



Customer name: -
Customer number: -
Country: The Netherlands
Language: English

Project Name: -
Project Number: -
Product: DEMAG CONTROL BOX 45 AMP.
Item number: ESBDE18002

Designer: MV	Supply Voltage: 400VAC
Design date: 13-11-2017	Nominal Power: ...kW
Revision number: D	Max. supply Current: 63A
Status: Released	Control Voltage: 24VDC

Total pages: 022

Prev. sheet:

Next Sheet: 002

Designer: MV
Design date: 13-11-2017
Rev. nr.: D
Status: Released

Project name : -
Project number : -
Customer: -
Customer number: -



Product: DEMAG CONTROL BOX 45 AMP.
Item number: ESBDE18002
Doc. number: ESBDE18002_Page-001.dwg

Drawing descr.: Front page

Sheet: 001
Inst.:
Loc.:

General specifications

PAGE NUMBERING	
1	Front page
2	Project specifications
10	Drawing list
100	Main circuit
150	Power supplies
200	Control circuit
300	-
400	PLC overview
500	PLC I/O
600	-
700	-
800	Spare connections
900	Bill of material
910	Components list
950	Terminal plan

TERMINAL NUMBERING	
X0	Main supply
X1	Main power
X2	Control voltage 230VAC
X3	Control voltage 24Vac
X4	Control voltage 24Vdc
X5	Analog signals
X6	External supply
X7	EEx i
X8	?
X9	?

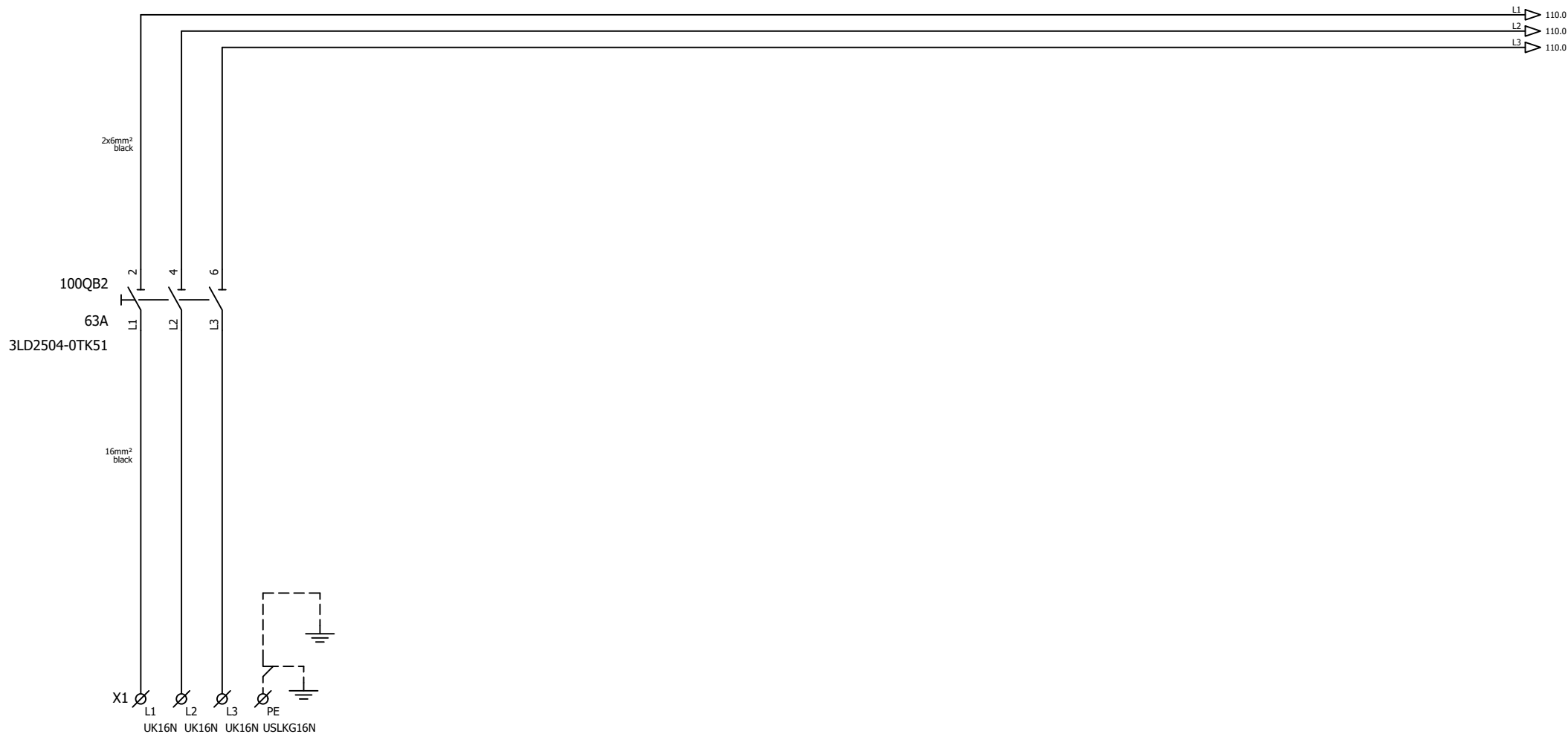
100M1
 └── REFERENCE NUMBER
 └── PART CODE
 └── PAGE NUMBER

COLOR CODE INTERNAL WIRING		
Main current 400/230V	Phase	Black
	Neutral	Lightblue
	Earth	Yellow/Green
Control voltage 230Vac	Phase	Red
	Switch wire	Red
	Neutral	Red/White
Control voltage 24Vac	Phase (L)	Yellow
	Switch wire	Yellow
	Neutral (N)	Yellow
Control voltage 24Vdc	Phase (+)	Darkblue
	Switch wire	Darkblue
	Neutral (-)	Darkblue/White
Measurement		Grey
External supply (Potential free contacts)		Orange
EEx i		Blue

Drawing list

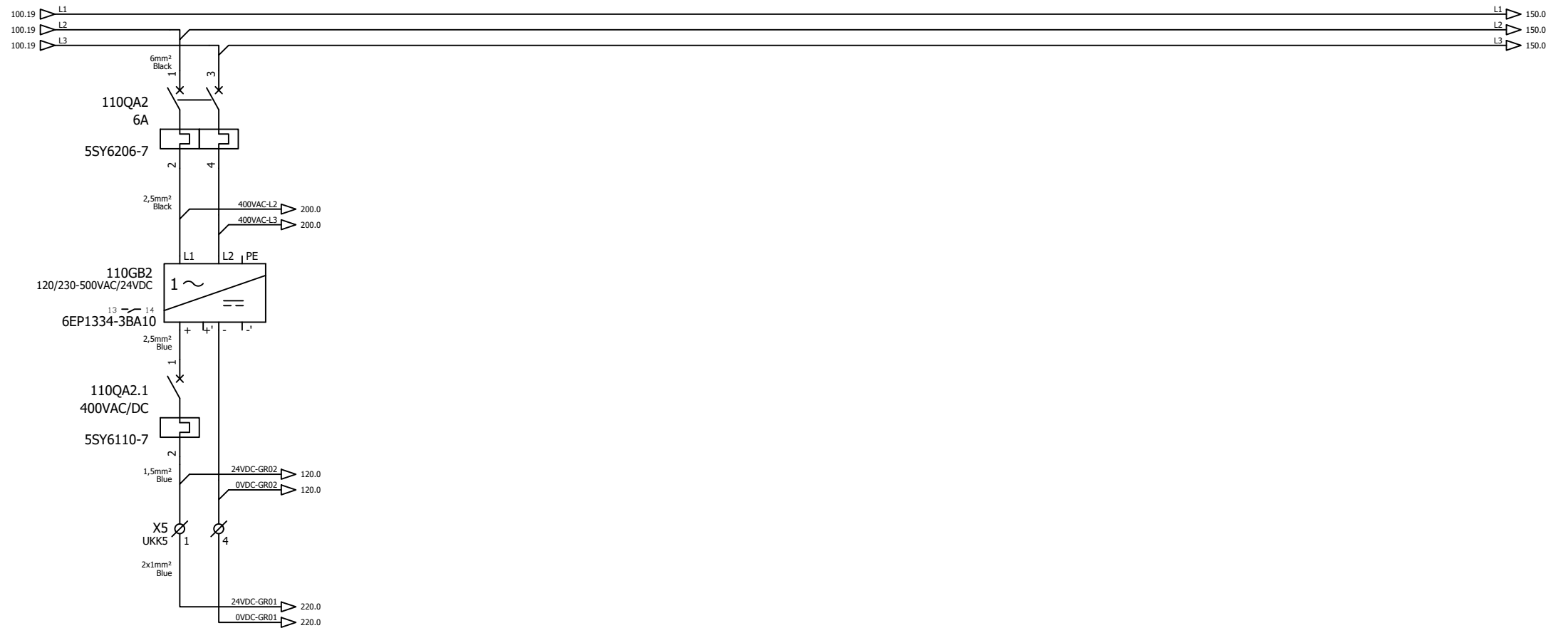
Installation	Location	Page	Description 1	Description 2	Description 3
		001	Front page		
		002	Project specification		
		010	Drawing list		
		100	Main Switch		
		110	Power supplies		
		120	Panel Components	Light / Ventilation / Heating	
		150	Main circuit		
		200	Control circuit 24Vac		
		220	Control circuit 24Vdc		
		400	PLC overview		
		500	PLC I/O Sigmatek CP102 1-1	CPU	
		501	PLC I/O Sigmatek DM161 1-2	Digital inputs	
		502	PLC I/O Sigmatek DM161 2-2	Digital outputs	
		503	PLC I/O Sigmatek AM221 1-1	Analog inputs/outputs	
		800	Spare connections		
		900	Bill of material		
		901	Bill of material		
		910	Components list		
		911	Components list		
		912	Components list		
		950	Terminal plan		
		990	Text plate		

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Prev. sheet: 010				Next Sheet: 110			
Designer: MV	Project name : -		Product: DEMAG CONTROL BOX 45 AMP.	Drawing descr.: Main Switch		Sheet: 100	
Design date: 13-11-2017	Project number : -		Item number: ESBDE18002				
Rev. nr.: D	Customer: -		Doc. number: ESBDE18002_Page-100.dwg				
Status: Released	Customer number: -						

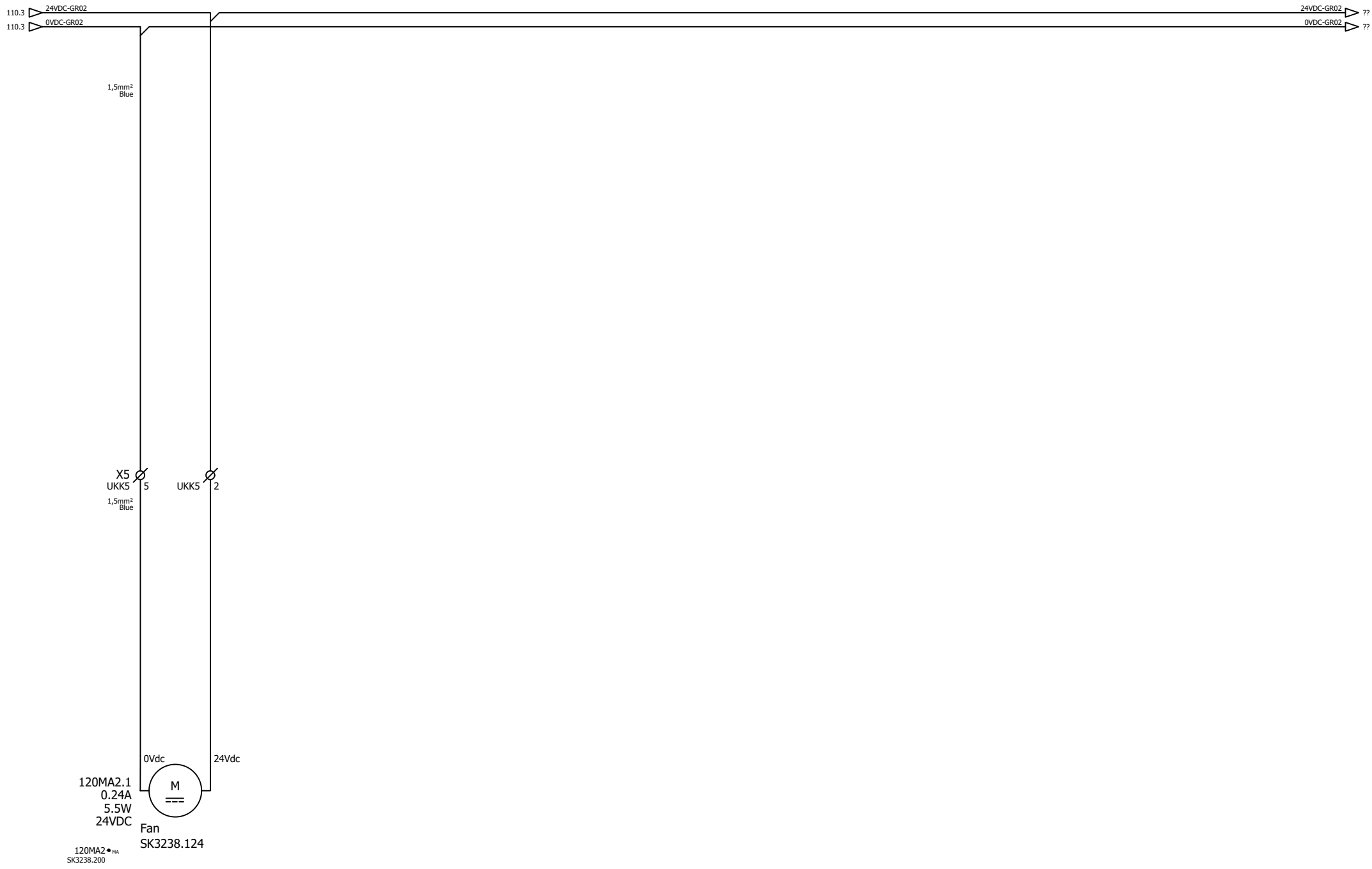
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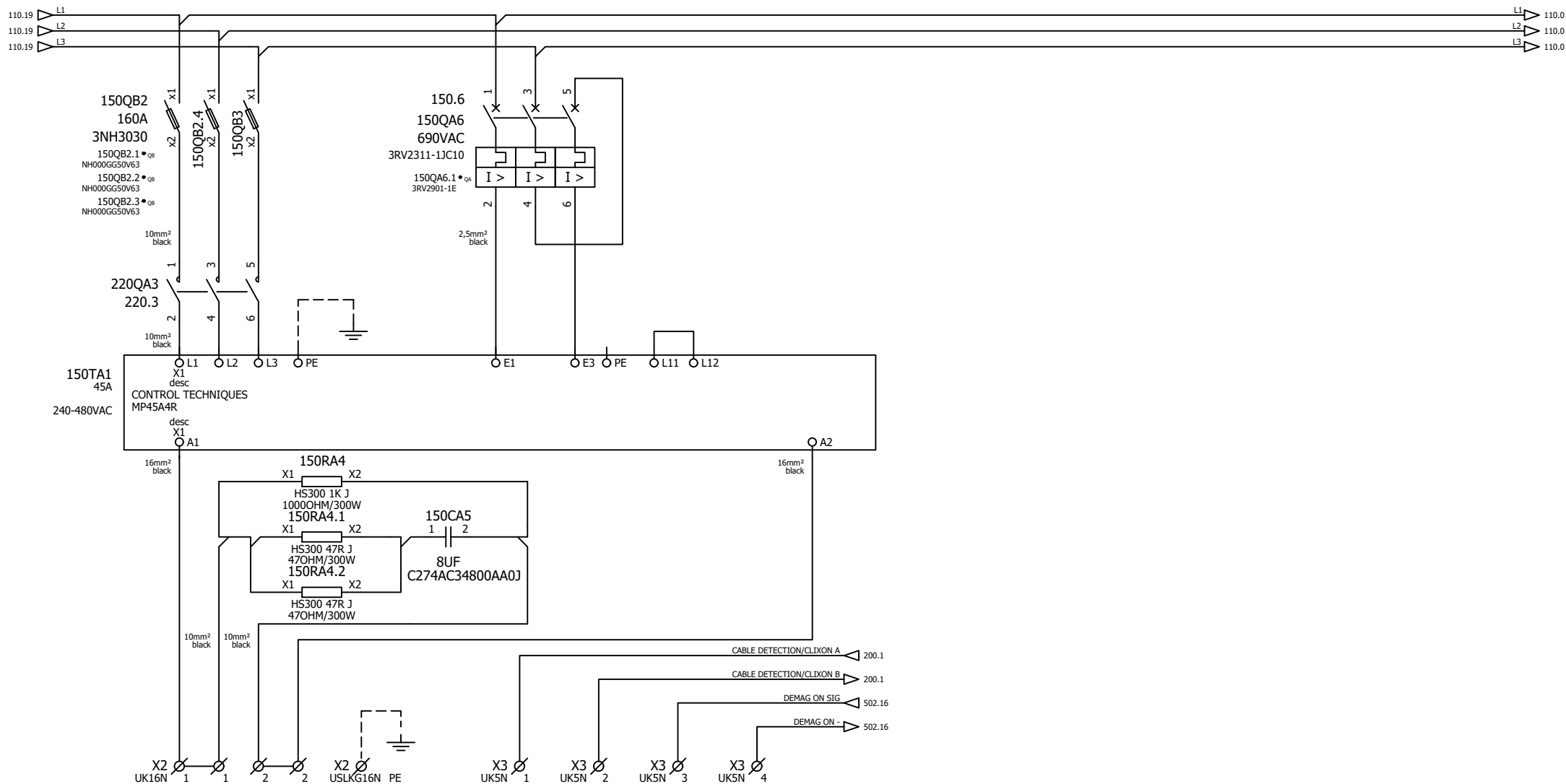
Control Power
24Vdc

Prev. sheet: 100			Next Sheet: 120		
Designer: MV	Project name : -		Product: DEMAG CONTROL BOX 45 AMP.	Drawing descr.: Power supplies	Sheet: 110 Inst.: Loc.:
Design date: 13-11-2017	Project number : -		Item number: ESBDE18002		
Rev. nr.: D	Customer: -		Doc. number: ESBDE18002_Page-110.dwg		
Status: Released	Customer number: -				

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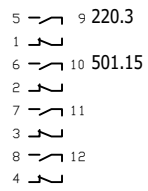
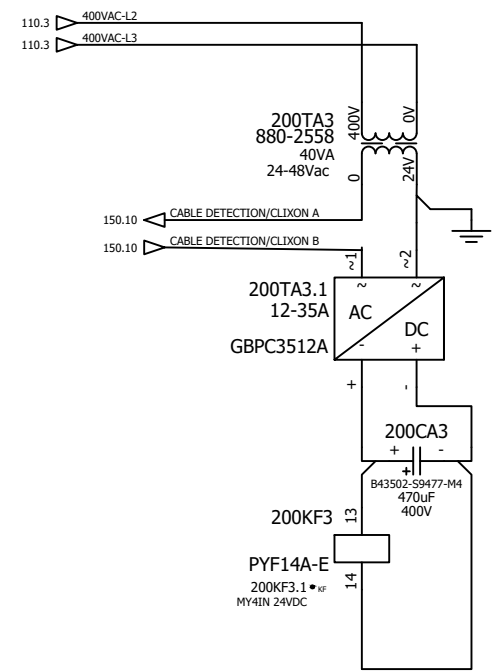


OPTION A - CABLE CONNECTION
SEE DRAWING E???????

OPTION B - TUNNEL CONNECTION
SEE DRAWING E0065572 OR E0067421

Designer: MV Design date: 13-11-2017 Rev. nr.: D Status: Released	Project name : - Project number : - Customer: - Customer number: -	GOUDSMIT MAGNETICS	Product: DEMAG CONTROL BOX 45 AMP. Item number: ESBDE18002 Doc. number: ESBDE18002_Page-150.dwg	Drawing descr.: Main circuit	Sheet: 150 Inst.: Loc.:
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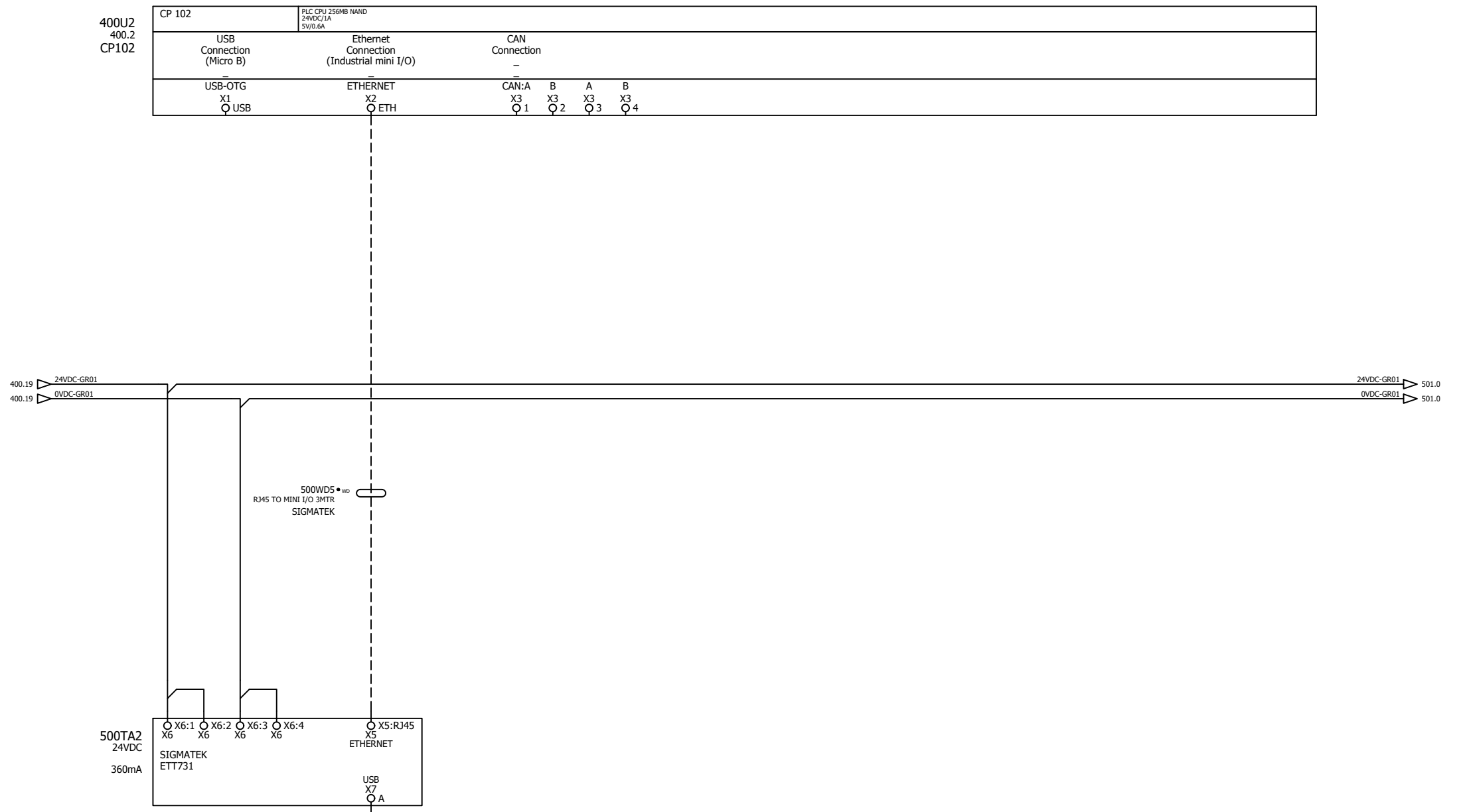


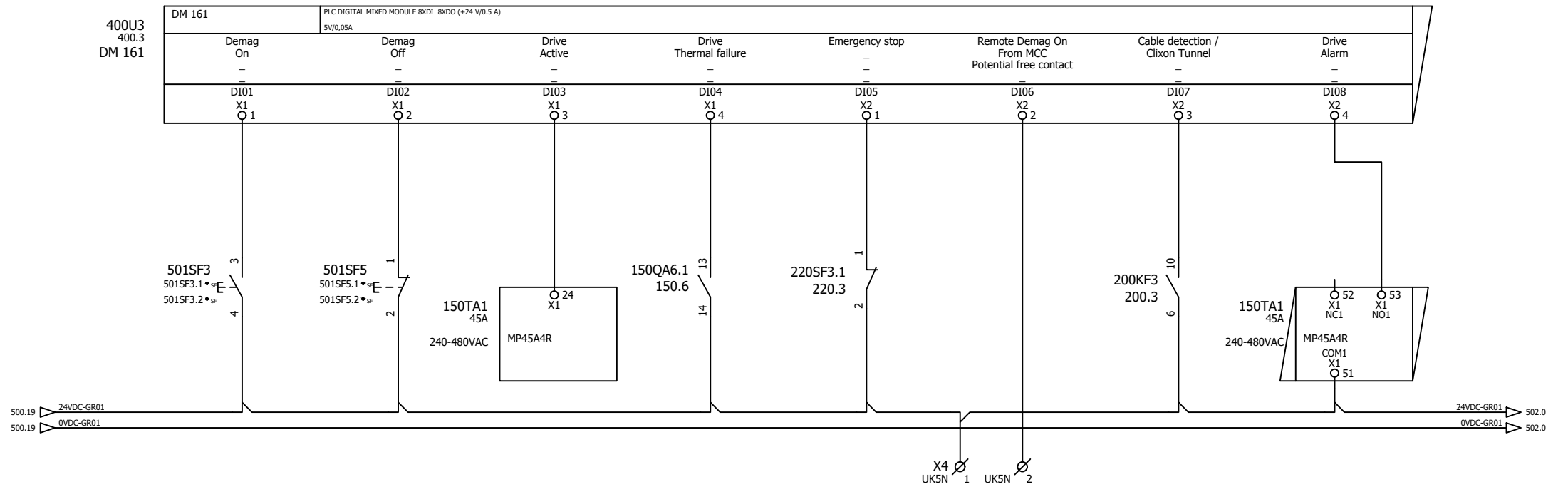


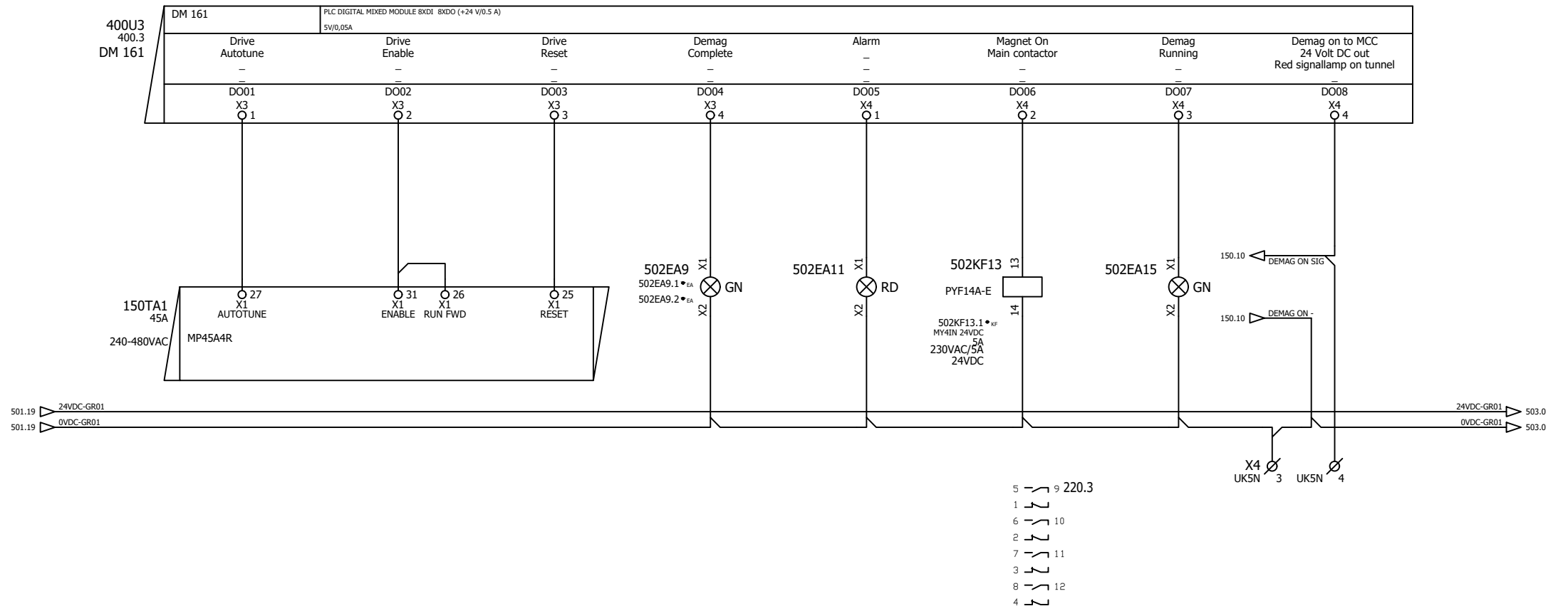
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- 3 4 150.2
- 5 6 150.3
- 13 14
- 21 22

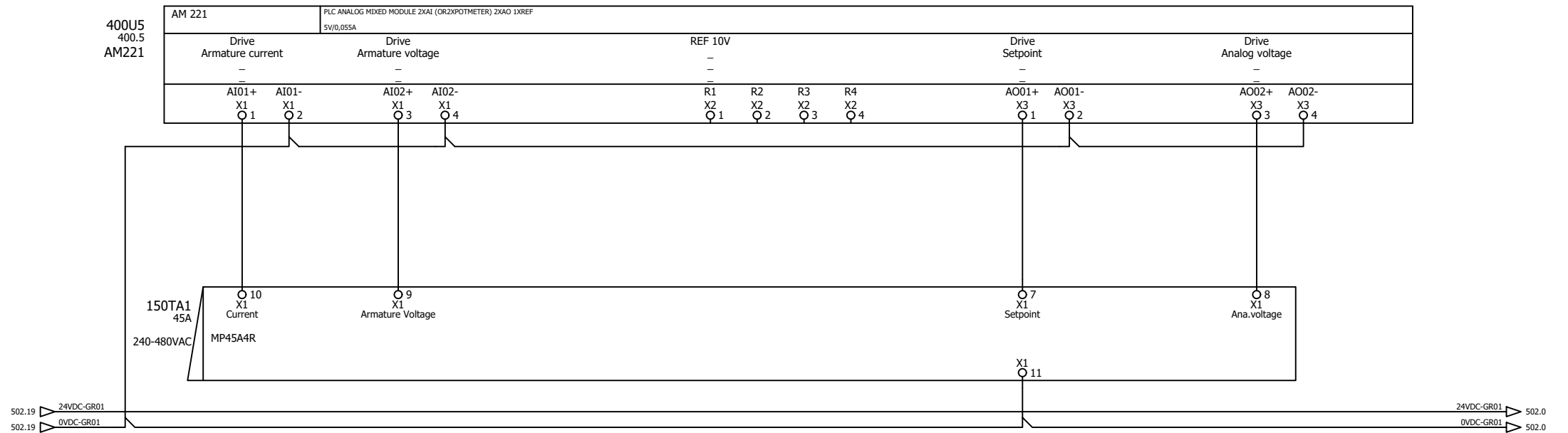
Magnet
On











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Prev. sheet: 503				Next Sheet: 900																	
Designer: MV Design date: 13-11-2017 Rev. nr.: D Status: Released				Project name : - Project number : - Customer: - Customer number: -								Product: DEMAG CONTROL BOX 45 AMP. Item number: ESBDE18002 Doc. number: ESBDE18002_Page-800.dwg				Drawing descr.: Spare connections				Sheet: 800 Inst.: Loc.:	

Bill of Material

#	Item number	Manufacturer	Product Code	Custom code	Description
2	E0084666	ARCOL	HS300 47R J	HS300 47R J	FIXED, 47R 300W
1	E0024728	ARCOL	HS300 1K J	HS300 1K J	FIXED, 1K 300W
1	E0085618	CONTROL TECHNIQUES	MP45A4R	MP45A4R	DC DRIVE, 75A, 3P+PE
1	E0075493	EPCOS	B43502-S9477-M4	B43502-S9477-M4	400v / 470UF
3	EIHF070301	FERRAZ	E213996	NH000GG50V63	GG DOUBLE INDICATOR 63A
1	E0085617	GOUDSMIT		STICKER LF DEMAG.KAST 45A	SEE E-DWG PAGE 990 FOR DETAILS
1	E0084664	KEMET	C274AC34800AA0J	C274AC34800AA0J	470v / 8UF
2	E0024800	OMRON	PYF14A-E	PYF14A-E	SOCKET FOR MY4(S)
2	EIDF632003	OMRON	MY4IN 24VDC	MY4IN 24VDC	4XNO/NC, 4PDT
1	E0085115	PHOENIX	2770024	D-UKK 3-5	END COVER FOR UKK 3-5 TERMINALS
2	EIOM030001	PHOENIX	3003020	D-UK 4-10	END COVER FOR UK 4-10 TERMINALS
2	EIOM050002	PHOENIX	3006027	D-UK 16	END COVER FOR UK 16 TERMINALS
7	EIOM100002	PHOENIX	3022218	CLIPFIX 35	END CLAMB FOR 35MM DIN RAIL, CLIPFIX 35
8	EIOJ010001	PHOENIX	3004362	UK5N	1 LEVEL - SCREW 0.2 - 4mm²
6	EIOJ010003	PHOENIX	2774017	UKK5	2 LEVELS - SCREW 0.2 - 4mm²
2	EIOJ350001	PHOENIX	0443023	USLKG16N	1 LEVEL - SCREW, GROUND, 2.5 - 25mm²
6	EIOJ050002	PHOENIX	3006043	UK16N	1 LEVEL - SCREW 2.5 - 25mm²
1	EI2G000016	RITTAL	SK3238.200	SK3238.200	OUTLET FILTER STANDARD 148.5 X 148.5 MM
1	E0024835	RITTAL	SK3238.124	SK3238.124	TOPTHERM FAN-AND-FILTER UNIT, 55 M³/H,148.5 X 148.5MM
1	E0076546	RS	880-2558	880-2558	SINGLE PHASE IP21 DIN RAIL TS35 400VAC PRIMARY, /24VAC SECONDARY
1	EIFC050005	SIEMENS	7055297	3SU1001-6AA40-0AA0	22MM PLASTIC ROUND INDICATOR: SMOOTH LENS, GREEN
1	EIFD403001	SIEMENS	7056701	3SU1401-1BB20-1AA0	ACTUATOR-/INDICATOR COMPONENT WITH INTEGRATED LED 24V AC/DC LAMP HOLDER SCREW TERMINAL RED
2	EIFD403002	SIEMENS	7056705	3SU1401-1BB40-1AA0	ACTUATOR-/INDICATOR COMPONENT WITH INTEGRATED LED 24V AC/DC LAMP HOLDER SCREW TERMINAL GREEN
1	EICH000015	SIEMENS	7055232	3SU1001-0AB20-0AA0	22MM PLASTIC ROUND ACTUATOR: ILLUMINATED PUSHBUTTON WITH FLAT BUTTON,RED
1	EICH000016	SIEMENS	7055234	3SU1001-0AB40-0AA0	22MM PLASTIC ROUND ACTUATOR: ILLUMINATED PUSHBUTTON WITH FLAT BUTTON,GREEN
1	EICG032200	SIEMENS	7056639	3SU1400-1AA10-1BA0	CONTACT BLOCK WITH 1 CONTACT ELEMENT, SCREW TERMINAL, 1NO
4	EICH000022	SIEMENS	7056854	3SU1500-0AA10-0AA0	22MM PUSHBUTTON HOLDER FOR 3 MODULES
1	EICH000021	SIEMENS	7057431	3SU1900-0BC31-0NB0	ROUND, 22MM: BACKING PLATE FOR EMERGEN.-STOP 75/23MM WITH INSCRIPTION: NOT-HALT 4 LANGUAGES:DE,EN,IT
1	EICH000017	SIEMENS	7055066	3SU1000-1GB20-0AA0	EMERGEN.-STOP MUSHR.PUSHB. 32MM LATCH.W. ROT.-TO-UNLATCH MECH. RED
3	EICG032100	SIEMENS	7056640	3SU1400-1AA10-1CA0	CONTACT BLOCK WITH 1 CONTACT ELEMENT, SCREW TERMINAL, 1NC
1	EIDB082002	SIEMENS	3RT2037-1KB40	3RT2037-1KB40	AC-3 30 KW/400 V, 24V DC, 3-POLE, SIZE S3, SCREW TERMINAL
1	E0025011	SIEMENS	3RV2311-1JC10	3RV2311-1JC10	SZ S00, FOR STARTER COMBINATION, RATED CURRENT 10A
3	EIHE091001	SIEMENS	LV10.1	3NH3030	SINGLE-POLE,160A,SIZE 00 PAD-TYPE TERMINAL, 95 SQMM, LV HRC 690V(1000V)

Bill of Material

#	Item number	Manufacturer	Product Code	Custom code	Description
1	E0025012	SIEMENS	3RV2901-1E	3RV2901-1E	AUXILIARY SWITCH 1XNO 1XNC FOR MOTOR PROTECTION CIRCUIT-BREAKER
1	E0062023	SIEMENS	6EP1334-3BA10	6EP1334-3BA10	SITOP PSU200M 10 A STABALIZED POWER SUPPLY INPUT: 120/230-500 V AC OUTPUT: 24 V DC/10 A
1	E0025015	SIEMENS	5SY6206-7	5SY6206-7	2-POLE, C, 400V 6KA,6A
1	E0025016	SIEMENS	5SY6110-7	5SY6110-7	1-POLE, C, 230/400V 6KA,10A
1	EICB073600	SIEMENS	7018484	3LD2504-0TK51	MAINSWITCH, 3-POLE, Iu:63 A, AC-23 A AT 400 V: 22 kW, FRONT MOUNTED, BLACK
1	E0061995	SIGMATEK	16-911-030	RJ45 TO MINI I/O 3MTR	RJ45 TO MINI 3MTR
1	E0024480	SIGMATEK	01-230-731	ETT731	7" WVGA TFT COLOR DISPLAY
1	E0027373	SIGMATEK	20-008-161	DM 161	DIGITAL MIXED MODULE 8XDI 8XDO (+24 V/0.5 A)
1	E0027409	SIGMATEK	20-004-102	CP 102	CPU 256MB NAND
1	E0027408	SIGMATEK	20-017-221	AM 221	ANALOG MIXED MODULE 2XAI (OR2XPOTMETER) 2XAO 1XREF
1	EIKCB25003	VISHAY	GBPC3512A	GBPC3512A	BRIDGE RECTIFIERS 1200 VOLT 35 AMP
1	E0078679	_UNKNOWN	X	SEE PAGE 990 FOR DETAILS	SEE E-DWG PAGE 990 FOR DETAILS

Components list

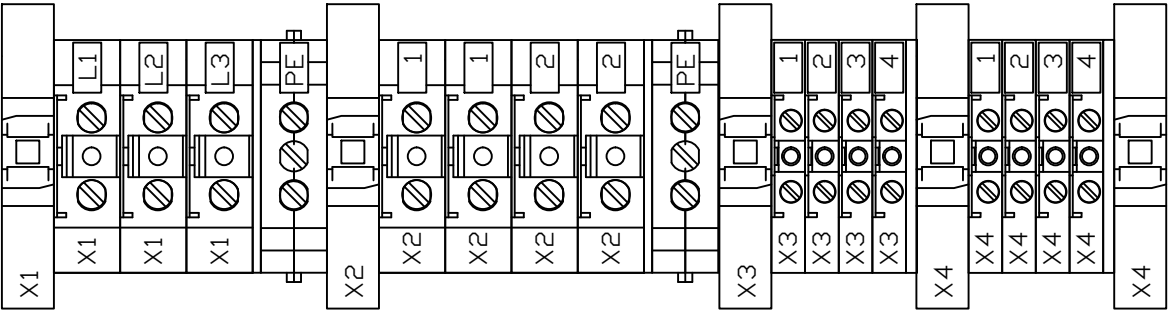
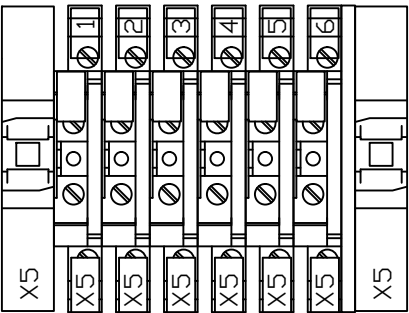
Component code	Item number	Manufacturer	Product Code	Custom code	Description
100QB2	EICB073600	SIEMENS	7018484	3LD2504-0TK51	SWITCH 3LD2504-0TK51 SIEMENS
110GB2	E0062023	SIEMENS	6EP1334-3BA10	6EP1334-3BA10	POWER SUPPLY 6EP1334-3BA10 SIEMENS
110QA2	E0025015	SIEMENS	5SY6206-7	5SY6206-7	CIRCUIT BR. 5SY6206-7 SIEMENS
110QA2.1	E0025016	SIEMENS	5SY6110-7	5SY6110-7	CIRCUIT BR. 5SY6110-7 SIEMENS
120MA2	EI2G000016	RITTAL	SK3238.200	SK3238.200	FAN SK3238.200 RITTAL
120MA2.1	E0024835	RITTAL	SK3238.124	SK3238.124	FAN SK3238.124 RITTAL
150CA5	E0084664	KEMET	C274AC34800AA0J	C274AC34800AA0J	CAPACITOR C274AC34800AA0J KEMET
150QA6	E0025011	SIEMENS	3RV2311-1JC10	3RV2311-1JC10	CIRCUIT BR. MOTOR 3RV2311-1JC10 SIEMENS
150QA6.1	E0025012	SIEMENS	3RV2901-1E	3RV2901-1E	CIRCUIT BR. MOTOR AUX. 3RV2901-1E SIEMENS
150QB2	EIHE091001	SIEMENS	LV10.1	3NH3030	FUSE HOLDER 3NH3030 SIEMENS
150QB2.1	EIHF070301	FERRAZ	E213996	NH000GG50V63	FUSE NH000GG50V63 FERRAZ
150QB2.2	EIHF070301	FERRAZ	E213996	NH000GG50V63	FUSE NH000GG50V63 FERRAZ
150QB2.3	EIHF070301	FERRAZ	E213996	NH000GG50V63	FUSE NH000GG50V63 FERRAZ
150QB2.4	EIHE091001	SIEMENS	LV10.1	3NH3030	FUSE HOLDER 3NH3030 SIEMENS
150QB3	EIHE091001	SIEMENS	LV10.1	3NH3030	FUSE HOLDER 3NH3030 SIEMENS
150RA4	E0024728	ARCOL	HS300 1K J	HS300 1K J	RESISTOR HS300 1K J ARCOL
150RA4.1	E0084666	ARCOL	HS300 47R J	HS300 47R J	RESISTOR HS300 47R J ARCOL
150RA4.2	E0084666	ARCOL	HS300 47R J	HS300 47R J	RESISTOR HS300 47R J ARCOL
150TA1	E0085618	CONTROL TECHNIQUES	MP45A4R	MP45A4R	DRIVE MP45A4R CONTROL TECHNIQUES
200CA3	E0075493	EPCOS	B43502-S9477-M4	B43502-S9477-M4	CAPACITOR B43502-S9477-M4 EPCOS
200KF3	E0024800	OMRON	PYF14A-E	PYF14A-E	CONTROL RELAY AUX. PYF14A-E OMRON
200KF3.1	EIDF632003	OMRON	MY4IN 24VDC	MY4IN 24VDC	CONTROL RELAY MY4IN 24VDC OMRON
200TA3	E0076546	RS	880-2558	880-2558	TRANSFORMER 880-2558 RS
200TA3.1	EIKCB25003	VISHAY	GBPC3512A	GBPC3512A	CONVERTER GBPC3512A VISHAY
220QA3	EIDB082002	SIEMENS	3RT2037-1KB40	3RT2037-1KB40	CONTACTOR 3RT2037-1KB40 SIEMENS
220SF3	EICG032100	SIEMENS	7056640	3SU1400-1AA10-1CA0	PUSHBUTTON 3SU1400-1AA10-1CA0 SIEMENS
220SF3.1	EICG032100	SIEMENS	7056640	3SU1400-1AA10-1CA0	PUSHBUTTON 3SU1400-1AA10-1CA0 SIEMENS
220SF3.2	EICH000017	SIEMENS	7055066	3SU1000-1GB20-0AA0	PUSHBUTTON 3SU1000-1GB20-0AA0 SIEMENS
220SF3.3	EICH000021	SIEMENS	7057431	3SU1900-0BC31-0NB0	TEXT PLATE 3SU1900-0BC31-0NB0 SIEMENS
220SF3.4	EICH000022	SIEMENS	7056854	3SU1500-0AA10-0AA0	HOLDER 3SU1500-0AA10-0AA0 SIEMENS
400U2	E0027409	SIGMATEK	20-004-102	CP 102	PLC CP 102 SIGMATEK
400U3	E0027373	SIGMATEK	20-008-161	DM 161	PLC DM 161 SIGMATEK
400U5	E0027408	SIGMATEK	20-017-221	AM 221	PLC AM 221 SIGMATEK

Components list

Component code	Item number	Manufacturer	Product Code	Custom code	Description
500TA2	E0024480	SIGMATEK	01-230-731	ETT731	DISPLAY ETT731 SIGMATEK
500WD5	E0061995	SIGMATEK	16-911-030	RJ45 TO MINI I/O 3MTR	CABLE RJ45 TO MINI I/O 3MTR SIGMATEK
501SF3	EICG032200	SIEMENS	7056639	3SU1400-1AA10-1BA0	PUSHBUTTON 3SU1400-1AA10-1BA0 SIEMENS
501SF3.1	EICH000016	SIEMENS	7055234	3SU1001-0AB40-0AA0	PUSHBUTTON 3SU1001-0AB40-0AA0 SIEMENS
501SF3.2	EICH000022	SIEMENS	7056854	3SU1500-0AA10-0AA0	HOLDER 3SU1500-0AA10-0AA0 SIEMENS
501SF5	EICG032100	SIEMENS	7056640	3SU1400-1AA10-1CA0	PUSHBUTTON 3SU1400-1AA10-1CA0 SIEMENS
501SF5.1	EICH000015	SIEMENS	7055232	3SU1001-0AB20-0AA0	PUSHBUTTON 3SU1001-0AB20-0AA0 SIEMENS
501SF5.2	EICH000022	SIEMENS	7056854	3SU1500-0AA10-0AA0	HOLDER 3SU1500-0AA10-0AA0 SIEMENS
502EA11	EIFD403001	SIEMENS	7056701	3SU1401-1BB20-1AA0	INDICATOR 3SU1401-1BB20-1AA0 SIEMENS
502EA15	EIFD403002	SIEMENS	7056705	3SU1401-1BB40-1AA0	INDICATOR 3SU1401-1BB40-1AA0 SIEMENS
502EA9	EIFD403002	SIEMENS	7056705	3SU1401-1BB40-1AA0	INDICATOR 3SU1401-1BB40-1AA0 SIEMENS
502EA9.1	EIFC050005	SIEMENS	7055297	3SU1001-6AA40-0AA0	INDICATOR 3SU1001-6AA40-0AA0 SIEMENS
502EA9.2	EICH000022	SIEMENS	7056854	3SU1500-0AA10-0AA0	HOLDER 3SU1500-0AA10-0AA0 SIEMENS
502KF13	E0024800	OMRON	PYF14A-E	PYF14A-E	CONTROL RELAY AUX. PYF14A-E OMRON
502KF13.1	EIDF632003	OMRON	MY4IN 24VDC	MY4IN 24VDC	CONTROL RELAY MY4IN 24VDC OMRON
990TEXTPLATE10	E0085617	GOUDSMIT		STICKER LF DEMAG.KAST 45A	TEXT PLATE STICKER LF DEMAG.KAST 45A
990TEXTPLATE2	E0078679	_UNKNOWN	X	SEE PAGE 990 FOR DETAILS	TEXT PLATE SEE PAGE 990 FOR DETAILS

Components list

Component code	Item number	Manufacturer	Product Code	Custom code	Description



- X1 ES1 CLIPFIX 35
- X2 ES2 CLIPFIX 35
- X3 ES3 CLIPFIX 35
- X4 ES4 CLIPFIX 35
- X4 ES5 CLIPFIX 35
- X1 EP1 D-UK 16
- X2 EP2 D-UK 16
- X3 EP3 D-UK 4-10
- X4 EP4 D-UK 4-10
- X5 ES6 CLIPFIX 35
- X5 ES7 CLIPFIX 35
- X5 EP5 D-UKK 3-5

990TEXTPLATE2

ON	OFF
EMERGENCY STOP	DEMAGCYCLE COMPLETED
ALARM	DEMAGCYCLE RUNNING
COIL-1	COIL-2
POWER INLET	MAINSWITCH

- Text plate dimension: 50x15mm
- Text plate color: White
- Text color: Black

990TEXTPLATE10

GOUDSMIT		CE
MAGNETIC SYSTEMS		
WWW.GOUDSMITMAGNETS.COM		
Serial nr.: ORxxxxxx - xxx - 001		
Item nr.: ESBDE18002	Output voltage: 500 Vdc	
Input frequency: 50/60 Hz	Output current: 45 A	
Input voltage: 3x400 Vac	Year:	