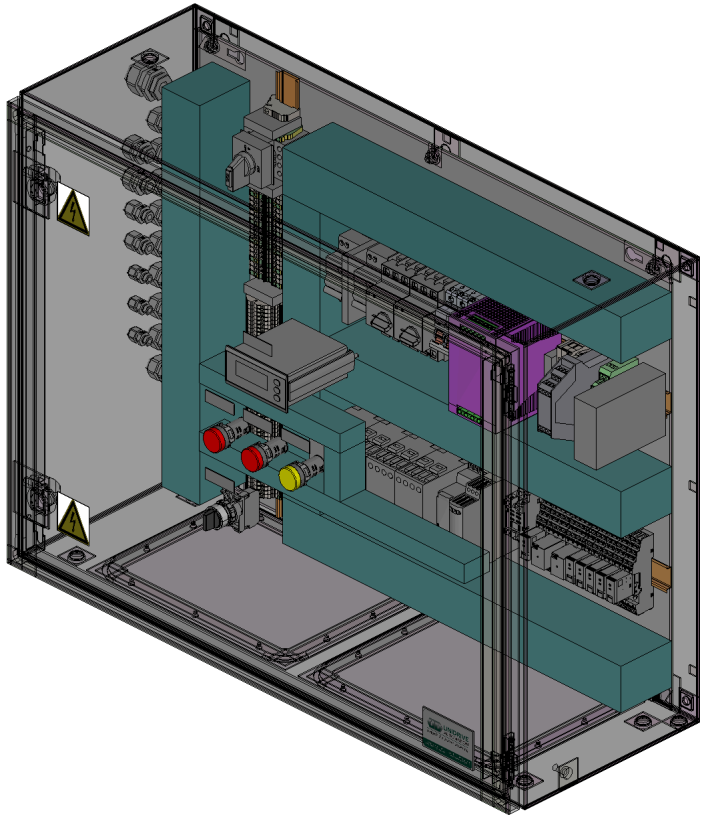
UNIDRIVE AUTOMATION

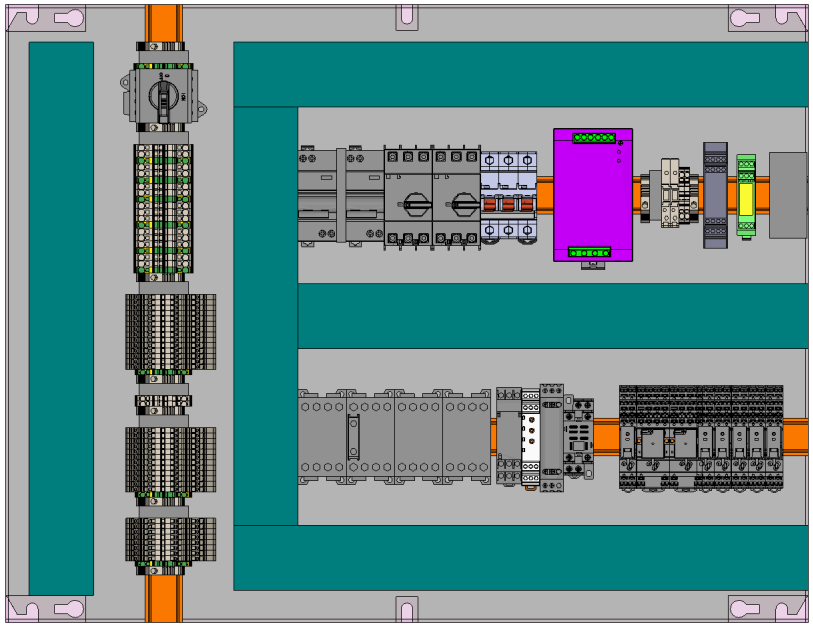
Oliemolenweg 3B
7944 HX Meppel
+31 (0)522 245713
info@unidrive-automation.nl

Voeding - Power supply

Bestel nummer PO number	2230097	Netspanning/frequentie Nom. voltage/frequency	400V/50Hz
Bouwjaar/week Prod. year/week	2023/17	Fases Phases	L1/L2/L3/N/PE
Schema nr. Drawing number	2230097	Stroom Current	16A
Ip waarde: Degree of protection	IP65	Hoofd zekering Main fuse	
		Kortsluitstroom Short-breaking capacity	<10 kA

www.unidrive-automation.nl





AX Wandkast, BHD: 800x600x300 mm
AX Wandkast, BHD: 800x600x300 mm, plaatstaal, met montageplaat, met één deur, twee knevelsluitingen

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

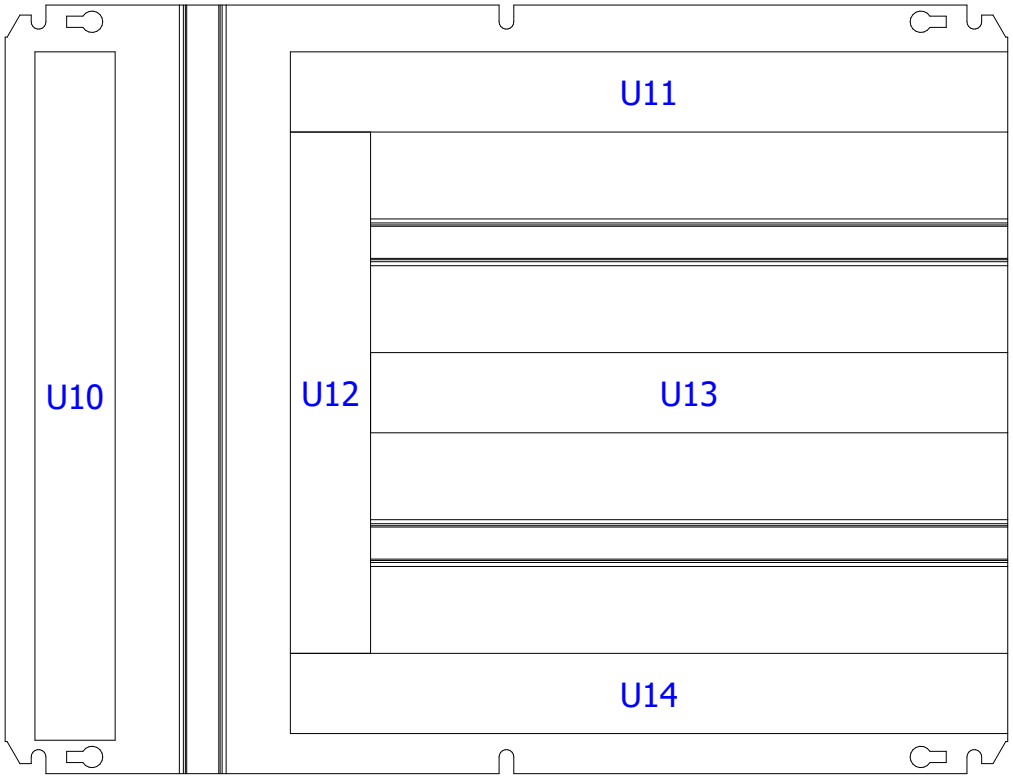
+A2	Control panel
&MTL11	Panel layout
=	

Assembly Overview

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	1		

Cutlist

DT	Artikel	Length
U11	LIC 60 x 80	537 mm
U14	LIC 60 x 80	537 mm
U10	LIC 60 x 80	515 mm
U12	LIC 60 x 80	390 mm
U13	LIC 60 x 80	477 mm
U15	Support rail TS 35/7.5	575 mm
U16	Support rail TS 35/7.5	477 mm
U17	Support rail TS 35/7.5	477 mm



S1:Montageplaat

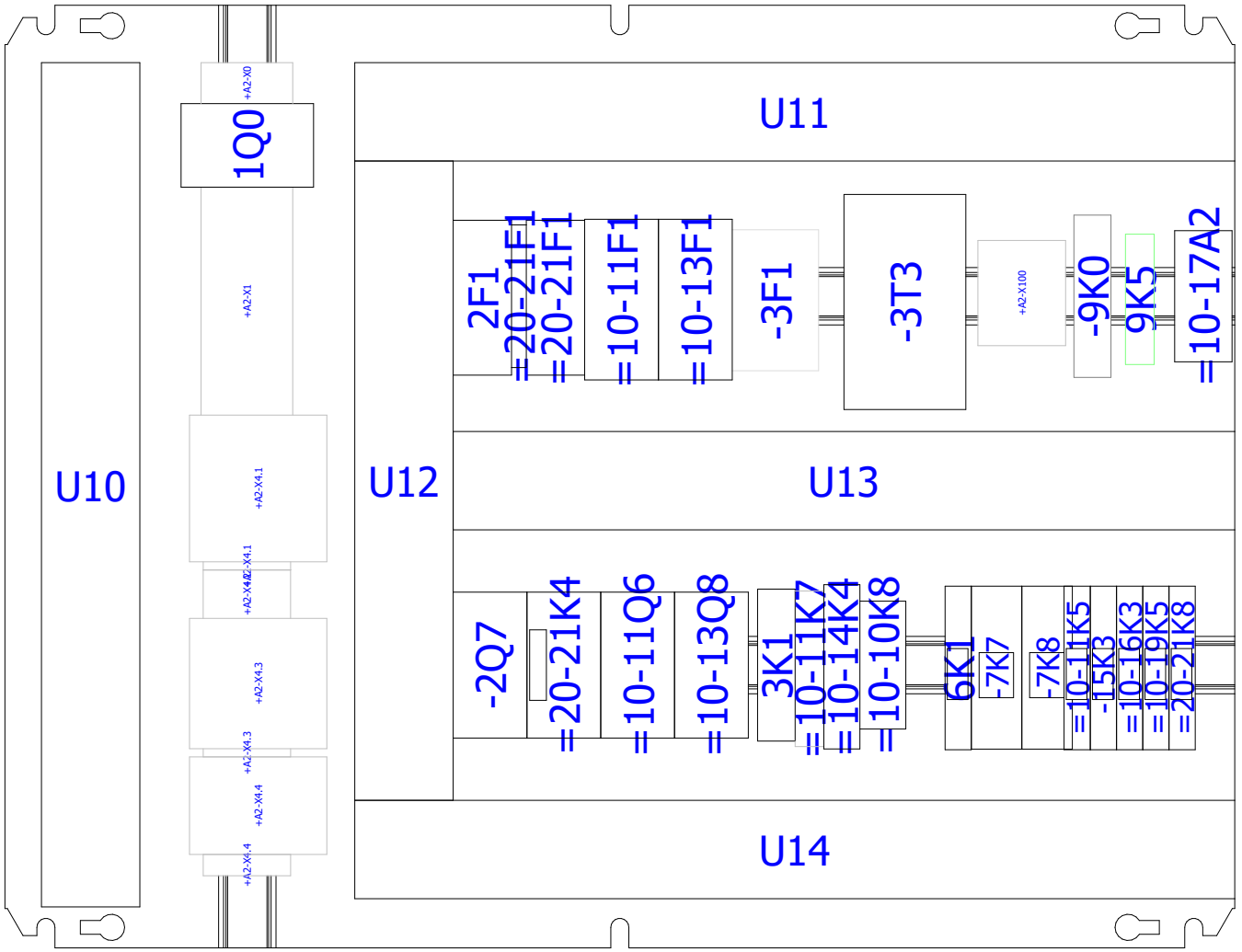
UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A2	Control panel
&MTL11	Panel layout
=	

Mount plate
Cable ducts and din-rail

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	2		

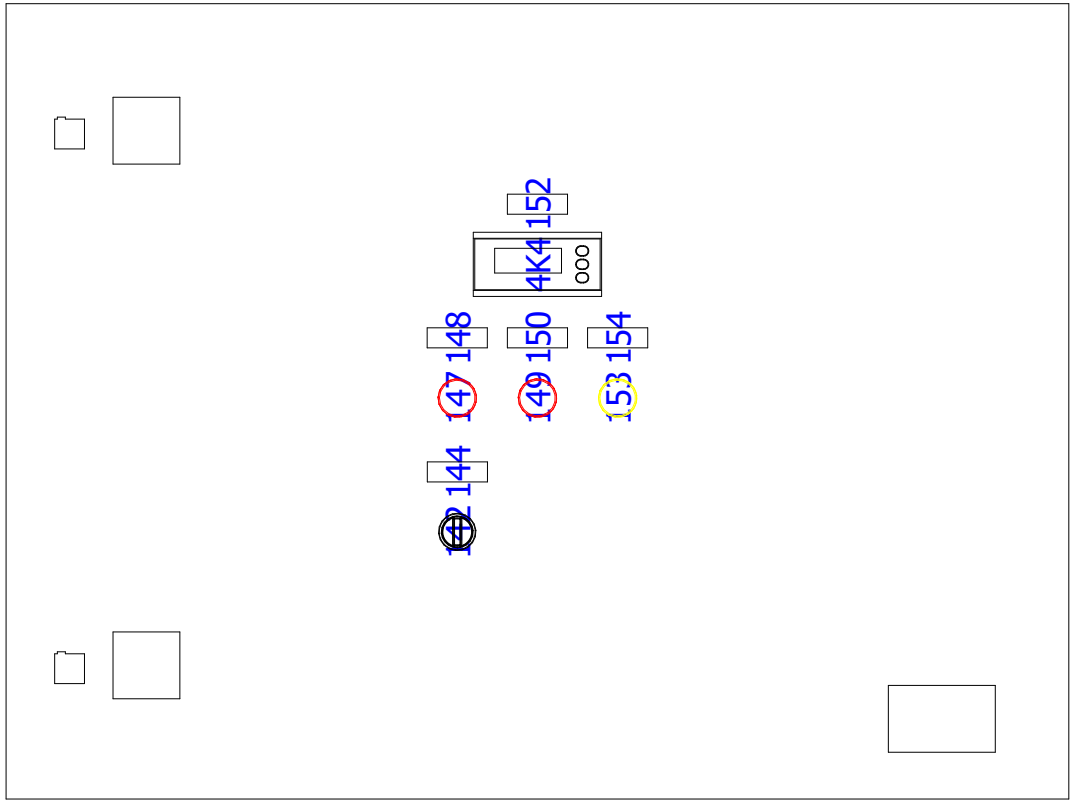


S1:Montageplaat

UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A2	Control panel	Mounting plate Component placement	Project number:	2230097
			&MTL11	Panel layout		Designed: JY	Date: 2-3-2023
			=			Changed: JY	Date:
						Page: 3	

Engraving

Legend item	DT	Artikel	Text
144	=+A2-2S7	TTP 45x15 Tekstplaatje	Verlichting 0-1
148	=+A2-6P4	TTP 45x15 Tekstplaatje	Phase sequence
150	=+A2-6P5	TTP 45x15 Tekstplaatje	Fault drive
152	=+A2-4K4	TTP 45x15 Tekstplaatje	Diesel level
154	=+A2-4H5	TTP 45x15 Tekstplaatje	Low diesel



S1:Deur

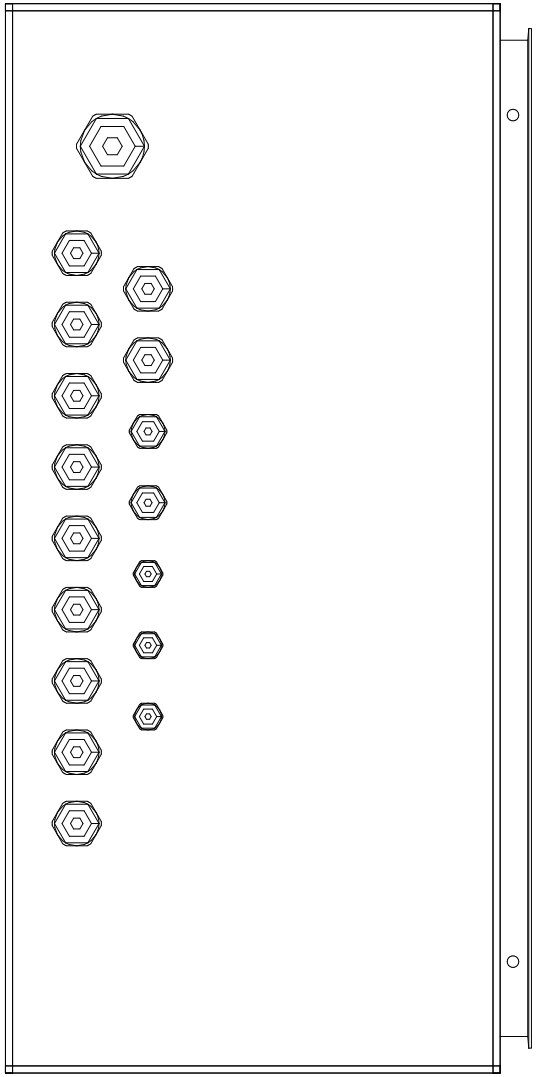
UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A2	Control panel
&MTL11	Panel layout
=	

Door
Component placement

Project number: 2230097
Designed: JY Date: 2-3-2023
Changed: JY Date:
Page: 4



S1:Zijwand links buiten

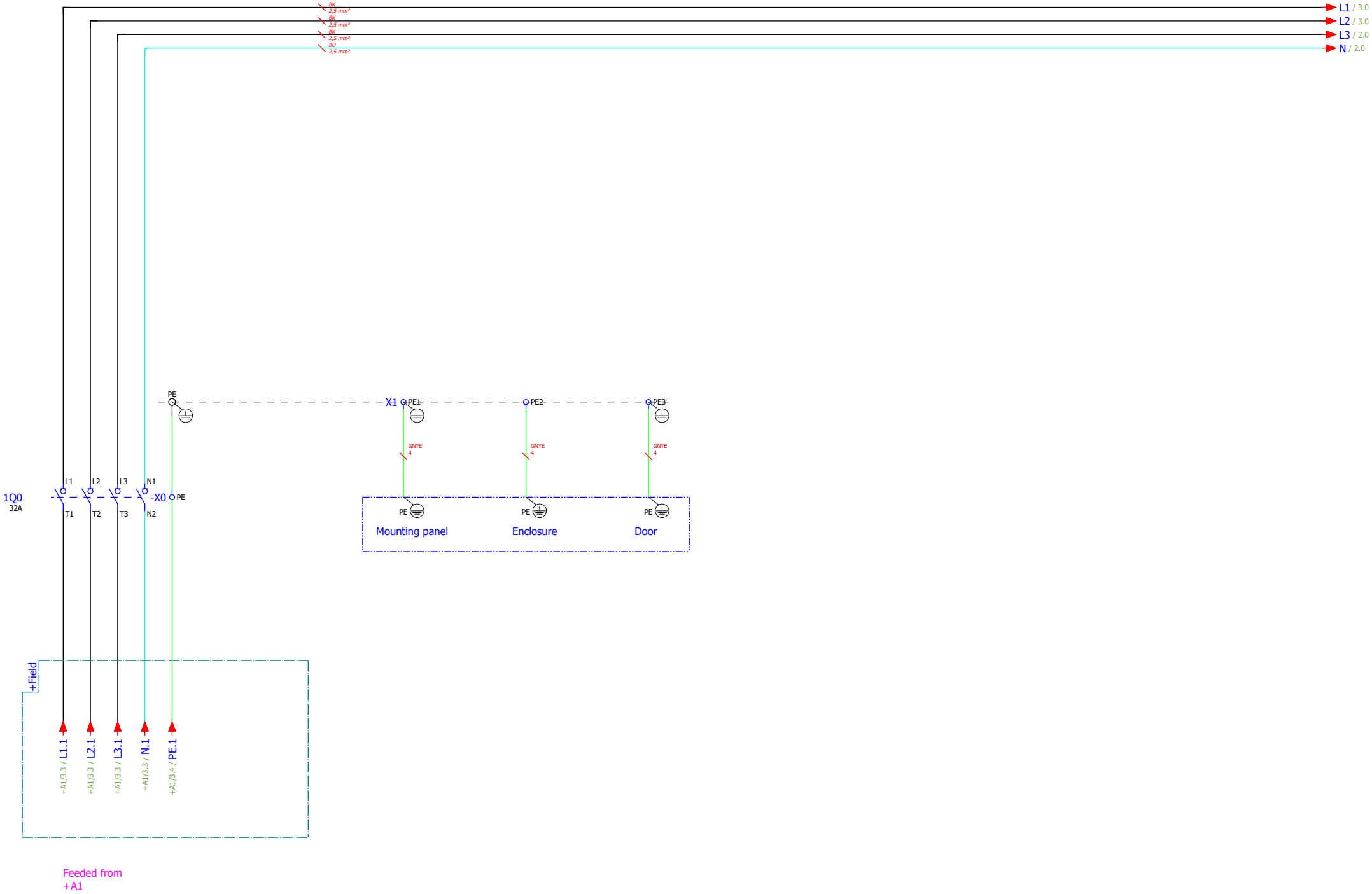
UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A2	Control panel
&MTL11	Panel layout
=	

Left panel side
Cable entry

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	**5**		

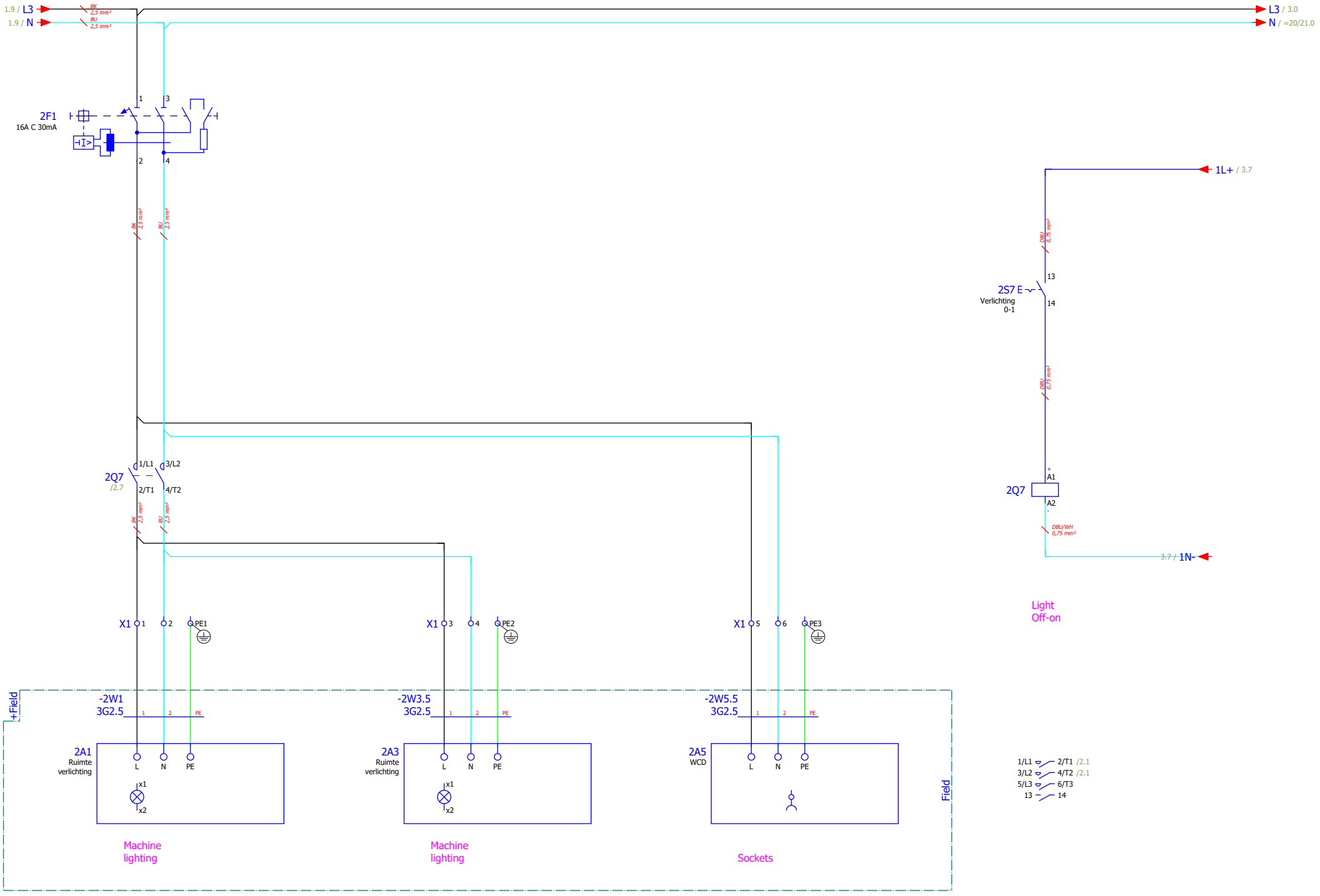


&MTL11/5

2

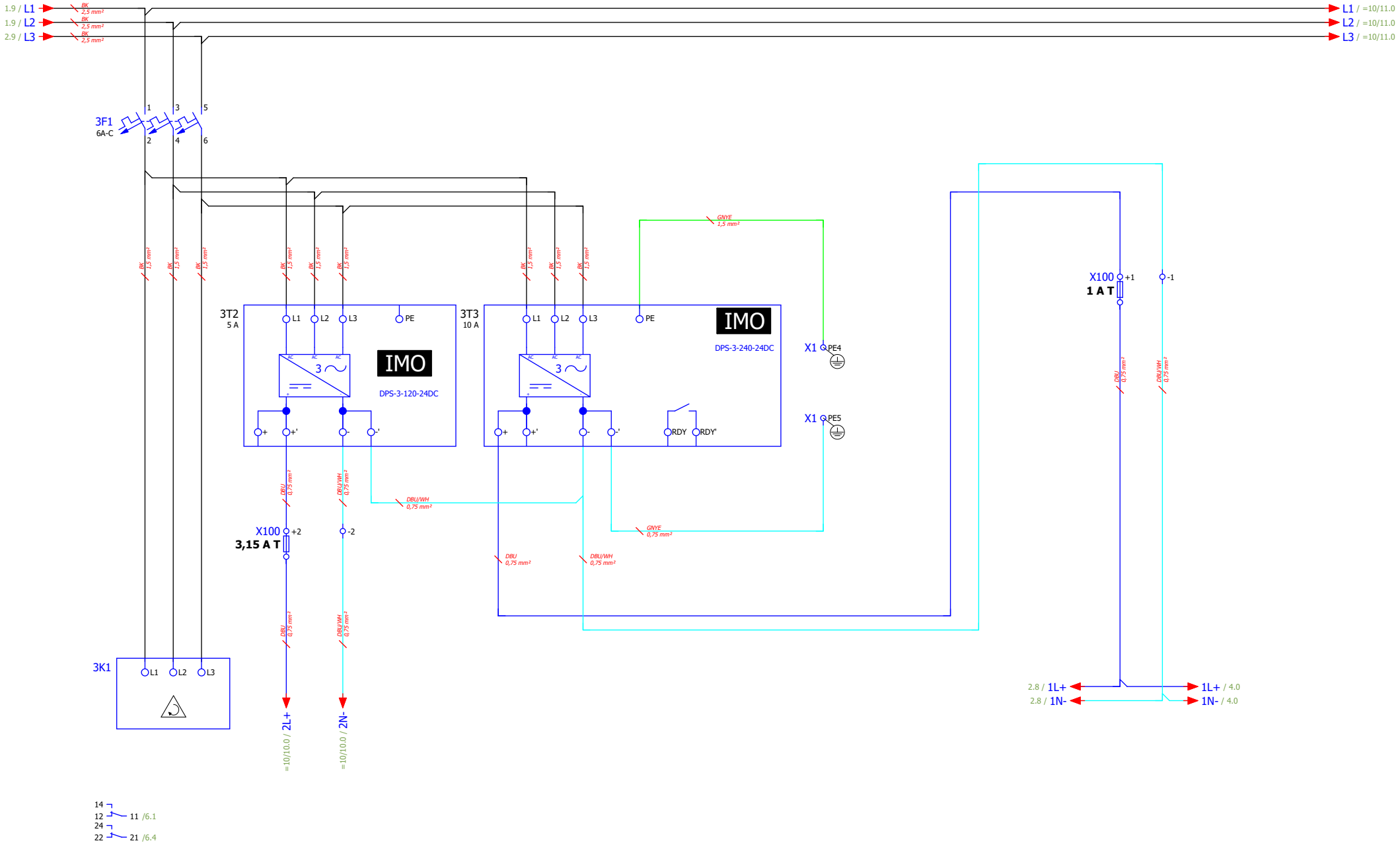
UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A2	Control panel	Incoming power from +A1
			&EFS1	Electrical engineering schematic	
			=		

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	1		

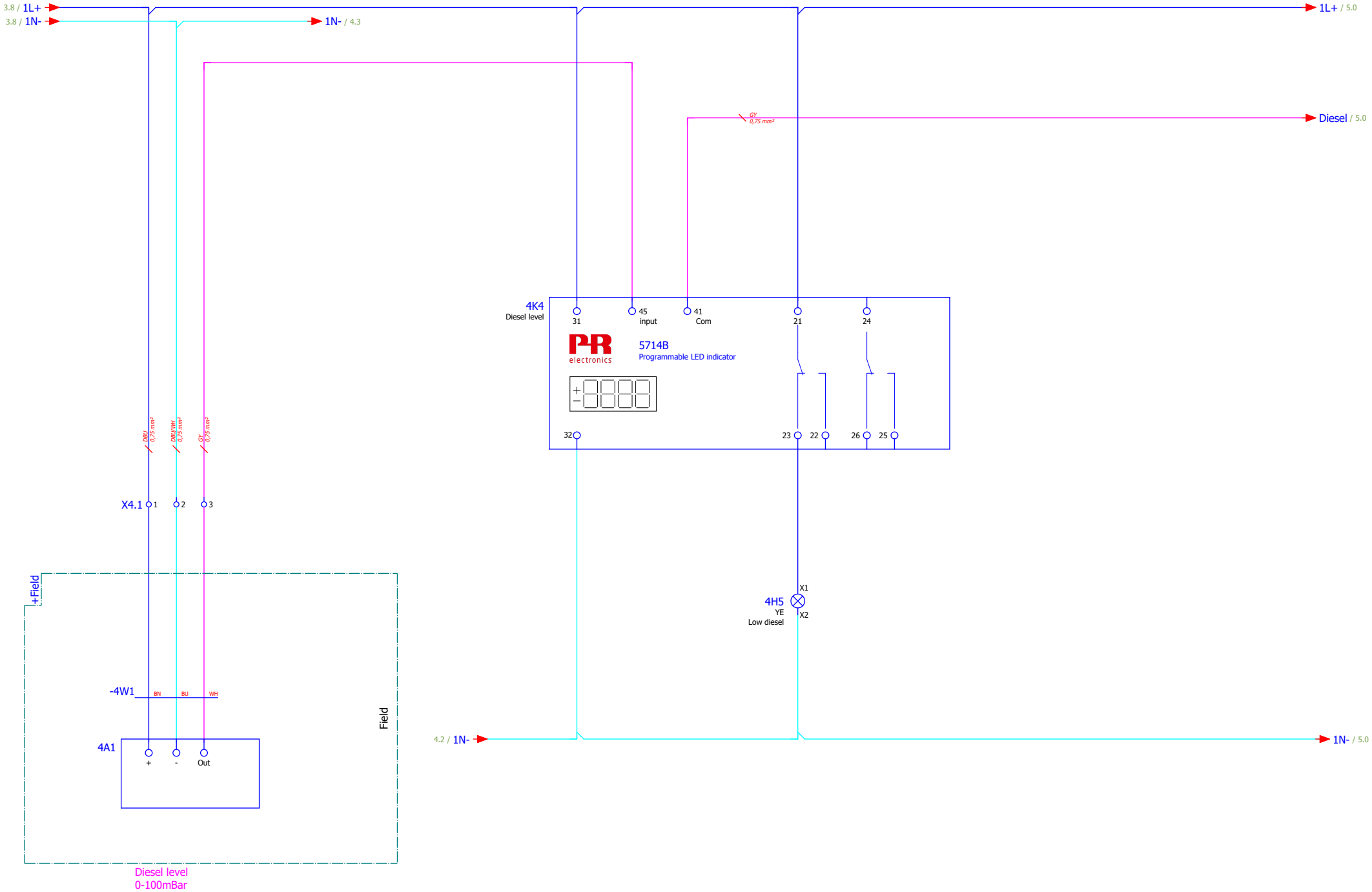


UNIDRIVE AUTOMATION		Sitetec B.V.	+A2	Control panel	Lighting and sockets
		P2000EG650	&EFS1	Electrical engineering schematic	
		Revisie 1	=		

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	22-01-2021
Page:	2		

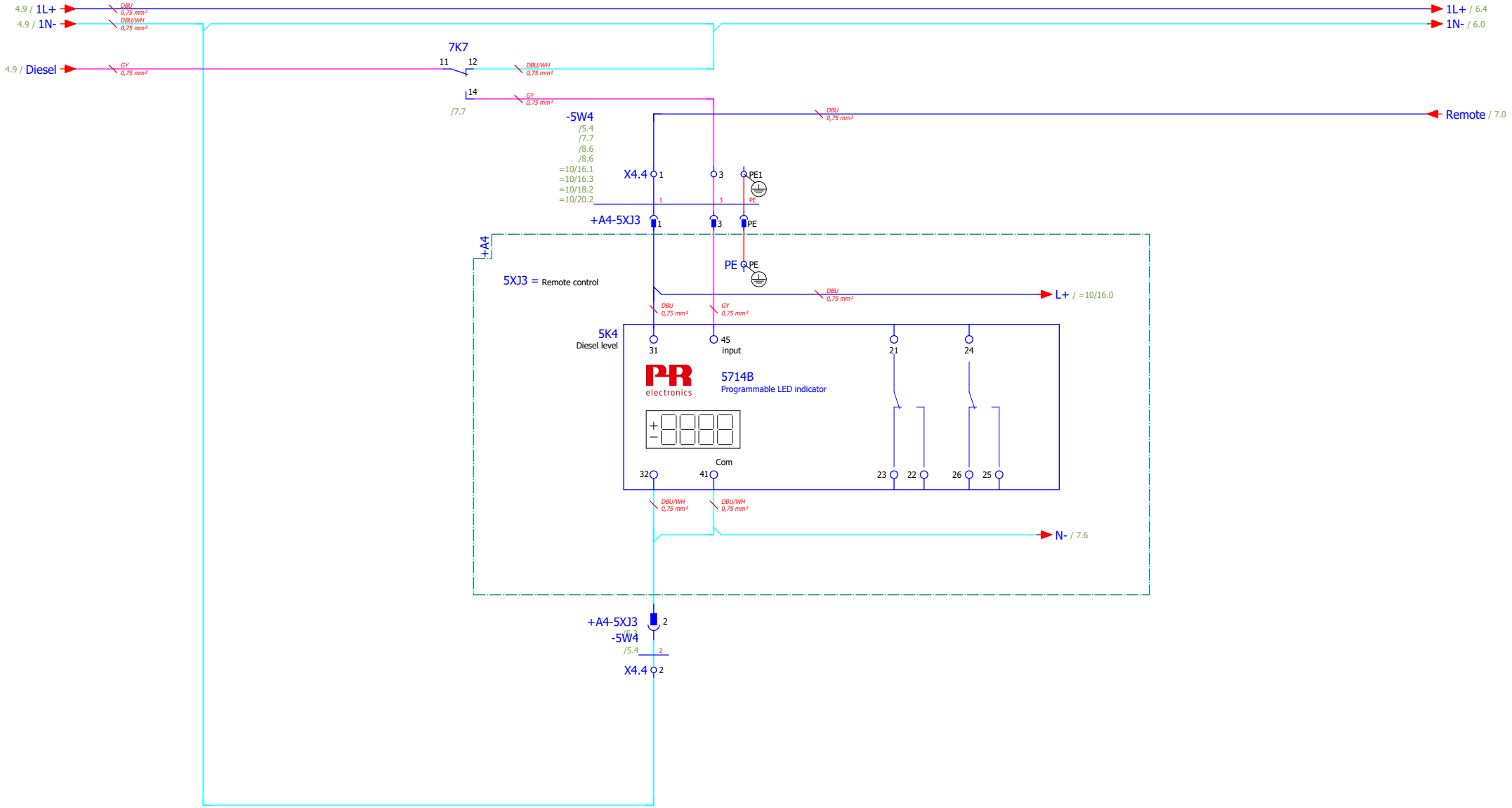


UNIDRIVE AUTOMATION		Sitetec B.V.	+A2	Control panel	24VDC Powersupply	Project number:	2230097
		P2000EG650	&EFS1	Electrical engineering schematic		Designed: JY	Date: 2-3-2023
		Revisie 1	=			Changed: JY	Date:
						Page: 3	

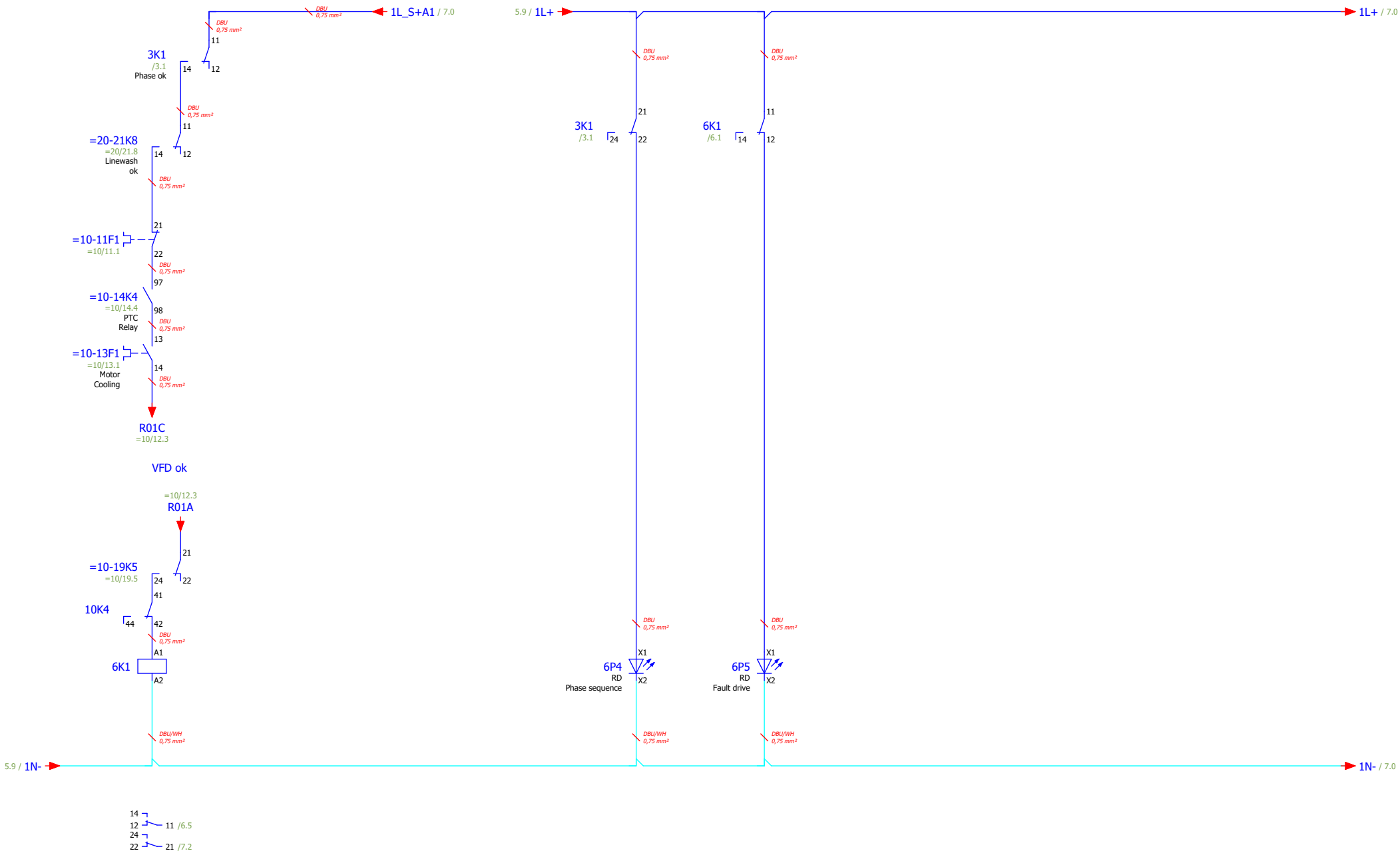


3 5

UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A2	Control panel	Dieseltank Level measurement	Project number:	2230097
			&EFS1	Electrical engineering schematic		Designed: JY	Date: 2-3-2023
			=			Changed: JY	Date:
						Page: **4**	

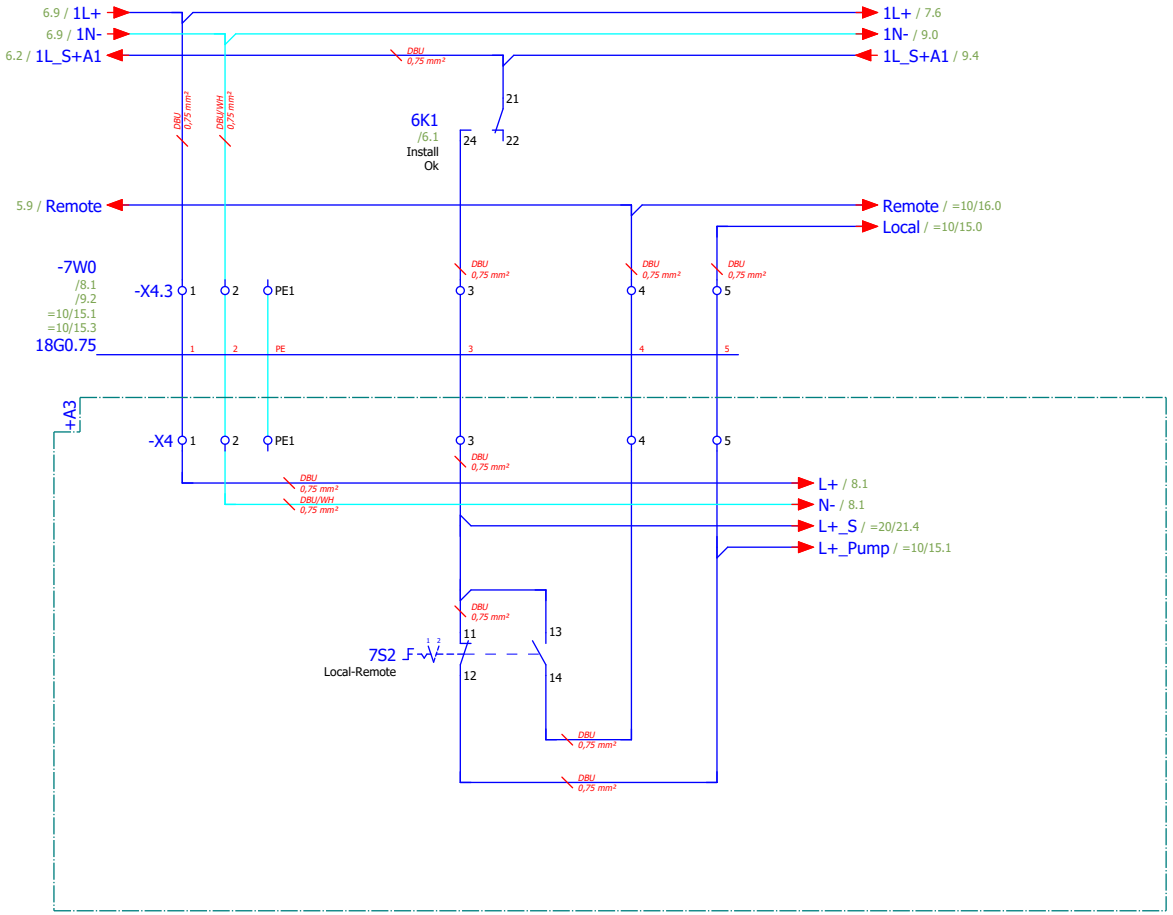


UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A2 &EFS1 =	Control panel Electrical engineering schematic	Dieseltank Level measurement remote display	Project number: 2230097 Designed: JY Date: 2-3-2023 Changed: JY Date: Page: 5	

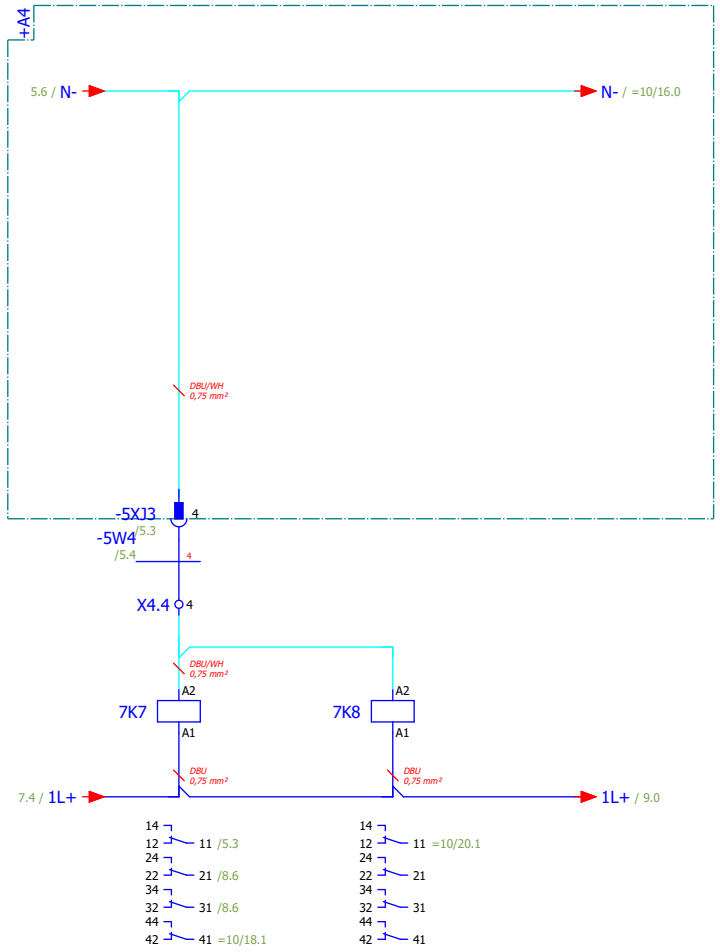


UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A2 &EFS1 =	Control panel Electrical engineering schematic	Controls Installation okay relay

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	6		



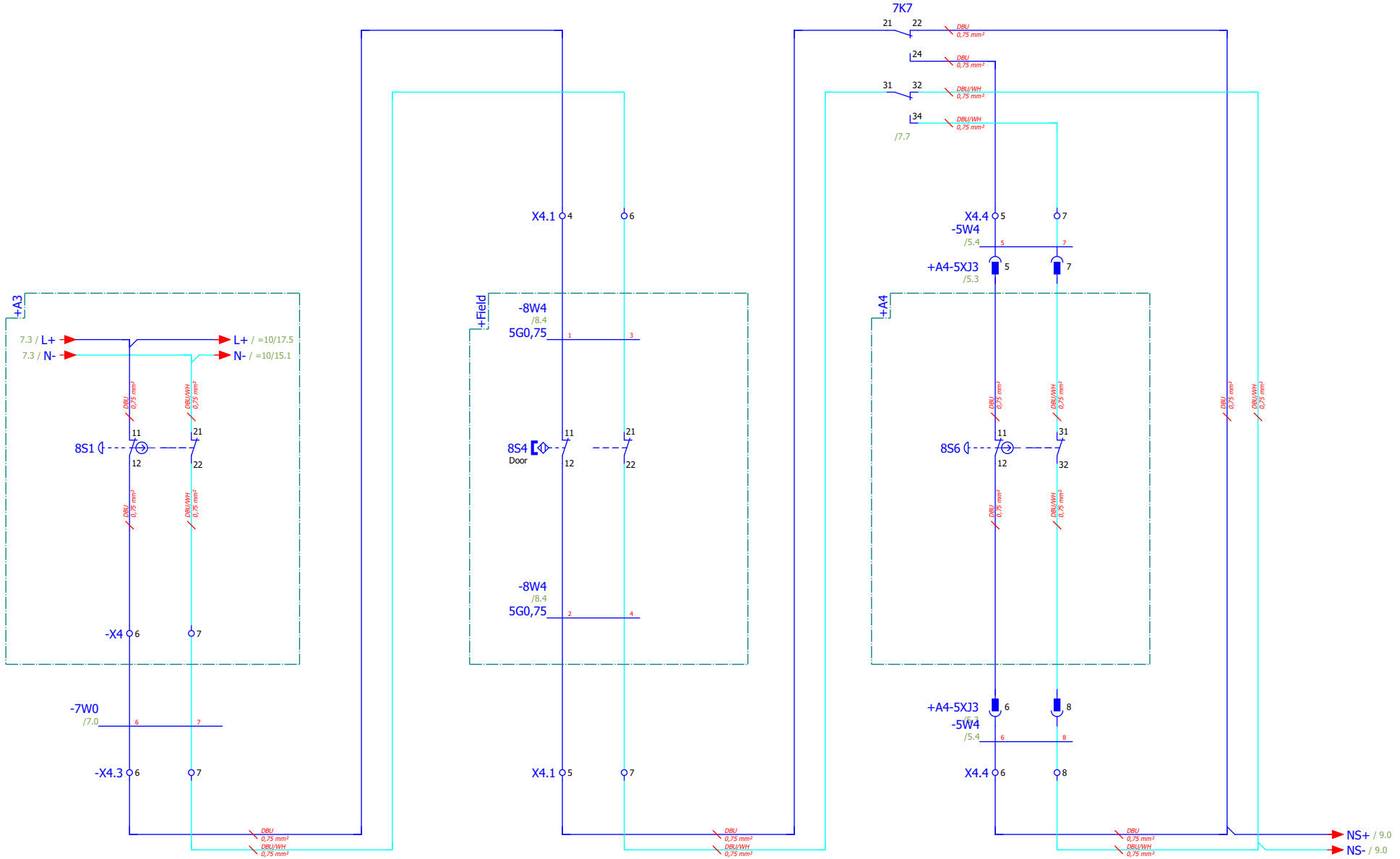
Switch
Local - remote



Remote control
connected

UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A2 &EFS1 =	Control panel Electrical engineering schematic	Controlmode Local-remote switch

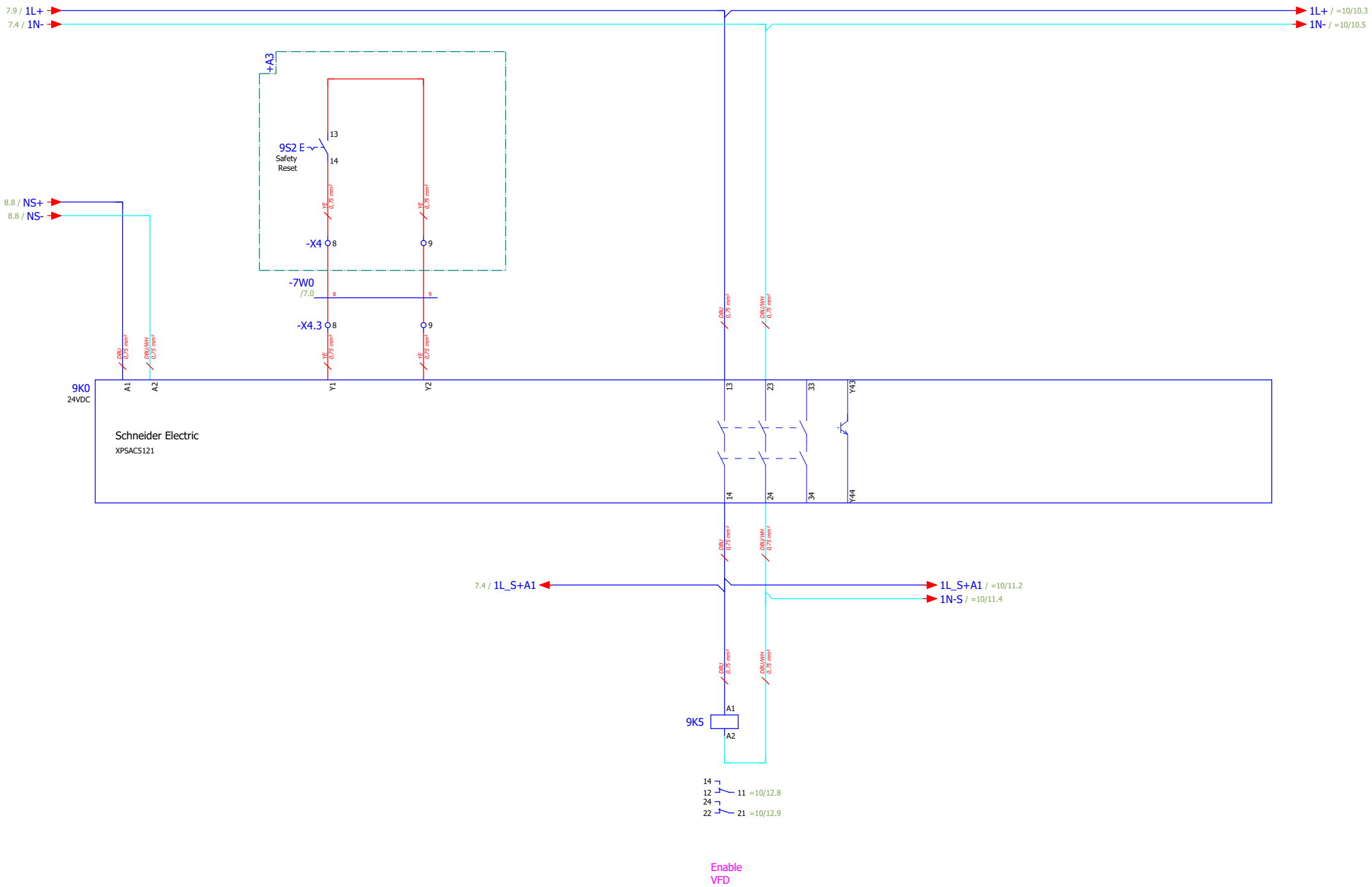
Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	7		



Emergency stop

UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A2 &EFS1 =	Control panel Electrical engineering schematic	Safety Emergency stop and coverswitch

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	8		

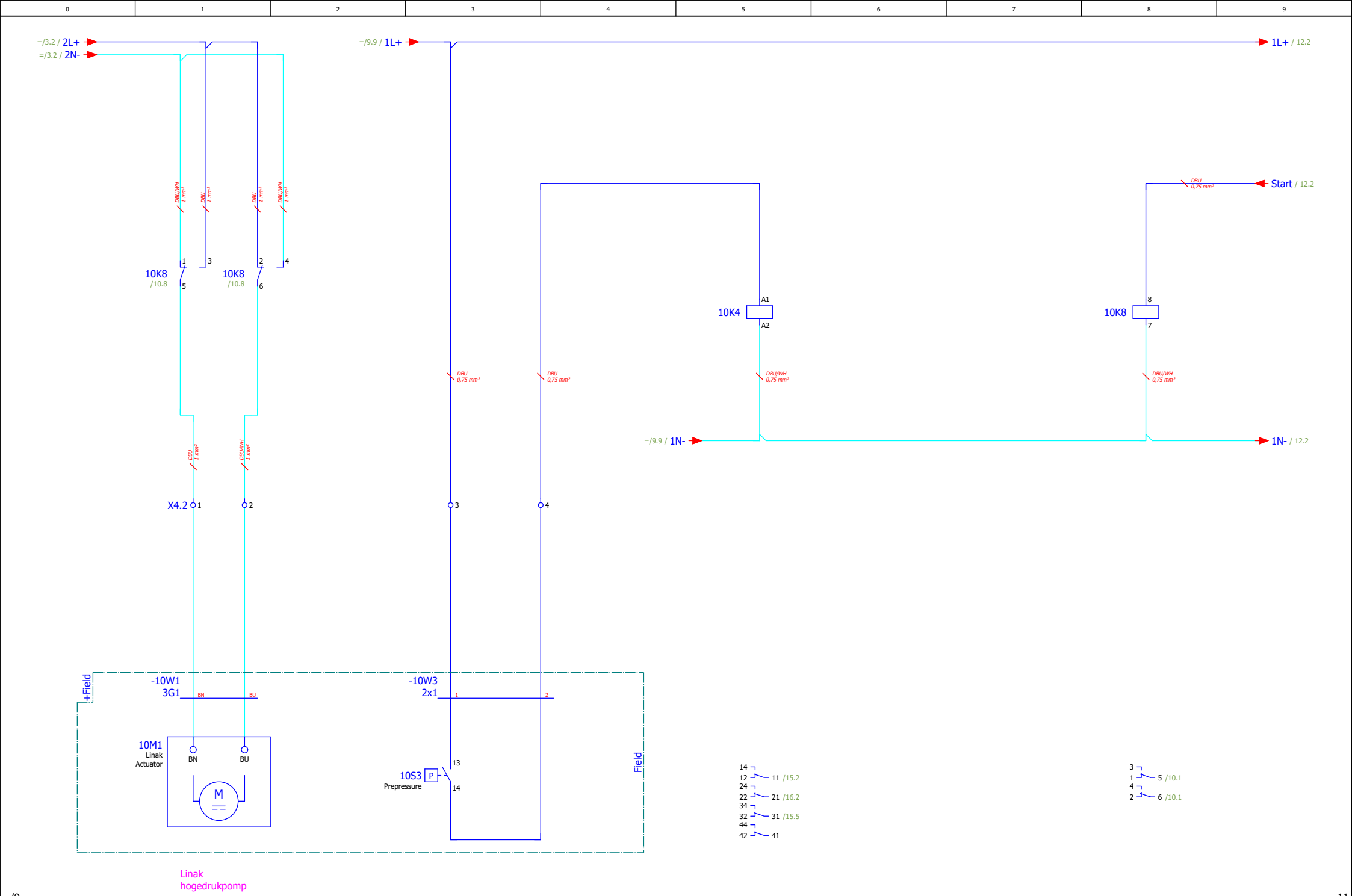


8

=10/10

UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A2 &EFS1 =	Control panel Electrical engineering schematic	Safety Emergency stop relay

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	**9**		

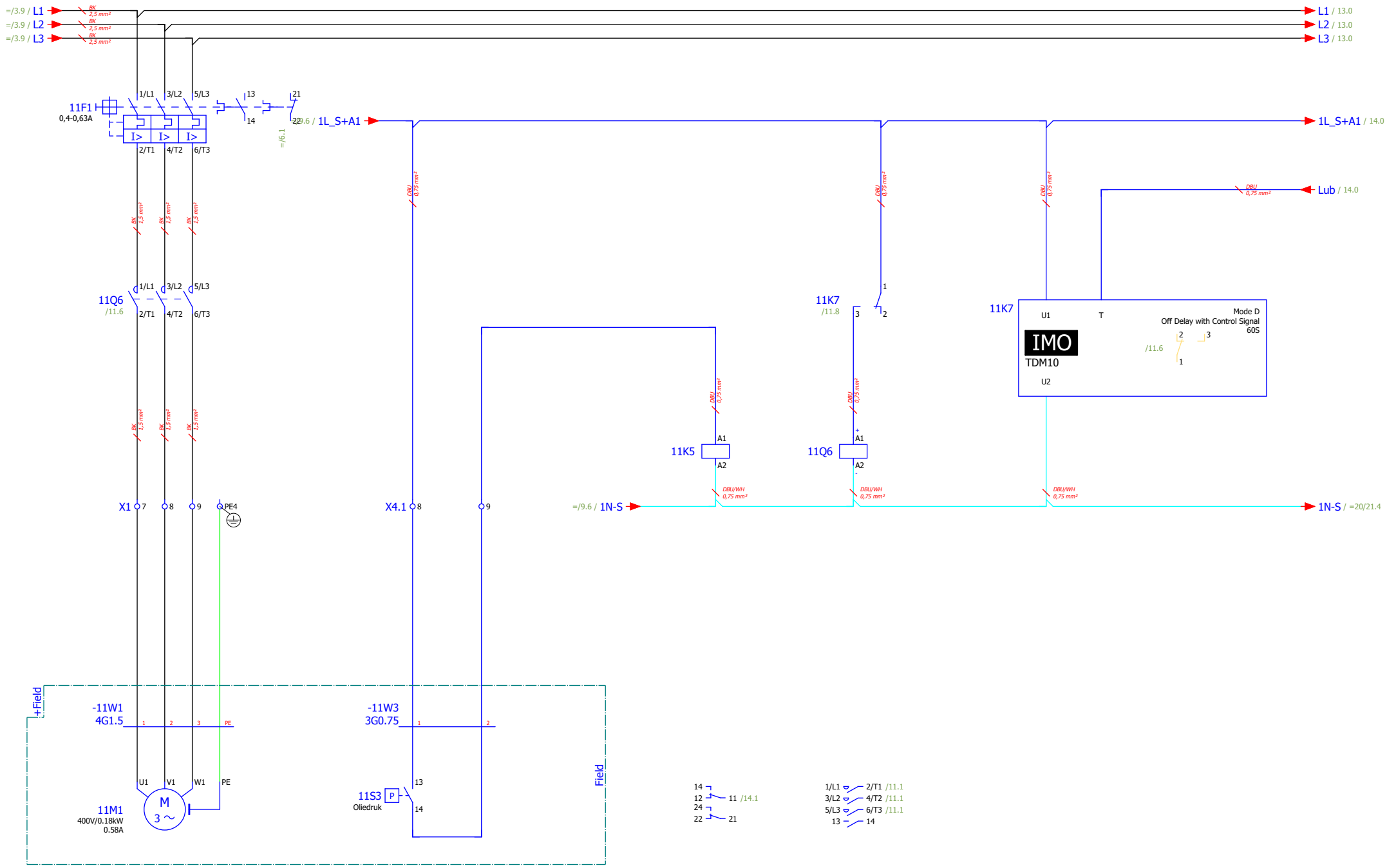


=/9

11

UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A2	Control panel	Pump Main valve
			&EFS1	Electrical engineering schematic	
			=10	Pump	

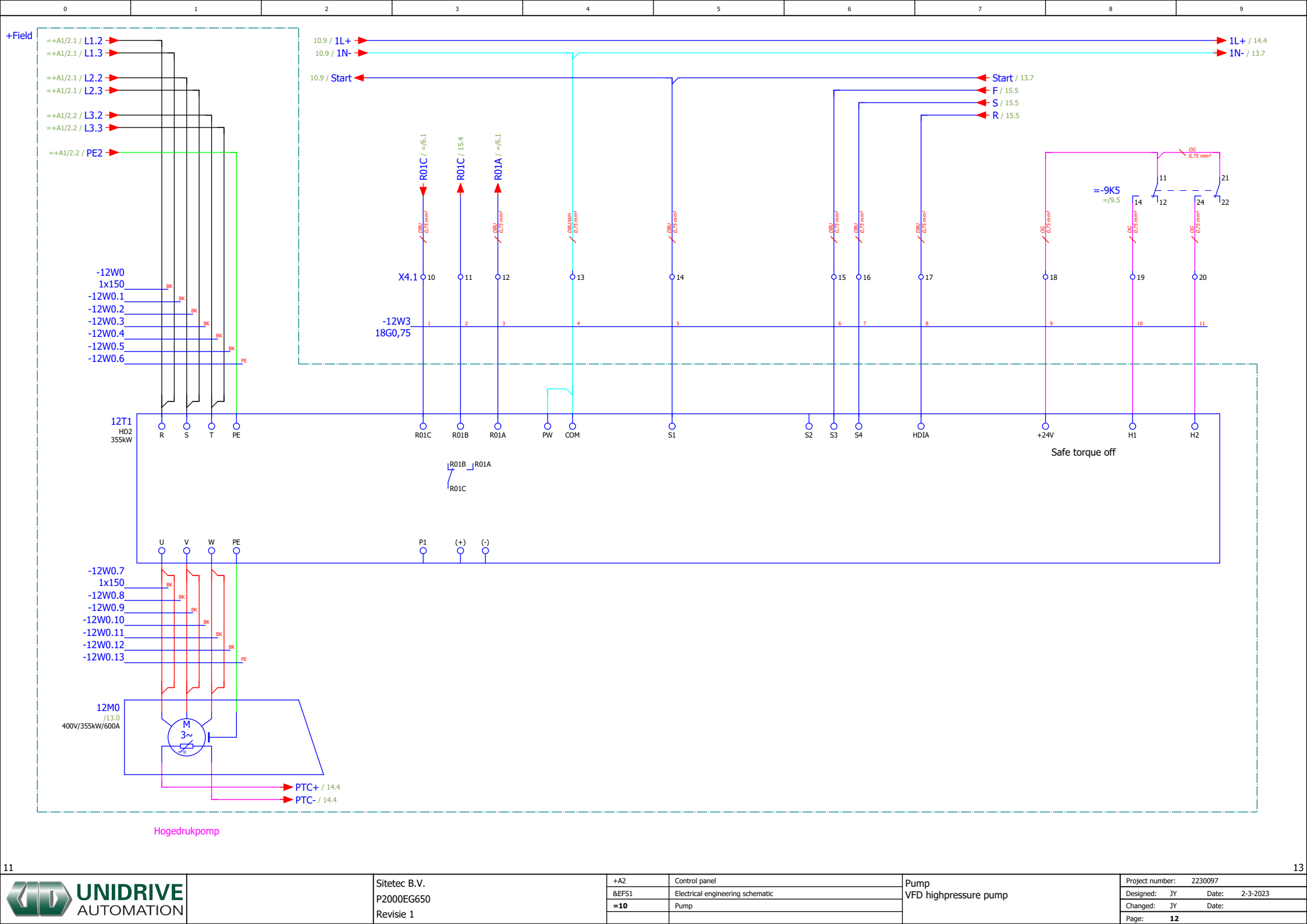
Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	**10**		



10 12

UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A2	Control panel	Pump Lubrication pump
			&EFS1	Electrical engineering schematic	
			=10	Pump	

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	**11**		



11

13

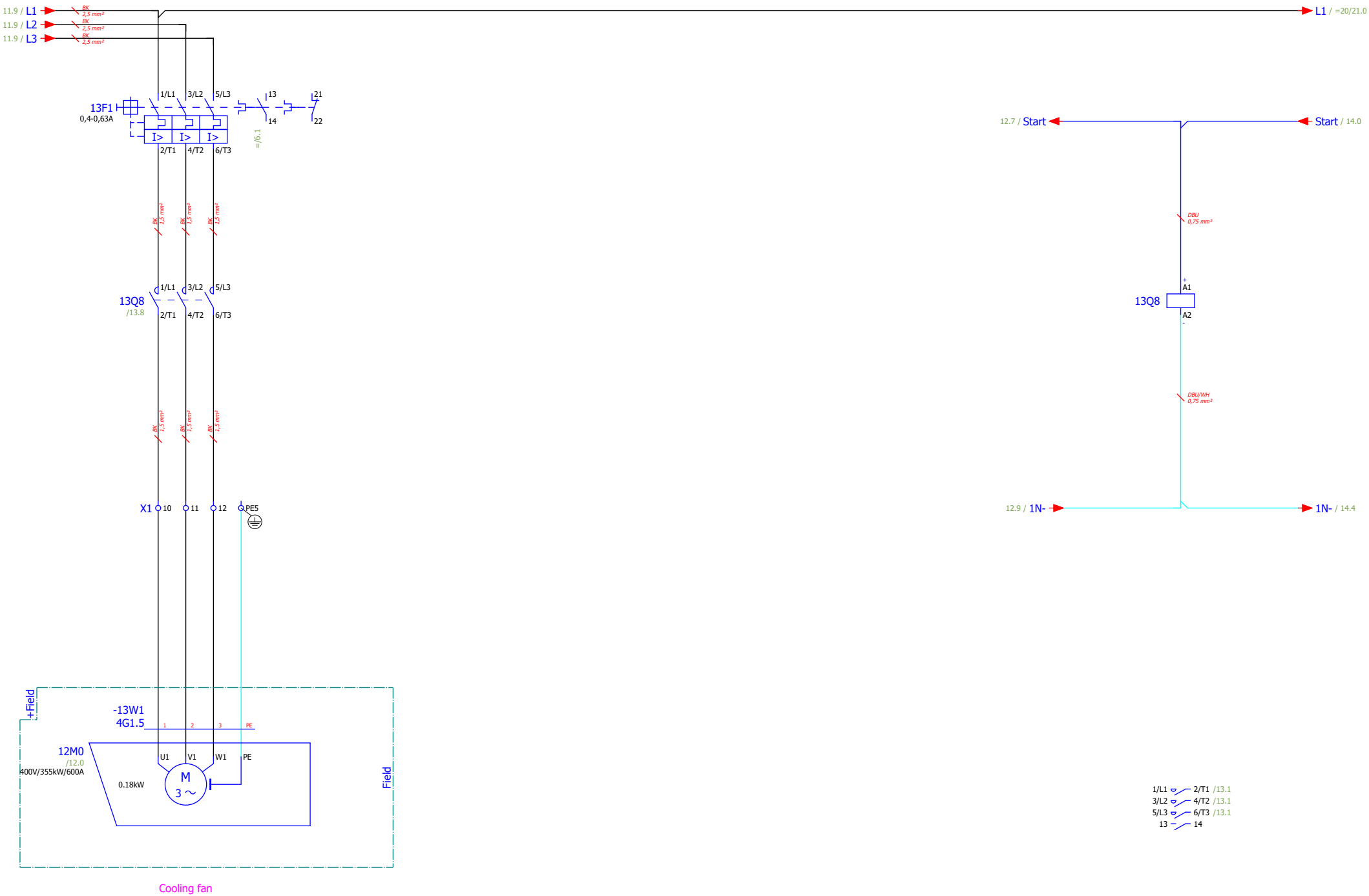
UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A2	Control panel
&EFS1	Electrical engineering schematic
=10	Pump

Pump
VFD highpressure pump

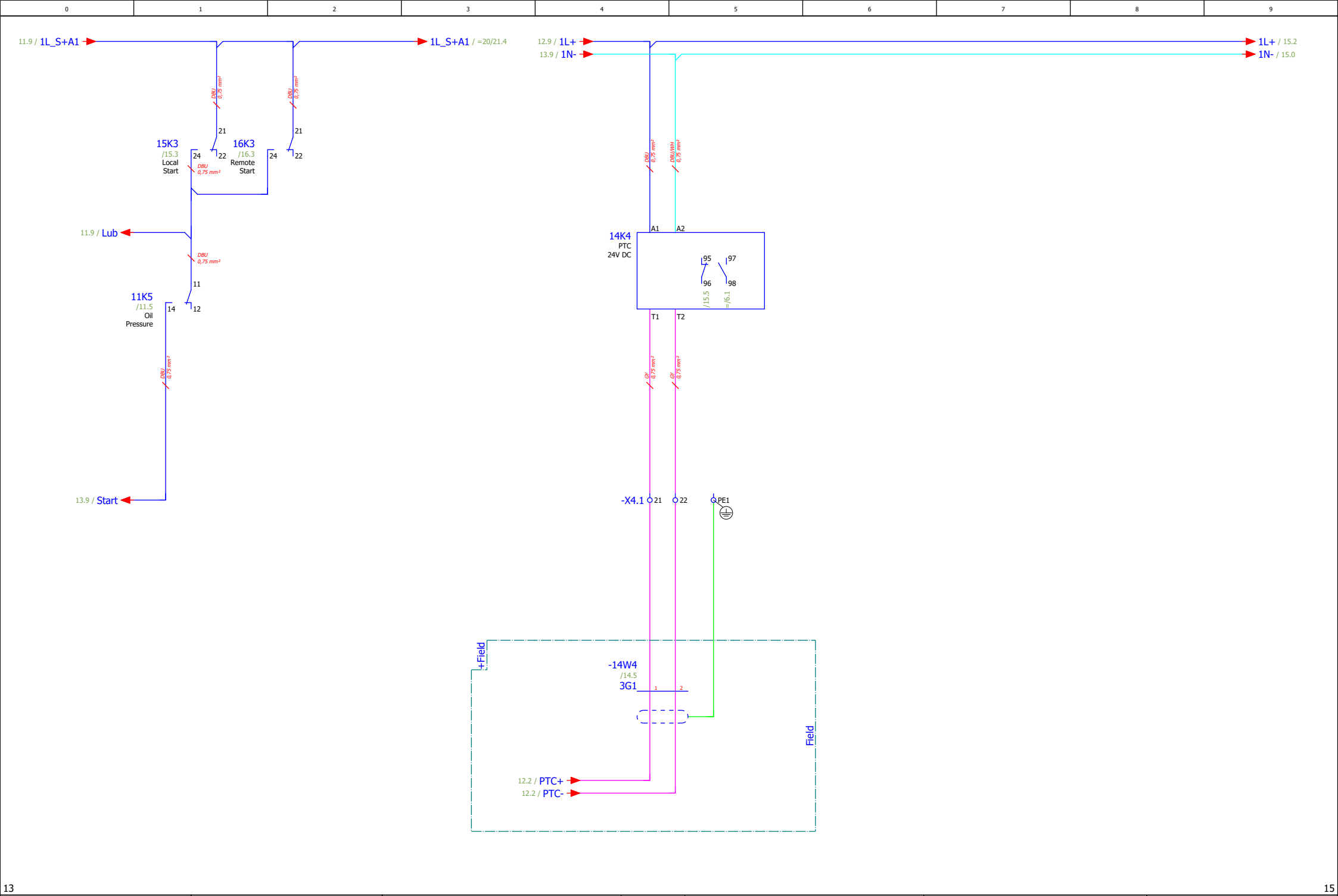
Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	**12**		



UNIDRIVE AUTOMATION

Sitetec B.V.	+A2	Control panel	High pressure pump
P2000EG650	&EFS1	Electrical engineering schematic	Cooling fan
Revisie 1	**=10**	Pump	

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	**13**		



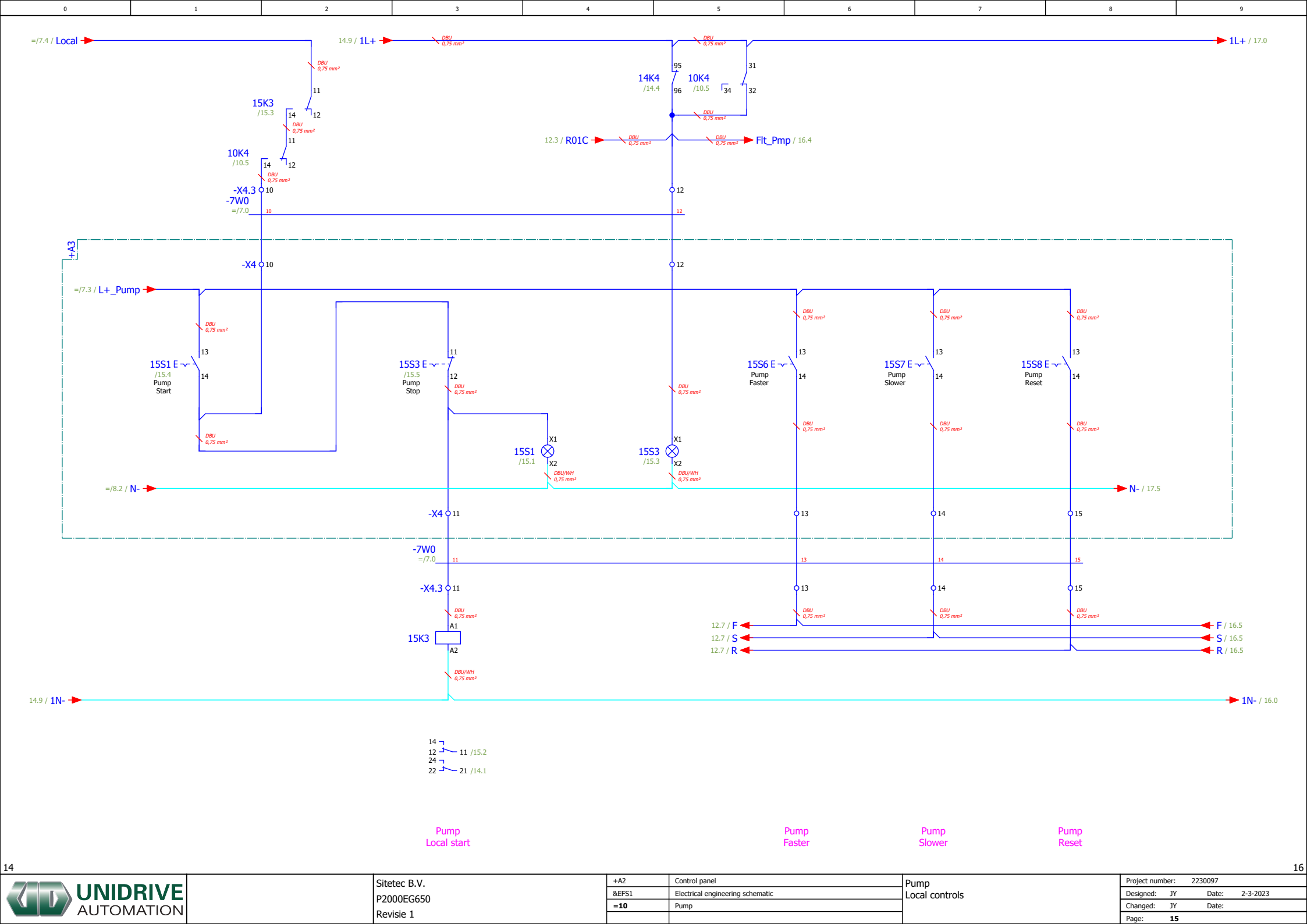
UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A2	Control panel
&EFS1	Electrical engineering schematic
=10	Pump

High pressure pump
Start and PTC-relay

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	14		



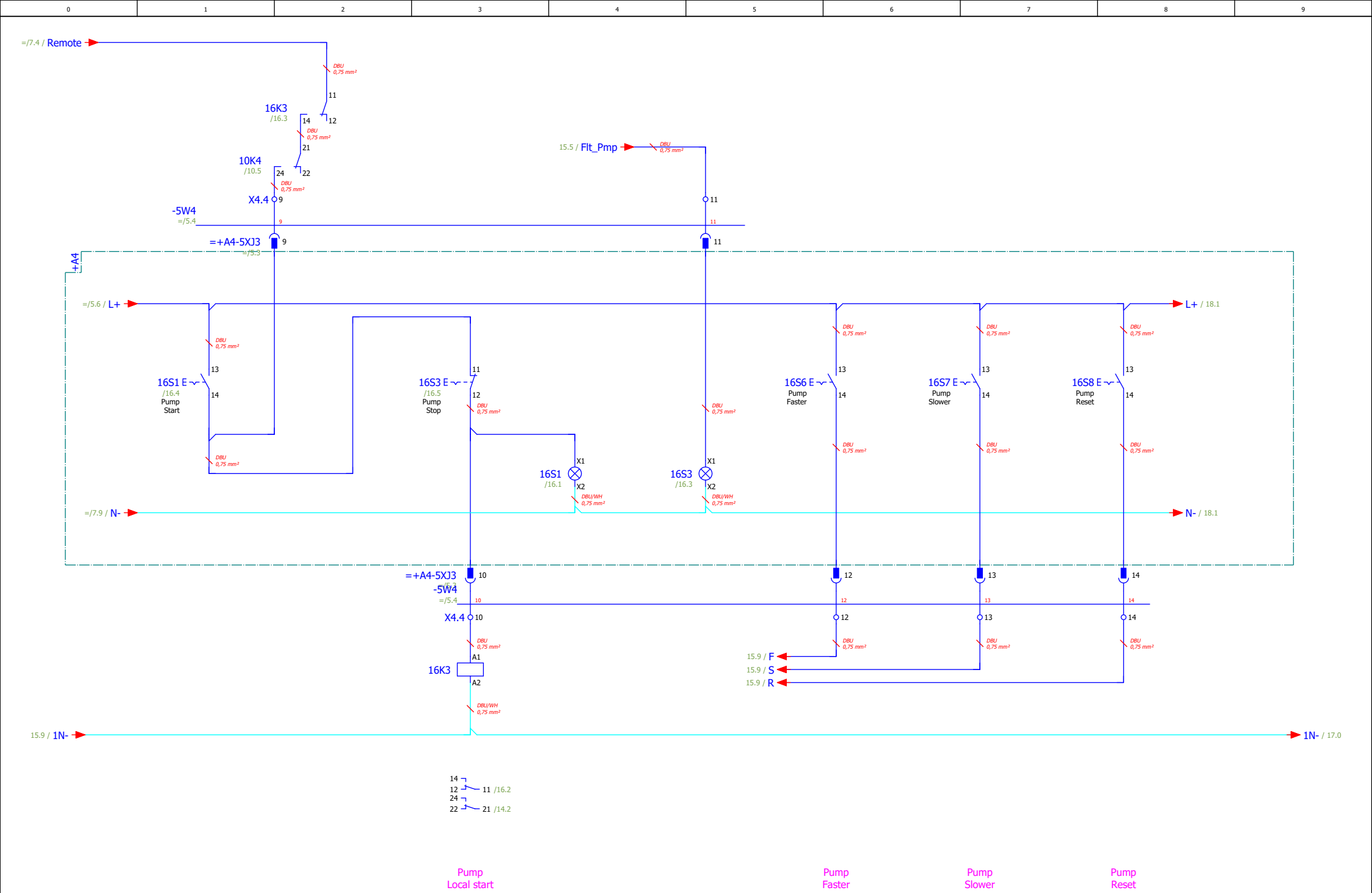
UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A2	Control panel
&EFS1	Electrical engineering schematic
=10	Pump

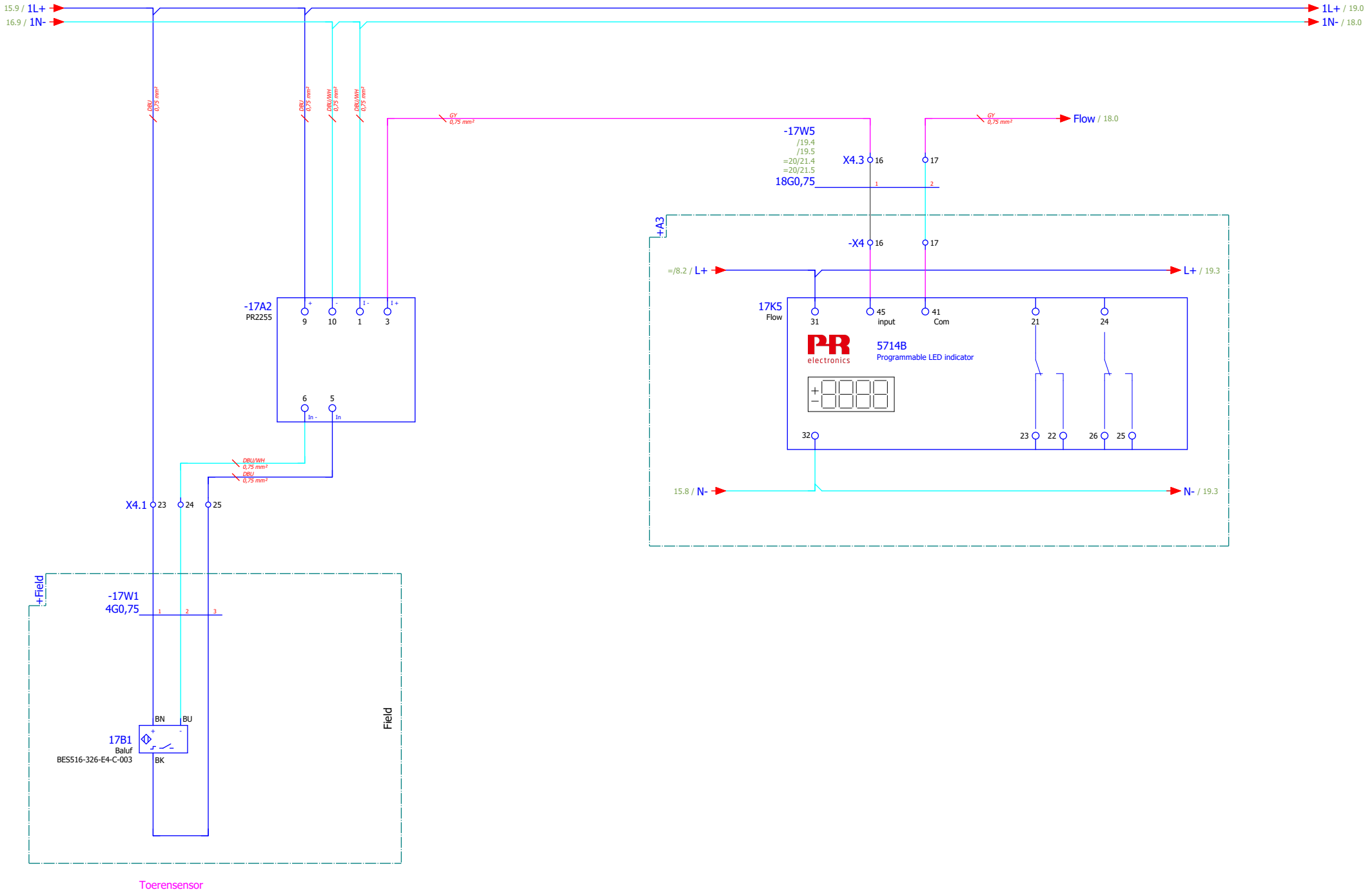
Pump
Local controls

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	**15**		



15 17

UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A2	Control panel	Pump Remote controls	Project number:	2230097
			&EFS1	Electrical engineering schematic		Designed: JY	Date: 2-3-2023
			=10	Pump		Changed: JY	Date:
						Page: **16**	

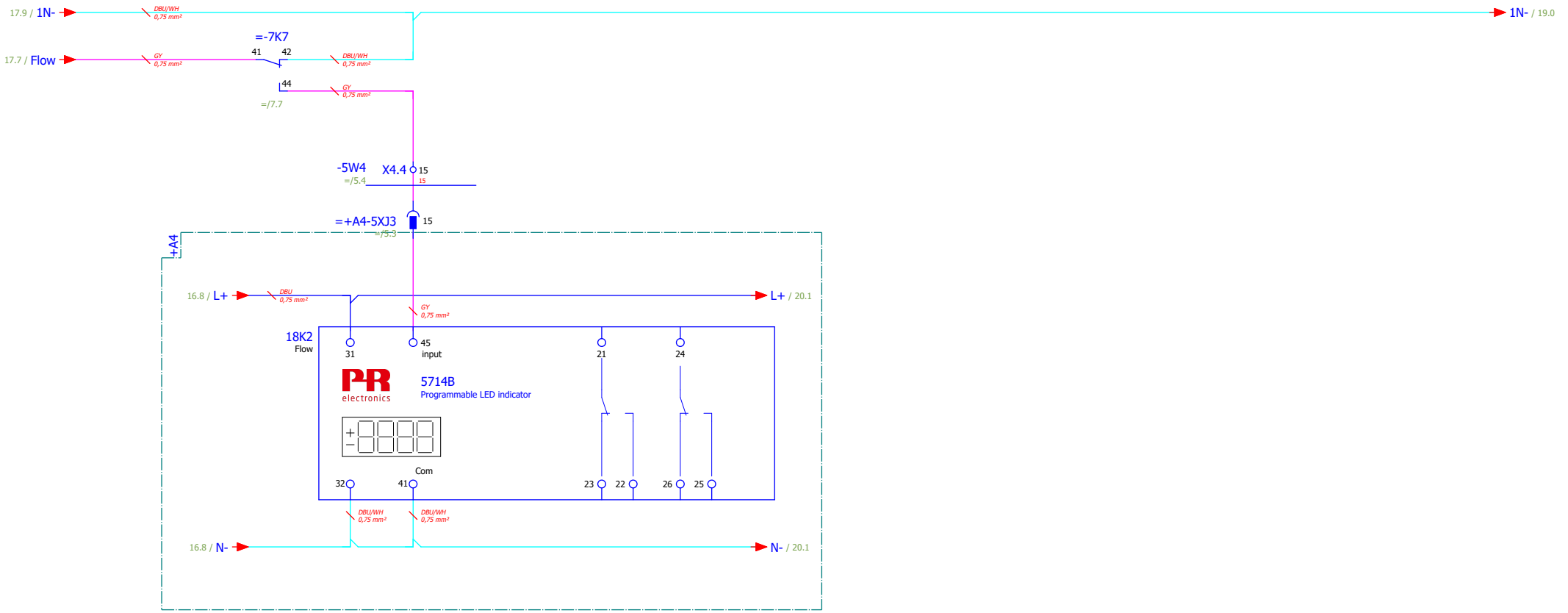


16

18

UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A2	Control panel	Flow measurement and local display
			&EFS1	Electrical engineering schematic	
			=10	Pump	

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	**17**		



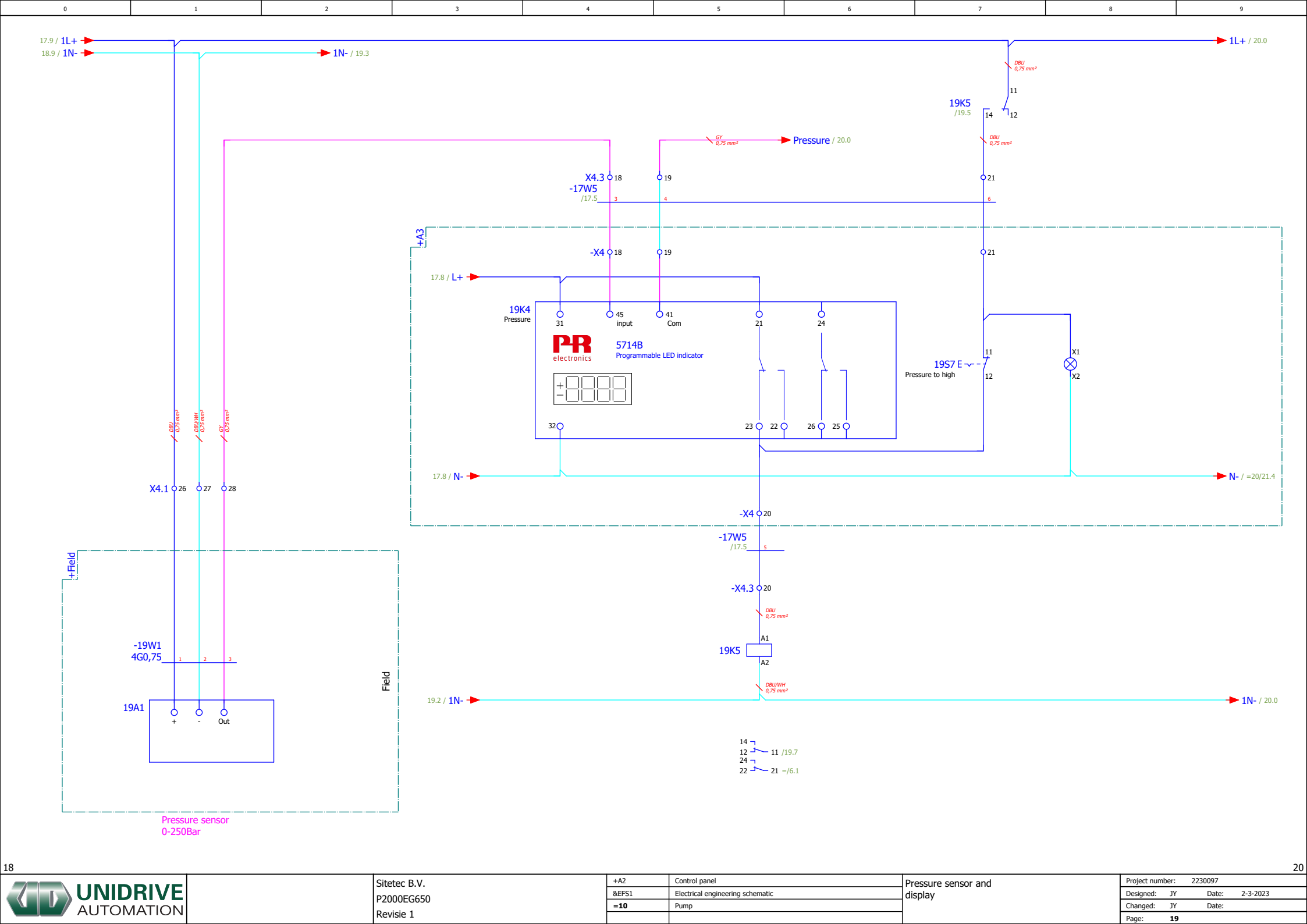
UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A2	Control panel
&EFS1	Electrical engineering schematic
=10	Pump

Flow measurement remote display

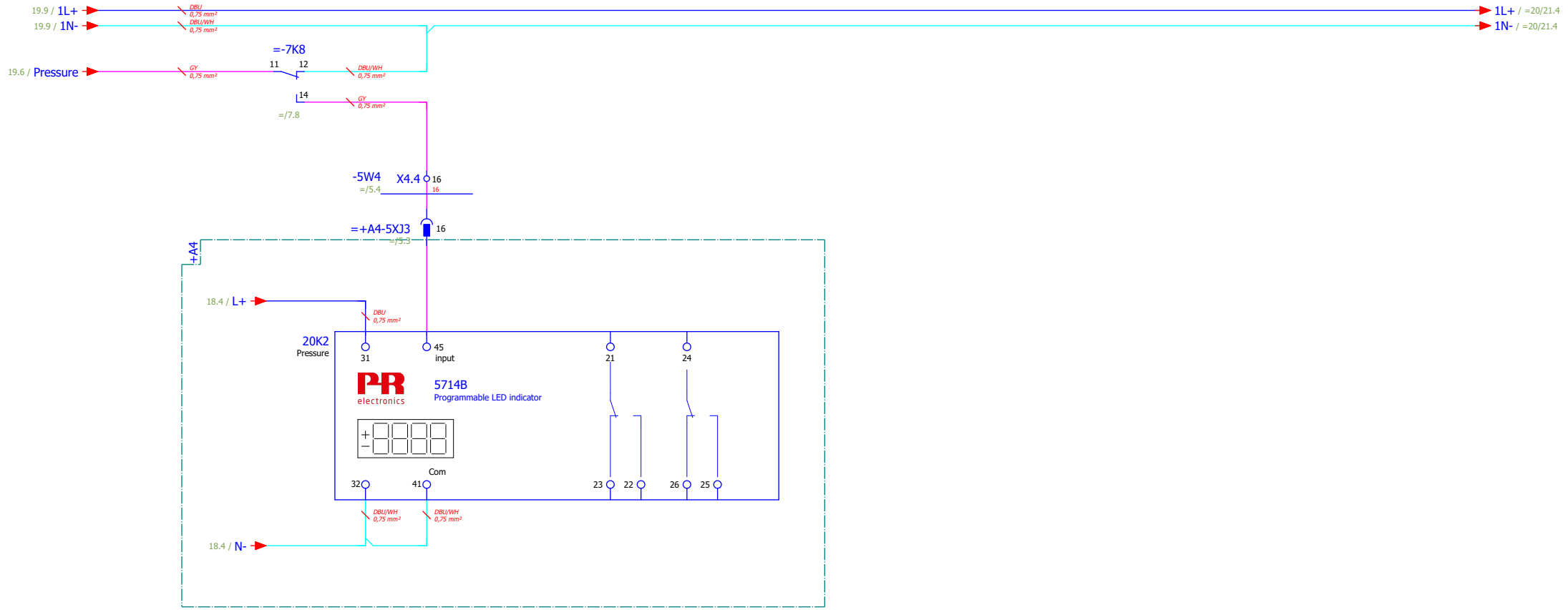
Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	**18**		



18 20

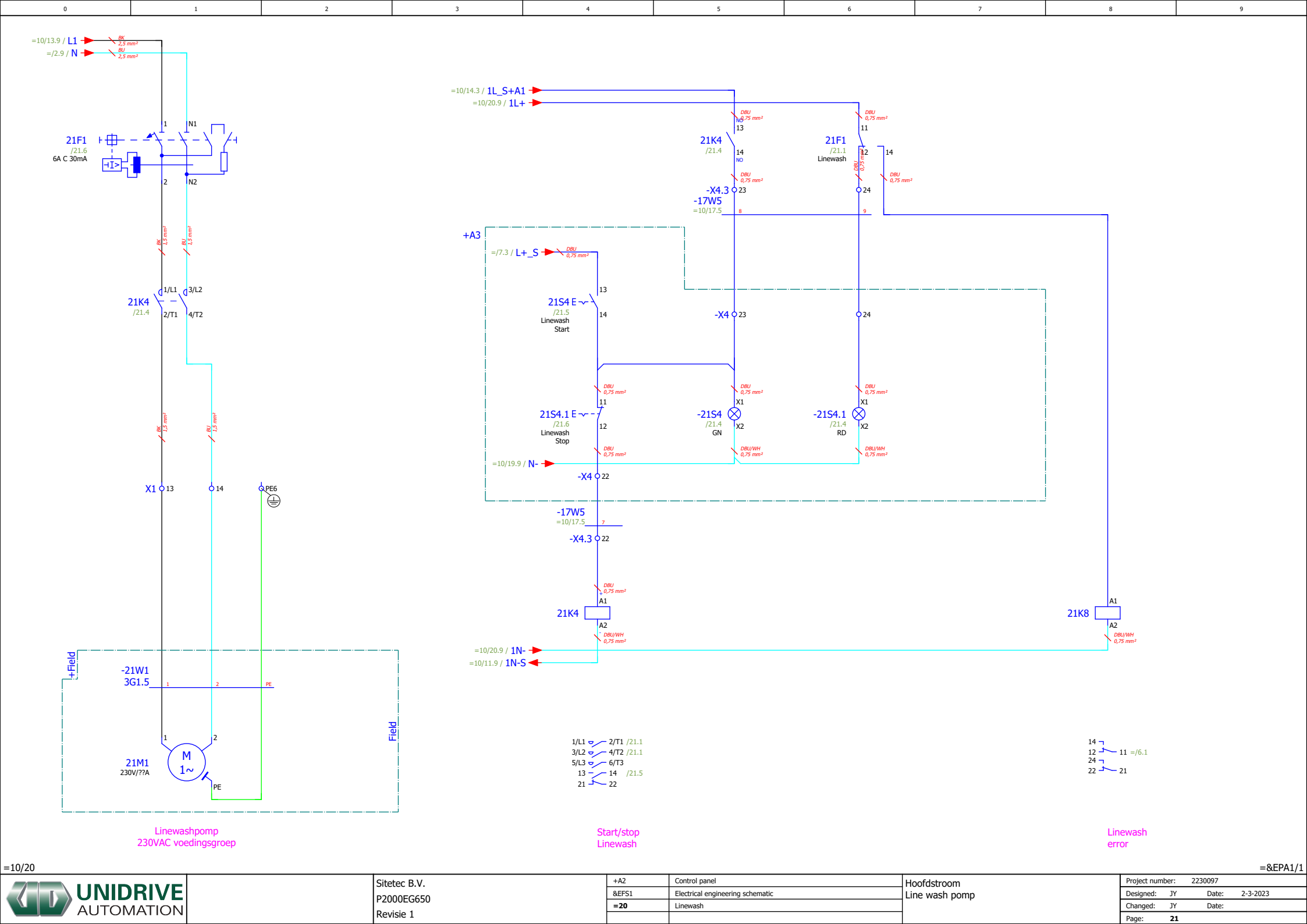
UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A2	Control panel	Pressure sensor and display
			&EFS1	Electrical engineering schematic	
			=10	Pump	

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	**19**		



UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A2 &EFS1 **=10**	Control panel Electrical engineering schematic Pump	Pressure sensor Remote display

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	**20**		



=10/20

=&EPA1/1

UNIDRIVE AUTOMATION		Sitetec B.V. P2000EG650 Revisie 1	+A2	Control panel	Hoofdstroom Line wash pomp
			&EFS1	Electrical engineering schematic	
			=20	Linewash	

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	**21**		

Parts list

F01_UDA_V00

Device tag	Quantity	Designation	Type number	Supplier	Part number
-2F1	1	RCBO C16 30mA	B6CR1N16-30-A	IMO Precision Controls	IMO.B6CR1N16-30-A
-3F1	1	MCB 10kA, C Curve 3 Pole, 6 Amp	B10C3006A	IMO Precision Controls	IMO.B10C3006A
-4H5	1	Signal lamp yellow 24VAC/24VDC	LMB-24-YELLOW	IMO Precision Controls	IMO.LMB-24-YELLOW
-4H5	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
-3K1	1	Three-Phase control relay 183…528Vac, 2 C/O	RM22TG20	Schneider Electric	SE.RM22TG20
-4K4	1	Programmable LED indicator	5714B		PR.5714B
-4K4	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
-6K1	1	PF Relay Socket + Clip For HME Relay 2 Pole	PFHME-S	IMO Precision Controls	IMO.PFHME-S
-6K1	1	IMO Subminiature Power Relay 2 pole SPCO,8A, 24VDC	HME21PN	IMO Precision Controls	IMO.HME21PN24DC
-7K7	1	PF Relay Socket + Clip For HYE41 Relays T35 Din/Panel Mount, 14 Pins Contacts same side	PFHYE-S	IMO Precision Controls	IMO.PFHYE-S
-7K7	1	General Purpose Power Relay 4PCO, 5A, 24VDC	HY41PX24DC	IMO Precision Controls	IMO.HY41PX24DC
-7K8	1	PF Relay Socket + Clip For HYE41 Relays T35 Din/Panel Mount, 14 Pins Contacts same side	PFHYE-S	IMO Precision Controls	IMO.PFHYE-S
-7K8	1	General Purpose Power Relay 4PCO, 5A, 24VDC	HY41PX24DC	IMO Precision Controls	IMO.HY41PX24DC
-9K0	1	Safety relay 3M-1ST	XPSAC5121	Schneider Electric	SE.XPSAC5121
-9K5	1	Safe coupling relay with forced contacts	PSR-SCF- 24UC/URM/2X21	Phoenix Contact	PXC.2981363
-6P4	1	Signal lamp red 24VAC/24VDC	LMB-24-RED	IMO Precision Controls	IMO.LMB-24-RED
-6P4	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
-6P5	1	Signal lamp red 24VAC/24VDC	LMB-24-RED	IMO Precision Controls	IMO.LMB-24-RED
-6P5	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
-PE	1	End clamp	ES1	IMO Precision Controls	IMO.ES1
-PE	1	Tag Car	GMBEIGE	IMO Precision Controls	IMO.GMBEIGE
-1Q0	1	Base Mount Isolator 4 Pole, 32A, Fitted 48x48mm Red And Yellow Handle	DM69-4032-RY48	IMO Precision Controls	IMO.DM69-4032-RY48
-2Q7	1	Contactor 3 Pole Open 4kW 10A AC3, 1 Normally Open Auxiliary 24V DC Coil	MCD10-S-10=24	IMO Precision Controls	IMO.MCD10-S-10=24
-2S7	1	Illuminable Rotary Knob, 2 Position Maintained 90deg Aluminium Bezel	B3KL2	IMO Precision Controls	IMO.B3KL2
-2S7	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
-2S7	1	Contact NO	B3T10	IMO Precision Controls	IMO.B3T10
-2S7	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
-3T2	1	Power Supply 340-575AC input 24VDC Output, 120W 5A Din Rail Mtg	DPS-3-120-24DC	IMO Precision Controls	IMO.DPS-3-120-24DC
-3T3	1	Power Supply 340-575AC input 24VDC Output, 240W 10A Din Rail Mtg	DPS-3-240-24DC	IMO Precision Controls	IMO.DPS-3-240-24DC
-U1	1	AX Compact enclosure, WHD: 800x600x300 mm, sheet steel	AX.1055000		RIT.1055000
-U2	1	Lapp Skintop ST-M M32 Cable Gland, Polyamide RAL 7035	53111440	LAPP	LAPP.53111440
-U3	1	Lapp Skintop ST-M M20 Cable Gland, Polyamide RAL 7035	53111420	LAPP	LAPP.53111420
-U4	1	Lapp Skintop ST-M M20 Cable Gland, Polyamide RAL 7035	53111420	LAPP	LAPP.53111420
-U5	1	Lapp Skintop ST-M M20 Cable Gland, Polyamide RAL 7035	53111420	LAPP	LAPP.53111420
-U6	1	Lapp Skintop ST-M M12 Cable Gland, Polyamide RAL 7035	53111400	LAPP	LAPP.53111400
-U7	1	Lapp Skintop ST-M M20 Cable Gland, Polyamide RAL 7035	53111420	LAPP	LAPP.53111420
-U8	1	Lapp Skintop ST-M M20 Cable Gland, Polyamide RAL 7035	53111420	LAPP	LAPP.53111420
-U9	1	Lapp Skintop ST-M M16 Cable Gland, Polyamide RAL 7035	53111410	LAPP	LAPP.53111410
-U10	1	LIC 60 x 80	60 x 80	Licatec	LIC.7332-1
-U11	1	LIC 60 x 80	60 x 80	Licatec	LIC.7332-1
-U12	1	LIC 60 x 80	60 x 80	Licatec	LIC.7332-1
-U13	1	LIC 60 x 80	60 x 80	Licatec	LIC.7332-1
-U14	1	LIC 60 x 80	60 x 80	Licatec	LIC.7332-1
-U15	1	Support rail TS 35/7.5	34-TS35/FSZ-1	Calpe	CAL.34-TS35/FSZ-1
-U16	1	Support rail TS 35/7.5	34-TS35/FSZ-1	Calpe	CAL.34-TS35/FSZ-1
-U17	1	Support rail TS 35/7.5	34-TS35/FSZ-1	Calpe	CAL.34-TS35/FSZ-1
-U18	1	Brady Y437259 safety icon 50x50	250221	Brady	BRA.250221
-U19	1	Brady Y437259 safety icon 50x50	250221	Brady	BRA.250221
-U20	1	Unidrive Automation domingsticker	D8050	Unidrive Automation	UDA.D8050
-U21	1	LIC 25 x 40	25 x 40	Licatec	LIC.7309-1
-U22	1	LIC 25 x 40	25 x 40	Licatec	LIC.7309-1
-U23	1	LIC 25 x 40	25 x 40	Licatec	LIC.7309-1
-X0	1	End clamp	ES1	IMO Precision Controls	IMO.ES1
-X0	1	Tag Car	GMBEIGE	IMO Precision Controls	IMO.GMBEIGE
-X0	1	Ground modular terminal block	SCPE4	IMO Precision Controls	IMO.SCPE4
-X1	1	End clamp	ES1	IMO Precision Controls	IMO.ES1

Parts list

F01_UDA_V00

Device tag	Quantity	Designation	Type number	Supplier	Part number
-X1	1	Tag Car	GMBEIGE	IMO Precision Controls	IMO.GMBEIGE
-X1	14	Spring Clamp Terminal 4mm², 600V, 26A Beige	SC4	IMO Precision Controls	IMO.SC4
-X1	6	Ground modular terminal block	SCPE4	IMO Precision Controls	IMO.SCPE4
-X4.1	1	End clamp	ES1	IMO Precision Controls	IMO.ES1
-X4.1	1	Tag Car	GMBEIGE	IMO Precision Controls	IMO.GMBEIGE
-X4.1	14	Spring Clamp Terminal 2.5mm², 600V, 20A, Double Deck Beige	SCD2.5BEIGE	IMO Precision Controls	IMO.SCD2.5BEIGE
-X4.1	1	Ground modular terminal block	SCPE2.5	IMO Precision Controls	IMO.SCPE2.5
-X4.2	1	End clamp	ES1	IMO Precision Controls	IMO.ES1
-X4.2	1	Tag Car	GMBEIGE	IMO Precision Controls	IMO.GMBEIGE
-X4.2	2	Spring Clamp Terminal 2.5mm², 600V, 20A Beige	SC2.5	IMO Precision Controls	IMO.SC2.5
-X4.3	1	End clamp	ES1	IMO Precision Controls	IMO.ES1
-X4.3	1	Tag Car	GMBEIGE	IMO Precision Controls	IMO.GMBEIGE
-X4.3	12	Spring Clamp Terminal 2.5mm², 600V, 20A, Double Deck Beige	SCD2.5BEIGE	IMO Precision Controls	IMO.SCD2.5BEIGE
-X4.3	1	Ground modular terminal block	SCPE2.5	IMO Precision Controls	IMO.SCPE2.5
-X4.4	2	End clamp	ES1	IMO Precision Controls	IMO.ES1
-X4.4	1	Tag Car	GMBEIGE	IMO Precision Controls	IMO.GMBEIGE
-X4.4	8	Spring Clamp Terminal 2.5mm², 600V, 20A, Double Deck Beige	SCD2.5BEIGE	IMO Precision Controls	IMO.SCD2.5BEIGE
-X4.4	1	Ground modular terminal block	SCPE2.5	IMO Precision Controls	IMO.SCPE2.5
-X100	2	End clamp	ES1	IMO Precision Controls	IMO.ES1
-X100	1	Tag Car	GMBEIGE	IMO Precision Controls	IMO.GMBEIGE
-X100	2	Fuse modular terminal block	ERF2	IMO Precision Controls	IMO.ERF2
-X100	1	Fuse 1A	522517	Solar	SOL.522517
-X100	1	Fuse 3,15A	522522	Solar	SOL.522522
-X100	2	Spring Clamp Terminal 2.5mm², 600V, 20A Beige	SC2.5	IMO Precision Controls	IMO.SC2.5
=10-17A2	1	f/I-f/f converter	2255-B-1	PR electronics	PR.2255-B-1
=10-11F1	1	Thermal Magnetic Motor Circuit Breaker 0,4-0,63A Magn. 8,2A	C4/32R-0,63	IMO Precision Controls	IMO.C4/32R-0,63
=10-11F1	1	Auxiliary Contact Block 1 NO 1NC Top Mounting For C4/32/63/100 Breakers	C4HQ11	IMO Precision Controls	IMO.C4HQ11
=10-13F1	1	Thermal Magnetic Motor Circuit Breaker 0,4-0,63A Magn. 8,2A	C4/32R-0,63	IMO Precision Controls	IMO.C4/32R-0,63
=10-13F1	1	Auxiliary Contact Block 1 NO 1NC Top Mounting For C4/32/63/100 Breakers	C4HQ11	IMO Precision Controls	IMO.C4HQ11
=10-10K4	1	Relay Socket (Base) For HYE41 Relays T35 Din/Panel Mount, 14 Pins	SRNE4-S	IMO Precision Controls	IMO.SRNE4-S
=10-10K8	1	Relay Socket (Base) For QYE21/ PQY21 Relays T35 Din/Panel Mount, 8 Pin	SRHE2-C	IMO Precision Controls	IMO.SRHE2-C
=10-10K8	1	General Purpose Power Relay 2PCO, 10A, 24VDC, up to 1.1W Plug-in, NO indication	QY21XX24DC	IMO Precision Controls	IMO.QY21XX24DC
=10-11K5	1	PF Relay Socket + Clip For HME Relay 2 Pole	PFHME-S	IMO Precision Controls	IMO.PFHME-S
=10-11K5	1	IMO Subminiature Power Relay 2 pole SPCO,8A, 24VDC	HME21PN	IMO Precision Controls	IMO.HME21PN24DC
=10-11K7	1	24-350VDC, 24-265VAC Supply 10 Function, DinRail Mount	TDM10	IMO Precision Controls	IMO.TDM10
=10-14K4	1	Thermistor relais - PTC sonde - Automatische reset	LT3SA00ED	Schneider Electric	SE.LT3SA00ED
=10-15K3	1	PF Relay Socket + Clip For HME Relay 2 Pole	PFHME-S	IMO Precision Controls	IMO.PFHME-S
=10-15K3	1	IMO Subminiature Power Relay 2 pole SPCO,8A, 24VDC	HME21PN	IMO Precision Controls	IMO.HME21PN24DC
=10-16K3	1	PF Relay Socket + Clip For HME Relay 2 Pole	PFHME-S	IMO Precision Controls	IMO.PFHME-S
=10-16K3	1	IMO Subminiature Power Relay 2 pole SPCO,8A, 24VDC	HME21PN	IMO Precision Controls	IMO.HME21PN24DC
=10-19K5	1	PF Relay Socket + Clip For HME Relay 2 Pole	PFHME-S	IMO Precision Controls	IMO.PFHME-S
=10-19K5	1	IMO Subminiature Power Relay 2 pole SPCO,8A, 24VDC	HME21PN	IMO Precision Controls	IMO.HME21PN24DC
=10-11Q6	1	Contactor 3 Pole Open 4kW 10A AC3, 1 Normally Open Auxiliary 24V DC Coil	MCD10-S-10=24	IMO Precision Controls	IMO.MCD10-S-10=24
=10-13Q8	1	Contactor 3 Pole Open 4kW 10A AC3, 1 Normally Open Auxiliary 24V DC Coil	MCD10-S-10=24	IMO Precision Controls	IMO.MCD10-S-10=24
=10-U1	1	Lapp Skintop ST-M M20 Cable Gland, Polyamide RAL 7035	53111420	LAPP	LAPP.53111420
=10-U2	1	Lapp Skintop ST-M M20 Cable Gland, Polyamide RAL 7035	53111420	LAPP	LAPP.53111420
=10-U3	1	Lapp Skintop ST-M M20 Cable Gland, Polyamide RAL 7035	53111420	LAPP	LAPP.53111420
=10-U4	1	Lapp Skintop ST-M M20 Cable Gland, Polyamide RAL 7035	53111420	LAPP	LAPP.53111420
=10-U5	1	Lapp Skintop ST-M M16 Cable Gland, Polyamide RAL 7035	53111410	LAPP	LAPP.53111410
=10-U6	1	Lapp Skintop ST-M M12 Cable Gland, Polyamide RAL 7035	53111400	LAPP	LAPP.53111400
=10-U7	1	Lapp Skintop ST-M M20 Cable Gland, Polyamide RAL 7035	53111420	LAPP	LAPP.53111420
=10-U8	1	Lapp Skintop ST-M M12 Cable Gland, Polyamide RAL 7035	53111400	LAPP	LAPP.53111400
=20-21F1	1	RCBO C6 30mA	B6CR1N06-30-A	IMO Precision Controls	IMO.B6CR1N06-30-A
=20-21F1	1	MCB Aux Contact 1PCO, 6A @ 230VAC / 24VDC, 3A	B10-F3	IMO Precision Controls	IMO.B10-F3
=20-21K4	1	Contactor 3 Pole Open 7.5kW 18A AC3, 1 Normally Open Auxiliary, 24V DC Coil	MCD18-S-10=24	IMO Precision Controls	IMO.MCD18-S-10=24
=20-21K4	1	Auxiliary Contact Block 1 Normally Closed Contact, For MC10 to MC115 Contactors, Top Mount	MCA01	IMO Precision Controls	IMO.MCA01

UNIDRIVE AUTOMATION

Sitetec B.V.
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Revisie 1

+A2	Control panel
&APB	Device tag list
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Parts list : IMO.GMBEIGE - IMO.MCA01

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Parts list

F01_UDA_V00

Device tag	Quantity	Designation	Type number	Supplier	Part number
=20-21K8	1	PF Relay Socket + Clip For HME Relay 2 Pole	PFHME-S	IMO Precision Controls	IMO.PFHME-S
=20-21K8	1	IMO Subminiature Power Relay 2 pole SPCO,8A, 24VDC	HME21PN	IMO Precision Controls	IMO.HME21PN24DC
=20-U1	1	Lapp Skintop ST-M M20 Cable Gland, Polyamide RAL 7035	53111420	LAPP	LAPP.53111420

UNIDRIVE AUTOMATION

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+A2	Control panel
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Parts list : IMO.PFHME-S - LAPP.53111420

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Cable overview

Cable name	Source (from)	Target (to)	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text	Graphical page of cable diagram
-5W4	-X4.4	+A4-5XJ3			17			Remote control connected	
-7W0	-X4.3	+A3-X4		18G	16	0.75			
-12W3	-X4.1	=10+Field-12T1		18G	11	0,75		Hogedrukpomp	
-17W5	-X4.3	+A3-X4		18G	9	0,75		Toerensensor	

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A2	Control panel
&EMB1	Cable overview
=	

Cable overview : +A2-5W4 - +A2-17W5

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Terminal diagram

Strip

+A2-X0

Inkomende voeding

Function text	Cable name	Cable type	Target designation	Connection point	Terminal	Jumper	Target designation	Connection point	Cable type	Cable name	Page / column
Feeded from +A1			PE		PE	,	PE				EFS1/1.1

UNIDRIVE AUTOMATION	Sitetec B.V. P2000EG650 Revisie 1	+A2 / Control panel &EMA2 / Terminal diagram =	Terminal diagram +A2-X0	Project number: 2230097 Designed: JY Date: 2-3-2023 Changed: JY Date: Page: 1

Terminal diagram

Function text			+Field-21W1	+Field-13W1	+Field-11W1	+Field-2W5.5	+Field-2W3.5	+Field-2W1	Cable name	Strip +A2-X1 Motors Target designation	Connection point	Terminal	Jumper	Target designation	Connection point	Cable name					Page / column
									Cable type							Cable type					
Machine lighting								1		+Field-2A1	L	1	,	-2Q7	2/T1						EFS1/2.1
=								2		+Field-2A1	N	2	,	-2Q7	4/T2						EFS1/2.1
=								PE		+Field-2A1	PE	PE1	,								EFS1/2.1
=							1			+Field-2A3	L	3	,	-2Q7	2/T1						EFS1/2.3
=							2			+Field-2A3	N	4	,	-2Q7	4/T2						EFS1/2.3
=							PE			+Field-2A3	PE	PE2	,								EFS1/2.3
Sockets						1				+Field-2A5	L	5	,	-2F1	2						EFS1/2.5
=						2				+Field-2A5	N	6	,	-2F1	4						EFS1/2.5
=						PE				+Field-2A5	PE	PE3	,								EFS1/2.6
					1					=10+Field-11M1	U1	7	,	=10-11Q6	2/T1						=10EFS1/11.1
Lubrication pump					2					=10+Field-11M1	V1	8	,	=10-11Q6	4/T2						=10EFS1/11.1
=					3					=10+Field-11M1	W1	9	,	=10-11Q6	6/T3						=10EFS1/11.1
=					PE					=10+Field-11M1	PE	PE4	,								=10EFS1/11.1
				1						=10+Field-12M0	U1	10	,	=10-13Q8	2/T1						=10EFS1/13.1
Cooling fan				2						=10+Field-12M0	V1	11	,	=10-13Q8	4/T2						=10EFS1/13.1
=				3						=10+Field-12M0	W1	12	,	=10-13Q8	6/T3						=10EFS1/13.1
=				PE						=10+Field-12M0	PE	PE5	,								=10EFS1/13.2
			1							=20+Field-21M1	1	13	,	=20-21K4	2/T1						=20EFS1/21.1
Linewashpomp 230VAC voedingsgroep			2							=20+Field-21M1	2	14	,	=20-21K4	4/T2						=20EFS1/21.1
=			PE							=20+Field-21M1	PE	PE6	,								=20EFS1/21.2

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A2	Control panel
&EMA2	Terminal diagram
=	

Terminal diagram +A2-X1

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Terminal diagram

Strip

+A2-X4.1

Controlvoltage

Function text		+Field-19W1	+Field-17W1	+Field-14W4	-12W3	+Field-11W3	+Field-8W4	+Field-4W1	Cable name	Cable type	Target designation	Connection point	Terminal	Jumper	Target designation	Connection point	Cable name	Cable type					Page / column
Diesel level 0-100mBar								BN			+Field-4A1	+	1	,	-X100	+1:2							EFS1/4.1
															-4K4	31							
Diesel level 0-100mBar								BU			+Field-4A1	-	2	,	-X100	-1:2							EFS1/4.1
															-4K4	32							
Diesel level 0-100mBar								WH			+Field-4A1	Out	3	,	-4K4	45							EFS1/4.1
Emergency stop							1				+Field-8S4	11	4	,	-X4.3	6:3							EFS1/8.4
=							2				+Field-8S4	12	5	,	-7K7	21							EFS1/8.4
=							3				+Field-8S4	21	6	,	-X4.3	7:1							EFS1/8.4
=							4				+Field-8S4	22	7	,	-7K7	31							EFS1/8.4
Lubrication pressure switch						1					=10+Field-11S3	13	8	,	-9K0	14							=10EFS1/11.3
															=10-11K7	1							
Lubrication pressure switch						2					=10+Field-11S3	14	9	,	=10-11K5	A1							=10EFS1/11.3
Hogedrukpomp					1						=10+Field-12T1	R01C	10	,	=10-13F1	14							=10EFS1/12.3
=					2						=10+Field-12T1	R01B	11	,	=10-14K4	96							=10EFS1/12.3
															=10-10K4	32							
Hogedrukpomp					3						=10+Field-12T1	R01A	12	,	=10-19K5	21							=10EFS1/12.3
=					4						=10+Field-12T1	COM	13	,	=10-10K8	7							=10EFS1/12.4
															=10-13Q8	A2							
Hogedrukpomp					5						=10+Field-12T1	S1	14	,	=10-10K8	8							=10EFS1/12.5
															=10-13Q8	A1							
Hogedrukpomp					6						=10+Field-12T1	S3	15	,	-X4.3	13:1							=10EFS1/12.6
=					7						=10+Field-12T1	S4	16	,	-X4.3	14:3							=10EFS1/12.6
=					8						=10+Field-12T1	HDIA	17	,	-X4.3	15:1							=10EFS1/12.7
=					9						=10+Field-12T1	+24V	18	,	-9K5	11							=10EFS1/12.8
=					10						=10+Field-12T1	H1	19	,	-9K5	14							=10EFS1/12.8
=					11						=10+Field-12T1	H2	20	,	-9K5	24							=10EFS1/12.9
				1							=10+Field-12M0		21	,	=10-14K4	T1							=10EFS1/14.4
				2							=10+Field-12M0		22	,	=10-14K4	T2							=10EFS1/14.5
Toerensensor			1								=10+Field-17B1	BN	23	,	=10-10K4	31							=10EFS1/17.1
															=10-17A2	9							
Toerensensor			2								=10+Field-17B1	BU	24	,	=10-17A2	6							=10EFS1/17.1
=			3								=10+Field-17B1	BK	25	,	=10-17A2	5							=10EFS1/17.1
Pressure sensor 0-250Bar		1									=10+Field-19A1	+	26	,	=10-17A2	9							=10EFS1/19.1
															=10-19K5	11							
Pressure sensor 0-250Bar		2									=10+Field-19A1	-	27	,	-7K7	42							=10EFS1/19.1

UNIDRIVE AUTOMATION

Sitetec B.V.
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Revisie 1

+A2	Control panel
&EMA2	Terminal diagram
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Terminal diagram +A2-X4.1

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Terminal diagram

Function text						+Field-14W4	+Field-19W1	Cable name / Cable type	Target designation	Connection point	Terminal	Jumper	Target designation	Connection point	Cable name / Cable type					Page / column
							2						=10-19K5	A2						
Pressure sensor 0-250Bar							3		=10+Field-19A1	Out	28	•	-X4.3	18:3						=10EFS1/19.1
									+Field-14W4		PE1	•								=10EFS1/14.5

Strip: +A2-X4.1 Controlvoltage

Terminal diagram

Strip

+A2-X4.2

Linak Actuator

Function text	+Field-10W1	+Field-10W3	Cable name	Cable type	Target designation	Connection point	Terminal	Jumper	Target designation	Connection point	Cable type	Cable name	Page / column
Linak hogedrukpomp		1			=10+Field-10S3	13	3	,	-9K0	13			=10EFS1/10.3
									=10-14K4	A1			
Linak hogedrukpomp		2			=10+Field-10S3	14	4	,	=10-10K4	A1			=10EFS1/10.4
=	BN				=10+Field-10M1	BN	1	,	=10-10K8	5			=10EFS1/10.1
=	BU				=10+Field-10M1	BU	2	,	=10-10K8	6			=10EFS1/10.1

UNIDRIVE AUTOMATION

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+A2	Control panel
&EMA2	Terminal diagram
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Terminal diagram +A2-X4.2

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Terminal diagram

Function text	-1?W5	-?W0	Cable name	Cable type	Target designation	Connection point	Terminal	Jumper	Target designation	Connection point	Cable name	Cable type	Page / column
					Strip +A2-X4.3 Control cabinet A3								
		1			+A3-X4	1:2	1	,	-6K1	11			EFS1/7.1
									-7K7	A1			
		2			+A3-X4	2:2	2	,	-6P5	X2			EFS1/7.1
									-9K0	23			
Switch Local - remote		3			+A3-X4	3:2	3	,	-6K1	24			EFS1/7.2
=		4			+A3-X4	4:2	4	,	-X4.4	1:1			EFS1/7.3
									=10-16K3	11			
Switch Local - remote		5			+A3-X4	5:2	5	,	=10-15K3	11			EFS1/7.3
Emergency stop		6			+A3-X4	6:2	6	,	-X4.1	4:3			EFS1/8.1
=		7			+A3-X4	7:2	7	,	-X4.1	6:3			EFS1/8.1
		8			+A3-X4	8:2	8	,	-9K0	Y1			EFS1/9.2
		9			+A3-X4	9:2	9	,	-9K0	Y2			EFS1/9.3
		10			+A3-X4	10:2	10	,	=10-10K4	14			=10EFS1/15.2
Pump Local start		11			+A3-X4	11:2	11	,	=10-15K3	A1			=10EFS1/15.3
=		12			+A3-X4	12:2	12	,	=10-14K4	96			=10EFS1/15.5
									=10-10K4	32			
Pump Faster		13			+A3-X4	13:2	13	,	-X4.1	15:1			=10EFS1/15.6
									-X4.4	12:3			
Pump Slower		14			+A3-X4	14:2	14	,	-X4.1	16:3			=10EFS1/15.7
									-X4.4	13:1			
Pump Reset		15			+A3-X4	15:2	15	,	-X4.1	17:1			=10EFS1/15.8
									-X4.4	14:3			
Toerensensor	1				+A3-X4	16:2	16	,	=10-17A2	3			=10EFS1/17.6
=	2				+A3-X4	17:2	17	,	-7K7	41			=10EFS1/17.6
Pressure sensor 0-250Bar	3				+A3-X4	18:2	18	,	-X4.1	28:3			=10EFS1/19.4
=	4				+A3-X4	19:2	19	,	-7K8	11			=10EFS1/19.5
=	5				+A3-X4	20:2	20	,	=10-19K5	A1			=10EFS1/19.5
=	6				+A3-X4	21:2	21	,	=10-19K5	14			=10EFS1/19.7
Start/stop Linewash	7				+A3-X4	22:2	22	,	=20-21K4	A1			=20EFS1/21.4
=	8				+A3-X4	23:2	23	,	=20-21K4	14			=20EFS1/21.5
=	9				+A3-X4	24:2	24	,	=20-21F1	12			=20EFS1/21.6
Switch Local - remote		PE			+A3-X4	PE1:2	PE1	,					EFS1/7.1

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A2	Control panel
&EMA2	Terminal diagram
=	

Terminal diagram +A2-X4.3

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Terminal diagram

Strip

+A2-X4.4

Control cabinet A3

Function text	-5W4	Cable name	Cable type	Target designation	Connection point	Terminal	Jumper	Target designation	Connection point	Cable name	Cable type	Page / column
	1			+A4-5XJ3	1	1		-X4.3	4:3			EFS1/5.4
	2			+A4-5XJ3	2	2		-4H5	X2			EFS1/5.4
								-7K7	12			
	3			+A4-5XJ3	3	3		-7K7	14			EFS1/5.4
Remote control connected	4			+A4-5XJ3	4	4		-7K7	A2			EFS1/7.7
Emergency stop	5			+A4-5XJ3	5	5		-7K7	24			EFS1/8.6
=	6			+A4-5XJ3	6	6		-7K7	22			EFS1/8.6
=	7			+A4-5XJ3	7	7		-7K7	34			EFS1/8.7
=	8			+A4-5XJ3	8	8		-7K7	32			EFS1/8.7
	9			+A4-5XJ3	9	9		=10-10K4	24			=10EFS1/16.2
Pump Local start	10			+A4-5XJ3	10	10		=10-16K3	A1			=10EFS1/16.3
=	11			+A4-5XJ3	11	11		=10-14K4	96			=10EFS1/16.5
								=10-10K4	32			
Pump Faster	12			+A4-5XJ3	12	12		-X4.3	13:1			=10EFS1/16.6
Pump Slower	13			+A4-5XJ3	13	13		-X4.3	14:3			=10EFS1/16.7
Pump Reset	14			+A4-5XJ3	14	14		-X4.3	15:1			=10EFS1/16.8
	15			+A4-5XJ3	15	15		-7K7	44			=10EFS1/18.2
	16			+A4-5XJ3	16	16		-7K8	14			=10EFS1/20.2
	PE			+A4-5XJ3	PE	PE1						EFS1/5.4

UNIDRIVE AUTOMATION

Sitetec B.V.
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&EMA2	Terminal diagram
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Terminal diagram +A2-X4.4

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Unidrive Automation B.V.
Oliemolenweg 3B
7944 HX Meppel
The Nederlands
Tel: +31 (0)522 245713
E-mail: info@unidrive-automation.nl

Company / customer	Sitetec B.V.
Project description	P2000EG650
Job number	2230097
Commission	Sitetec B.V.

Manufacturer (company)	Unidrive Automation B.V.
Project name	2230097 - P2000EG650-Rev 1
Make	Rittal
Type	AE1007.600
Place of installation	
Control cabinet name	A3

Created on	2-3-2023	Prepared by	JY
Project status	Revisie 1	Edit date	

Applied Wire Colors

U > 50VAC	
L1	Black
L2	Black
L3	Black
N*1	Blue
Earth	Yellow / green

U < 50VDC	
Plus	Darkblue
Switch wire	Darkblue
Min	Darkblue / white
Earth	Yellow / green

Analog signals	
Plus	Gray
Min	Gray
Earth	Yellow / green

U < 50VAC	
Plus	Gray
Min	Gray
Earth	Yellow / green

Safety circuits	
All	Yellow

External supplies	
All*2	Orange or Black

1 * = If AC voltage is not from a transformer
in the control cabinet itself the corresponding zero is light blue.
2 * = depending on the situation.

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A3	Operation panel
&AAA1	Title page / cover sheet
=	

Wire colors

Project number:	2230097		
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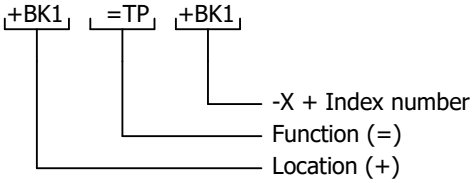
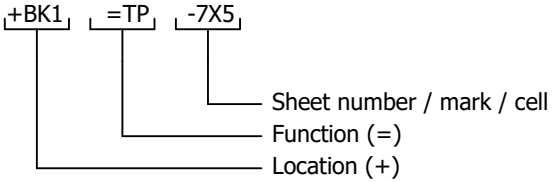
Page:	2		

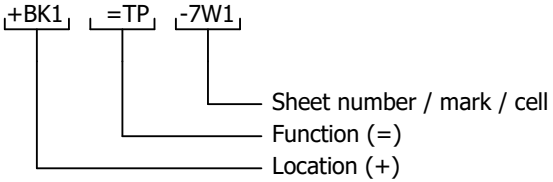
TERMINAL NUMBERING



Component coding



Cable numbering



Normal cable

Shielded cable

Structure

+	Location
&	Document type
=	Function

Component coding (internal)

A	Assemblies, cabinets (Cabinet, PCB, PLC, amplifier, laser)
T	Inverters, from non-electric to electric or vice versa (Pt100, proximity switch, photoelectric cell)
C	Capacitors
E	Several (Heating appliance, lighting appliance, appliances not mentioned elsewhere)
F	Protection devices (Fuse, circuit breaker, surge arrester)
G	Generator
P	Signaling (signal lamp, buzzer)
K	Relays & contactors
R	Coils, reactors
M	Motors
P	Measuring device, test device (Indicator, writer, integrating measuring device, signal generator, clock)
Q	Switching device for power circuits (motor protection, starter, breaker)
R	Resistance (Potentiometer, adjustable resistance, rheostat, shunt resistor, thermistor)
S	Control circuit switch, selector (push button, cam switch, limit switch, selector contact)
T	Transformer (Voltage transformer, current transformer)
T	Modulator, inverter (frequency converter, DC power supply, coder decoder, inverter, signal converter)
W	Cable
X	Terminals, sockets, plugs
Y	Electrically operated mechanical device (Brake, clutch, pneumatic valve)

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A3	Operation panel
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=	

Explanatory documents

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RATED CURRENTS FOR COPPER CONDUCTORS

IN ACCORDANCE WITH
NEN-EN-IEC 61439-1 : 2011 TABLE 11

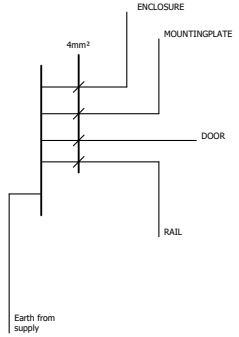
Cross-sectional mm2	Current
1	8
1,5	12
2,5	20
4	25
6	32
10	50
16	65
25	85
35	115
50	150
70	175
95	225
120	250
150	275
185	350
240	400

Enclosure earthing

Remark:

ALL PARTS WHERE 230V COMPONENTS
TO BE MOUNTED MUST BE EARTHED
WITH MINIMUM 4mm²

EARTH WIRES MUST NOT BE LOOPED.
ALL EARTH POINTS TO A CENTRAL EARTH POINT



UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A3	Operation panel
&AAA1	Title page / cover sheet
=	

Explanatory documents

Project number:	2230097		
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UNIDRIVE AUTOMATION

Oliemolenweg 3B
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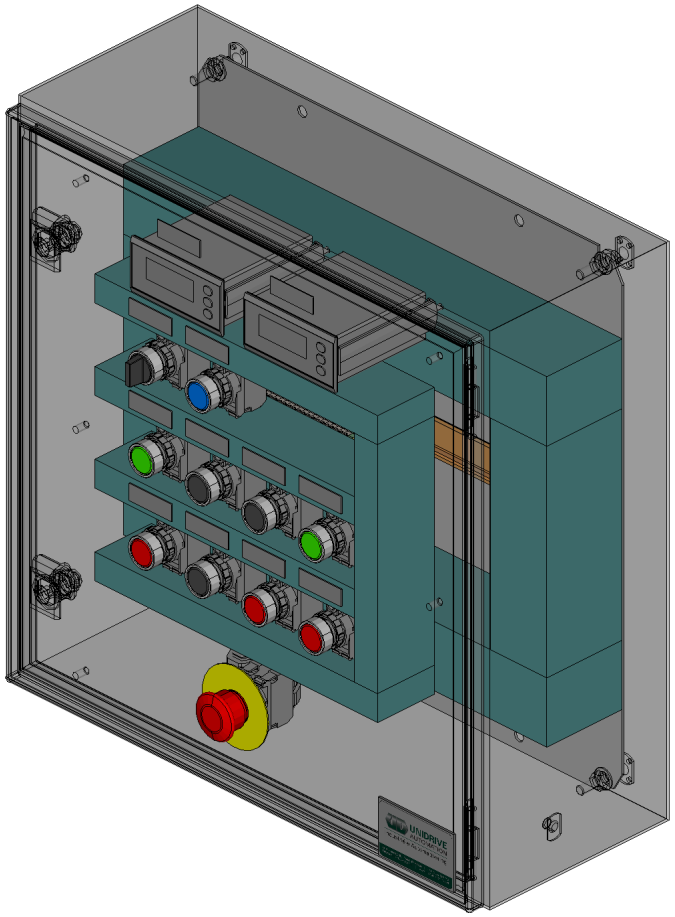
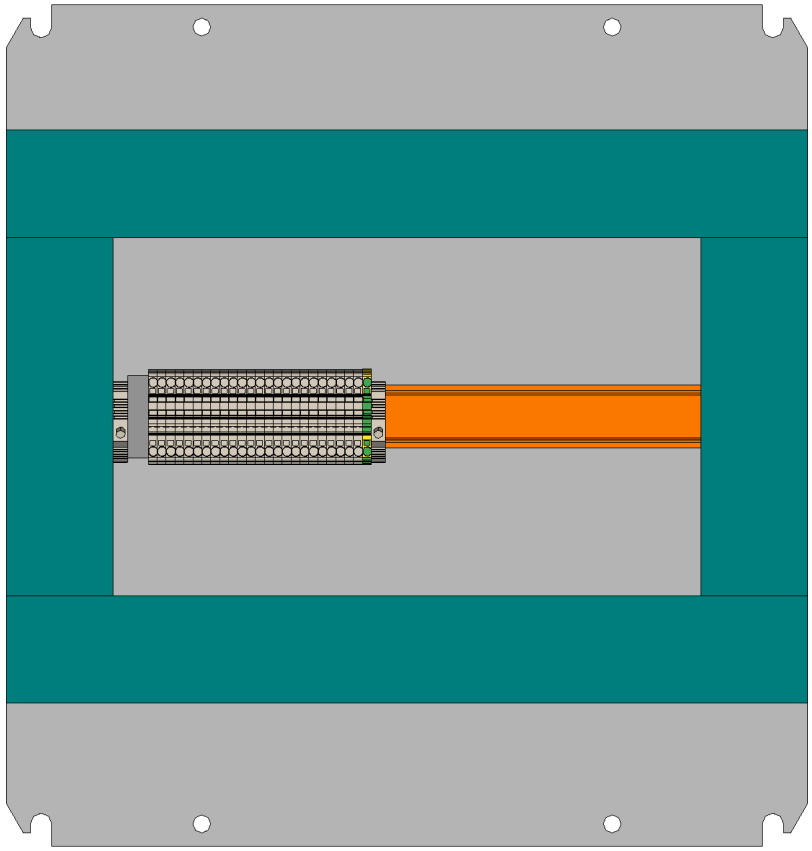
info@unidrive-automation.nl

Voeding - Power supply

Bestel nummer PO number	2230097	Netspanning/frequentie Nom. voltage/frequency	24VDC
Bouwjaar/week Prod. year/week	2023/17	Fases Phases	+/-
Schema nr. Drawing number	2230097	Stroom Current	1A
Ip waarde: Degree of protection		Hoofd zekering Main fuse	
		Kortsluitstroom Short-breaking capacity	

www.unidrive-automation.nl





Wandkasten AE
AE Wandkast, roestvaststaal 1.4301 (AISI 304), met 1 deur, 500x500x210 mm BxHxD, met montageplaat, rondom gesloten

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A3	Operation panel
&MTL11	Panel layout
=	

Assembly Overview

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
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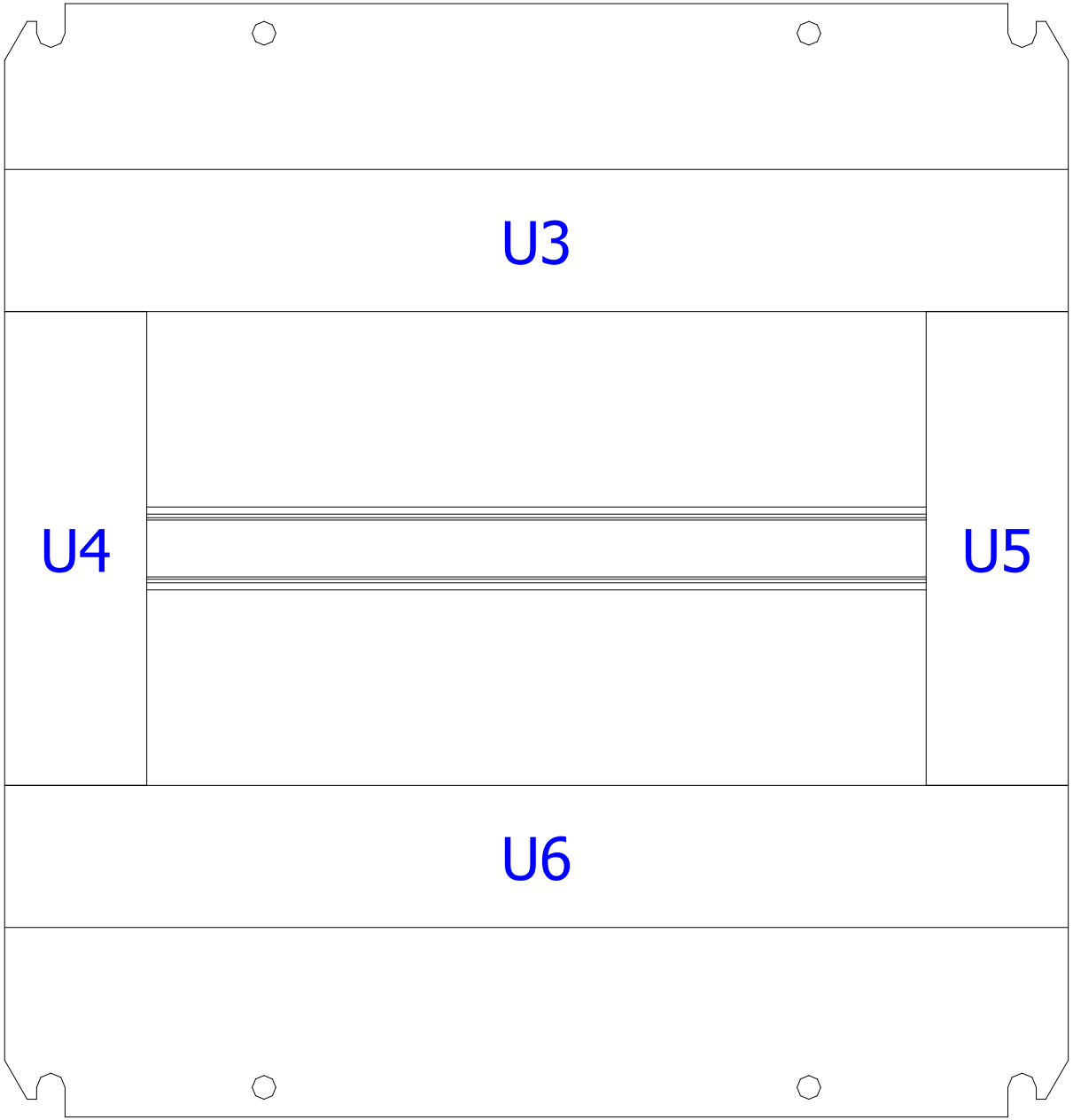


S2:Montageplaat

Cutlist

DT	Artikel	Length
U3	LIC 60 x 80	449 mm
U6	LIC 60 x 80	449 mm
U7	Support rail TS 35/7.5	329 mm
U4	LIC 60 x 80	200 mm
U5	LIC 60 x 80	200 mm

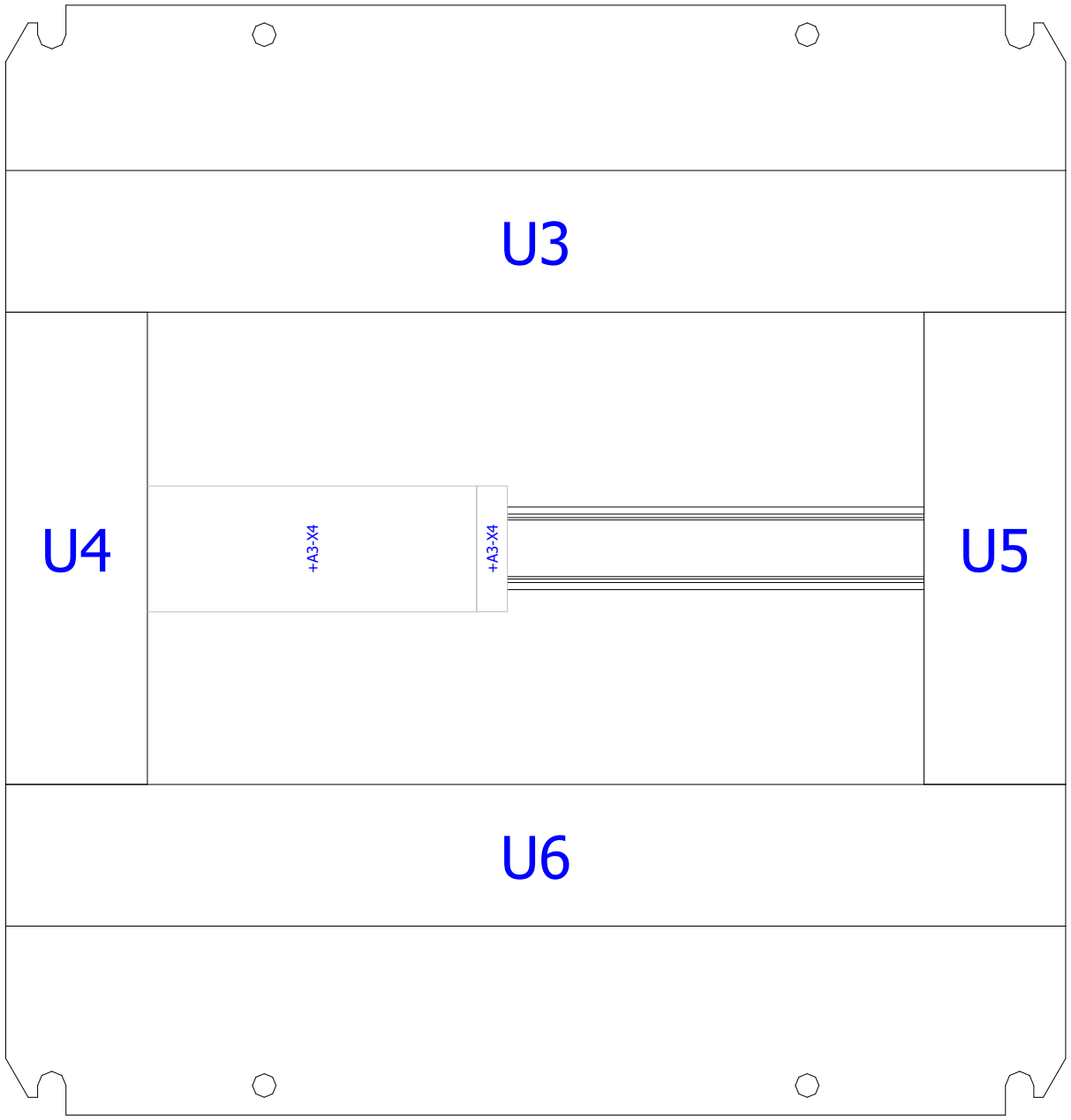
UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A3	Operation panel
&MTL11	Panel layout
=	

Mount plate
Cable ducts and din-rail

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	**2**		

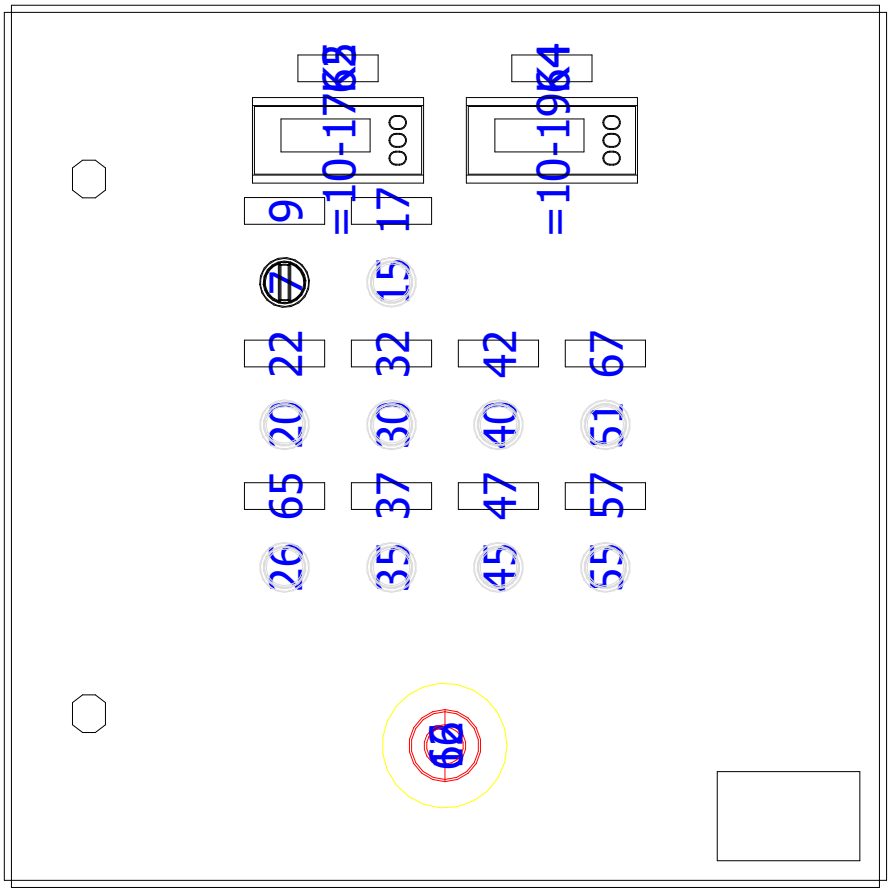


S2:Montageplaat

UNIDRIVE AUTOMATION	Sitetec B.V. P2000EG650 Revisie 1	+A3	Operation panel	Mounting plate Component placement	Project number: 2230097
		&MTL11	Panel layout		Designed: JY Date: 2-3-2023
		=			Changed: JY Date:
					Page: **3**

Engraving

Legend item	DT	Artikel	Text
9	=+A3-7S2	TTP 45x15 Tekstplaatje	Local-Remote
17	=+A3-9S2	TTP 45x15 Tekstplaatje	Safety Reset
22	=10+A3-15S1	TTP 45x15 Tekstplaatje	Pump Start
32	=10+A3-15S6	TTP 45x15 Tekstplaatje	Pump Faster
37	=10+A3-15S7	TTP 45x15 Tekstplaatje	Pump Slower
42	=10+A3-15S8	TTP 45x15 Tekstplaatje	Pump Reset
47	=10+A3-19S7	TTP 45x15 Tekstplaatje	Pressure to high
57	=20+A3-21S4.1	TTP 45x15 Tekstplaatje	Linewash Stop
62	=10+A3-17K5	TTP 45x15 Tekstplaatje	Flow
64	=10+A3-19K4	TTP 45x15 Tekstplaatje	Pressure
65	=10+A3-15S3	TTP 45x15 Tekstplaatje	Pump Stop
67	=20+A3-21S4	TTP 45x15 Tekstplaatje	Linewash Start



S2:Deur

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A3	Operation panel
&MTL11	Panel layout
=	

Door
Component placement

Project number:	2230097		
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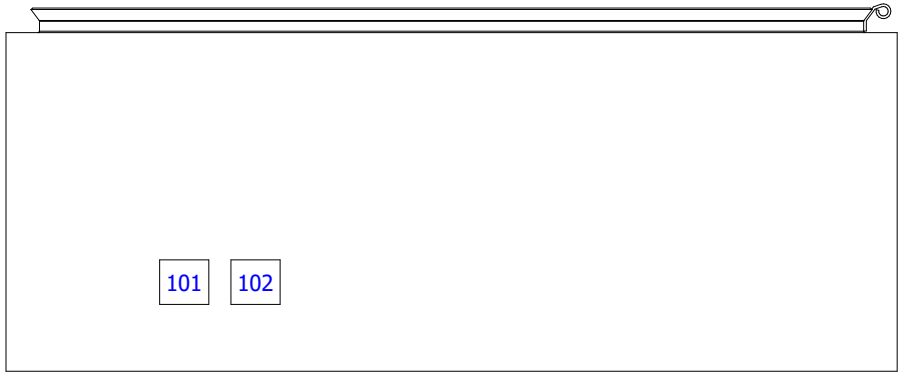

S2:Bodem buiten

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A3	Operation panel
&MTL11	Panel layout
=	

Cable glands

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
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Page:	5		

Parts list

F01_UDA_V00

Device tag	Quantity	Designation	Type number	Supplier	Part number
-7S2	1	Rotary Knob, 2 Position Maintained 60deg Aluminium Bezel	B3KN2	IMO Precision Controls	IMO.B3KN2
-7S2	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
-7S2	1	Contact NO	B3T10	IMO Precision Controls	IMO.B3T10
-7S2	1	Contact NC	B3T01	IMO Precision Controls	IMO.B3T01
-7S2	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
-8S1	1	Emergency stop button 30MM	BS3P44RED	IMO Precision Controls	IMO.BS3P44RED
-8S1	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
-8S1	2	Contact NC	B3T01	IMO Precision Controls	IMO.B3T01
-8S1	1	Push Button Yellow Disc Emergency Stop Label	B3-7603-2	IMO Precision Controls	IMO.B3-7603-2
-9S2	1	Push Button Spring Return Blue, Aluminium Bezel	B3DBLUE	IMO Precision Controls	IMO.B3DBLUE
-9S2	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
-9S2	1	Contact NO	B3T10	IMO Precision Controls	IMO.B3T10
-9S2	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
-U1	1	Lapp Skintop ST-M M20 Cable Gland, Polyamide RAL 7035	53111420	LAPP	LAPP.53111420
-U2	1	Compact enclosures AE	AE.1007600		RIT.1007600
-U3	1	LIC 60 x 80	60 x 80	Licatec	LIC.7332-1
-U4	1	LIC 60 x 80	60 x 80	Licatec	LIC.7332-1
-U5	1	LIC 60 x 80	60 x 80	Licatec	LIC.7332-1
-U6	1	LIC 60 x 80	60 x 80	Licatec	LIC.7332-1
-U7	1	Support rail TS 35/7.5	34-TS35/FSZ-1	Calpe	CAL.34-TS35/FSZ-1
-U8	1	Unidrive Automation domingsticker	D8050	Unidrive Automation	UDA.D8050
-U9	1	LIC 25 x 60	25 x 60	Licatec	LIC.7319-1
-U10	1	LIC 25 x 60	25 x 60	Licatec	LIC.7319-1
-U11	1	LIC 25 x 60	25 x 60	Licatec	LIC.7319-1
-U12	1	LIC 25 x 60	25 x 60	Licatec	LIC.7319-1
-U13	1	LIC 25 x 60	25 x 60	Licatec	LIC.7319-1
-X4	2	End clamp	ES1	IMO Precision Controls	IMO.ES1
-X4	1	Tag Car	GMBEIGE	IMO Precision Controls	IMO.GMBEIGE
-X4	24	Spring Clamp Terminal 2.5mm², 600V, 20A Beige	SC2.5	IMO Precision Controls	IMO.SC2.5
-X4	1	Ground modular terminal block	SCPE2.5	IMO Precision Controls	IMO.SCPE2.5
=10-17K5	1	Programmable LED indicator	5714B		PR.5714B
=10-17K5	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
=10-19K4	1	Programmable LED indicator	5714B		PR.5714B
=10-19K4	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
=10-15S1	1	Illuminable Push Button, Spring Return, Green, Aluminium Bezel	B3DLGREEN	IMO Precision Controls	IMO.B3DLGREEN
=10-15S1	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
=10-15S1	1	Contact NO	B3T10	IMO Precision Controls	IMO.B3T10
=10-15S1	1	Lamp holder	B3F	IMO Precision Controls	IMO.B3F
=10-15S1	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
=10-15S3	1	Illuminable Push Button, Spring Return, Red, Aluminium Bezel	B3DLGRED	IMO Precision Controls	IMO.B3DLRED
=10-15S3	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
=10-15S3	1	Contact NC	B3T01	IMO Precision Controls	IMO.B3T01
=10-15S3	1	Lamp holder	B3F	IMO Precision Controls	IMO.B3F
=10-15S3	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
=10-15S6	1	Push Button Spring Return Black, Aluminium Bezel	B3DBLACK	IMO Precision Controls	IMO.B3DBLACK
=10-15S6	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
=10-15S6	1	Contact NO	B3T10	IMO Precision Controls	IMO.B3T10
=10-15S6	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
=10-15S7	1	Push Button Spring Return Black, Aluminium Bezel	B3DBLACK	IMO Precision Controls	IMO.B3DBLACK
=10-15S7	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
=10-15S7	1	Contact NO	B3T10	IMO Precision Controls	IMO.B3T10
=10-15S7	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
=10-15S8	1	Push Button Spring Return Black, Aluminium Bezel	B3DBLACK	IMO Precision Controls	IMO.B3DBLACK
=10-15S8	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
=10-15S8	1	Contact NO	B3T10	IMO Precision Controls	IMO.B3T10
=10-15S8	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074

Parts list

F01_UDA_V00

Device tag	Quantity	Designation	Type number	Supplier	Part number
=10-19S7	1	Illuminable Push Button, Spring Return, Red, Aluminium Bezel	B3DLGRED	IMO Precision Controls	IMO.B3DLRED
=10-19S7	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
=10-19S7	1	Contact NC	B3T01	IMO Precision Controls	IMO.B3T01
=10-19S7	1	Lamp holder	B3F	IMO Precision Controls	IMO.B3F
=10-19S7	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
=10-U1	1	Lapp Skintop ST-M M20 Cable Gland, Polyamide RAL 7035	53111420	LAPP	LAPP.53111420
=20-21S4	1	Illuminable Push Button, Spring Return, Green, Aluminium Bezel	B3DLGREEN	IMO Precision Controls	IMO.B3DLGREEN
=20-21S4	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
=20-21S4	1	Contact NO	B3T10	IMO Precision Controls	IMO.B3T10
=20-21S4	1	Lamp holder	B3F	IMO Precision Controls	IMO.B3F
=20-21S4	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
=20-21S4.1	1	Illuminable Push Button, Spring Return, Red, Aluminium Bezel	B3DLGRED	IMO Precision Controls	IMO.B3DLRED
=20-21S4.1	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
=20-21S4.1	1	Contact NC	B3T01	IMO Precision Controls	IMO.B3T01
=20-21S4.1	1	Lamp holder	B3F	IMO Precision Controls	IMO.B3F
=20-21S4.1	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074

Terminal diagram

Function text							+A2-17W5	+A2-7W0	Cable name	Strip +A3-X4 Control voltage					Cable name					Page / column
									Cable type	Target designation	Connection point	Terminal	Jumper	Target designation	Connection point	Cable type				
								1		+A2-X4.3	1:2	1	,	-8S1	11					+A2EFS1/7.1
								2		+A2-X4.3	2:4	2	,	-8S1	21					+A2EFS1/7.1
Switch Local - remote								3		+A2-X4.3	3:2	3	,	-7S2	11					+A2EFS1/7.2
														=20-21S4	13					
Switch Local - remote								4		+A2-X4.3	4:4	4	,	-7S2	14					+A2EFS1/7.3
=								5		+A2-X4.3	5:2	5	,	-7S2	12					+A2EFS1/7.3
Emergency stop								6		+A2-X4.3	6:4	6	,	-8S1	12					+A2EFS1/8.1
=								7		+A2-X4.3	7:2	7	,	-8S1	22					+A2EFS1/8.1
								8		+A2-X4.3	8:4	8	,	-9S2	14					+A2EFS1/9.2
								9		+A2-X4.3	9:2	9	,	-9S2	13					+A2EFS1/9.3
								10		+A2-X4.3	10:4	10	,	=10-15S3	11					=10+A2EFS1/15.2
Pump Local start								11		+A2-X4.3	11:2	11	,	=10-15S3	12					=10+A2EFS1/15.3
=								12		+A2-X4.3	12:4	12	,	=10-15S3	X1					=10+A2EFS1/15.5
Pump Faster								13		+A2-X4.3	13:2	13	,	=10-15S6	14					=10+A2EFS1/15.6
Pump Slower								14		+A2-X4.3	14:4	14	,	=10-15S7	14					=10+A2EFS1/15.7
Pump Reset								15		+A2-X4.3	15:2	15	,	=10-15S8	14					=10+A2EFS1/15.8
Toerensensor							1			+A2-X4.3	16:4	16	,	=10-17K5	45					=10+A2EFS1/17.6
=							2			+A2-X4.3	17:2	17	,	=10-17K5	41					=10+A2EFS1/17.6
Pressure sensor 0-250Bar							3			+A2-X4.3	18:4	18	,	=10-19K4	45					=10+A2EFS1/19.4
=							4			+A2-X4.3	19:2	19	,	=10-19K4	41					=10+A2EFS1/19.5
=							5			+A2-X4.3	20:4	20	,	=10-19K4	23					=10+A2EFS1/19.5
=							6			+A2-X4.3	21:2	21	,	=10-19S7	11					=10+A2EFS1/19.7
Start/stop Linewash							7			+A2-X4.3	22:4	22	,	=20-21S4.1	12					=20+A2EFS1/21.4
=							8			+A2-X4.3	23:2	23	,	=20-21S4	X1					=20+A2EFS1/21.5
=							9			+A2-X4.3	24:4	24	,	=20-21S4.1	X1					=20+A2EFS1/21.6
Switch Local - remote								PE		+A2-X4.3	PE1:2	PE1	,							+A2EFS1/7.1

&APB/1.1

&EMA3/1

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A3	Operation panel
&EMA2	Terminal diagram
=	

Terminal diagram +A3-X4

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	1		

Unidrive Automation B.V.
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Tel: +31 (0)522 245713
E-mail: info@unidrive-automation.nl

Company / customer	Sitetec B.V.
Project description	P2000EG650
Job number	2230097
Commission	Sitetec B.V.

Manufacturer (company)	Unidrive Automation B.V.
Project name	2230097 - P2000EG650-Rev 1
Make	Rittal
Type	KL1529.010
Place of installation	
Control cabinet name	A4

Created on	2-3-2023	Prepared by	JY
Project status	Revisie 1	Edit date	

Applied Wire Colors

U > 50VAC	
L1	Black
L2	Black
L3	Black
N*1	Blue
Earth	Yellow / green

U < 50VDC	
Plus	Darkblue
Switch wire	Darkblue
Min	Darkblue / white
Earth	Yellow / green

Analog signals	
Plus	Gray
Min	Gray
Earth	Yellow / green

U < 50VAC	
Plus	Gray
Min	Gray
Earth	Yellow / green

Safety circuits	
All	Yellow

External supplies	
All*2	Orange or Black

1 * = If AC voltage is not from a transformer
in the control cabinet itself the corresponding zero is light blue.
2 * = depending on the situation.

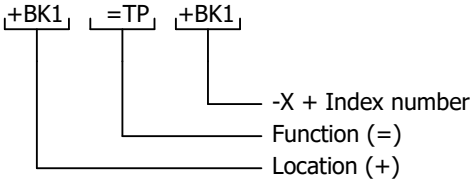
UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

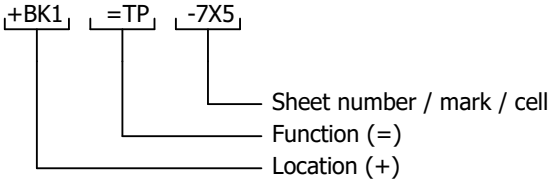
+A4	Remote operation panel	Wire colors
&AAA1	Title page / cover sheet	
=		

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
Page:	**2**		

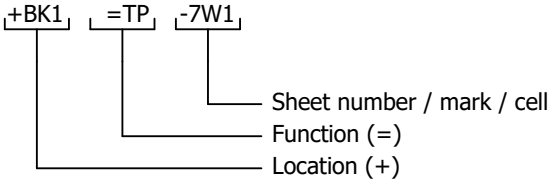
TERMINAL NUMBERING



Component coding



Cable numbering



Normal cable

Shielded cable

Structure

+	Location
&	Document type
=	Function

Component coding (internal)

A	Assemblies, cabinets (Cabinet, PCB, PLC, amplifier, laser)
T	Inverters, from non-electric to electric or vice versa (Pt100, proximity switch, photoelectric cell)
C	Capacitors
E	Several (Heating appliance, lighting appliance, appliances not mentioned elsewhere)
F	Protection devices (Fuse, circuit breaker, surge arrester)
G	Generator
P	Signaling (signal lamp, buzzer)
K	Relays & contactors
R	Coils, reactors
M	Motors
P	Measuring device, test device (Indicator, writer, integrating measuring device, signal generator, clock)
Q	Switching device for power circuits (motor protection, starter, breaker)
R	Resistance (Potentiometer, adjustable resistance, rheostat, shunt resistor, thermistor)
S	Control circuit switch, selector (push button, cam switch, limit switch, selector contact)
T	Transformer (Voltage transformer, current transformer)
T	Modulator, inverter (frequency converter, DC power supply, coder decoder, inverter, signal converter)
W	Cable
X	Terminals, sockets, plugs
Y	Electrically operated mechanical device (Brake, clutch, pneumatic valve)

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A4	Remote operation panel
&AAA1	Title page / cover sheet
=	

Explanatory documents

Project number:	2230097		
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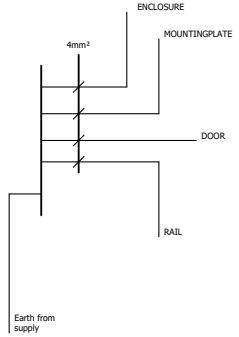
RATED CURRENTS FOR COPPER CONDUCTORS IN ACCORDANCE WITH NEN-EN-IEC 61439-1 : 2011 TABLE 11	
Cross-sectional mm2	Current
1	8
1,5	12
2,5	20
4	25
6	32
10	50
16	65
25	85
35	115
50	150
70	175
95	225
120	250
150	275
185	350
240	400

Enclosure earthing

Remark:

ALL PARTS WHERE 230V COMPONENTS
TO BE MOUNTED MUST BE EARTHED
WITH MINIMUM 4mm²

EARTH WIRES MUST NOT BE LOOPED.
ALL EARTH POINTS TO A CENTRAL EARTH POINT



UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A4	Remote operation panel
&AAA1	Title page / cover sheet
=	

Explanatory documents

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UNIDRIVE AUTOMATION

Oliemolenweg 3B
7944 HX Meppel
+31 (0)522 245713
info@unidrive-automation.nl

Voeding - Power supply

Bestel nummer PO number	2230097	Netspanning/frequentie Nom. voltage/frequency	24VDC
Bouwjaar/week Prod. year/week	2023/17	Fases Phases	
Schema nr. Drawing number	2230097	Stroom Current	1A
Ip waarde: Degree of protection		Hoofd zekering Main fuse	
		Kortsluitstroom Short-breaking capacity	

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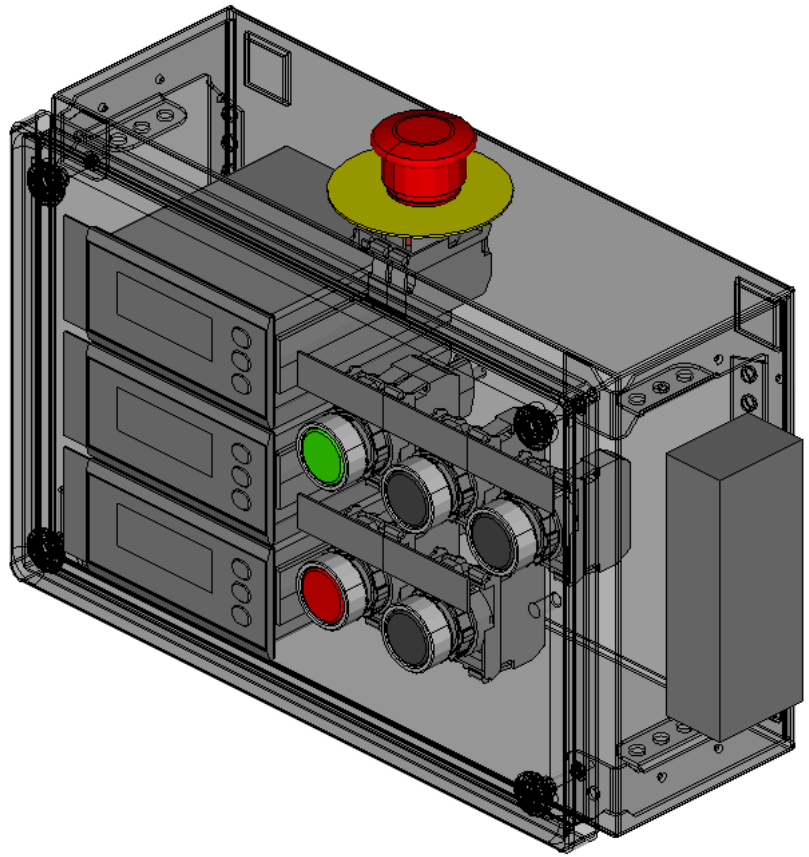

Klemmenkasten KL
KL Klemmenkast, 300x200x120 mm BxHxD, roestvaststaal 1.4301 (AISI 304), zonder wartelplaten, zonder montageplaat

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A4	Remote operation panel
&MTL11	Panel layout
=	

Assembly Overview

Project number:	2230097		
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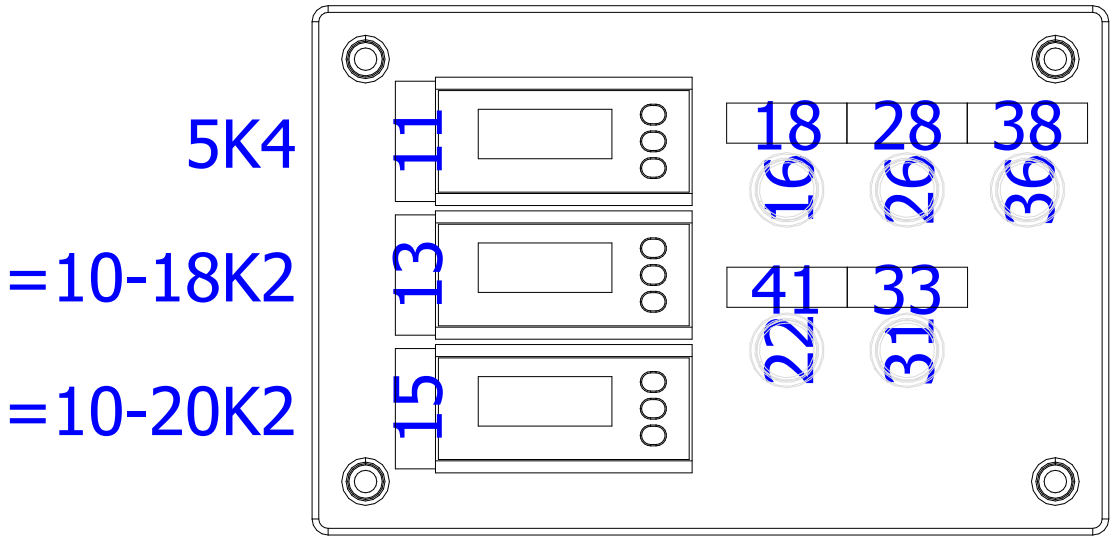
Engraving

Legend item	DT	Artikel	Text
11	=+A4-5K4	TTP 45x15 Tekstplaatje	Diesel level
13	=10+A4-18K2	TTP 45x15 Tekstplaatje	Flow
15	=10+A4-20K2	TTP 45x15 Tekstplaatje	Pressure
18	=10+A4-16S1	TTP 45x15 Tekstplaatje	Pump Start
28	=10+A4-16S6	TTP 45x15 Tekstplaatje	Pump Faster
33	=10+A4-16S7	TTP 45x15 Tekstplaatje	Pump Slower
38	=10+A4-16S8	TTP 45x15 Tekstplaatje	Pump Reset
41	=10+A4-16S3	TTP 45x15 Tekstplaatje	Pump Stop



S3:Deur

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A4	Remote operation panel
&MTL11	Panel layout
=	

Door
Component placement

Project number:	2230097		
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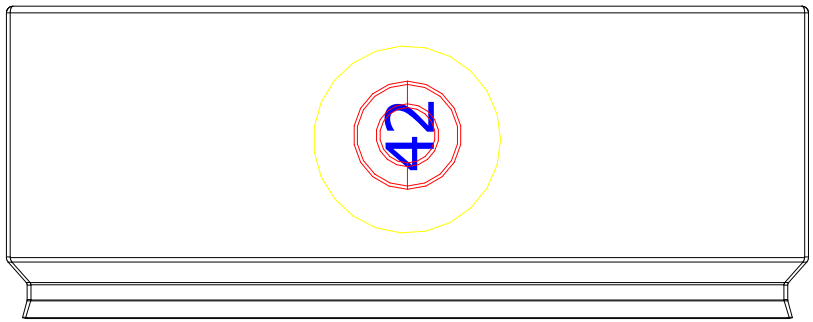
8S6



S3:Dak buiten

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A4	Remote operation panel
&MTL11	Panel layout
=	

Enclosure
Top-side

Project number:	2230097		
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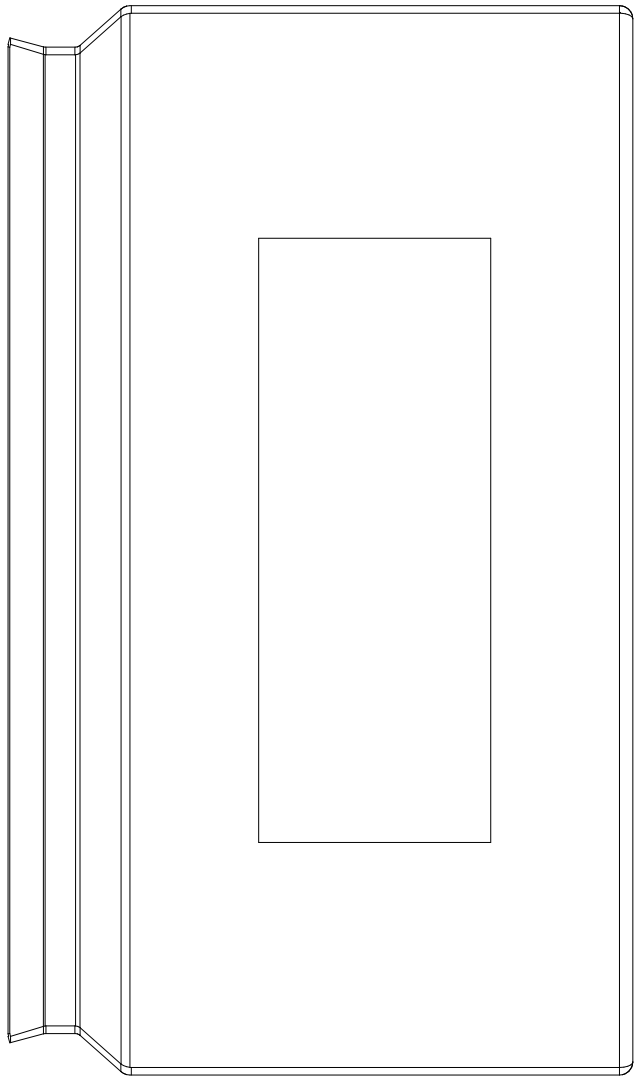

S3:Zijwand rechts buiten

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A4	Remote operation panel
&MTL11	Panel layout
=	

Enclosure
Right-side

Project number:	2230097		
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Parts list

F01_UDA_V00

Device tag	Quantity	Designation	Type number	Supplier	Part number
-5K4	1	Programmable LED indicator	5714B		PR.5714B
-5K4	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
-8S6	1	Emergency stop button 30MM	BS3P44RED	IMO Precision Controls	IMO.BS3P44RED
-8S6	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
-8S6	2	Contact NC	B3T01	IMO Precision Controls	IMO.B3T01
-8S6	1	Push Button Yellow Disc Emergency Stop Label	B3-7603-2	IMO Precision Controls	IMO.B3-7603-2
-U1	1	Terminal boxes KL	KL.1529010		RIT.1529010
-5XJ3	1	Hoods/Housings	Han 16B-agg-LB-K	Harting	HAR.09300160306
-5XJ3	1	Han 16E-bu-s	09330162701	Harting	HAR.09330162701
=10-18K2	1	Programmable LED indicator	5714B		PR.5714B
=10-18K2	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
=10-20K2	1	Programmable LED indicator	5714B		PR.5714B
=10-20K2	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
=10-16S1	1	Illuminable Push Button, Spring Return, Green, Aluminium Bezel	B3DLGREEN	IMO Precision Controls	IMO.B3DLGREEN
=10-16S1	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
=10-16S1	1	Contact NO	B3T10	IMO Precision Controls	IMO.B3T10
=10-16S1	1	Lamp holder	B3F	IMO Precision Controls	IMO.B3F
=10-16S1	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
=10-16S3	1	Illuminable Push Button, Spring Return, Red, Aluminium Bezel	B3DLGRED	IMO Precision Controls	IMO.B3DLRED
=10-16S3	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
=10-16S3	1	Contact NC	B3T01	IMO Precision Controls	IMO.B3T01
=10-16S3	1	Lamp holder	B3F	IMO Precision Controls	IMO.B3F
=10-16S3	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
=10-16S6	1	Push Button Spring Return Black, Aluminium Bezel	B3DBLACK	IMO Precision Controls	IMO.B3DBLACK
=10-16S6	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
=10-16S6	1	Contact NO	B3T10	IMO Precision Controls	IMO.B3T10
=10-16S6	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
=10-16S7	1	Push Button Spring Return Black, Aluminium Bezel	B3DBLACK	IMO Precision Controls	IMO.B3DBLACK
=10-16S7	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
=10-16S7	1	Contact NO	B3T10	IMO Precision Controls	IMO.B3T10
=10-16S7	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074
=10-16S8	1	Push Button Spring Return Black, Aluminium Bezel	B3DBLACK	IMO Precision Controls	IMO.B3DBLACK
=10-16S8	1	Contact frame	B3S	IMO Precision Controls	IMO.B3S
=10-16S8	1	Contact NO	B3T10	IMO Precision Controls	IMO.B3T10
=10-16S8	1	TTP 45x15 Tekstplaatje	53000074	Altec	ALT.53000074

Terminal diagram

Strip

+A4-PE

Function text	Cable name	Cable type	Target designation	Connection point	Terminal	Jumper	Target designation	Connection point	Cable name	Cable type	Page / column
			-5XJ3	PE	PE	,					+A2EFS1/5.4

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+A4	Remote operation panel
&EMA2	Terminal diagram
=	

Terminal diagram +A4-PE

Project number:	2230097		
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Page:	1		

Unidrive Automation B.V.
Oliemolenweg 3B
7944 HX Meppel
The Nederlands
Tel: +31 (0)522 245713
E-mail: info@unidrive-automation.nl

Company / customer	Sitetec B.V.
Project description	P2000EG650
Job number	2230097
Commission	Sitetec B.V.

Manufacturer (company)	Unidrive Automation B.V.
Project name	2230097 - P2000EG650-Rev 1
Make	
Type	
Place of installation	
Control cabinet name	Field

Created on	2-3-2023	Prepared by	JY
Project status	Revisie 1	Edit date	

Applied Wire Colors

U > 50VAC	
L1	Black
L2	Black
L3	Black
N*1	Blue
Earth	Yellow / green

U < 50VDC	
Plus	Darkblue
Switch wire	Darkblue
Min	Darkblue / white
Earth	Yellow / green

Analog signals	
Plus	Gray
Min	Gray
Earth	Yellow / green

U < 50VAC	
Plus	Gray
Min	Gray
Earth	Yellow / green

Safety circuits	
All	Yellow

External supplies	
All*2	Orange or Black

1 * = If AC voltage is not from a transformer
in the control cabinet itself the corresponding zero is light blue.
2 * = depending on the situation.

UNIDRIVE AUTOMATION

Sitetec B.V.
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Revisie 1

+Field	Field
&AAA1	Title page / cover sheet
=	

Wire colors

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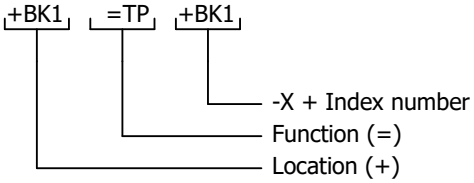
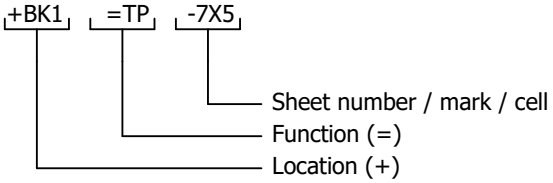
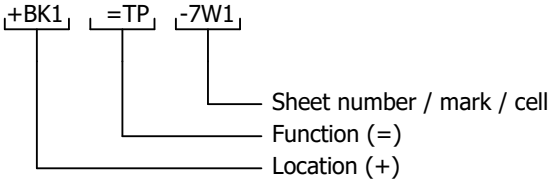
TERMINAL NUMBERING



Component coding



Cable numbering



Normal cable

Shielded cable

Structure

+	Location
&	Document type
=	Function

Component coding (internal)

A	Assemblies, cabinets (Cabinet, PCB, PLC, amplifier, laser)
T	Inverters, from non-electric to electric or vice versa (Pt100, proximity switch, photoelectric cell)
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P	Signaling (signal lamp, buzzer)
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R	Coils, reactors
M	Motors
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Q	Switching device for power circuits (motor protection, starter, breaker)
R	Resistance (Potentiometer, adjustable resistance, rheostat, shunt resistor, thermistor)
S	Control circuit switch, selector (push button, cam switch, limit switch, selector contact)
T	Transformer (Voltage transformer, current transformer)
T	Modulator, inverter (frequency converter, DC power supply, coder decoder, inverter, signal converter)
W	Cable
X	Terminals, sockets, plugs
Y	Electrically operated mechanical device (Brake, clutch, pneumatic valve)

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
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+Field	Field
&AAA1	Title page / cover sheet
=	

Explanatory documents

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Designed:	JY	Date:	2-3-2023
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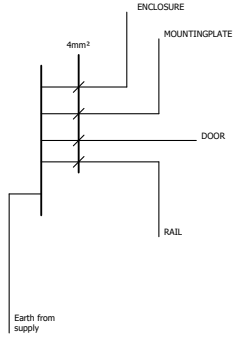
RATED CURRENTS FOR COPPER CONDUCTORS IN ACCORDANCE WITH NEN-EN-IEC 61439-1 : 2011 TABLE 11	
Cross-sectional mm2	Current
1	8
1,5	12
2,5	20
4	25
6	32
10	50
16	65
25	85
35	115
50	150
70	175
95	225
120	250
150	275
185	350
240	400

Enclosure earthing

Remark:

ALL PARTS WHERE 230V COMPONENTS
TO BE MOUNTED MUST BE EARTHED
WITH MINIMUM 4mm²

EARTH WIRES MUST NOT BE LOOPED.
ALL EARTH POINTS TO A CENTRAL EARTH POINT



UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+Field	Field
&AAA1	Title page / cover sheet
=	

Explanatory documents

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UNIDRIVE AUTOMATION

Oliemolenweg 3B
7944 HX Meppel
+31 (0)522 245713
info@unidrive-automation.nl

Voeding - Power supply

Bestel nummer PO number	2230097	Netspanning/frequentie Nom. voltage/frequency	
Bouwjaar/week Prod. year/week	2023/17	Fases Phases	
Schema nr. Drawing number	2230097	Stroom Current	
Ip waarde: Degree of protection		Hoofd zekering Main fuse	
		Kortsluitstroom Short-breaking capacity	

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Cable overview

Cable name	Source (from)	Target (to)	Cable type	all conductors	Conductors used	Cross-section [mm]	Length [m]	Function text	Graphical page of cable diagram
-2W1	+A2-X1	-2A1		3G	3	2.5		Machine lighting	
-2W3	-2XJ3	+A1-2F3		1x	1	70		Powerlock 1	
-2W3.1	-2XJ3	+A1-2F3		1x	1	70		=	
-2W3.2	-2XJ3	+A1-2F3		1x	1	70		=	
-2W3.3	-2XJ3	N		1x	1	70		=	
-2W3.4	-2XJ3	PE		1x	1	70		=	
-2W3.5	+A2-X1	-2A3		3G	3	2.5		Machine lighting	
-2W5	-2XJ5	+A1-2F5		1x	2	70		Powerlock 2	
-2W5.1				1x	0	70		=	
-2W5.2	-2XJ5	+A1-2F5		1x	1	70		=	
-2W5.3	-2XJ5	N		1x	1	70		=	
-2W5.4	-2XJ5	PE		1x	1	70		=	
-2W5.5	+A2-X1	-2A5		3G	3	2.5		Sockets	
-2W7	-2XJ7	+A1-2F7		1x	2	70		CEE socket 3F+N 63A	
-2W7.1				1x	0	70		=	
-2W7.2	-2XJ7	+A1-2F7		1x	1	70		=	
-2W7.3	-2XJ7	N		1x	1	70		=	
-2W7.4	-2XJ7	PE		1x	1	70		=	
-4W1	+A2-X4.1	-4A1			3			Diesel level 0-100mBar	
-8W4	+A2-X4.1	-8S4		5G	4	0,75		Emergency stop	
-10W1	+A2-X4.2	=10-10M1		3G	2	1		Linak hogedrukpomp	
-10W3	+A2-X4.2	=10-10S3		2x	2	1		=	
-11W1	+A2-X1	=10-11M1		4G	4	1.5			
-11W3	+A2-X4.1	=10-11S3		3G	2	0.75		Lubrication pressure switch	
-12W0	+A1-2A0	=10-12T1		1x	1	150			
-12W0.1	+A1-2A0	=10-12T1		1x	1	150			
-12W0.2	+A1-2A0	=10-12T1		1x	1	150			
-12W0.3	+A1-2A0	=10-12T1		1x	1	150			
-12W0.4	+A1-2A0	=10-12T1		1x	1	150			
-12W0.5	+A1-2A0	=10-12T1		1x	1	150			
-12W0.6	=10-12T1	PE		1x	1	150			
-12W0.7	=10-12M0	=10-12T1		1x	1	150			
-12W0.8	=10-12M0	=10-12T1		1x	1	150			
-12W0.9	=10-12M0	=10-12T1		1x	1	150		Hogedrukpomp	
-12W0.10	=10-12M0	=10-12T1		1x	1	150		=	
-12W0.11	=10-12M0	=10-12T1		1x	1	150		=	
-12W0.12	=10-12M0	=10-12T1		1x	1	150		=	
-12W0.13	=10-12M0	=10-12T1		1x	1	150		=	
-13W1	+A2-X1	=10-12M0		4G	4	1.5			
-14W4	+A2-X4.1	=10-12M0		3G	2	1			
-17W1	+A2-X4.1	=10-17B1		4G	3	0,75		Toerensensor	
-19W1	+A2-X4.1	=10-19A1		4G	3	0,75		Pressure sensor 0-250Bar	
-21W1	+A2-X1	=20-21M1		3G	3	1.5			

UNIDRIVE AUTOMATION

Sitetec B.V.
P2000EG650
Revisie 1

+Field	Field
&EMB1	Cable overview
=	

Cable overview : +Field-2W1 - +Field-21W1

Project number:	2230097		
Designed:	JY	Date:	2-3-2023
Changed:	JY	Date:	
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