







## WIRE COLOR

Main Voltage 400/230V

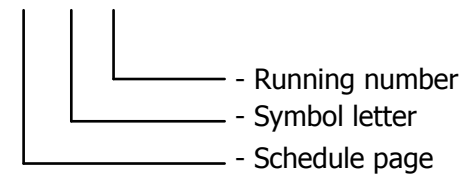
<u>Phase</u>	<u>Colors</u>
L1	- Black
L2	- Black
L3	- Black
N	- Light Blue
Earth / PE	- Yellow/Green

Control Voltage

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

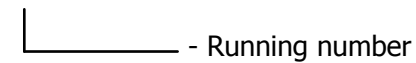
## SYMBOL CODE

11 F 11



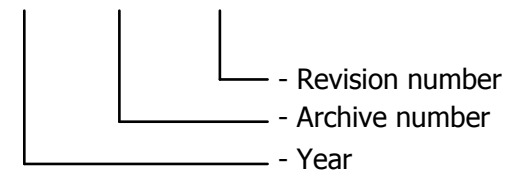
## CORE CODE

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## DRAWING NUMBER

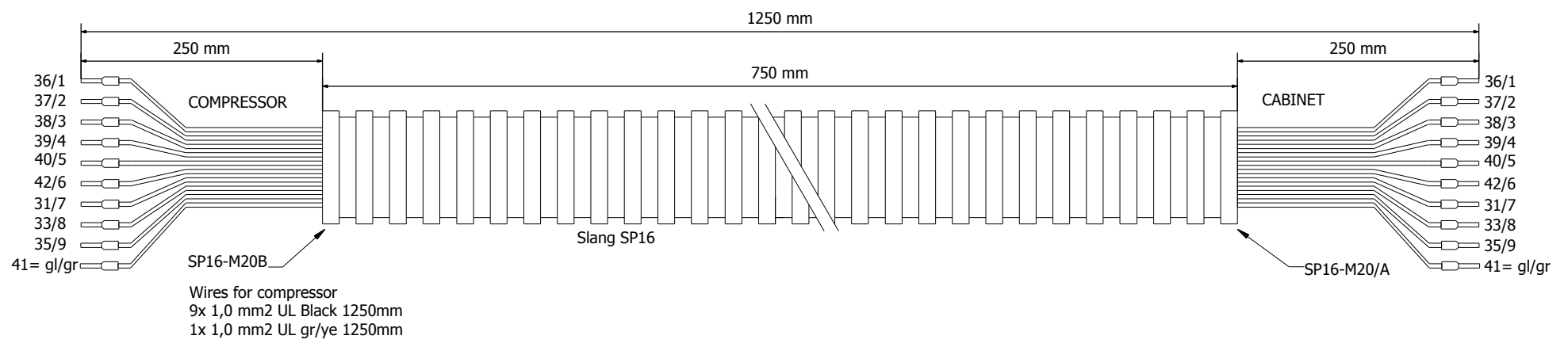
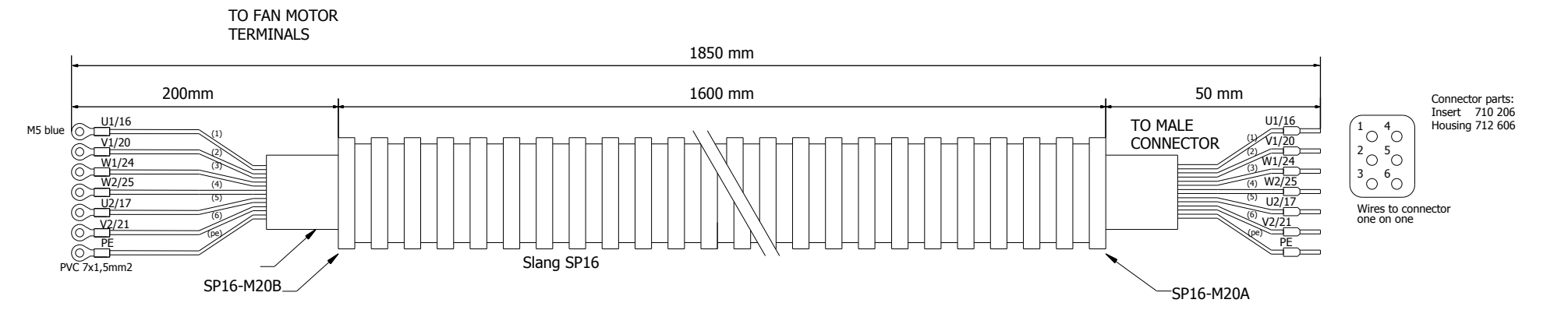
PJ##.####.##



	auxiliary contact	hulpcontact		signal light	signaallamp		Safety fuse	smeltveiligheid
	Power contact	vermogenscontact		horn	hoorn		Fused switch, three-pole	schakelbare scheider
	NO contact, opens with time delay	maakcontact, vertraagd open		apm.meter	amperemeter		Fused disconnect, three-pole	scheider "klapbak"
	NO contact, closes with time delay	maakcontact, vertraagd sluitend		runninghour counter	urenteller		Main switch	hoofdschakelaar
	NC contact, opens with time delay	verbreekcontact, vertraagd open		transformer	transformator		Circuit breaker, single-pole	installatieautomaat 1-polig
	NC contact, closes with time delay	verbreekcontact, vertraagd sluitend		Contactor coil relay coil	spoel		Circuit breaker, two-pole	installatieautomaat 2-polig
	Pushbutton rebound	drukknop terugverend		Contactor/relay coil, with pick-up delay	Spoel met opkomvertraging		Circuit breaker, three-pole	installatieautomaat 3-polig
	Pushbutton locking	drukknop blijvend		Contactor/relay coil, with drop-out delay	spoel met afvalvertraging		Power circuit breaker motor overload switch with switch mechanism	motorbeveiligingsschakelaar
	Rotary switch rebound	tip draaischakelaar		Contactor pulse coil relay pulse coil,	spoel puls		Valve	elektrisch bediende klep
	Rotary switch locking	draaischakelaar		Tube light	TL verlichting		Resistor with movable contact	regelbare weerstand
	Emergency stop rotary unlock	noodstop met draaibare vrijgave		Resistor / Heating	weerstand verwarming		Terminal	rijgklem
	Thermostatic switch	thermostaat hygrostaat		Socket	wandcontactdoos		Terminal with fuse	rijgklem met zekering
	Pressure switch	drukschakelaar		Current transformer	stroomtransformator		Rectifier	gelijkrichter
	Limit switch	eindschakelaar						
	Proximity switch	naderingsschakelaar						

			Date	28-5-2010	Project name:	654 BDC DUAL VOLTAGE E06901/UL230		Page description:	Symbol library	Customer:	Blastrac bv		=
			Ed.	HVDB									+
			Appr								Drawing number:	PJ09.1035.16	
Modification	Date	Name	Last print	8-2-2011									





Modification	Date	Name	Last print	8-2-2011
			Date	8-11-2010
			Ed.	HVDB
			Appr	

Project name:  
**654 BDC DUAL VOLTAGE**  
E06901/UL230

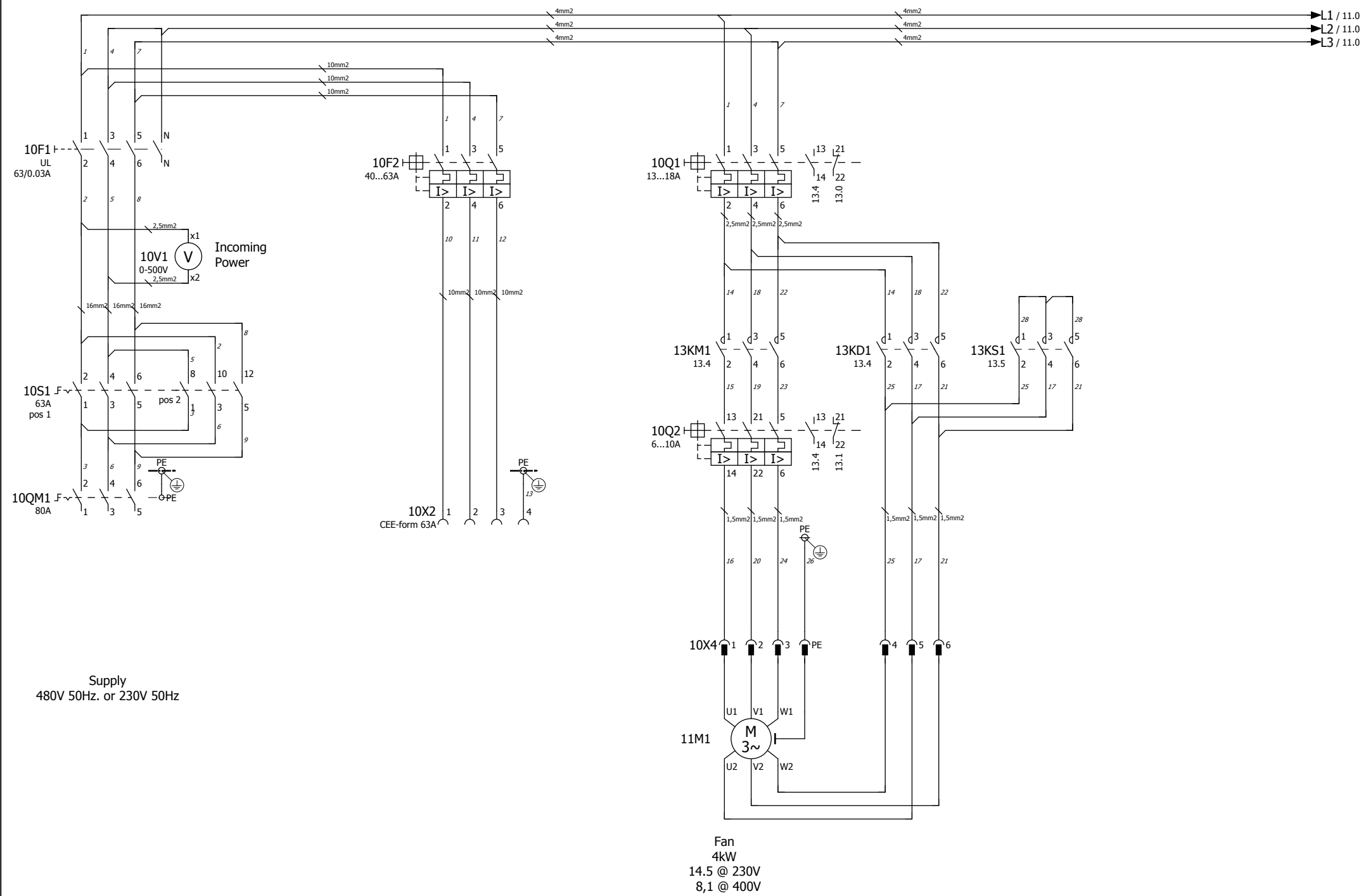


Page description:  
**Cable set**

Customer:  
**Blastrac bv**

Drawing number:  
**PJ09.1035.16**

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Page	<b>8</b>



Modification	Date	Name	Last print	8-2-2011
			Date	23-11-2010
			Ed.	
			Appr	

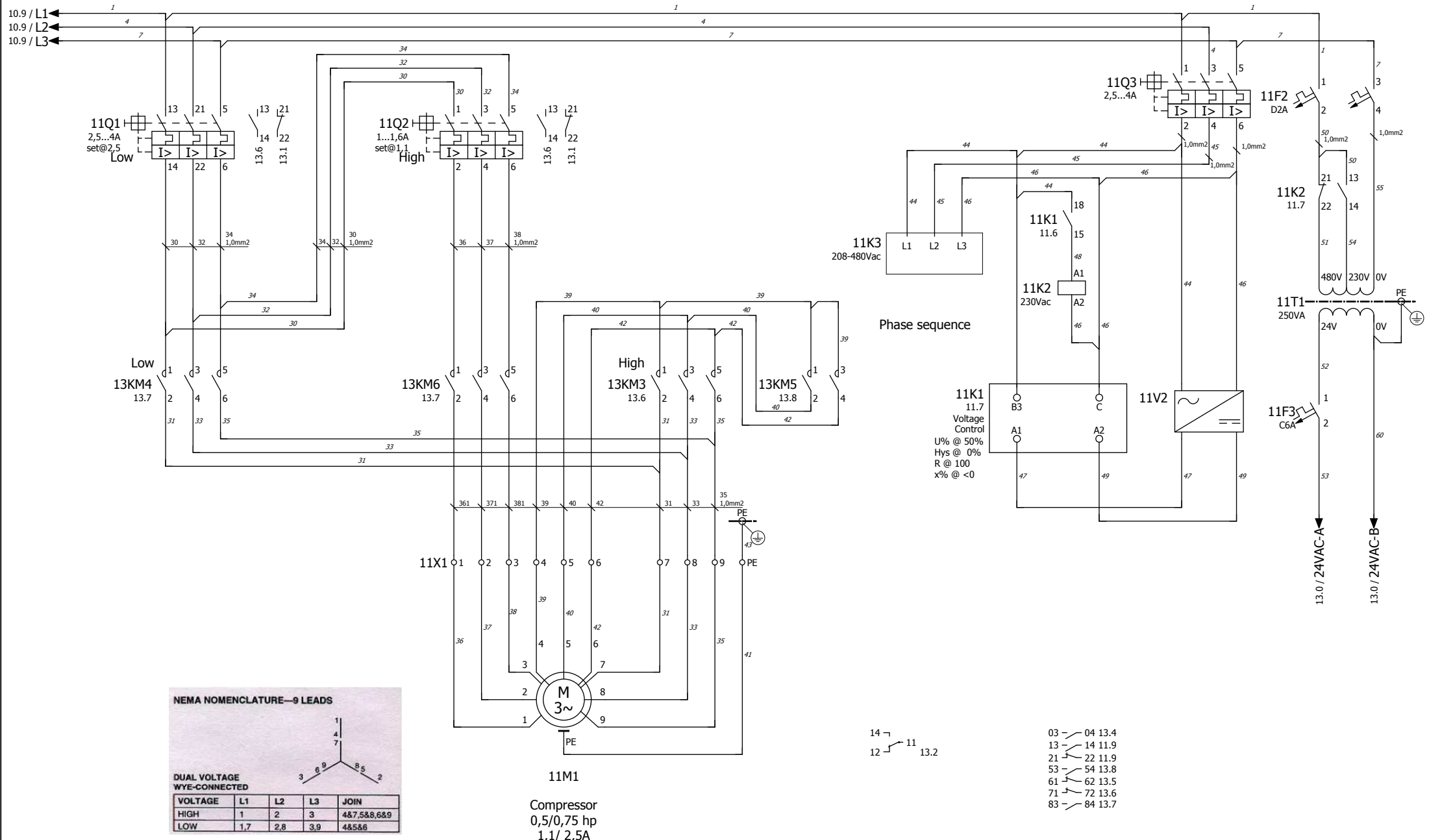
Project name: **654 BDC DUAL VOLTAGE**  
E06901/UL230



Page description: **Main Current**

Customer: **Blastrac bv**  
Drawing number: **PJ09.1035.16**





**NEMA NOMENCLATURE—9 LEADS**

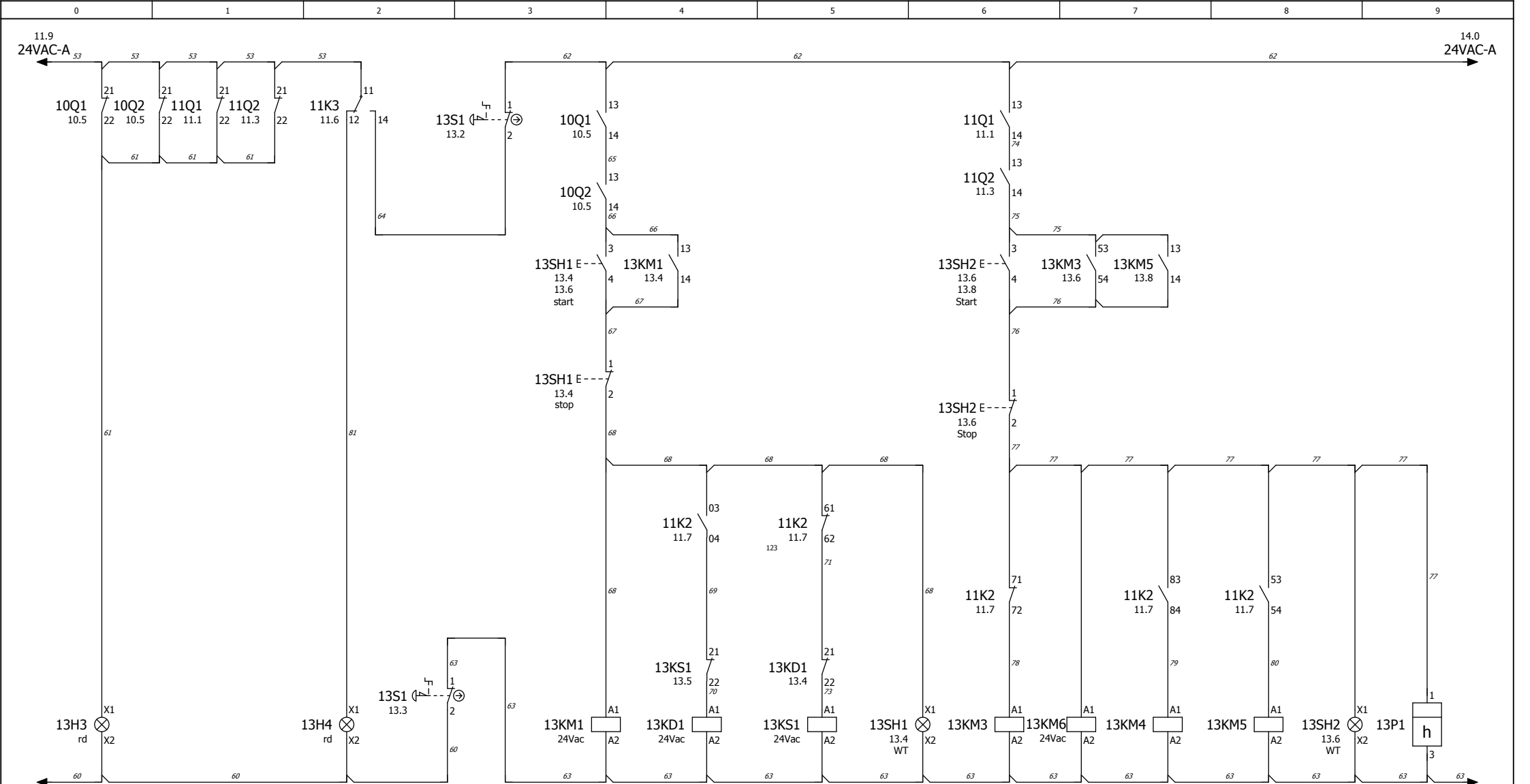
**DUAL VOLTAGE WYE-CONNECTED**

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

11M1  
Compressor  
0,5/0,75 hp  
1,1/ 2,5A

- 03 - 04 13.4
- 13 - 14 11.9
- 21 - 22 11.9
- 53 - 54 13.8
- 61 - 62 13.5
- 71 - 72 13.6
- 83 - 84 13.7

- 14 - 11
- 12 - 13.2



Motor failure

Improper phase sequence

Fan

Fan Delta

Fan Star

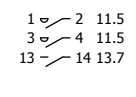
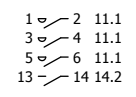
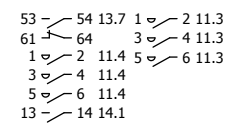
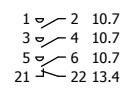
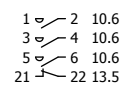
Fan running

Compressor running High Volt.

Compressor running Low volt.

Compressor running Low volt.

Compressor running





# Terminal diagram

function text	Cable name						Strip 11X1				Cable name						Page / column		
	cable type						Target designation	Connection point	terminal	jumper	Target designation	Connection point	cable type						
							11M1	1	1	.	13KM6	2							11.3
							11M1	2	2	.	13KM6	4							11.3
							11M1	3	3	.	13KM6	6							11.3
							11M1	4	4	.	13KM3	1							11.3
Compressor 0,5/0,75 hp 1,1/ 2,5A							11M1	5	5	.	13KM3	3							11.3
=							11M1	6	6	.	13KM3	5							11.4
=							11M1	7	7	.	13KM3	2							11.4
											13KM4	2							
Compressor 0,5/0,75 hp 1,1/ 2,5A							11M1	8	8	.	13KM3	4							11.4
											13KM4	4							
Compressor 0,5/0,75 hp 1,1/ 2,5A							11M1	9	9	.	13KM3	6							11.4
											13KM4	6							
Compressor 0,5/0,75 hp 1,1/ 2,5A							11M1	PE	PE	.		PE							11.5



# Parts list

device tag	Quantity	designation	Type number	Brand	Blastrac number
CAB	1	Kastwand 600x00x210 ral 7035	MAS 0605021R5	Eldon	E050157
CAB	3	M16*1.5 polyamide 50.616 PA	WARTEL PA M16*1.5	Jacob	E01196
CAB	1	M40*1.5 polyamide 50.640 PA	WARTEL PA M40*1.5	Jacob	
CAB	3	wartelmoer M16*1.5 50.216PA	WARTELMOER PA M16	Jacob	
CAB	2	wartelmoer M20*1.5 50.220PA	WARTELMOER PA M20	Jacob	
CAB	1	wartelmoer PA M40*1.5 50.240PA	WARTELMOER PA M40*1.	Jacob	
CAB	2	M20*1.5 polyamide 50.620 PA	WARTEL PA M20*1.5	Jacob	
CAB	2	FITTING @16*M20	SP16/M20/A	Adaptaflex	
CAB	2	FITTING @16*M20 DRAAIBAAR	SP16/M20/B	Adaptaflex	E03508
CAB	5	BESCHERMSLANG 16*13	SP16/ZWART	Adaptaflex	E00559
CAB	1	differential pressure gauge range 0-10 inches of water	MAGNEHELIC MODEL 2010	Dwyer	
CAB	3	DIN-A Connectioncable led+suppr 24Vac/dc 3M Bk	MURR 7000-18021-636-300	Murr Elektronik	
CAB	2	7*1.5 1 t/m 6+aarde+afschrem.	STUURSTR.KAB.7*1.5		
CAB	2	Mont.goot BXH 40X80 MM vpp=40	T1-E 40X80 MONT.GOOT	Licatec	
CAB	2	M.rail verz.geel,7,5x35MM 2M	TS35 MONT.RAIL SLEUF	Generic	
CAB	7	1.5 mm 2 zwart	MONTAGESNOER 1.5MM Z	LAPP	
CAB	3	10 mm 2 ZWART 105 C	MONTAGESNOER 10MM ZW	LAPP	
CAB	3	16 mm 2 ZWART	MONTAGESNOER 16MM ZW		
CAB	25	1.0 Wit mont.snoer op rol H05	MONTAGESNOER 1MM W	LAPP	
CAB	25	1 mm 2 zwart	MONTAGESNOER 1MM ZW		
CAB	4	2.5 mm 2 ZWART	MONTAGESNOER 2.5MM Z		
CAB	5	H07V-K 4,0 zwart op rol	MONTAGESNOER 4MM ZW	LAPP	
CAB	32	Klemkodering voor weidmuller klemmen blanco	WEID DEKS/5MC	Weidmuller	
CAB	150	label ader 12*12	BPT-305-427		
CAB	1	bocht 90 M20 inw* M20 uitw	B/PG13/90	Generic	
10F1	1	aardlek63A 4-P 30mA UL/CSA ABB	F204-A63/0.03		E05068
10F2	1	Mot.Th/Mag bev.40,0..63.0A	GV3-P65	Schneider Electric	E00247
11F2	1	zek.autom. AB 2P 2A D-kar UL 489 480/277V	C60N-1489-A2D020	Allen Bradley	
11F3	1	zek.autom. AB 1P 6A C-kar	C60N-1492-SP1C060	Allen Bradley	E05160
13H3	1	bediening lamph. incl.protected led,rood 24vac/dc	XB5-AVB4	Schneider Electric	E05161
13H3	1	res.houder tbv ZBY5102 verzonk	ZBZ-35	Schneider Electric	E05080
13H4	1	bediening lamph. incl.protected led,rood 24vac/dc	XB5-AVB4	Schneider Electric	E05161
13H4	1	res.houder tbv ZBY5102 verzonk	ZBZ-35	Schneider Electric	E05080
11K1	1	volt.bew.2w30-300/500V 24-240V	RM4-UA33MW	Schneider Electric	500-3570-EDA
11K2	1	Contactoor 4.0kW 400vac 1M/1V coil 230Vac	LC1-D09-P7 (SP230V)	Schneider Electric	333-3384
11K2	1	M.S.hulpc.2M/2V v LC1-D09..D38	LAD-N22	Schneider Electric	E05162
11K3	1	3-phase monitoring relays	DPA 01 C M44	Carlo Gavazzi	
13KD1	1	Contactoor 4.0kW 400vac 1M/1V coil 24Vac	LC1-D09-B7 (SP24AC)	Schneider Electric	333-3580
13KM1	1	Contactoor 4.0kW 400vac 1M/1V coil 24Vac	LC1-D09-B7 (SP24AC)	Schneider Electric	333-3580
13KM3	1	Contactoor 4.0kW 400vac 1M/1V coil 24Vac	LC1-D09-B7 (SP24AC)	Schneider Electric	333-3580
13KM3	1	M.S.hulpc.1M/1V tbv LC09..D38	LAD-N11	Schneider Electric	E01324 / 333-3482
13KM4	1	Contactoor 4.0kW 400vac 1M/1V coil 24Vac	LC1-D09-B7 (SP24AC)	Schneider Electric	333-3580
13KM5	1	Contactoor 4.0kW 400vac 1M/1V coil 24Vac	LC1-D09-B7 (SP24AC)	Schneider Electric	333-3580
13KM6	1	Contactoor 4.0kW 400vac 1M/1V coil 24Vac	LC1-D09-B7 (SP24AC)	Schneider Electric	333-3580
13KS1	1	Contactoor 4.0kW 400vac 1M/1V coil 24Vac	LC1-D09-B7 (SP24AC)	Schneider Electric	333-3580
13P1	1	urentel.pan.12/24 AC/DC 22mm.	XB5-DSB	Schneider Electric	E00366
10Q1	1	Mot.Th/Magn.bev. 13.0..18.0A	GV2-ME20	Schneider Electric	E00553
10Q1	1	Hulpcont. front voor GV2-ME 1xNO +1xNC	GV2-AE11	Schneider Electric	333-3455
10Q2	1	Mot.Th/Magn.bev. 6.0-10.0 A	GV2-ME14	Schneider Electric	E05163
10Q2	1	Hulpcont. front voor GV2-ME 1xNO +1xNC	GV2-AE11	Schneider Electric	333-3455
11Q1	1	Hulpcont. front voor GV2-ME 1xNO +1xNC	GV2-AE11	Schneider Electric	333-3455
11Q1	1	Mot.Th/Magn.bev. 2.4..4.0A	GV2-ME08	Schneider Electric	E01456
11Q2	1	Hulpcont. front voor GV2-ME 1xNO +1xNC	GV2-AE11	Schneider Electric	333-3455
11Q2	1	Mot.Th/Magn.bev. 1.0-1.6 A	GV2-ME06	Schneider Electric	E01322
11Q3	1	Trafobev. 2.4..4.0A 20XIN	GV2-RT08	Schneider Electric	E00417
10QM1	1	bed.draaisch.rood/geelvergrend	KCF-2PZ	Schneider Electric	333-3486.02

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# Parts list

device tag	Quantity	designation	Type number	Brand	Blastrac number
10QM1	1	vergrend.plaat voor V3..V6	KZ74	Schneider Electric	E00347
10QM1	1	lastschakelaar 80A 3P	V4 BED.LASTSCHAK.	Schneider Electric	E00563
10QM1	1	Assen 300..320mm voor V3..V6	VZ18 BED.ASSEN	Schneider Electric	E00346
10QM1	1	Conn.aardkl.,16MM2, ge/gr	VUPE-5-16 CONN.A.KL.	Wieland	E05191
10S1	1	faseomkeerschakelaar 6P 63A,dinr.mot+knop AB	194E-A63-3753/194L-HE4A-375	Allen Bradley	E05061
10S1	1	grijs/zwart vergr.baar voor 194L-E(48*48)	194L-HE4A-375 BED.DRAAISCH.	Allen Bradley	E05061-1
13S1	1	knop noodstop zwart/rood 40mm draaiontgrendel. + 'moment'	ZB5-AS844	Schneider Electric	E01543
13S1	1	element 2xNC + kopp.	ZB5-AZ104	Schneider Electric	E01544
13S1	1	con.sch. geel @60 emergency st	ZBY-9330		E00361
13SH1	1	Lamphouder 24VAC/DC incl. LED wit	ZB5-AVB1	Schneider Electric	333-3226
13SH1	1	dubb.drukknop verh/verz grijs/rood/groen "I/O" cent.LEDverl.	ZB5-AW7A3741	Schneider Electric	
13SH1	1	Silicon kapje tbv ZB-AA7 serie	ZBA-710	Schneider Electric	E05070
13SH1	1	SCHAKELBLOK LOS TBV ZB 1M	ZBE-101	Schneider Electric	E05091
13SH1	1	SCHAKELBLOK LOS TBV ZB 1V	ZBE-102	Schneider Electric	E05092
13SH2	1	Lamphouder 24VAC/DC incl. LED wit	ZB5-AVB1	Schneider Electric	333-3226
13SH2	1	dubb.drukknop verh/verz grijs/rood/groen "I/O" cent.LEDverl.	ZB5-AW7A3741	Schneider Electric	
13SH2	1	Silicon kapje tbv ZB-AA7 serie	ZBA-710	Schneider Electric	E05070
13SH2	1	SCHAKELBLOK LOS TBV ZB 1M	ZBE-101	Schneider Electric	E05091
13SH2	1	SCHAKELBLOK LOS TBV ZB 1V	ZBE-102	Schneider Electric	E05092
11T1	1	prim. 230-480+/-20V, sec.24V-320VA	TE 10/3 230-480>24V	Schneider Electric	
14U1	1	se zelio 12 I/O se2b121b	SR2B121B	Schneider Electric	E01557 / MP04072
14U1	1	geheugen module voor programma zelio	SR2MEM02	Schneider Electric	E01557 / MP04072
10V1	1	Voltmeter 500V 48*48 met cornermask	IQ/EQ48 500V		BG007854
11V2	1	Geschakelde voeding 24Vdc 3A 200-520Vac	TELE ABL8-RPS24030	Schneider Electric	E05193
10X2	1	4p/63A/7h 3*480V panel-mounted socket outlet straight	ABL F43556	ABL SURSUM	E05164
10X4	1	Busbinnenwerk s.B6P+A	710.106	Walther	RIG-3630-CDF /3625?
10X4	1	Penbinnenwerk serie B6-P+A	710.206 CONN.PANEEL	Walther	RIG-3628-CDF
10X4	1	Aanb.contacthuis met kl 6+A	714.406 CON.PANEEL		RIG-3629-CDF / 3617
10X4	1	St.stek.huis,wartelzijkant 6+a	712.606 CON.PANEEL	Walther	RIG-3627-CDF
11X1	1	Eindplaat Beige voor ZDK 2.5 etageklem	WEID ZAP/TW ZDK2.5 DB	Weidmuller	E05171
11X1	5	Etageklem 2*2.5	WEID ZDK 2.5	Weidmuller	E05169
11X1	1	Aardklem voor ZDK 2*2.5	WEID ZDK 2.5PE	Weidmuller	E05170
14X1	1	Eindplaat Beige voor ZDK 2.5 etageklem	WEID ZAP/TW ZDK2.5 DB	Weidmuller	E05171
14X1	3	Etageklem 2*2.5	WEID ZDK 2.5	Weidmuller	E05169
14X1	1	Aardklem voor ZDK 2*2.5	WEID ZDK 2.5PE	Weidmuller	E05170
14X1	1	Eindblok voor weidmuller klemmen	WEID ZEW 35	Weidmuller	E05177