



Project description 654 BDC 3X230V OVP TRUBRAND

Drawing number PJ15.1186.00.1

Blastrac number E10790

Power supply 240V 60Hz

Input lead Input lead

Control Voltage 24VAc

Status Preliminary

Year of Manufacturing 2015

Created on 1-10-2015 by KR

Edit date 3-2-2016 by KR

Number of pages 18

Modification	Date	Name	Last print
	23-11-2015		
		HVDB	
		Appr	
	3-2-2016		

Project naam:	654 BDC 3X240V OVP
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Pagina beschrijving:	Titlepage /Cover sheet
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Klant:	TRUBRAND	= E1
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		Page <b>1</b>



Revision	Date	Description	Remark	Editor
00.0	1-10-2015	Preliminary	Engineering ART4	KR
00.1	29-10-2015	Update cable set	Engineering ART4	KR

2.a

Date	29-10-2015	Project naam:	654 BDC 3X240V OVP	Pagina beschrijving:	Revision sheet	Klant:	<b>TRUBRAND</b>	= E1
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## WIRE COLOR

### All wiring AWG

#### Main Voltage

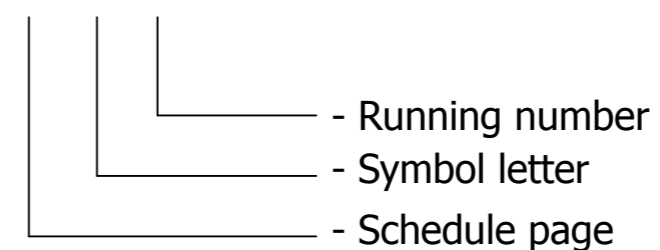
<u>Phase</u>	<u>Colors</u>
L1	- Black
L2	- Black
L3	- Black
N	- Light Blue
Earth / PE	- Yellow/Green

#### Control Voltage

Phase (24VAC)	- Red
Hook-up wire	- Red
Neutral (24VAC)	- Red
Plus (24VDC)	- Dark blue
Hook-up wire	- Dark blue
Minus / Ground (24VDC)	- White/Blue

## SYMBOL CODE

11 F 11



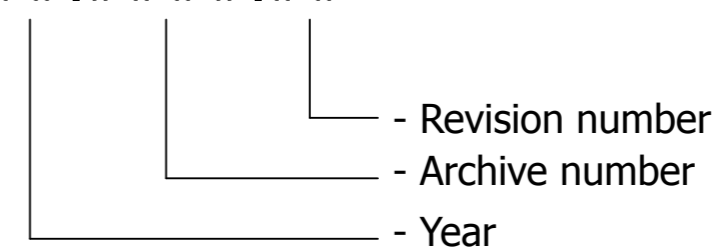
## CORE CODE

11 11



## DRAWING NUMBER

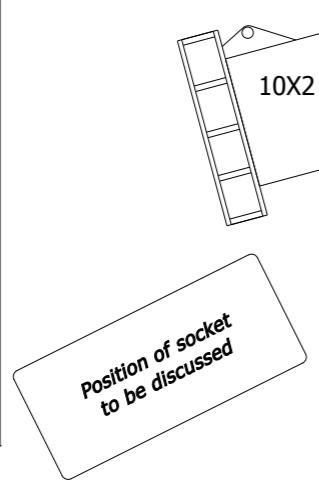
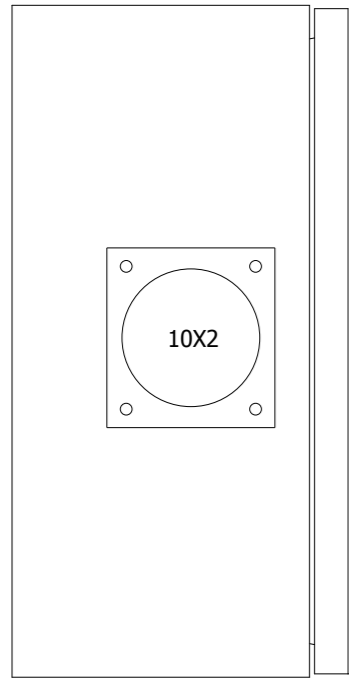
PJ##.####.##



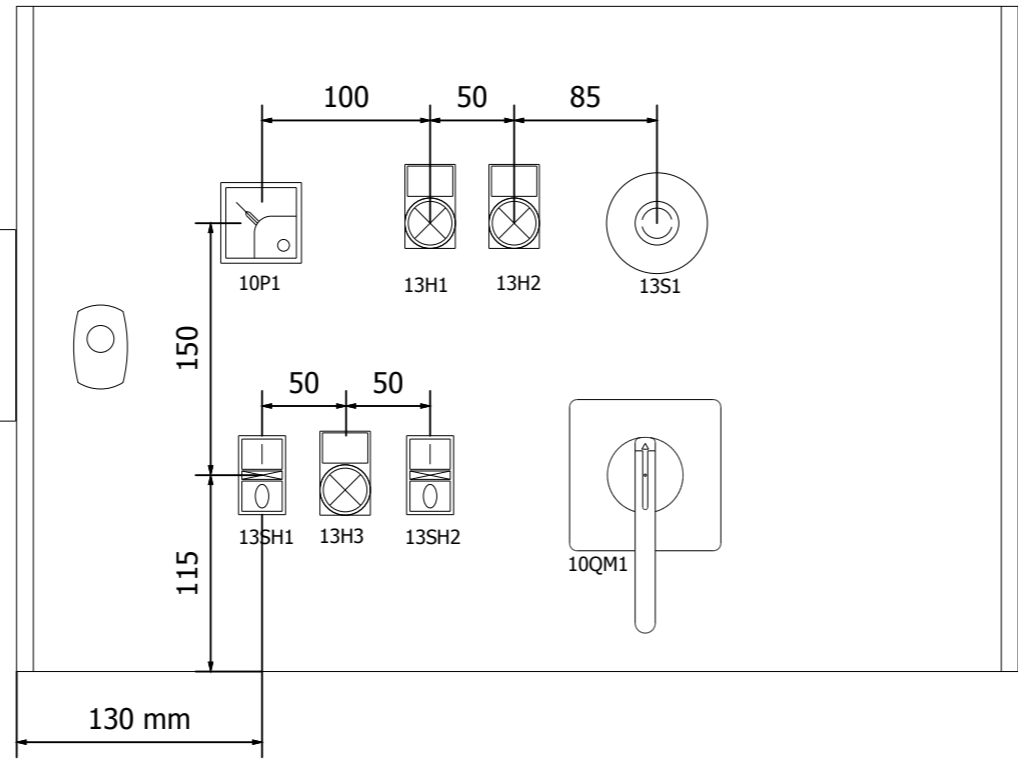


CAB

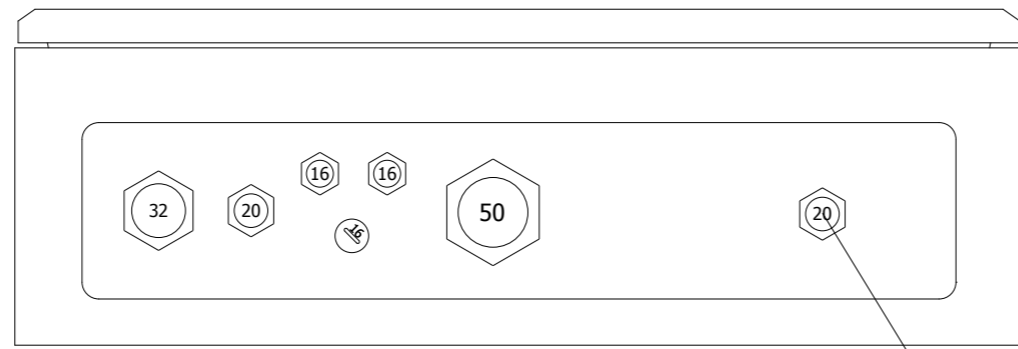
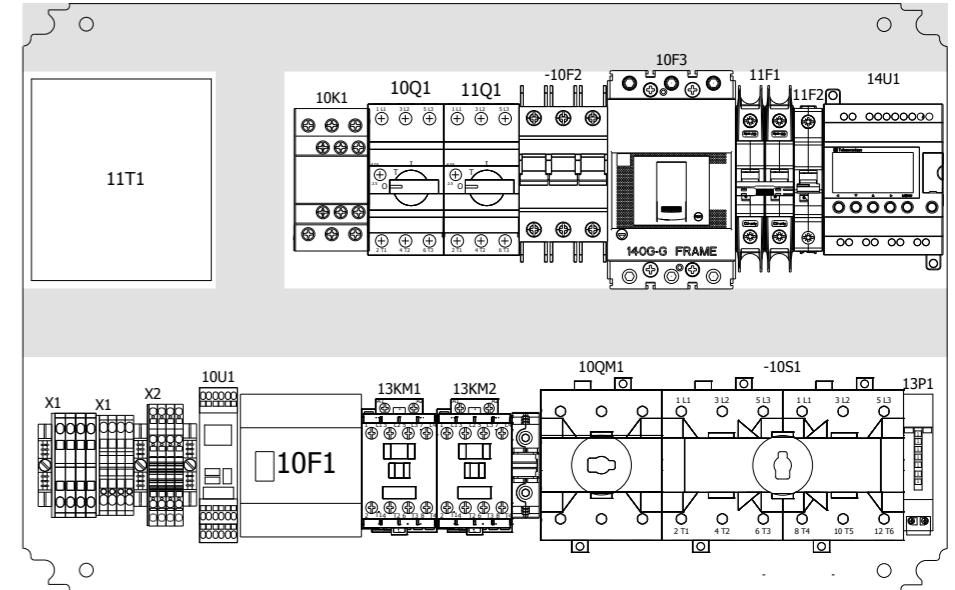
CABINET  
LEFT HAND VIEW



CABINET  
FRONT VIEW



MOUNTING PLATE

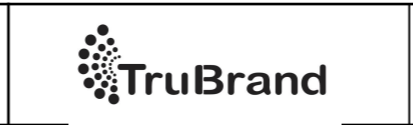


CABINET  
BOTTOM VIEW

(\*): With cable  
 M16 - Pulse system 3x0.75mm<sup>2</sup> length 3,0 mtr.  
 M20 - Compressor  
 M32 - Fan  
 M50 - Power supply

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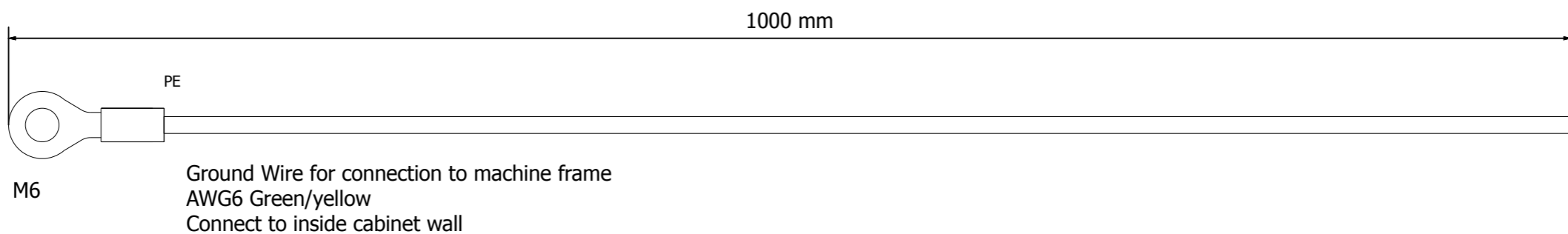
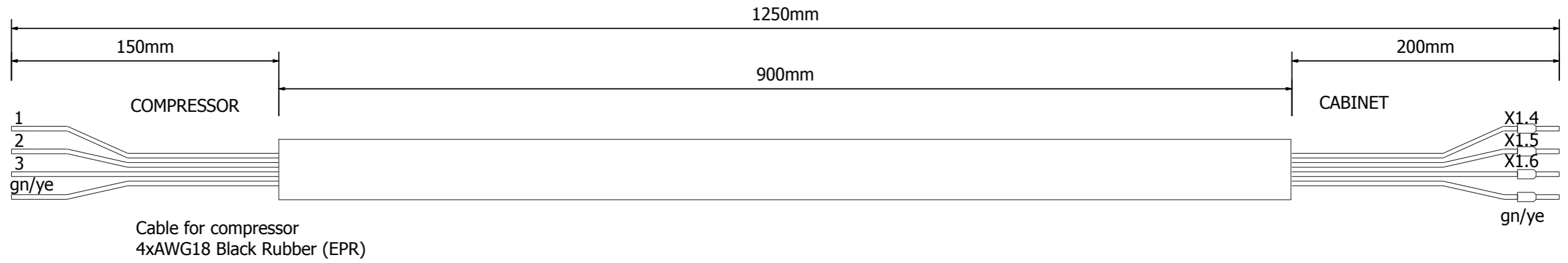
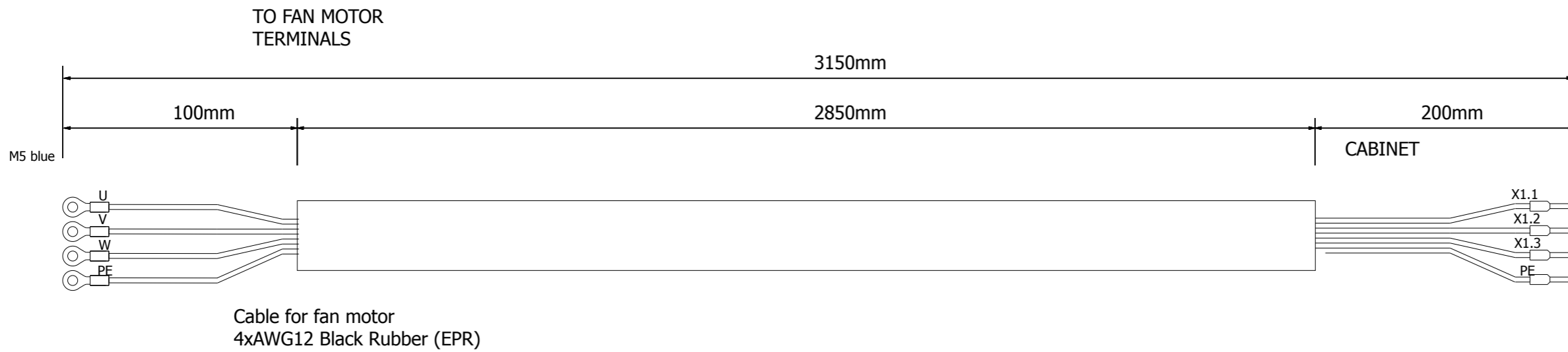
Project naam:	654 BDC 3X240V OVP
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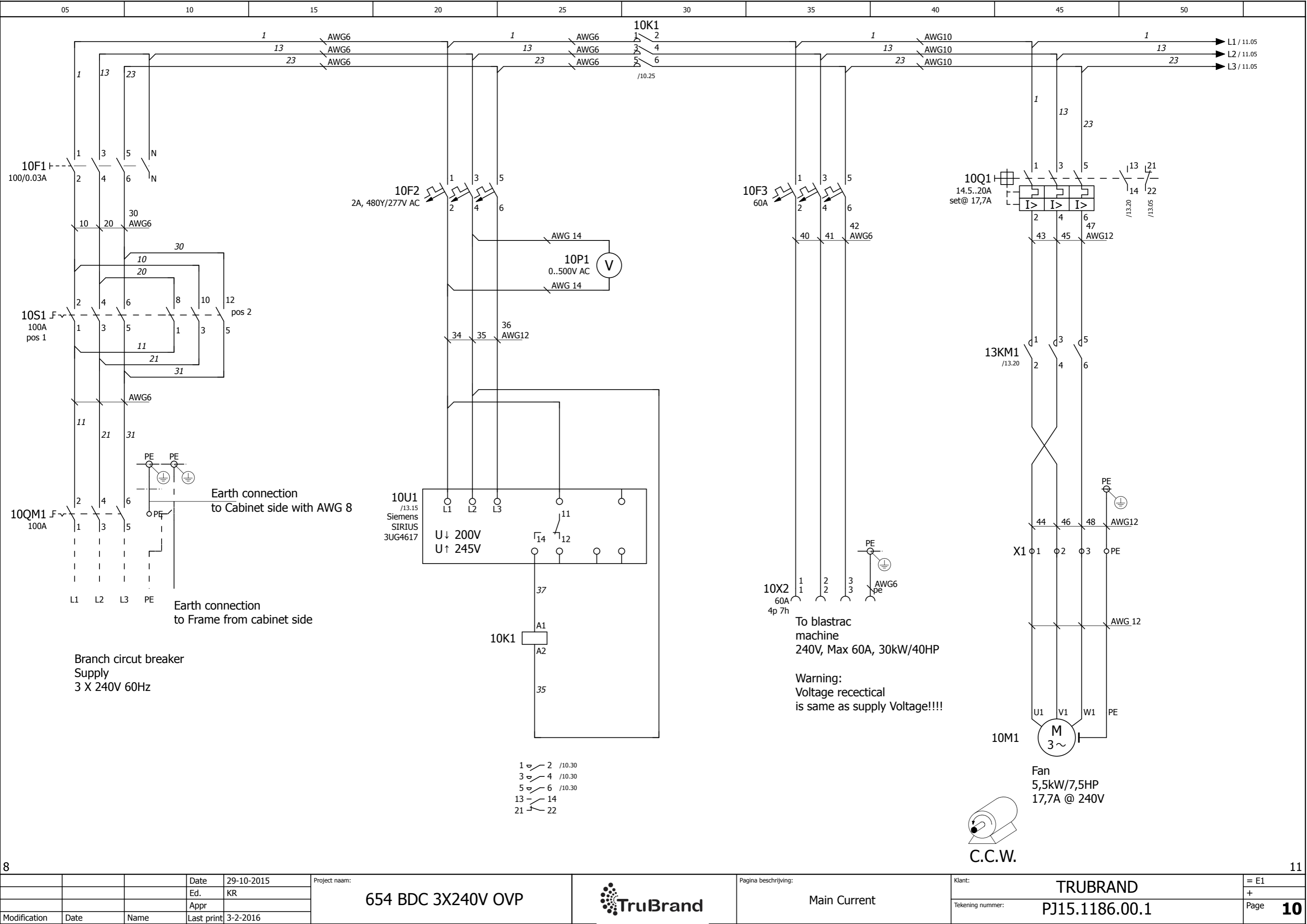


Pagina beschrijving:	Panel Layout
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10F1  
100/0.03A

10S1  
100A  
pos 1

10QM1  
100A

Earth connection  
to Cabinet side with AWG 8

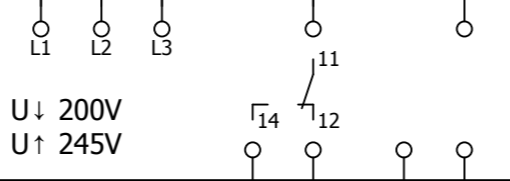
Earth connection  
to Frame from cabinet side

Branch circuit breaker  
Supply  
3 X 240V 60Hz

10F2  
2A, 480Y/277V AC

10P1  
0..500V AC

10U1  
/13.15  
Siemens  
SIRIUS  
3UG4617



10K1  
A1  
A2  
35

10F3  
60A

10X2  
60A  
4p 7h

To blastrac  
machine  
240V, Max 60A, 30kW/40HP

Warning:  
Voltage recetical  
is same as supply Voltage!!!!

10Q1  
14.5..20A  
set@ 17,7A

13KM1  
/13.20

10M1  
M  
3~

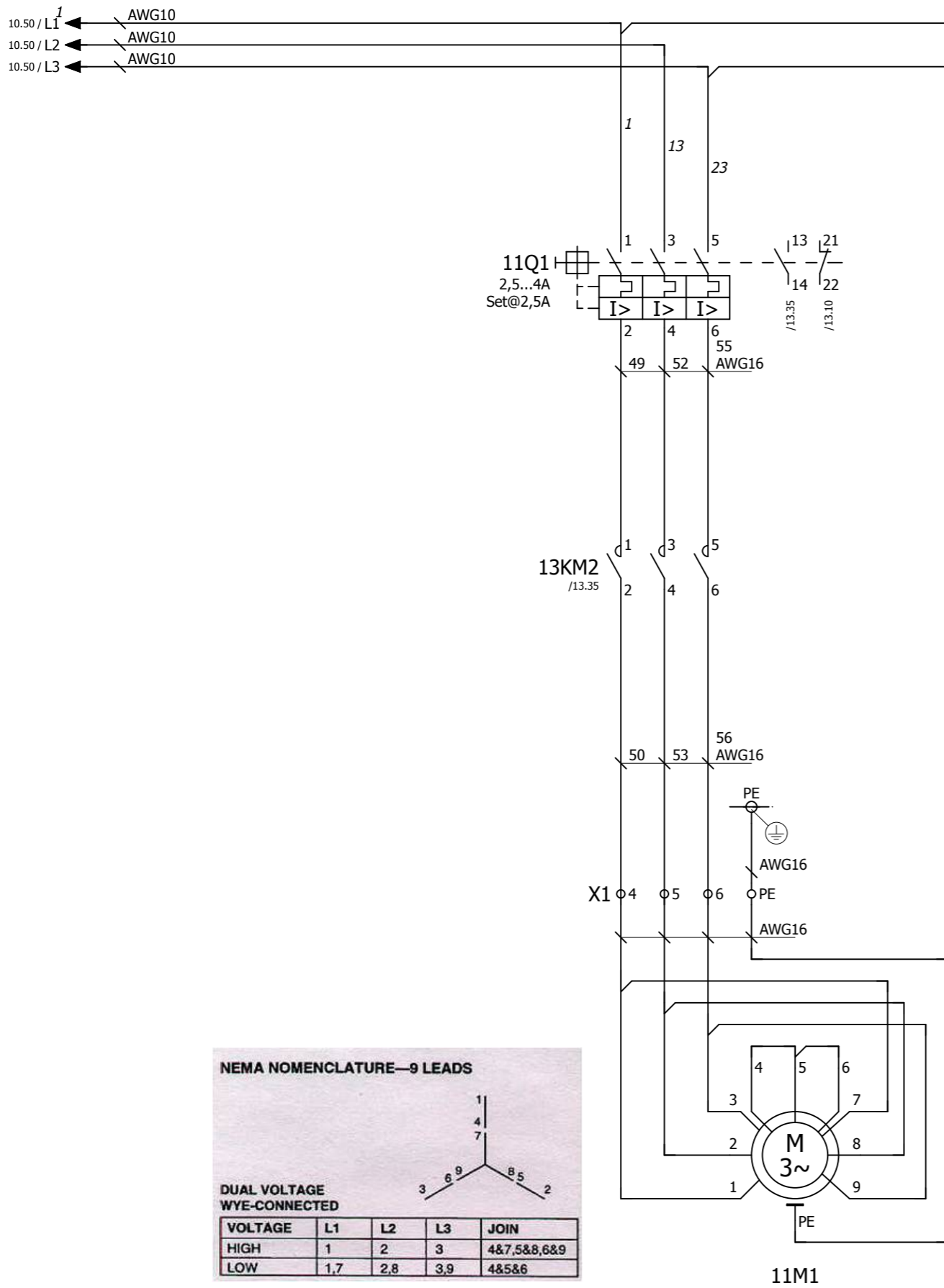
Fan  
5,5kW/7,5HP  
17,7A @ 240V



C.C.W.

- 1 2 /10.30
- 3 4 /10.30
- 5 6 /10.30
- 13 14
- 21 22



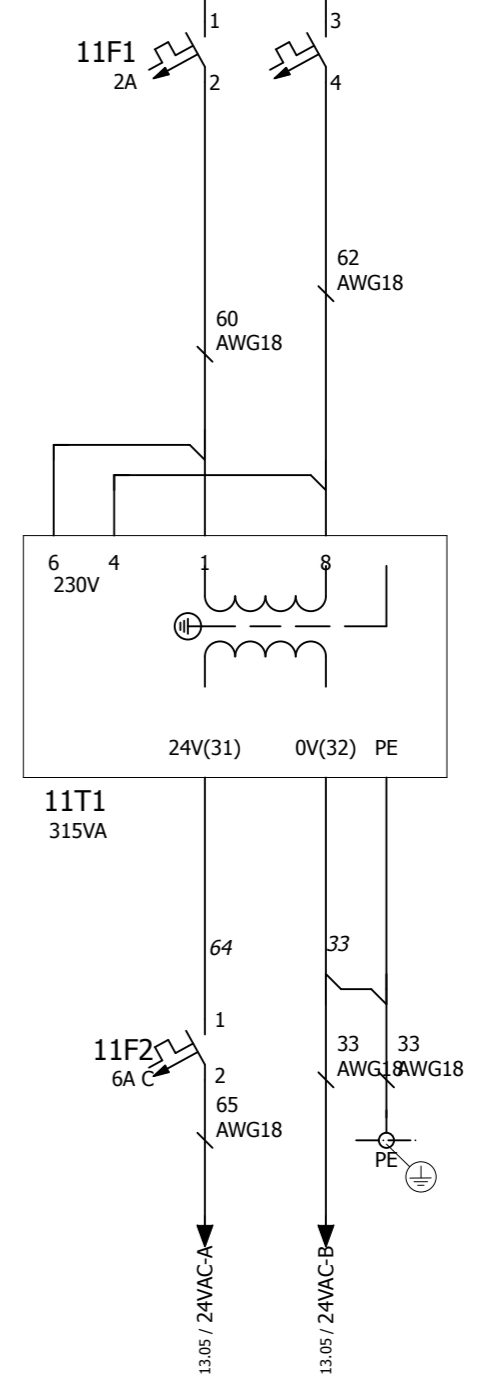


**NEMA NOMENCLATURE—9 LEADS**

DUAL VOLTAGE  
WYE-CONNECTED

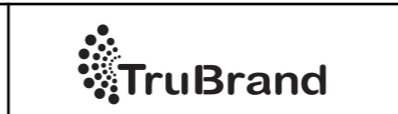
VOLTAGE	L1	L2	L3	JOIN
HIGH	1	2	3	4&7,5&8,6&9
LOW	1,7	2,8	3,9	4&5&6

Compressor 0.5kW/0.75HP  
2,5A@240V



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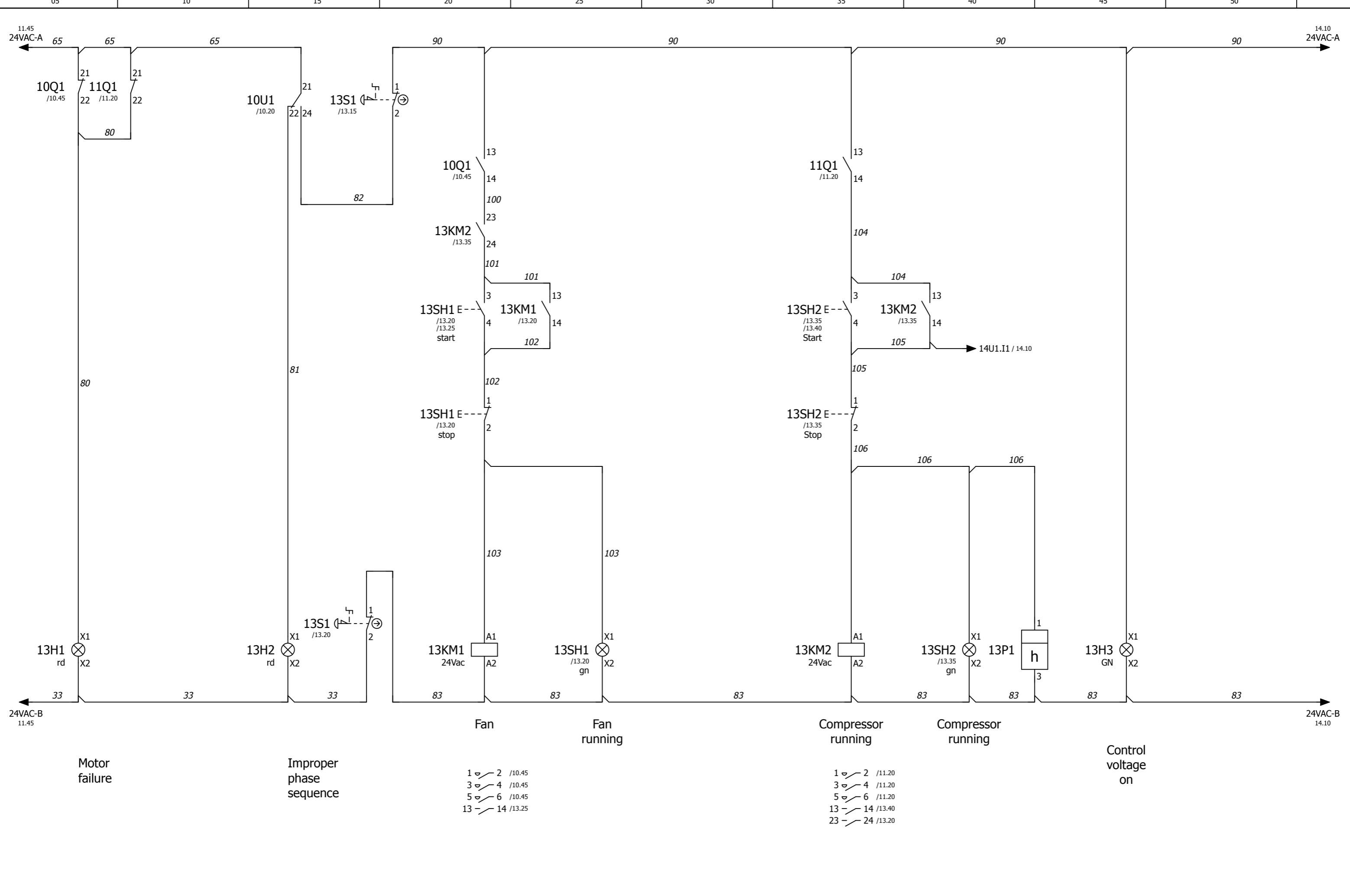
Project naam:  
**654 BDC 3X240V OVP**



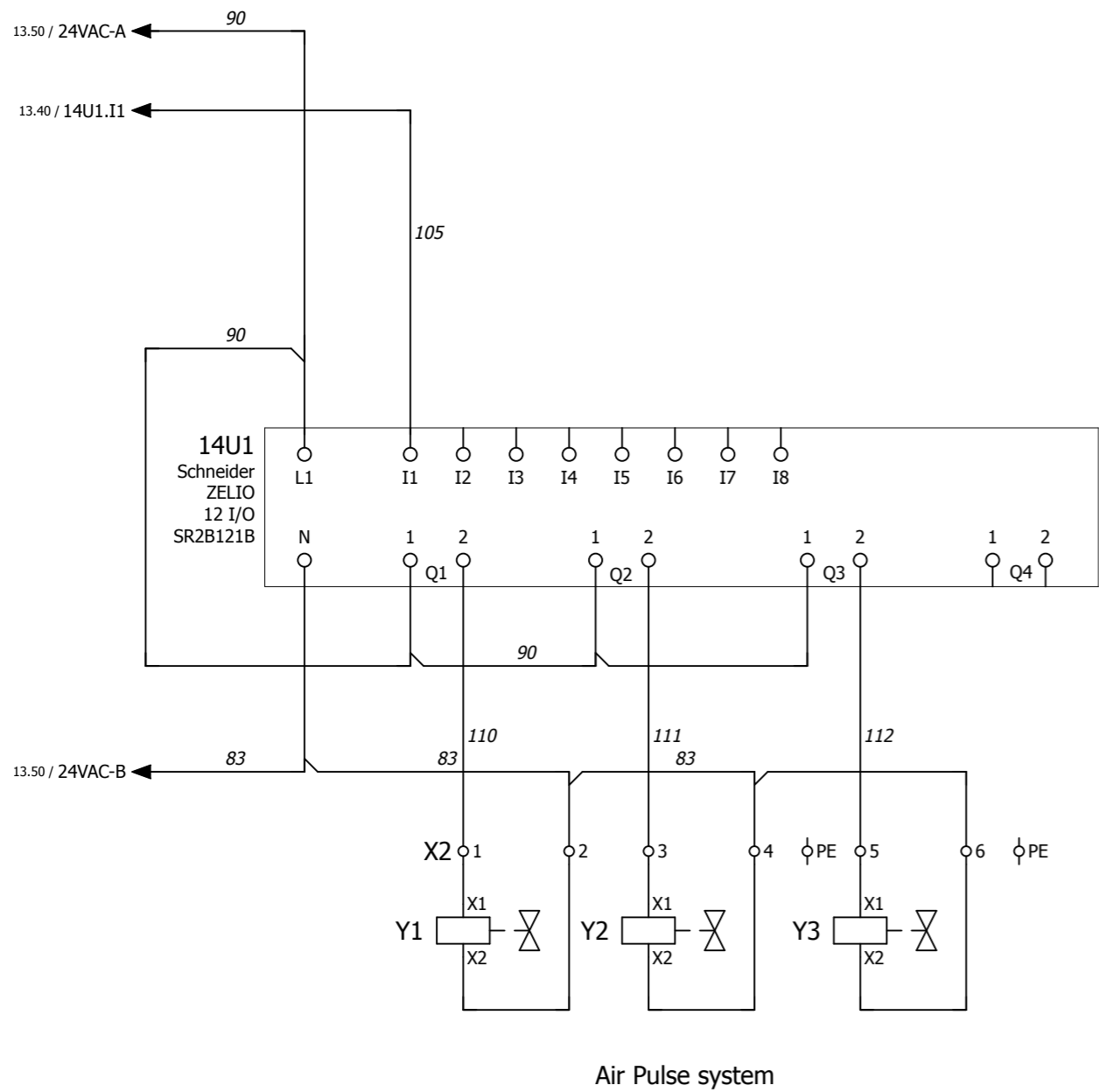
Pagina beschrijving:  
**Main Current**

Klant:  
**TRUBRAND**

Tekening nummer:  
**PJ15.1186.00.1**



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I1 = start signal  
 I2, I3, I4 = spare start signal  
 I5 = Timer setting (when not connected than in UL mode)  
 I6 = Spare timer setting  
 I7 = 2 pulses for 2 valves system (when not connected 3 valves system)  
 I8 = spare pulse setting

Air Pulse system

Date	2-10-2015
Ed.	KR
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Last print	3-2-2016

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Pagina beschrijving:	Control Current Zelio PLC
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# Terminal diagram

Page / column	Cable name				Strip =E1+-X1					Cable name				function text	
					Connection point	Target designation	Jumper	terminal	Connection point	Target designation					
/10.45								1							Fan 5,5kW/7,5HP 17,7A @ 240V
/10.45								2							=
/10.45								3							=
/10.45					PE	-10U1	.	PE	PE	-10M1					=
/11.20								4							Compressor 0.5kW/0.75HP 2,5A@240V
/11.20								5							=
/11.20								6							=
/11.20					PE		.	PE	PE	-11M1					=



# Terminal diagram

Page / column	Cable name		Strip =E1+-X2						Cable name		function text
	cable type	Connection point	Target designation	Jumper	terminal	Connection point	Target designation	cable type			
/14.15		X1	-Y1		1	2	-14U1				
/14.15		X2	-Y1		2	N	-14U1				
/14.15		X1	-Y2		3	2	-14U1			Air Pulse system	
/14.20		X2	-Y2		4					=	
/14.20		X1	-Y3		5	2	-14U1			=	
/14.25		X2	-Y3		6					=	
/14.20					.	PE				=	
/14.25				.	PE				=		

# Terminal line-up diagram

1
2
3
PE
4
5
6
PE

=E1+-X1		
Terminal	End plate	End clamp
WEID ZDU 4	WEID ZAP/TW 4 DB	EINDSTEUN V4 CON.ACC
WEID ZDU 4		
WEID ZDU 4		
WEID ZPE 4		
WEID ZDU 2.5	WEID ZAP/TW 1	EINDSTEUN V4 CON.ACC
WEID ZDU 2.5		
WEID ZDU 2.5		
WEID ZPE 2.5		

# Terminal line-up diagram

	1	2	
	3	4	
	5	6	
	PE	PE	

=E1+-X2		
Terminal	End plate	End clamp
WEID ZDK 2.5-2	WEID ZAP/TW ZDK2.5-2	EINDSTEUN V4 CON.ACC
WEID ZDK 2.5-2		
WEID ZDK 2.5-2		
WEID ZDK 2.5-2PE		

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Pagina beschrijving:	Terminal line-up =E1+-X2
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Klant:	TRUBRAND
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# Parts list

device tag	Quantity	designation	Type number	Brand	Blastrac number
-CAB	1	Enclosure H400xW600xD200 IP66 RAL7035 with mount.plate.	NSYS3D4620P	Schneider Electric	E08021
-CAB	4	Blindklinkmoer cilinderkop M8x16 staal elvz	POPBC-1Z-M8X16 CK16	Generic	E07968
-CAB	1	Mount.drain BxH 25x60 MM vpp=60	T1-E 25X60 MOUNT.DRAIN	Generic	E07972
-CAB	1	Mont.goot BXH 40X60 MM vpp=48	T1-E 40X60 MONT.GOOT	Generic	E08396
-CAB	1	M.rail galvanized,7,5x35MM 2M	TS35 MOUNT.RAIL GROOVE	Generic	E07835
-CAB	2	Internal wire yellow/green AWG16 1.5 mm2 UL-CSA	AWG 16 GN/GE	LAPP	E07975
-CAB	5	Internal wire black AWG16 1.5mm2 UL-CSA	AWG 16 ZWART	LAPP	E07947
-CAB	3	DIN-A Connectioncable led+suppr 24Vac/dc 3M Bk	MURR 7000-18021-636-300	Murrelektronik B.V.	E07945
-CAB	6	Internal wire black AWG12 4mm2 UL-CSA	AWG 12 ZW	LAPP	E08110
-CAB	6	Internal wire black AWG6 16mm2 UL-CSA	AWG 6 ZWART	LAPP	E07948
-CAB	2	Internal wire black AWG10 6mm2 UL-CSA	AWG 10 ZW	LAPP	E07891
-CAB	1	Internal wire black AWG18 1.0mm2 UL-CSA	AWG 18 ZWART	LAPP	E07845
-CAB	50	Internal wire red AWG18 1.0mm2 UL-CSA	AWG 18 ROOD	LAPP	E07894
-CAB	20	Ferrule 1*16mm2 ivory insulated	G 496-N ADERHULS 16	Calpe	9999-0001
-CAB	6	Ferrule 2*16mm2 blue insulated	G 496-TWIN	Calpe	E08159
-CAB	15	Ferrule 6mm2 green insulated	G 494 MONT.A.H.	Calpe	E07865
-CAB	10	Ferrule 2x6mm2 yellow insulated	G 494-TWIN MONT.A.H.	Calpe	E08140
-CAB	50	Ferrule 1mm2 red insulated	G 490	Calpe	E07849
-CAB	20	Ferrule 2x1mm2 red insulated	G 490-TWIN MONT.A.H.	Calpe	E07850
-CAB	10	Ferrule 1,5mm2 black insulated	G 491 MONT.A.H.	Calpe	E07851
-CAB	6	Ferrule 2x1,5mm2 zwart insulated	G 491-TWIN MONT.A.H.	Calpe	E08013
-CAB	22	Label for components Brady 2500pcs. p/r	BPT-1-8423-2 5T	Brady	E07896
-CAB	100	Label for ader 12*12 Brady 7000pcs. p/r	BPT-305-427	Brady	E07893
-CAB	2	Cabel gland M20*1.5 (PG11/13.5/16) brass, nickel-plated	WARTEL M20*1.5	Jacob	E00406
-CAB	1	Cable gland M32*1.5 (PG21/29) brass, nickel-plated	WARTEL M32*1.5	Jacob	E00408
-CAB	1	Cable gland plug M16*1.5 brass, nickel-plated	WARTEL BLINDSTOP M16	Jacob	E08398
-CAB	2	Cabel gland M16*1.5 (PG9/11) IP68 brass, nickel-plated 50616	WARTEL M16*1.5	Jacob	E00405
-CAB	3	Cable gland nut M16*1.5 brass, nickel-plated	WARTELMOER M16*1.5	Jacob	E00405_1
-CAB	3	UL neopreen 4*AWG12 (2.5mm2) 600V.	AWG 12*4	LAPP	E07976
-CAB	1	UL neopreen 4*AWG16 (1.5mm2) 600V.	AWG 16*4	LAPP	E10796
-CAB	6	Ferrule 4mm2 orange insulated	G 493 MONT.AD.HULS	Calpe	E07854
-CAB	2	Cable gland nut M20*1.5 brass, nickel-plated	WARTELMOER M20*1.5	Jacob	E00406_1
-CAB	1	Cable gland nut M32*1.5 brass, nickel-plated	WARTELMOER M32*1.5	Jacob	E00408_1
-CAB	1	Cable gland M50*1.5 brass, nickel-plated 50650ml	WARTEL M50*1.5	Jacob	E00410
-CAB	1	Cable gland nut M50*1.5 brass, nickel-plated	WARTELMOER M50*1.5	Jacob	E00410_1
-X1	2	Eindsteun V4 klein 9708/2S35	EINDSTEUN V4 CON.ACC	Wieland	E07828
-X1	1	End plate Beige for ZDU 4	WEID ZAP/TW 4 DB	Weidmuller	E08411
-X1	3	Tension clamp terminal 2*4(6)mm	WEID ZDU 4	Weidmuller	E08409
-X1	1	Earth terminal for ZDU 4 2*4(6)mm	WEID ZPE 4	Weidmuller	E08410
-X1	1	End plate Beige for ZDU 2.5	WEID ZAP/TW 1	Weidmuller	E05168
-X1	3	Tension clamp terminal 2*2.5 beige	WEID ZDU 2.5	Weidmuller	E05166
-X1	1	Earth terminal for ZDU 2.5 2*2.5(4)mm	WEID ZPE 2.5	Weidmuller	E05167
-X2	1	Eindsteun V4 klein 9708/2S35	EINDSTEUN V4 CON.ACC	Wieland	E07828
-X2	1	End plate, Partition plate, dark Beige Wemid	WEID ZAP/TW ZDK2.5-2	Weidmuller	
-X2	3	tension clamp connection Wemid, Dark Beige	WEID ZDK 2.5-2	Weidmuller	
-X2	1	PE terminal Wemid, green/yellow	WEID ZDK 2.5-2PE	Weidmuller	
-10F1	1	Aardlek 100A 4-P 30mA UL/CSA ABB	F204-A100/0.03	Allen Bradley	E07951
-10F2	1	Circuit breaker AB 3P 2A C-kar UL 489 480/277V	C60N-1489-A3C020	Allen Bradley	E07954
-10F3	1	Molded Case Circuit Breaker 3P C60A UL489	AB 140G-G2C3-C60	Allen Bradley	E07952
-10K1	1	Contacteur 11kw 400VAC coil 230VAC 1NO/1NC	LC1-D25-P7	Schneider Electric	E01609
-10P1	1	Voltmeter 500V 48*48 met cornermask E242-75VG Crompton	IQ/EQ48 500V	Crompton	BG007854
-10Q1	1	Motor Circuit Breaker 20Amp 14.5...20Amp	140M-C2E-C20	Allen Bradley	E08453
-10Q1	1	Auxiliary Contact NC/NO Allan Br.	140M-C-AFA11	Allen Bradley	E08405
-10Q1	1	3 Phase busbar 2 conn.	140M-C W542N	Allen Bradley	E08406
-10QM1	1	3P 100A, dinr.mot UL489	194E-A100-1753	Allen Bradley	E07957
-10QM1	1	Bed. draaisch. rood/geel voor 194L-E (64*64) UL489	194L-HE6I-175	Allen Bradley	E07958



