

PRODUCT TYPE

THREE-PHASE LINE CONDITIONER  
TYPE: DISCOVERY 400±15

400kVA 47-65Hz  
Input: 400V±15% - Output: 400V±0.5%  
Soft Start

CODE




SD400KBS00D030W

DRAWING no:

D030001

REVISION STATUS

REV.	PAGE 0	PAGE 1	PAGE 2	PAGE 3	PAGE 4	PAGE 5	PAGE 6	PAGE 7	PAGE 8	PAGE 9	PAGE 10
0	25.08.11	25.08.11	25.08.11	25.08.11	25.08.11	25.08.11	25.08.11	25.08.11	25.08.11	25.08.11	25.08.11
1											
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Tolerance class for dimensions without specific indication: ISO 2768 c	REV.	DESCRIPTION	DATE	DRAWN	APPROVED	 	DRAWING D030001	
	0	ISSUE	25.08.11	GP	REM			FILE D030001Z
SCALE	 Dimensions in mm					COVER PAGE	PAGE 0	
							NEXT 1	
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1 2 3 4 5 6 7 8

A

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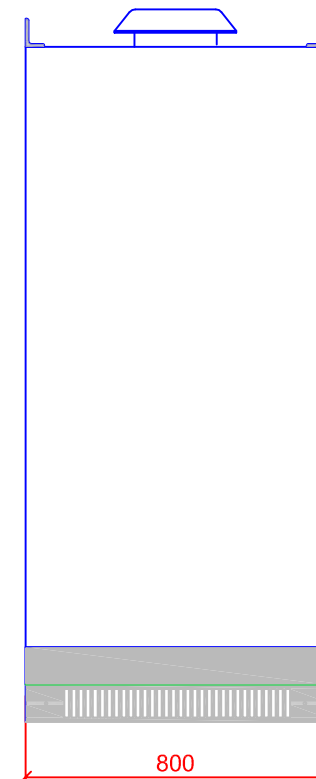
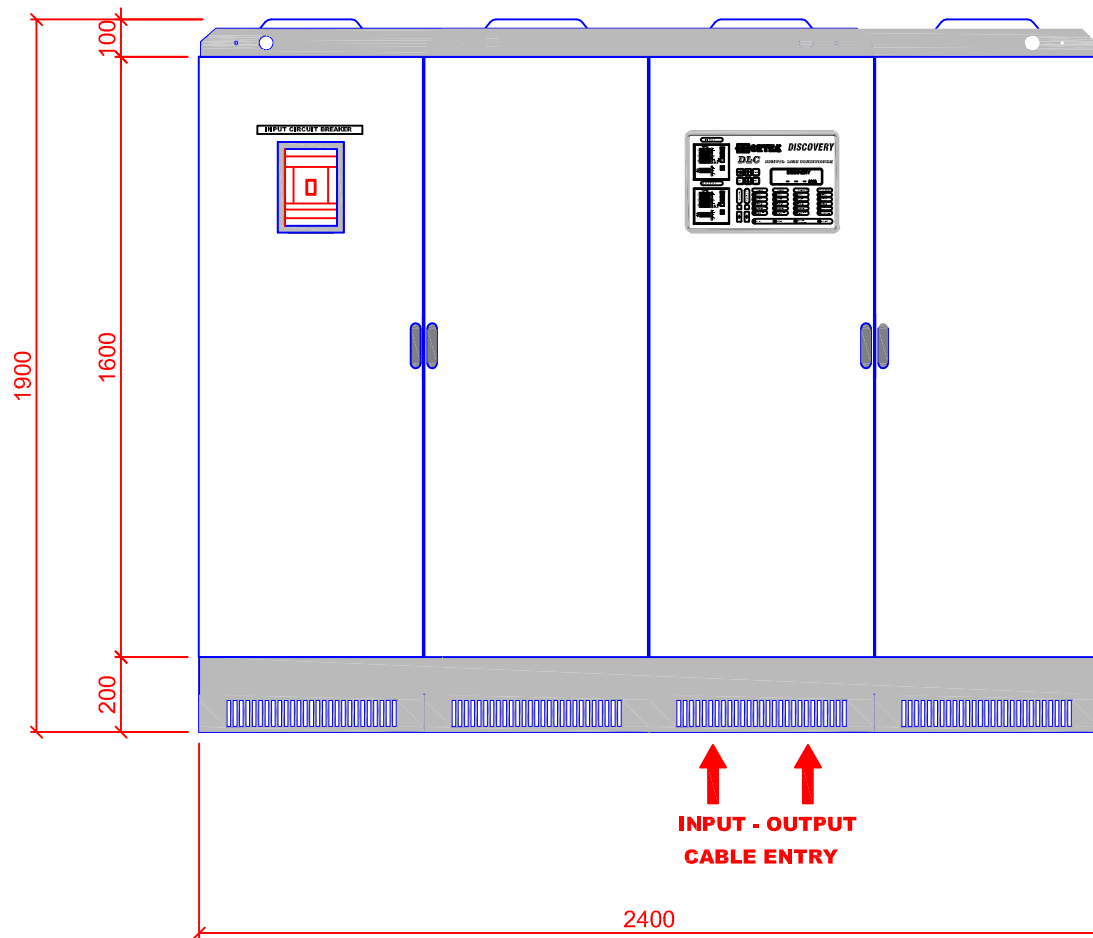
A

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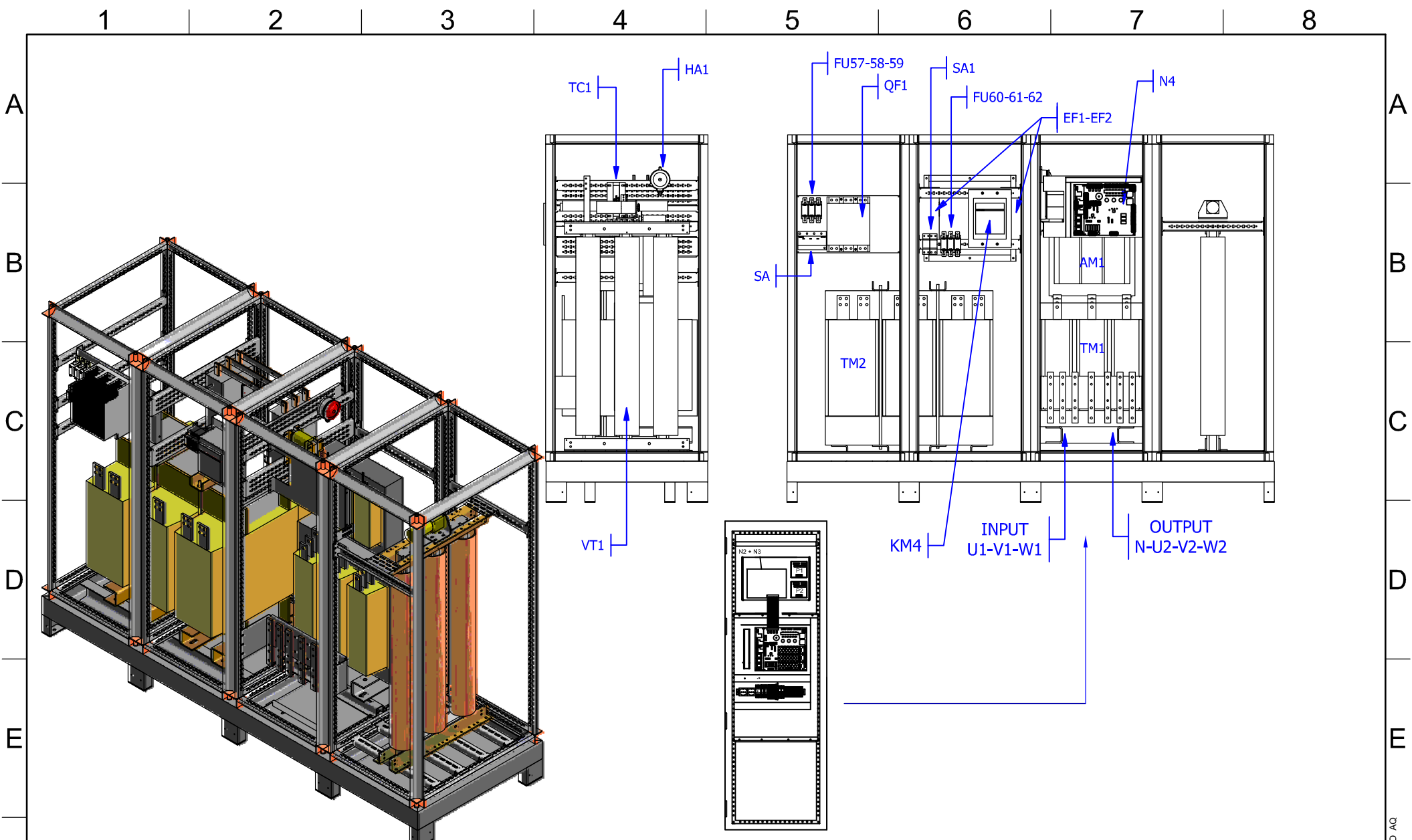
Approx. weight: 2600kg  
Protection degree: IP21

F

Tolerance class for dimenstons without specific Indcation: ISO 2768 c	REV	DESCRIPTION	DATE	DRAWN	APPROVED	 	DESCRIPTION	DRAWING
	0	ISSUED	25.08.11	GP	REM		400kVA THREE-PHASE LINE CONDITIONER TYPE: DISCOVERY 400-15 + Soft Start	D030001
SCALE	 Dimensions in mm						CODE	FILE
							SD400KBS00D030W	D030001A
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FORM 04-03  
APPROVED AQ



Tolerance class for dimensions  
without specific indication: ISO 2768 c

SCALE

Dimensions in mm

REV.	DESCRIPTION	DATE	DRAWN	APPROVED
00	ISSUED	25-08-11	GP	REM



DESCRIPTION  
400kVA THREE-PHASE LINE CONDITIONER  
TYPE: DISCOVERY 400-15 + Soft Start  
CODE  
SD400KBS00D030W  
TITLE Internal Layout

DRAWING	D030001
FILE	D030001B
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FORM 04-03 APPROVED AQ

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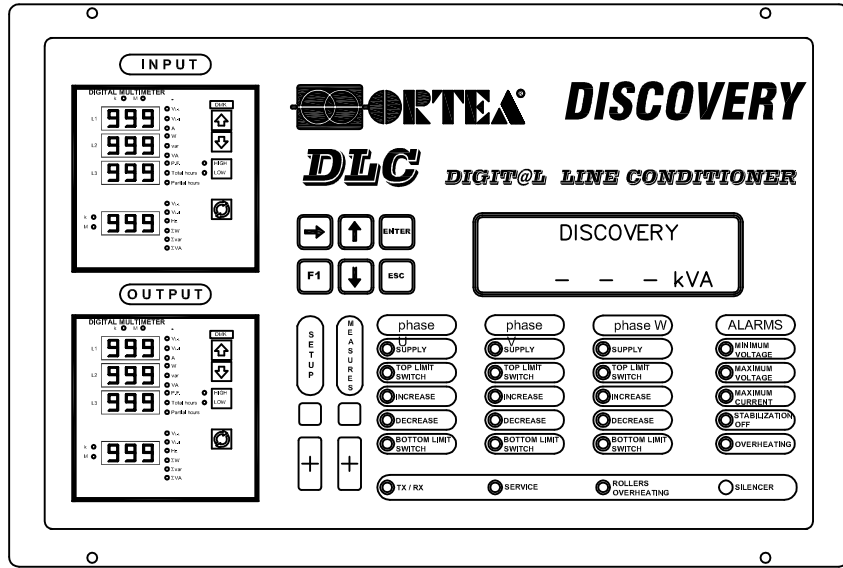
A

B

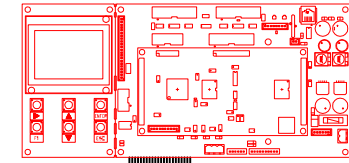
C

D

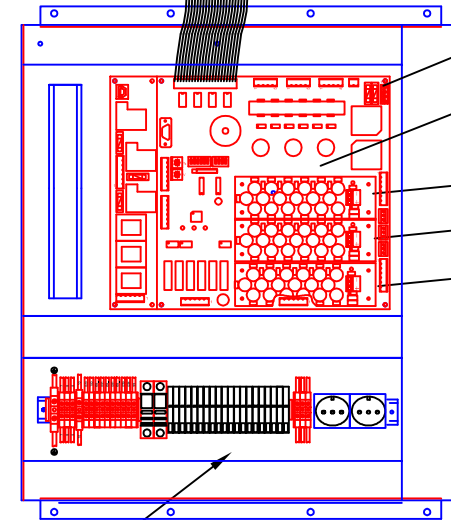
E



EXTERNAL CONTROL PANEL



N2+N3



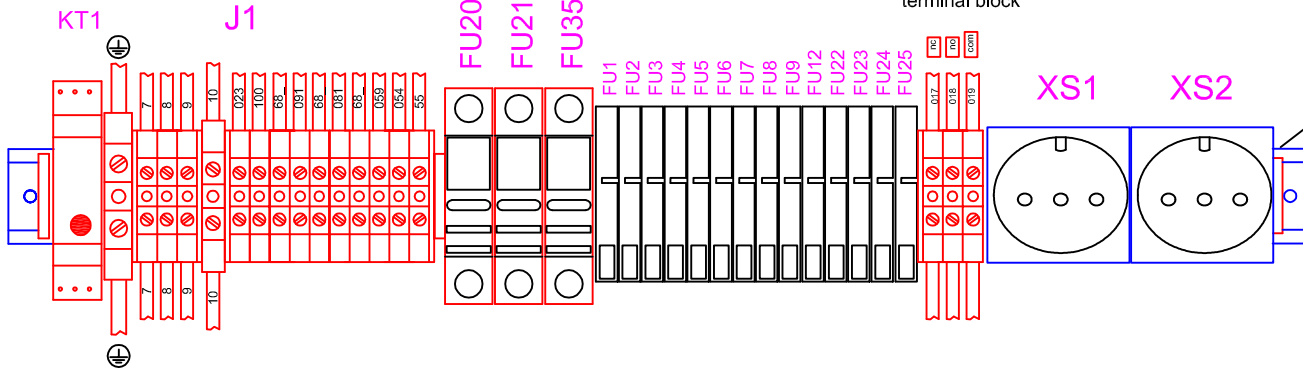
FU50-FU51

N1

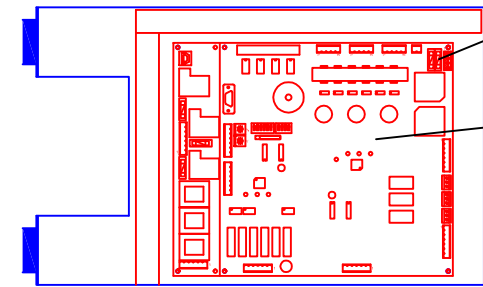
C7

C7

C7



Remote alarm terminal block



FU52-FU53

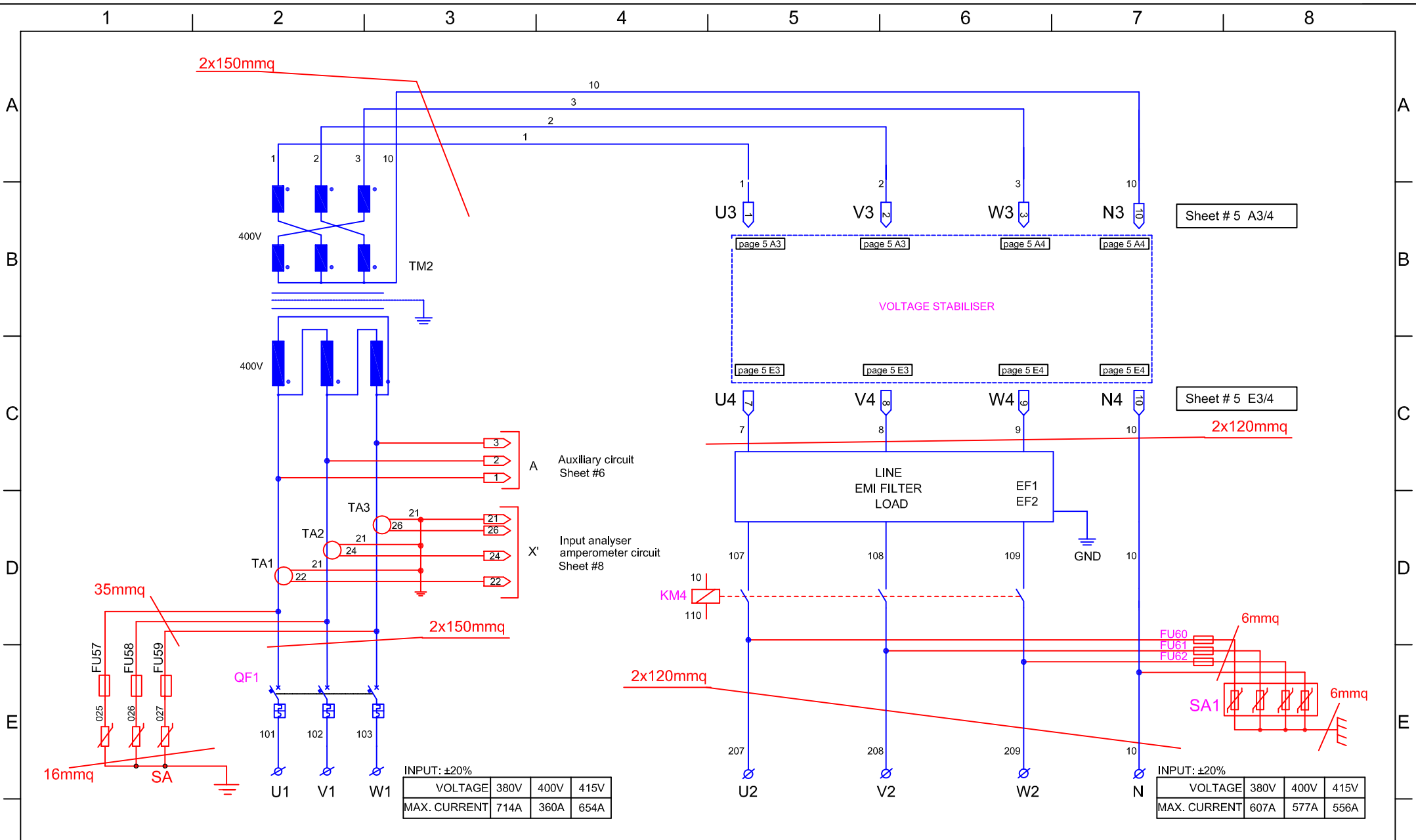
N4

Tolerance class for dimensions without specific indication: ISO 2768 c	REV	DESCRIPTION	DATE	DRAWN	APPROVED	 	DESCRIPTION	DRAWING
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FORM 04-03  
APPROVED AQ



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Sheet # 5 E3/4

INPUT: ±20%

VOLTAGE	380V	400V	415V
MAX. CURRENT	714A	360A	654A

INPUT: ±20%

VOLTAGE	380V	400V	415V
MAX. CURRENT	607A	577A	556A

Tolerance class for dimensions without specific indication: ISO 2768 c

SCALE

Dimensions in mm

REV	DESCRIPTION	DATE	DRAWN	APPROVED
0	ISSUED	25.08.11	GP	REM

DATE: 25.08.11  
 DRAWN: GP  
 APPROVED: REM



DESCRIPTION  
 400kVA THREE-PHASE LINE CONDITIONER  
 TYPE: DISCOVERY 400-15 + Soft Start

CODE  
 SD400KBS00D030W

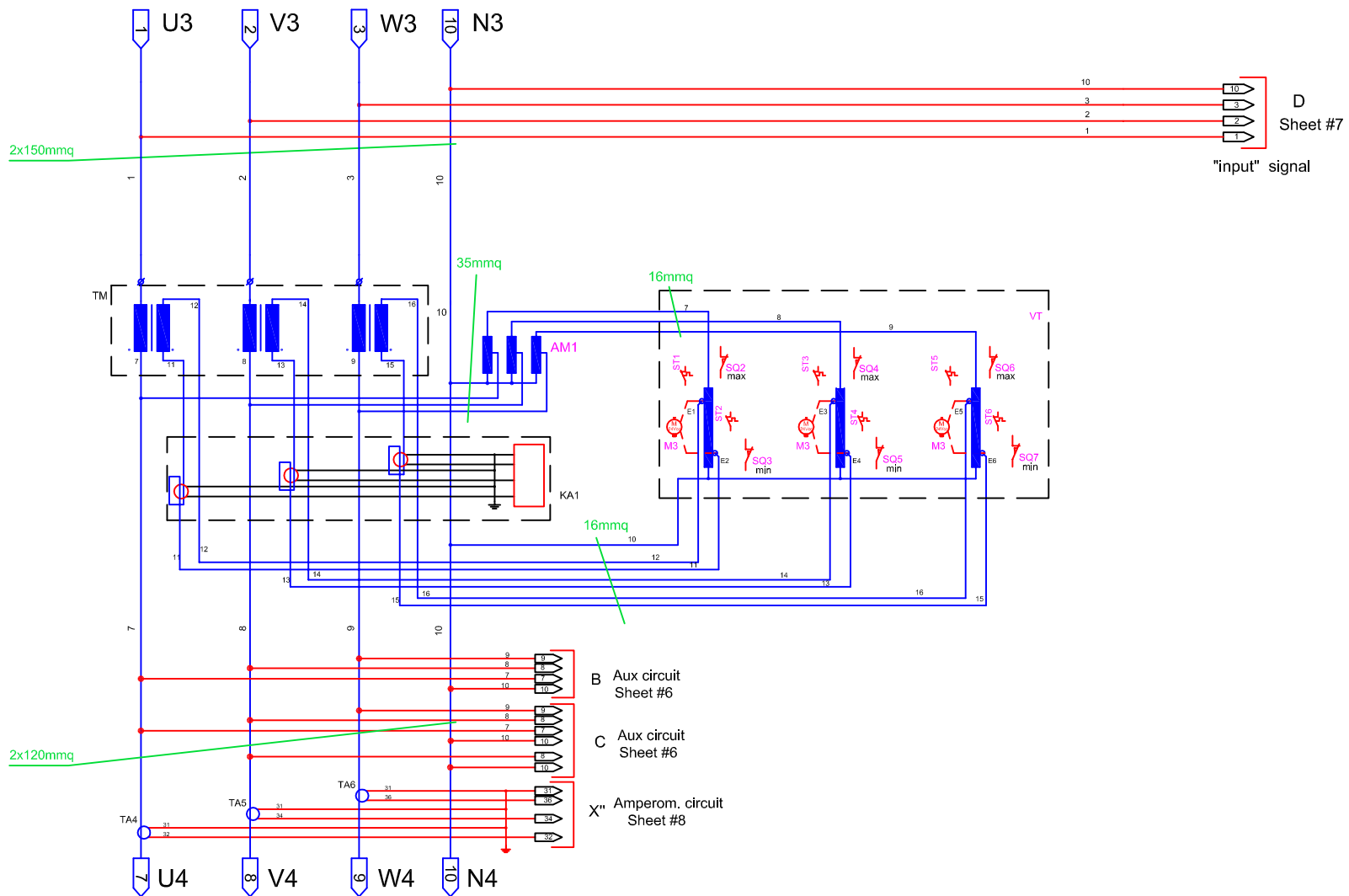
DRAWING	D030001
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TITLE: AUXILIARY LAYOUT

FORM 04-03  
 APPROVED AQ

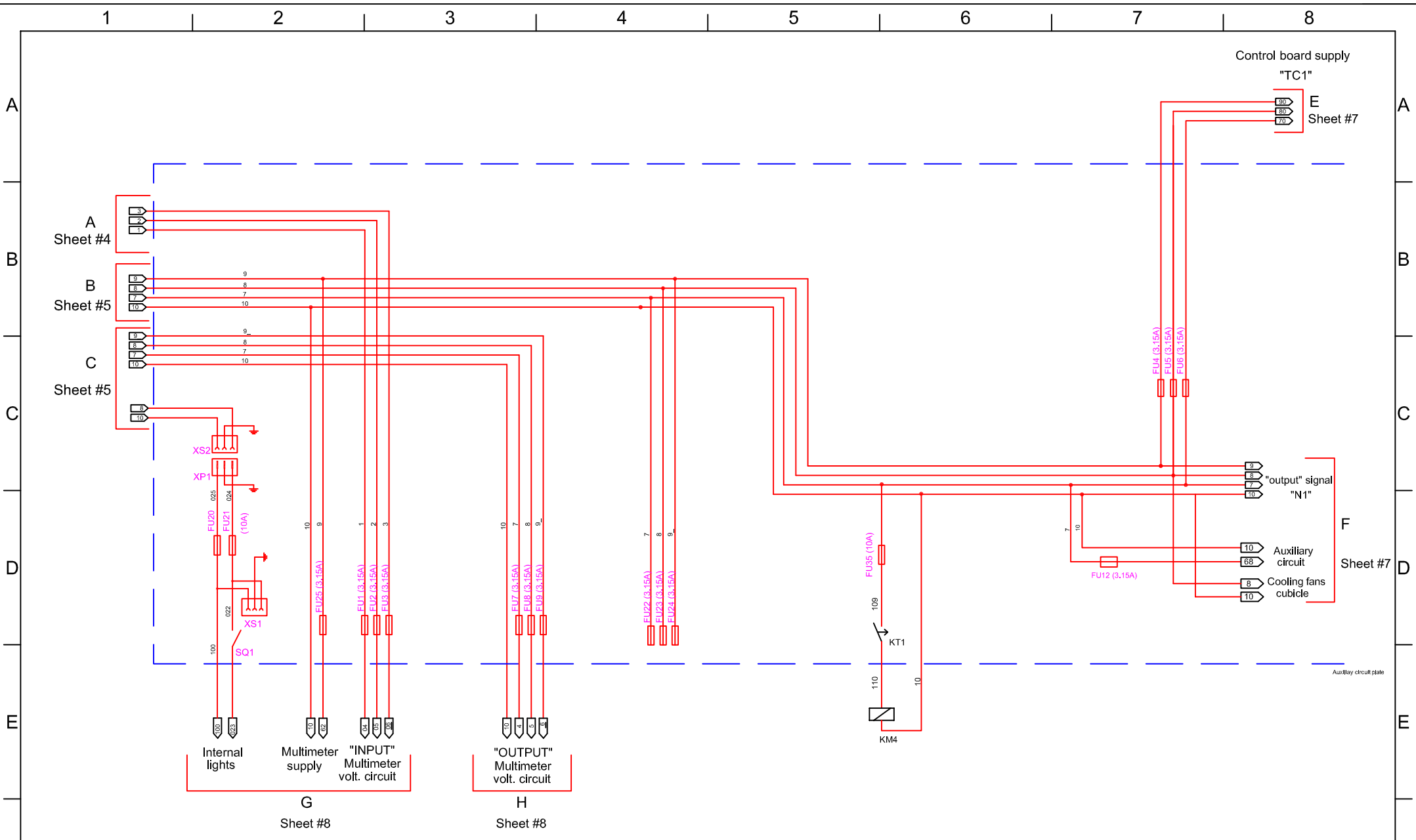
Sheet # 4 A3/4



Sheet # 4 A5/7

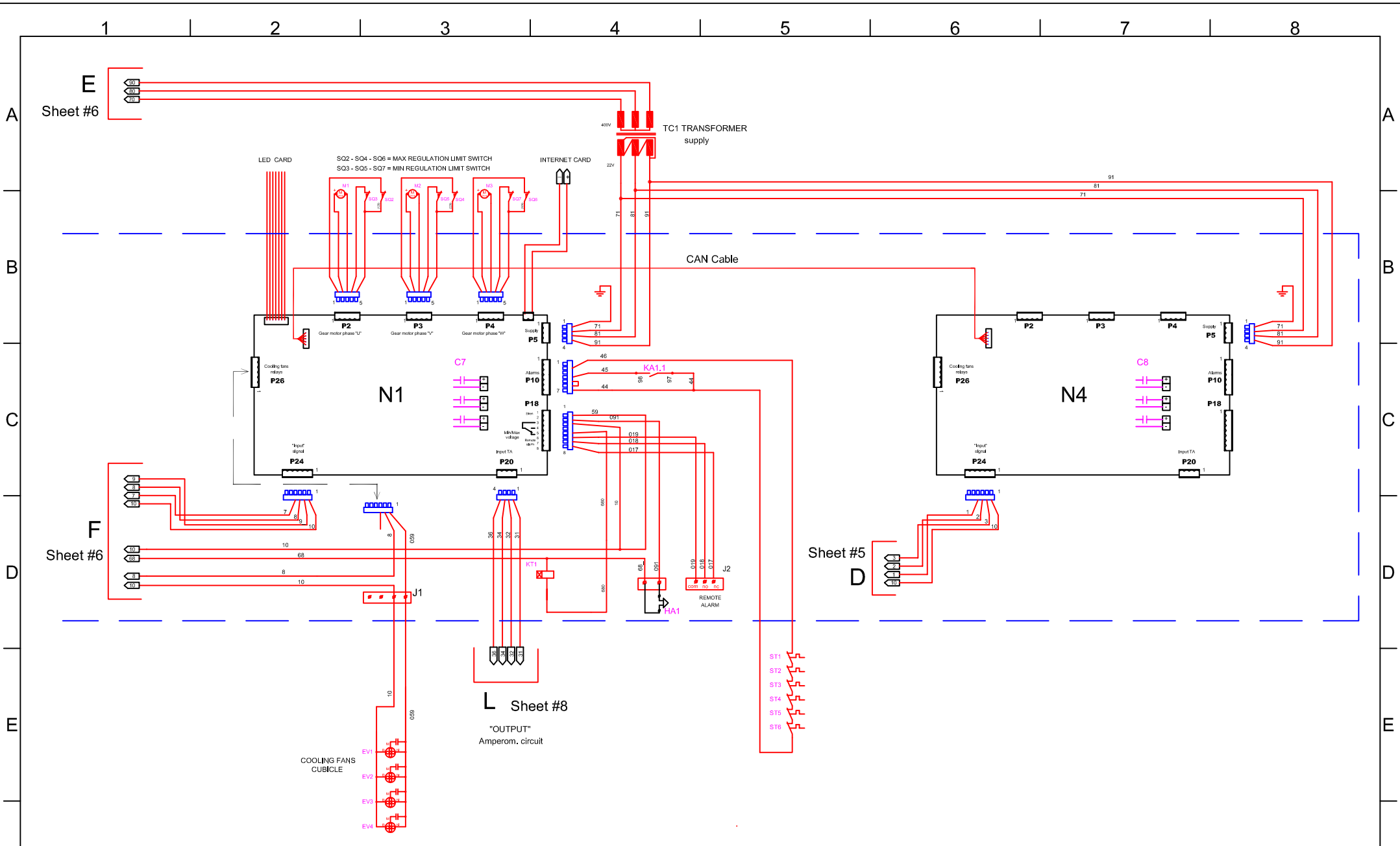
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	0	ISSUED	25.08.11	GP	REM	400kVA THREE-PHASE LINE CONDITIONER TYPE: DISCOVERY 400-15 + Soft Start		D030001	
SCALE	 Dimensions in mm						CODE	FILE	
							SD400KBS00D030W	D030001E	
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								POWER CIRCUIT	D030

FORM 04-03  
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Tolerance class for dimensions without specific indication: ISO 2768 c	REV	DESCRIPTION	DATE	DRAWN	APPROVED	 	DESCRIPTION	DRAWING
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Tolerance class for dimensions without specific Indication: ISO 2768 c	REV.	DESCRIPTION	DATE	DRAWN	APPROVED	 	DESCRIPTION	DRAWING
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							SD400KBS00D030W	D030001G
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C

D

E

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Sheet #6

Sheet #9

Sheet #6

Sheet #9

Sheet #7

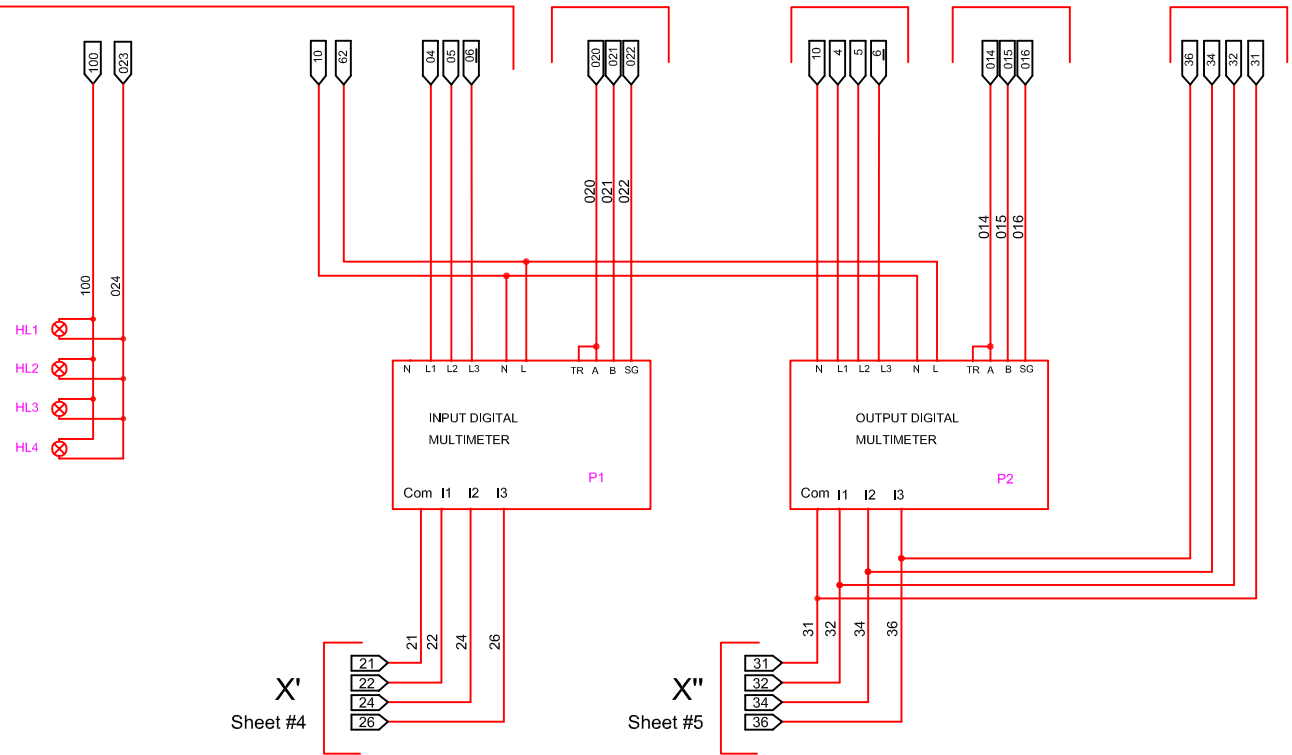
G

M

H

N

L



X'  
Sheet #4

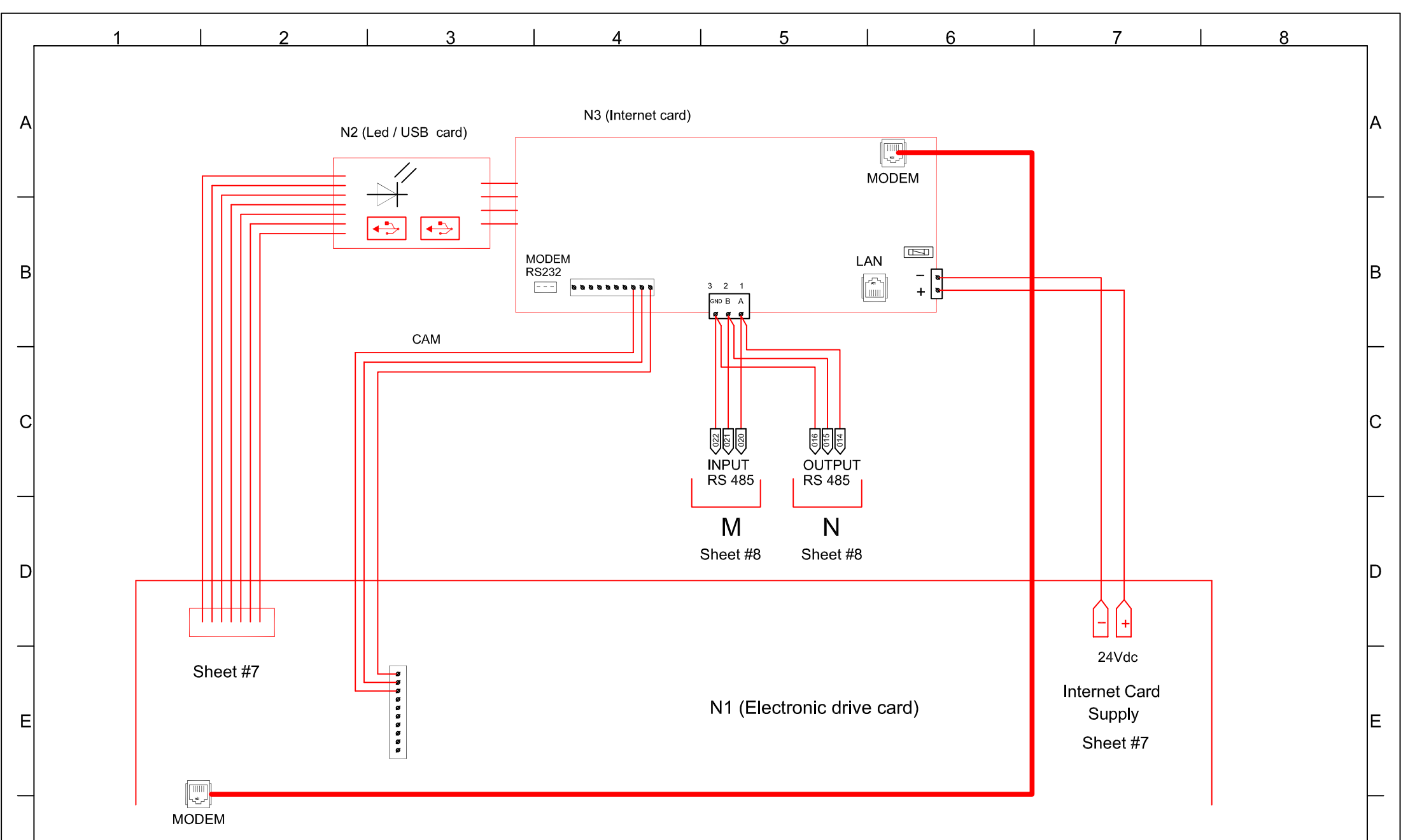
X''  
Sheet #5



Tolerance class for dimensions without specific indication: ISO 2768 c	REV	DESCRIPTION	DATE	DRAWN	APPROVED	 	DESCRIPTION	DRAWING
	0	ISSUED	25.08.11	GP	REM		400kVA THREE-PHASE LINE CONDITIONER TYPE: DISCOVERY 400-15 + Soft Start	D030001
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FORM 04-03  
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Tolerance class for dimensions without specific indication: ISO 2768 c	REV.	DESCRIPTION	DATE	DRAWN	APPROVED		DESCRIPTION	DRAWING
	0	ISSUED	25.08.11	GP	REM		400kVA THREE-PHASE LINE CONDITIONER TYPE: DISCOVERY 400-15 + Soft Start	D030001
SCALE	 Dimensions in mm					CODE	FILE	
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<b>Reference</b>	<b>Q.ty</b>	<b>Description</b>	<b>Code</b>	<b>Reference</b>	<b>Q.ty</b>	<b>Description</b>	<b>Code</b>										
<b>Power components</b>				<b>Auxiliary components</b>													
A E1 ... E30	24	Roller, support and resistance	8XGR001	TC1	1	300VA 400/23V 3-ph. aux. transformer	6TX300C001										
KA1	1	150/500A Overload relay	6BC034	XP1	1	10/16A 230V auxiliary plug	6QB003										
KM4	1	Soft start contactor	6BA531	XS1 - XS2	2	10/16A 230V auxiliary socket	6QA007										
QF1	1	800A 3P input circuit breaker	6AA03B08000004	KT1	1	Timing relay	6BC014										
SA	1	3+1-pole Class II-I Surge Arrester	6SKA002														
SA1	1	4-pole Class II Surge Arrester	6SKA006														
TA1 ... TA6	6	1000/5A current transformer	6TA10000A001														
B TM1	1	85kVA 3-ph. buck/boost transformer	DBG0850DAA58168														
TM2	1	470kVA 3-ph. isolating transformer	YXG4700DAB58177														
AM1	1	80kVA 3-ph. Auto-transformer	AAG0800DAA11667														
EF1	2	300A EMI-FILTER	6XA024														
VT1	1	93kVA 3-ph. voltage regulator	V3D0930DB11666														
<b>Auxiliary components</b>				<b>Fuses</b>													
C7	3	Supercapacitor group	6HA4041	FU1 ... FU9	9	3.15A 5x20 fuse + base	6FA00031A1+6FB01A002										
EV1 ... EV3	4	Cabinet cooling fan	HGXX020CO	FU12	1	3.15A 5x20 fuse + base	6FA00031A1+6FB01A002										
SQ1	1	Cabinets light switch	3TA515	FU22 ... FU25	4	3.15A 5x20 fuse + base	6FA00031A1+6FB01A002										
HA1	1	Siren	6XA031	FU10 - FU11	2	6.3A 5x20 fuse + base	6FA00063A1+6FB01A002										
D HL1 ... HL3	4	230V 15W internal light	6PC013	FU20 - FU21	2	10A 10x38 fuse + base	6FA00100B1+6FB01B009										
M1 - M2 - M3	3	24Vdc gearmotor	6GC1508	FU35	1	10A 10x38 fuse + base	6FA00100B1+6FB01B009										
N1	1	Control board	6HA1081	FU57 - FU58 - FU59	3	125A NH0 fuse	6FA01250D2										
N4	1	Control board	6HA1081	FU60 - FU61 - FU62	3	125A NH0 fuse	6FA01250D2										
N2 + N3	1	LED card + Ethernet connection card	6HA1103														
ST1 ... ST6	6	Regulator thermal probe	6KA010	FU50 - FU51	2	10A 5x20 fuse	6FA00100A1										
E P1	1	Input digital multimeter	6CX012	FU52 - FU53	2	10A 5x20 fuse	6FA00100A1										
P2	1	Output digital multimeter	6CX012														
SQ2-SQ4-SQ6	3	Increase mode limit microswitch	6BD001														
SQ3-SQ5-SQ7	3	Decrease mode limit microswitch	6BD001														
<table border="1"> <thead> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>DATE</th> <th>DRAWN</th> <th>APPROVED</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>ISSUED</td> <td>24.08.11</td> <td>GP</td> <td>REM</td> </tr> </tbody> </table>				REV	DESCRIPTION	DATE	DRAWN	APPROVED	0	ISSUED	24.08.11	GP	REM	 		DESCRIPTION 400kVA THREE-PHASE LINE CONDITIONER TYPE: DISCOVERY 400-15 + Soft Start DRAWING D030001L FILE D030001L CODE SD400KBS00D030W PAGE 10 NEXT -	
REV	DESCRIPTION	DATE	DRAWN	APPROVED													
0	ISSUED	24.08.11	GP	REM													
Tolerance class for dimensions without specific indication: ISO 2768 c SCALE  Dimensions in mm				TITLE LIST OF COMPONENTS PROJECT D030		APPROVED AQ											
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