

Diagrams and charts

Index	Remarks	Creator	Checker	Approver	Date
1	FAT-Revision	CS	SBG	WW	02.09.24

Customer SMO RI EL COC TPS DC

Project ProRail, Den Haag Noord

Plant RECTIFIER
SITRAS ® REC
DC 1500V

Plant Section RECTIFIER 1
COVER SHEET

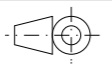
Job identification / SAP C.6837

Date of first issue 06.06.23

Customer document No.

Workshop No. 7000-2887-0

Mechanical documentation

M	A3	EN	NAME	DATE
				
Created by			Thita	06.06.23
Checked by			Seeberger	06.06.23
Approved by			Wenzel	06.06.23

Document designation =GLR1&EAA000 +GLR1 / A / AA1

Producer document No. A52811-E7640-U101-1

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=GLR1 +GLR1	A	AA1					A52811-E7640-U101-1		1	1	1	02.09.24	RECTIFIER 1 COVER SHEET REGISTER	SMO RI EL COC TPS
=GLR1 +GLR1	A	AB1					A52811-E7640-L102-1		1	3	1	02.09.24	RECTIFIER 1 LIST OF DOCUMENTS REGISTER	SMO RI EL COC TPS
=GLR1 +GLR1	A	AB2					A52811-E7640-L102-1		2	3	1	02.09.24	RECTIFIER 1 LIST OF DOCUMENTS REGISTER	SMO RI EL COC TPS
=GLR1 +GLR1	A	AB3					A52811-E7640-L102-1		3	3	1	02.09.24	RECTIFIER 1 LIST OF DOCUMENTS REGISTER	SMO RI EL COC TPS
=GLR1 +GLR1	B	BD1					A52811-E7640-U110-1		1	2	1	02.09.24	RECTIFIER 1 RATING PLATE MARKINGS RATED VALUES OVERVIEWS	SMO RI EL COC TPS
=GLR1 +GLR1	B	BD2					A52811-E7640-U110-1		2	2	1	02.09.24	RECTIFIER 1 DC - SETTINGS FOR AC - VOLTAGE MONITORING OVERVIEWS	SMO RI EL COC TPS
=GLR1 +GLR1	B	BE1					A52811-E7640-S111-1		1	1	1	02.09.24	RECTIFIER 1 OVERVIEW DIAGRAM OVERVIEWS	SMO RI EL COC TPS
=GLR1 +GLR1	S	DA1					A52811-E7640-S126-1		1	5	1	02.09.24	RECTIFIER 1 AC MAIN CIRCUIT CIRCUIT DIAGRAM	SMO RI EL COC TPS
=GLR1 +GLR1	S	DA2					A52811-E7640-S126-1		2	5	1	02.09.24	RECTIFIER 1 AC MAIN CIRCUIT CIRCUIT DIAGRAM	SMO RI EL COC TPS
=GLR1 +GLR1	S	DA3					A52811-E7640-S126-1		3	5	1	02.09.24	RECTIFIER 1 AC MAIN CIRCUIT CIRCUIT DIAGRAM	SMO RI EL COC TPS
=GLR1 +GLR1	S	DA4					A52811-E7640-S126-1		4	5	1	02.09.24	RECTIFIER 1 AC MAIN CIRCUIT CIRCUIT DIAGRAM	SMO RI EL COC TPS
=GLR1 +GLR1	S	DA5					A52811-E7640-S126-1		5	5	1	02.09.24	RECTIFIER 1 AC MAIN CIRCUIT CIRCUIT DIAGRAM	SMO RI EL COC TPS

1	FAT-Revision	CS	SBG	WW	02.09.24	Creat.	Thita	06.06.23	SMO RI EL COC TPS DC	 Siemens Mobility GmbH SMO RI EL COC TPS	RECTIFIER 1 LIST OF DOCUMENTS REGISTER			=GLR1	&EAB000		
						Check.	Seeberger	06.06.23	ProRail, Den Haag Noord					+GLR1	A / AB1		
						Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V								
Index	Remarks	Creat	Check	Appr	Date		Name	Date	Origin: /Replacement for: /Replaced by:			C.6837	 EN	7000-2887-0	SCL	--- A52811-E7640-L102-1	Page 1+ of 3

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=GLR1 +GLR1	S	GA1					A52811-E7640-S132-1			1	1	1	02.09.24	RECTIFIER 1 DC MAIN CIRCUIT CIRCUIT DIAGRAM	SMO RI EL COC TPS
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=GLR1 +GLR1	T	YT1					A52811-E7640-L193-1			1	3	1	02.09.24	RECTIFIER 1 PARTS LIST PARTS LIST	SMO RI EL COC TPS
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=GLR1 +GLR1	U	YU2					A52811-E7640-V194-1			2	4	1	02.09.24	RECTIFIER 1 TOP VIEW ARRANGEMENT DRAWING	SMO RI EL COC TPS

1	FAT-Revision	CS	SBG	WW	02.09.24	Creat.	Thita	06.06.23	SMO RI EL COC TPS DC	 Siemens Mobility GmbH SMO RI EL COC TPS	RECTIFIER 1 LIST OF DOCUMENTS REGISTER				=GLR1	&EAB000
					Check.	Seeberger	06.06.23	ProRail, Den Haag Noord				+GLR1	A / AB2			
					Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V								
Index	Remarks	Creat	Check	Appr	Date		Name	Date	Origin: /Replacement for: /Replaced by:				C.6837	 EN		
												7000-2887-0	SCL	---	A52811-E7640-L102-1	Page 2+ of 3

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=GLR1 +GLR1	U	YU3		A52811-E7640-V194-1	3	4	1	02.09.24	RECTIFIER 1 SIDE VIEW A-A ARRANGEMENT DRAWING	SMO RI EL COC TPS
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=GLR1 +GLR1	V	YV1		A52811-E7640-S195-1	1	2	1	02.09.24	RECTIFIER 1 TERMINALS/PLUGS -XD1 TERMINAL CONNECTION TABLE	SMO RI EL COC TPS
=GLR1 +GLR1	V	YV2		A52811-E7640-S195-1	2	2	1	02.09.24	RECTIFIER 1 TERMINALS/PLUGS -XPAS TERMINAL CONNECTION TABLE	SMO RI EL COC TPS

1	FAT-Revision	CS	SBG	WW	02.09.24	Creat.	Thita	06.06.23	SMO RI EL COC TPS DC	 Siemens Mobility GmbH SMO RI EL COC TPS	RECTIFIER 1 LIST OF DOCUMENTS REGISTER	 EN	=GLR1	&EAB000					
					Check.	Seeberger	06.06.23	ProRail, Den Haag Noord	+GLR1				A / AB3						
					Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V											
Index	Remarks	Creat	Check	Appr	Date		Name	Date	Origin: /Replacement for: /Replaced by:				C.6837	7000-2887-0	SCL	---	A52811-E7640-L102-1	Page 3-	of 3

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DC VOLTAGE		AC VOLTAGE		AC SINGLE PHASE TRANSFORMER VOLTAGE	
1600	1185	175			
1625	1204	178			
1650	1222	181			
1675	1241	183			
1700	1259	186			
1725	1278	189			
1750	1296	192			
1775	1315	194			
1800	1333	197			
1825	1352	200			
1850	1370	203			
1875	1389	205			
1900	1407	208			
1925	1426	211			
1950	1444	214			
1975	1463	216			
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2050	1519	224			
2075	1537	227			
2100	1556	230			

100

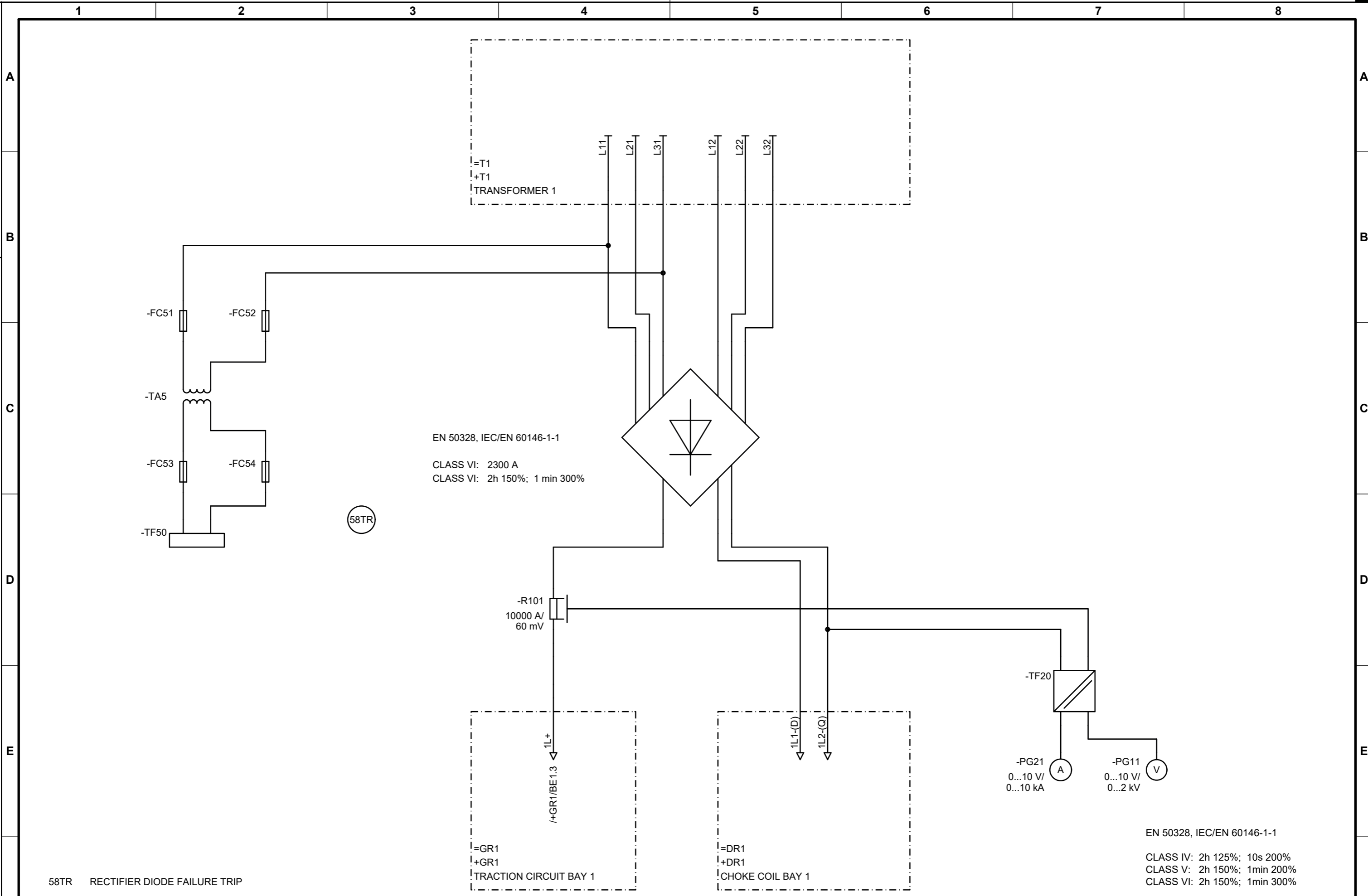
120

M 1:1.92

1	FAT-Revision	CS	SBG	WW	02.09.24	Creat.	Thita	06.06.23	SMO RI EL COC TPS DC	 Siemens Mobility GmbH SMO RI EL COC TPS	RECTIFIER 1 DC - SETTINGS FOR AC - VOLTAGE MONITORING OVERVIEWS			=GLR1	&EDA000	
						Check.	Seeberger	06.06.23	ProRail, Den Haag Noord					+GLR1	B / BD2	
						Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V					C.6837	EN	
Index	Remarks	Creat	Check	Appr	Date		Name	Date	Origin: /Replacement for: /Replaced by:			7000-2887-0	SCL	---	A52811-E7640-U110-1	Page 2- of 2

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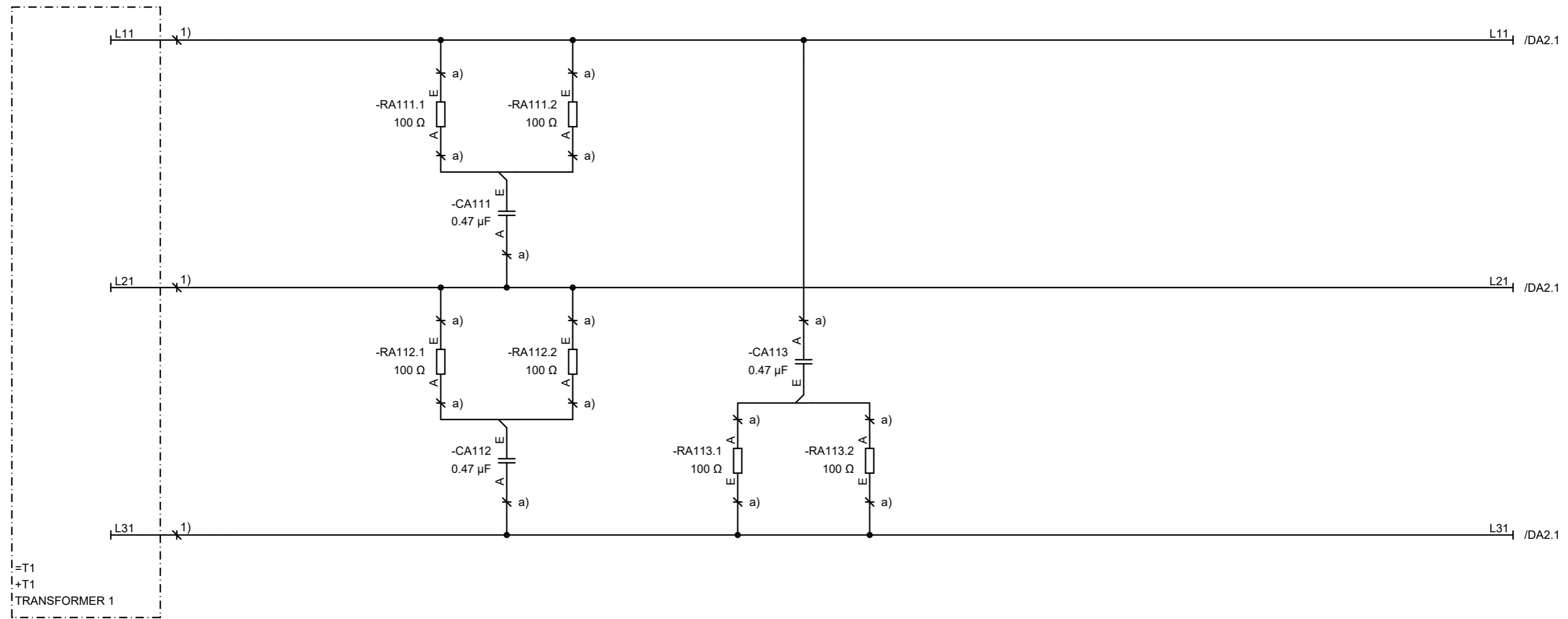


58TR RECTIFIER DIODE FAILURE TRIP

F	1	FAT-Revision	CS	SBG	WW	02.09.24	Creat.	Thita	06.06.23	SMO RI EL COC TPS DC	 Siemens Mobility GmbH SMO RI EL COC TPS	RECTIFIER 1 OVERVIEW DIAGRAM OVERVIEWS	EN 7000-2887-0 SCL --- A52811-E7640-S111-1 Page 1- of 1	=GLR1	&EFA000
						Check.	Seeberger	06.06.23	ProRail, Den Haag Noord	+GLR1				B / BE1	
						Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V						
	Index	Remarks	Creat	Check	Appr	Date	Name	Date	Origin: /Replacement for: /Replaced by:						

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- 1) Cable number, cable type and cable cross-sectional area see station-overall single-line diagram
- a) 9GKW-AX 3.6/6 kV / 1.5 mm² / BK

1	FAT-Revision	CS	SBG	WW	02.09.24	Creat.	Thita	06.06.23	SMO RI EL COC TPS DC
						Check.	Seeberger	06.06.23	ProRail, Den Haag Noord
						Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V
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SIEMENS
Siemens Mobility GmbH
SMO RI EL COC TPS

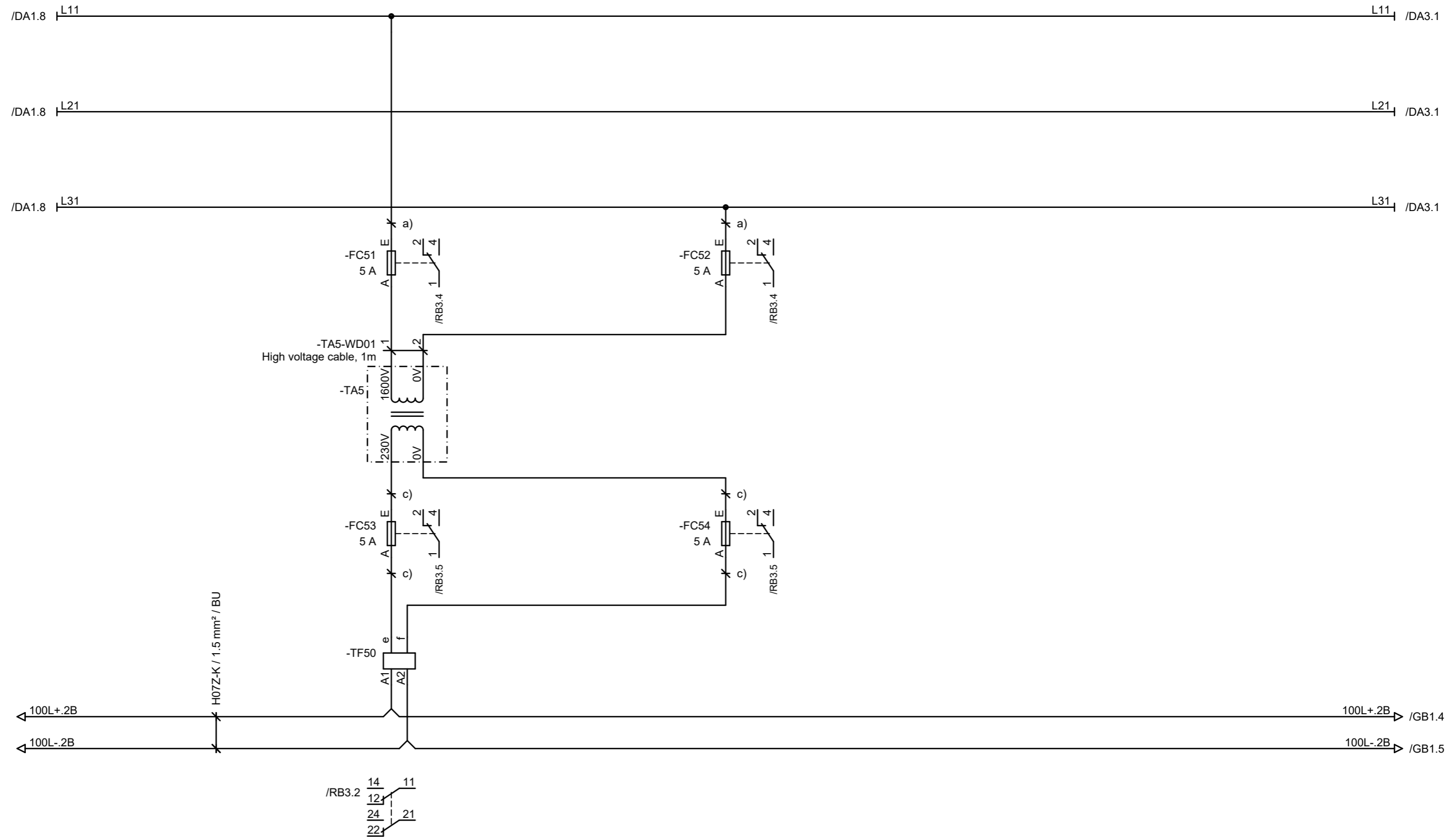
RECTIFIER 1
AC MAIN CIRCUIT
CIRCUIT DIAGRAM

=GLR1	&EFS000
+GLR1	S / DA1
C.6837	EN
7000-2887-0	SCL --- A52811-E7640-S126-1
Page 1+	of 5

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VOLTAGE MEASURING
AC-VOLTAGE



c) H07Z-K 2.5 BK

1	FAT-Revision	CS	SBG	WW	02.09.24	Creat.	Thita	06.06.23	SMO RI EL COC TPS DC
						Check.	Seeberger	06.06.23	ProRail, Den Haag Noord
						Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V
Index	Remarks	Creat	Check	Appr	Date	Name	Date	Origin: /Replacement for:	/Replaced by:

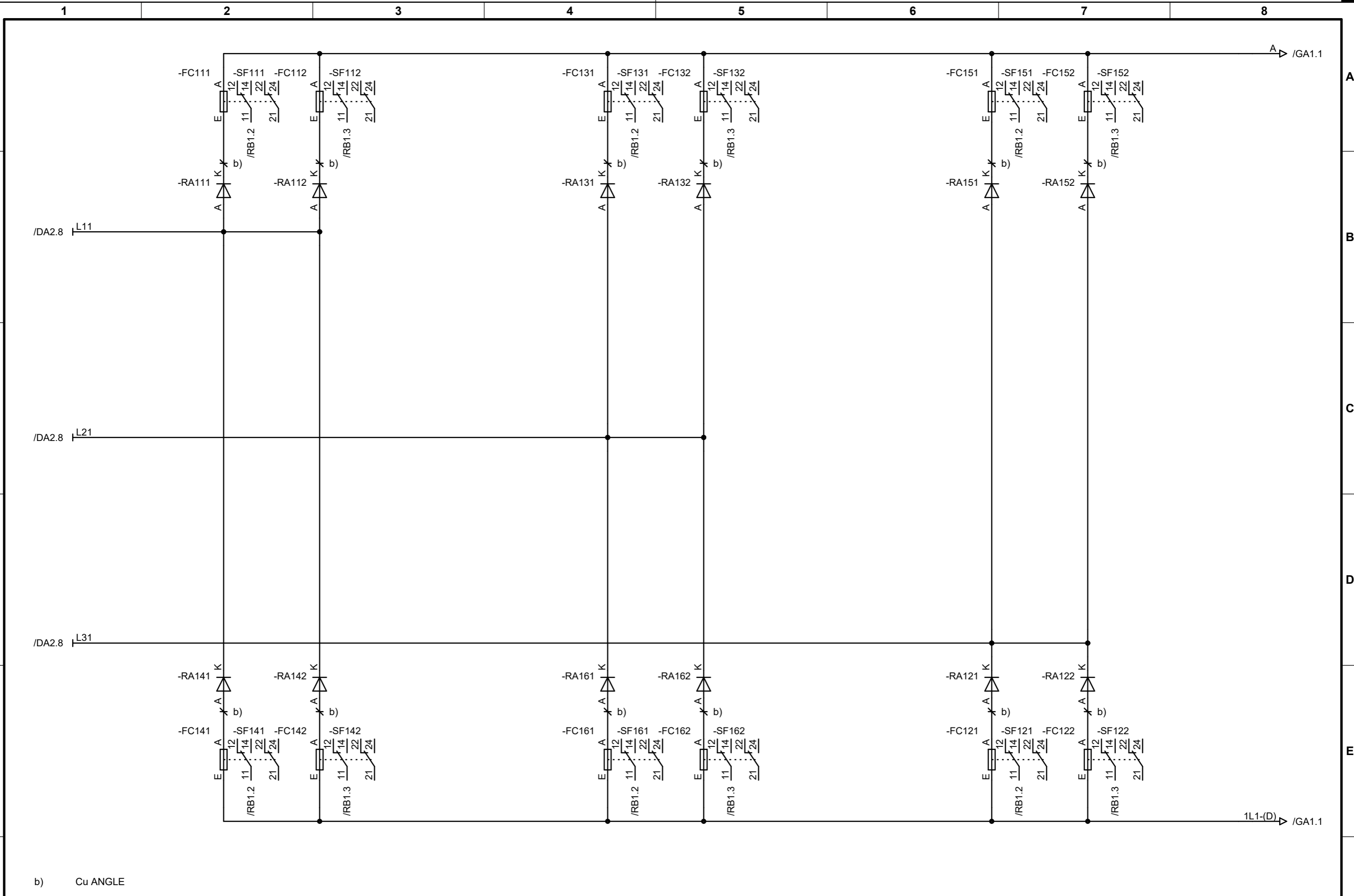
SIEMENS
Siemens Mobility GmbH
SMO RI EL COC TPS

RECTIFIER 1
AC MAIN CIRCUIT
CIRCUIT DIAGRAM

		=GLR1	&EFS000
		+GLR1	S / DA2
C.6837		EN	
7000-2887-0	SCL	---	A52811-E7640-S126-1 Page 2+ of 5

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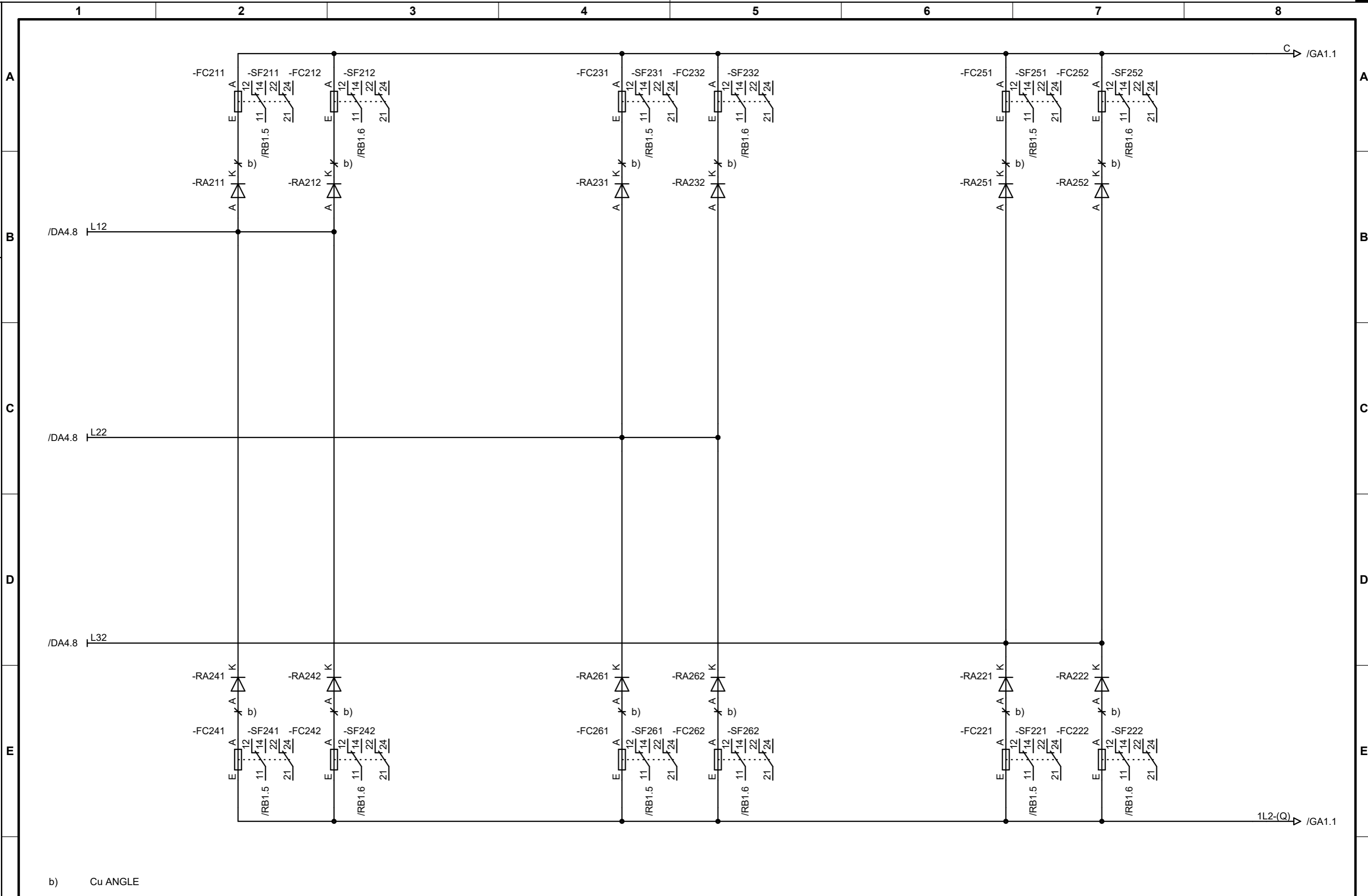


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						Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V
Index	Remarks	Creat	Check	Appr	Date	Name	Date	Origin: /Replacement for: /Replaced by:	

	RECTIFIER 1	=GLR1	&EFS000
	AC MAIN CIRCUIT	+GLR1	S / DA3
Siemens Mobility GmbH	CIRCUIT DIAGRAM	C.6837	EN
SMO RI EL COC TPS		7000-2887-0	SCL --- A52811-E7640-S126-1

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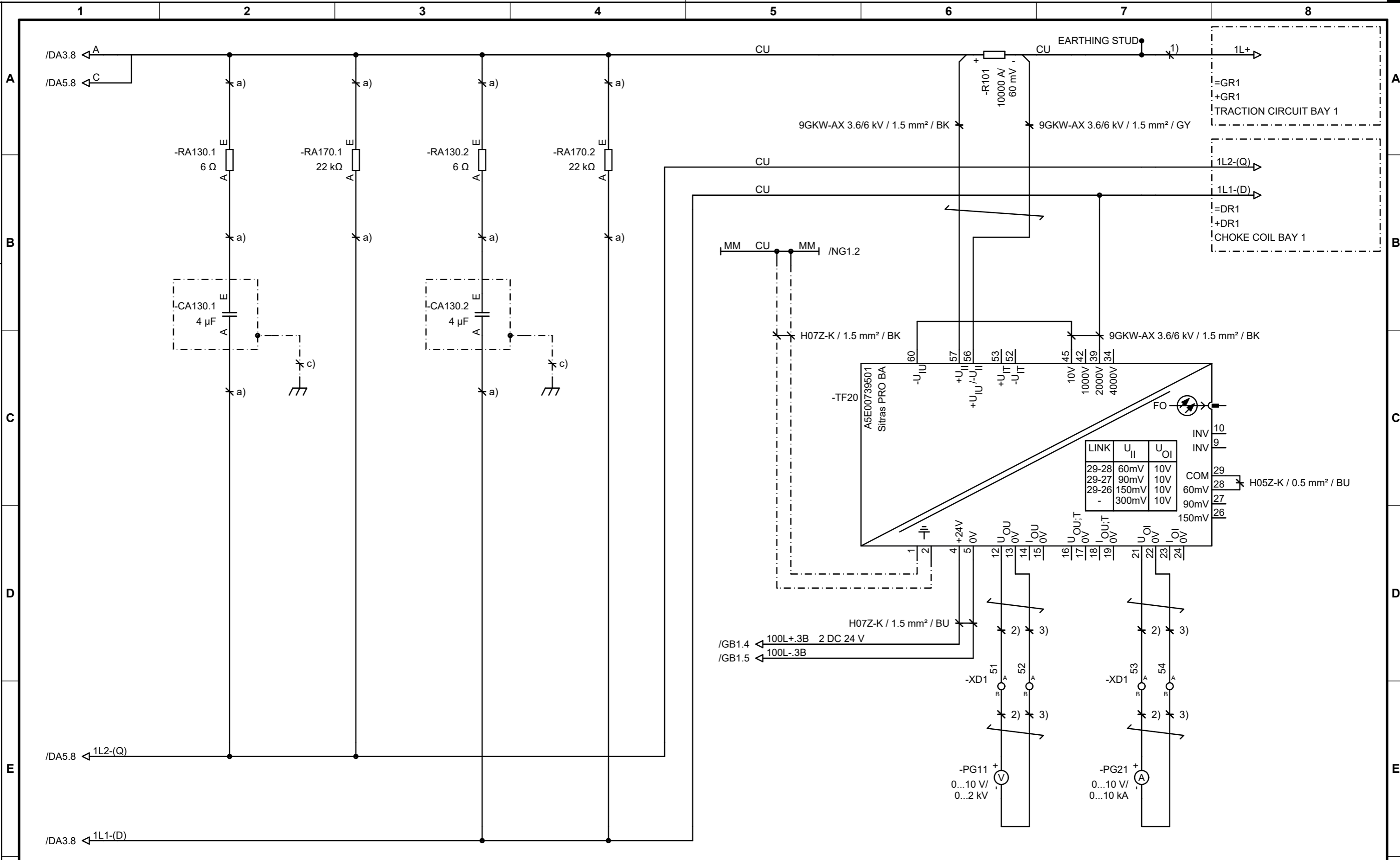
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b) Cu ANGLE

1	FAT-Revision	CS	SBG	WW	02.09.24	Creat.	Thita	06.06.23	SMO RI EL COC TPS DC		RECTIFIER 1 AC MAIN CIRCUIT	=GLR1 &EFS000 +GLR1 S / DA5
						Check.	Seeberger	06.06.23	ProRail, Den Haag Noord			
						Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V	Siemens Mobility GmbH	CIRCUIT DIAGRAM	C.6837
Index	Remarks	Creat	Check	Appr	Date	Name	Date	Origin: /Replacement for: /Replaced by:		SMO RI EL COC TPS		7000-2887-0
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2												EN
3												A52811-E7640-S126-1
4												Page 5- of 5
5												
6												
7												
8												

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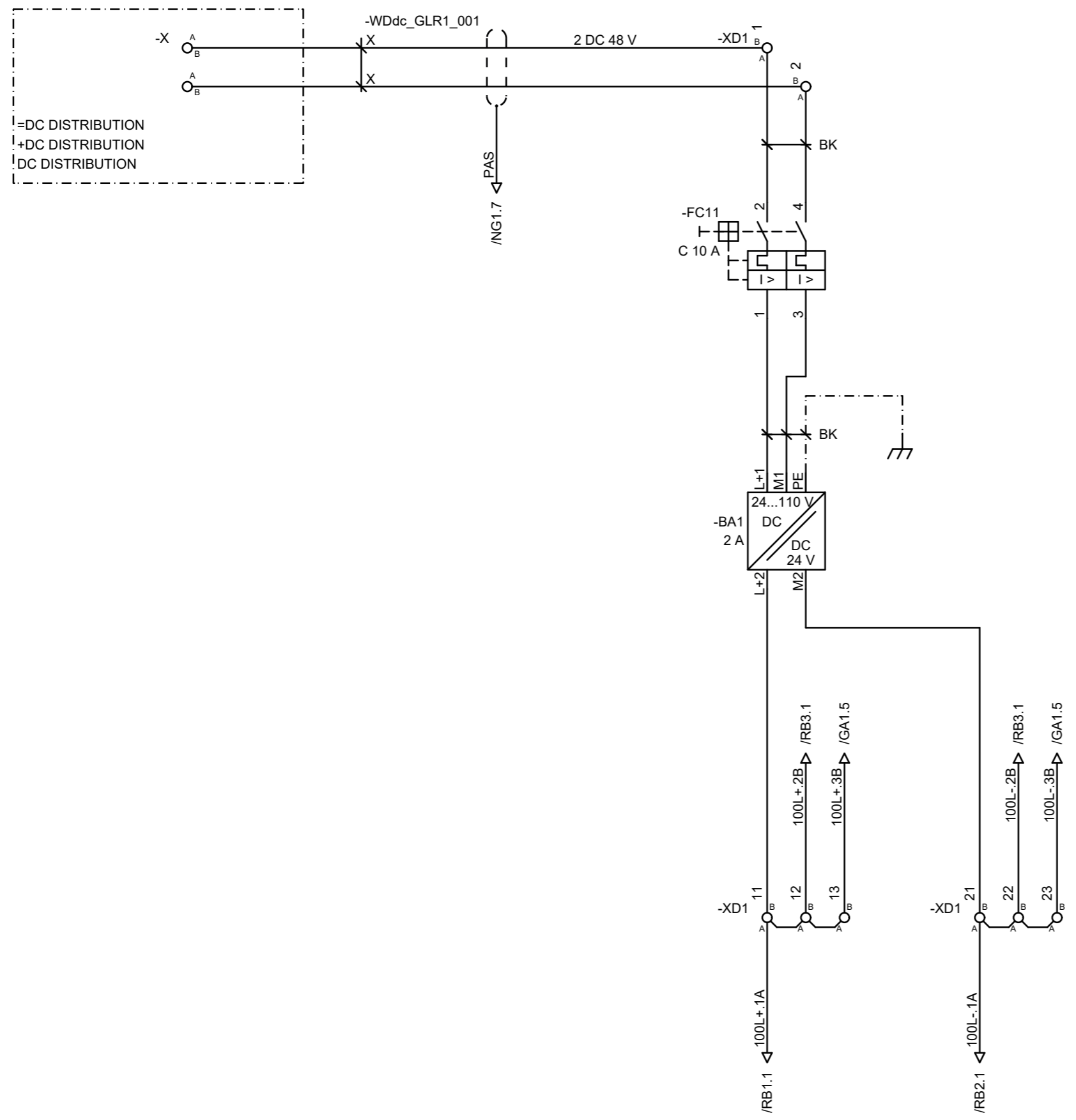
- 1) Cable number, cable type and cable cross-sectional area see station-overall single-line diagram
- 2) H07Z-K 1.5 BK
- a) 4GKW-AX 1.8/3 kV / 1.5 mm² / BK
- 3) H07Z-K 1.5 GY
- c) H07Z-K / 2.5 mm² / BK

F	1	FAT-Revision	CS	SBG	WW	02.09.24	Creat.	Thita	06.06.23	SMO RI EL COC TPS DC		RECTIFIER 1	=GLR1 &EFS000
							Check.	Seeberger	06.06.23	ProRail, Den Haag Noord		DC MAIN CIRCUIT	
							Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V	Siemens Mobility GmbH		
										Origin: /Replacement for: /Replaced by:	SMO RI EL COC TPS	CIRCUIT DIAGRAM	
		Index	Remarks	Creat	Check	Appr	Date	Name	Date				
		1					2			3			A3

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CONTROL AND MEASURING



All unlabeled connections: H07Z-K / 1.5 mm² / BU

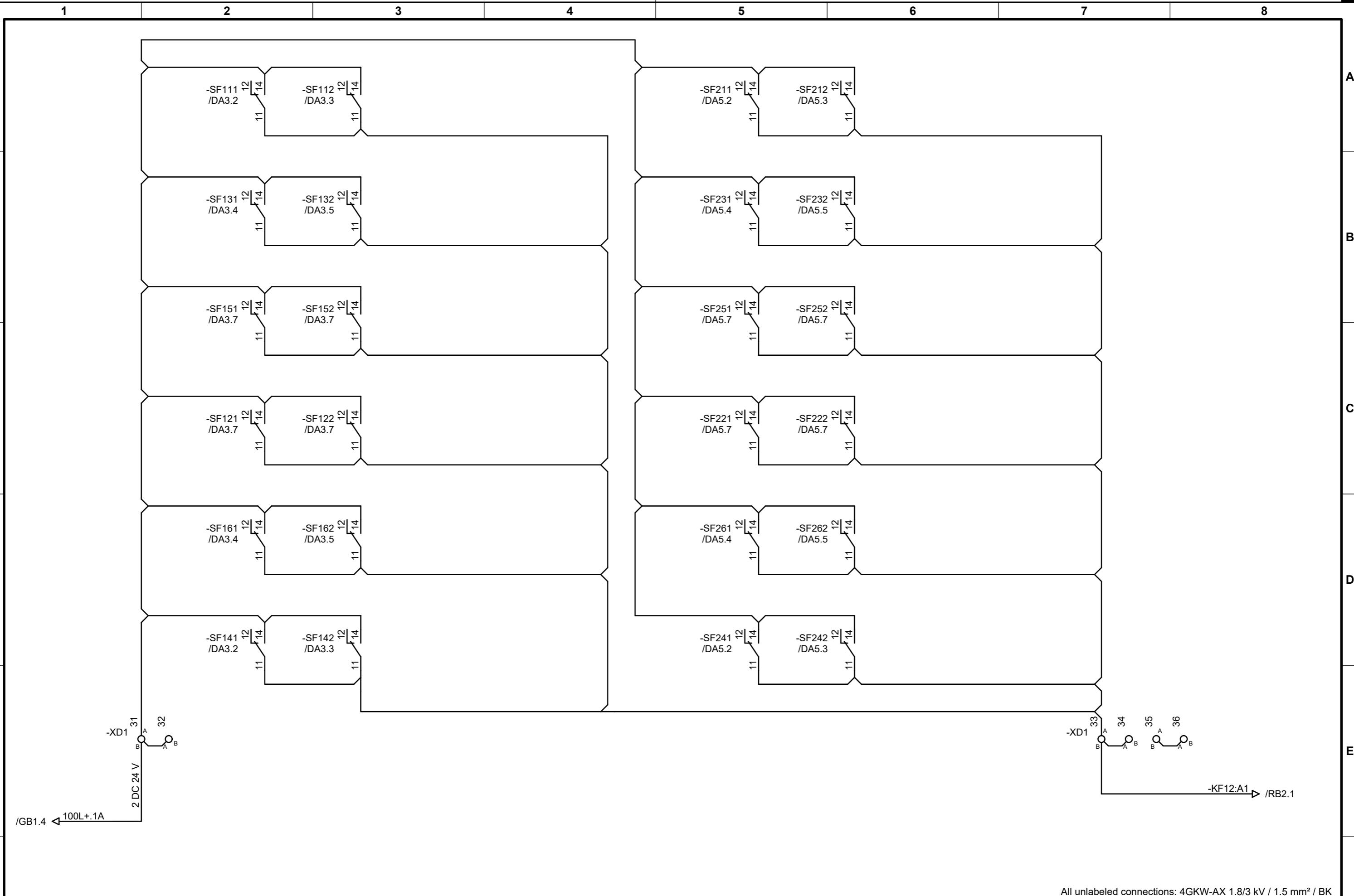
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						Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V
Index	Remarks	Creat	Check	Appr	Date	Name	Date	Origin: /Replacement for: /Replaced by:	

SIEMENS
Siemens Mobility GmbH
SMO RI EL COC TPS

RECTIFIER 1
DC AUXILIARY CIRCUIT DISTRIBUTION
CIRCUIT DIAGRAM

		=GLR1	&EFS000
		+GLR1	S / GB1
C.6837	EN		
7000-2887-0	SCL	---	A52811-E7640-S133-1
		Page 1-	of 1

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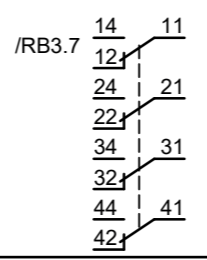
All unlabeled connections: 4GKW-AX 1.8/3 kV / 1.5 mm² / BK

1	FAT-Revision	CS	SBG	WW	02.09.24	Cre.	Thita	06.06.23	SMO RI EL COC TPS DC	 Siemens Mobility GmbH SMO RI EL COC TPS	RECTIFIER 1 ALARMS CIRCUIT DIAGRAM	EN	=GLR1	&EFS000	
						Check.	Seeberger	06.06.23	ProRail, Den Haag Noord				+GLR1	S / RB1	
						Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V	C.6837	7000-2887-0	SCL	---	A52811-E7640-S167-1	Page 1+ of 3
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1		2						3		4					A3

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DIODE FAILURE
TRIP



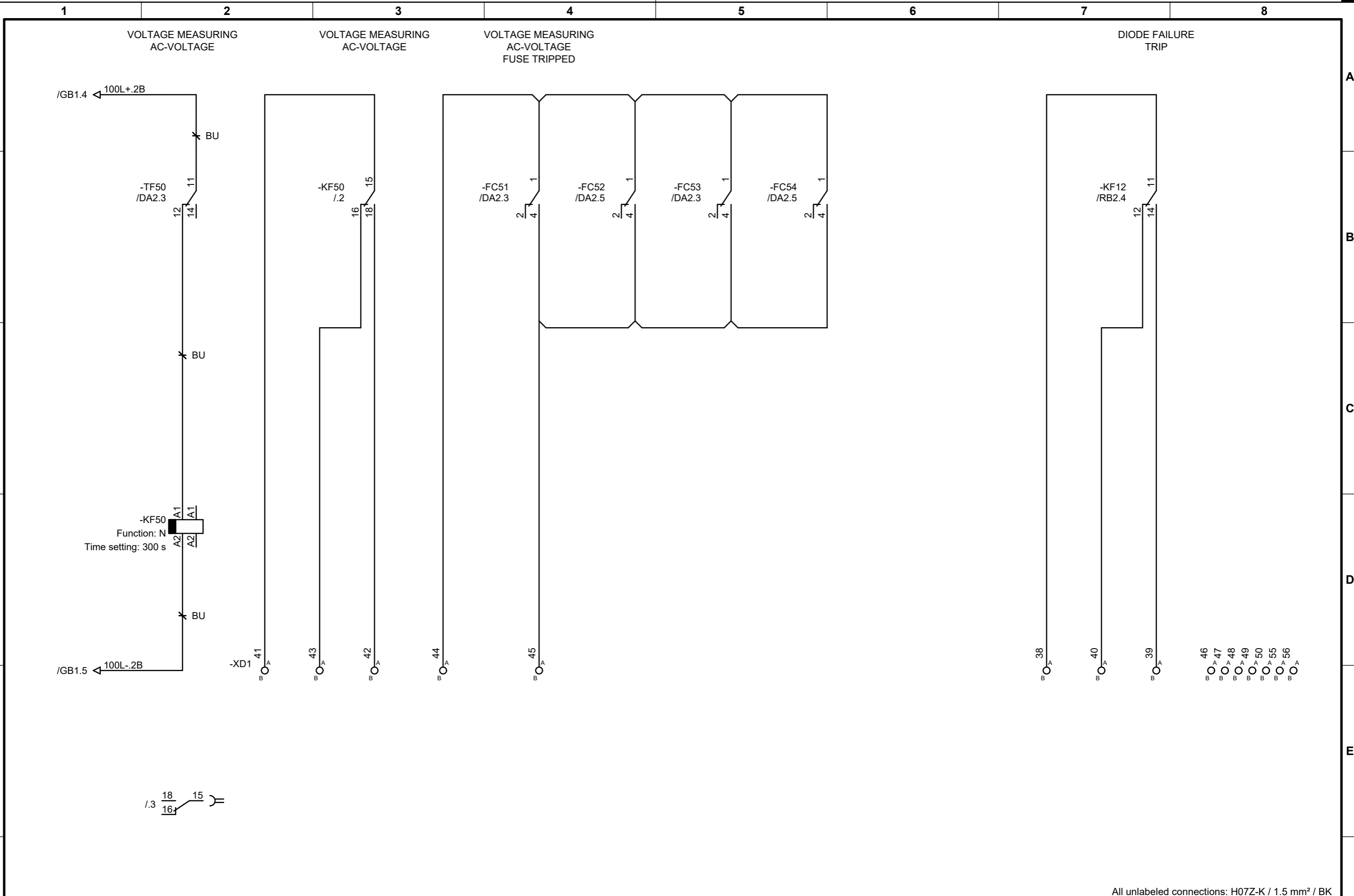
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							Check.	Seeberger	06.06.23	ProRail, Den Haag Noord					+GLR1	S / RB2		
							Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V					C.6837		EN	
	Index	Remarks	Creat	Check	Appr	Date		Name	Date	Origin: /Replacement for: /Replaced by:					7000-2887-0	SCL	---	A52811-E7640-S167-1

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All unlabeled connections: H07Z-K / 1.5 mm² / BK

1	FAT-Revision	CS	SBG	WW	02.09.24	Creat.	Thita	06.06.23	SMO RI EL COC TPS DC ProRail, Den Haag Noord RECTIFIER SITRAS ® REC, DC 1500V	 Siemens Mobility GmbH SMO RI EL COC TPS	RECTIFIER 1 ALARMS	C.6837	EN	7000-2887-0	SCL	---	A52811-E7640-S167-1	Page 3-	of 3	=GLR1 &EFS000 +GLR1 S / RB3
	Index	Remarks	Creat	Check	Appr.	Name	Date	Origin: /Replacement for: /Replaced by:												

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POS NO	DESCRIPTION	ARTICLE NUMBER	ORDER NO	MANUFACTURER	ITEM	QUANTITY	REMARK
0010	Fixed ball points 20mm,45°, Type: KFP 20 W45 M12 35SSM	A2V00001018136	DSN:706235	Dehn + Söhne GmbH + Co. KG		2 PC	
0020	Heat Sink Sitras REC-890mm, 200mm x 890mm x 103mm, black anodised	A2V00002967735	JKK:JK2186-890-SE-807	JUNIOR KUEHLKOERPER GMBH		6 PC	
0030	Heat Sink Sitras REC 200mm, 200mm x 200mm x 103mm, black anodised	A2V00002967331	JKK:JK2186-200-SE-803	JUNIOR KUEHLKOERPER GMBH		24 PC	
0040		A2V00001029576	WCS:U1192/137	Ixys UK Westcode Ltd		24 PC	
0050	Simatic S7-300 outdoor, with regulated power supply PS305, input: 24-110V DC, output: 24V DC/2A	A2V00001117318	6ES7305-1BA80-0AA0	Siemens AG A&D EC LZN	-BA1	1 PC	
0060	Simatic S7-300, installation adapter, for snapping the PS307, onto the 35mm DIN rail	A2V00000004658	6ES7390-6BA00-0AA0	Siemens AG A&D EC LZN	-BA1	1 PC	
0070	Capacitor 0,47µF 2100V	A2V00001134750	VIY:KA2100-0,47SAY	Vishay Electronic GmbH	-CA111 / -CA112 / -CA113 / -CA211 / -CA212 / -CA213	6 PC	
0080	Capacitor 4µF	A2V00002533857	VIY:GMKP3200-4IA	Vishay Electronic GmbH	-CA130.1 / -CA130.2	2 PC	
0090	Miniat. Circuit-breaker 400V 6kA, 2-pole, C, 10A, D=70mm	A2V00001814926	5SY6210-7	Siemens AG IC LMV LV RBG S	-FC11	1 PC	
0100	Semiconductor fuse, 1400V/1000A 3BKN/125, with support for, microswitch 170H0067	A2V00001129310	BUS:170M6723	Eaton Electric Limited	-FC111 / -FC112 / -FC121 / -FC122 / -FC131 / -FC132 / -FC141 / -FC142 / -FC151 / -FC152 / -FC161 / -FC162 / -FC211 / -FC212 / -FC221 / -FC222 / -FC231 / -FC232 / -FC241 / -FC242 / -FC251 / -FC252 / -FC261 / -FC262	24 PC	
0110	Isolator 1-pole, DC 1500 V, 63 A with micro switch 1 changeover contact, PSI 20 x 127 PRE+MC PS	A2V00001001917		MERSEN Österreich Wien GmbH	-FC51 / -FC52 / -FC53 / -FC54	4 PC	
0120	Terminal cover PS20	A2V00001018454	QHJ:F097226	Mersen France SB sas	-FC51 / -FC52 / -FC53 / -FC54	4 PC	
0130	DC Ferrule Fuse 5A/1500V DC CC 1551 CP gRB 20x127/5 reference-no.: C088368 packaging unit 10 pieces	A2V00002507024	FSW:FD20GB150V5T		-FC51 / -FC52 / -FC53 / -FC54	4 PC	
0140	Plug-in relay, 4CO contacts, 24V DC, 7A, with freewheeling diode/LED	A2V00001159102	FDR:55.34.9.024.0090	Finder GmbH	-KF12	1 PC	
0150	Clip for Plug-in relays, series 55 with socket 94.84.2	A2V00001120261	FDR:094.91.3	Finder GmbH	-KF12	1 PC	
0160	Socket for relay with 4CO contacts	A2V00001786801	FDR:94.84.2	Finder GmbH	-KF12	1 PC	

1	FAT-Revision	CS	SBG	WW	02.09.24	Creat.	Thita	06.06.23	SMO RI EL COC TPS DC
						Check.	Seeberger	06.06.23	ProRail, Den Haag Noord
						Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V
Index	Remarks	Creat	Check	Appr	Date		Name	Date	Origin: /Replacement for: /Replaced by:

SIEMENS Siemens Mobility GmbH SMO RI EL COC TPS	RECTIFIER 1		=GLR1	&EPB000
	PARTS LIST		+GLR1	T / YT1
			C.6837	EN
			7000-2887-0	SCL --- A52811-E7640-L193-1
				Page 1+ of 3

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POS NO	DESCRIPTION	ARTICLE NUMBER	ORDER NO	MANUFACTURER	ITEM	QUANTITY	REMARK
0170	Timing Relay,electronic, Off-delay, without Control Signal or Non-volatile Relay Definite Passing Make Contact, 7 T. Set. Ranges 0.05s...600s, 12-240V AC/DC, 1 CO Contact at 50/60Hz AC w. LED,Screw Terminal	A2V00002618767	3RP2540-1AW30	Siemens AG A&D CD (AMB)	-KF50	1 PC	
0180	Moving coil instrument for DC, class 1.5,96x96mm, for transducer, connection: +/-10V, instrument range: "A", measuring range: 0 up to 10V, test voltage: 3kV	A2V00002825036	LLZ:MA19NA606X0000008	LUMEL S.A.	-PG11	1 PC	#M = 0...10V #A = 0...2kV
0190	Moving coil instrument for DC, class 1.5,96x96mm, for transducer, connection: +/-10V, instrument range: "A", measuring range: 0 up to 10V, test voltage: 3kV	A2V00002825036	LLZ:MA19NA606X0000008	LUMEL S.A.	-PG21	1 PC	#M = 0...10V #A = 0...10kA
0200	Measuring shunt, class: 0.5, measurement range: 10000A, voltage drop: 60mV, test voltage: 5kV, with round spring washer, connection surfaces silver plated	A2V00003048509	LLZ:B206010K0CS100MA	LUMEL S.A.	-R101	1 PC	
0210	Rectifier Diode W3477MC400CAB, repetitive peak reverse voltage:., Vrrm = 4000V, voltage band width: 1,25V up to 1,35V, at 3000A, diameter: 74mm, diameter layer base: 47mm, height: 25,6/26,3mm	A2V00002426667	WCS:W3477MC400CAB	Ixys UK Westcode Ltd	-RA111 / -RA112 / -RA121 / -RA122 / -RA131 / -RA132 / -RA141 / -RA142 / -RA151 / -RA152 / -RA161 / -RA162 / -RA211 / -RA212 / -RA221 / -RA222 / -RA231 / -RA232 / -RA241 / -RA242 / -RA251 / -RA252 / -RA261 / -RA262	24 PC	
0220	Vitreous enamel wirewound resistor 100 Ohm,+-10% tolerance, typ 500 (500W/40°C)with caps thread M4	A2V00001111112	VIY:GWK150100R10%M4	Vishay Electronic GmbH	-RA111.1 / -RA111.2 / -RA112.1 / -RA112.2 / -RA113.1 / -RA113.2 / -RA211.1 / -RA211.2 / -RA212.1 / -RA212.2 / -RA213.1 / -RA213.2	12 PC	
0230	Vitreous enamel wirewound resistor 6 Ohm, +-10% tolerance, WM 110 (200W)with Ceramic centering disc for: GWS 30/...,GBS 30/...,ZWS 30/...,ZBS30/... order ref.: 401 183 BN 117	A2V00001111106	VIY:GBS30/133-6RO-10%	Vishay Electronic GmbH	-RA130.1 / -RA130.2	2 PC	

1	FAT-Revision	CS	SBG	WW	02.09.24	Creat.	Thita	06.06.23	SMO RI EL COC TPS DC
						Check.	Seeberger	06.06.23	ProRail, Den Haag Noord
						Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V
Index	Remarks	Creat	Check	Appr	Date		Name	Date	Origin: /Replacement for: /Replaced by:

SIEMENS
Siemens Mobility GmbH
SMO RI EL COC TPS

RECTIFIER 1
PARTS LIST
PARTS LIST


		=GLR1	&EPB000
		+GLR1	T / YT2
C.6837		EN	
7000-2887-0	SCL	---	A52811-E7640-L193-1

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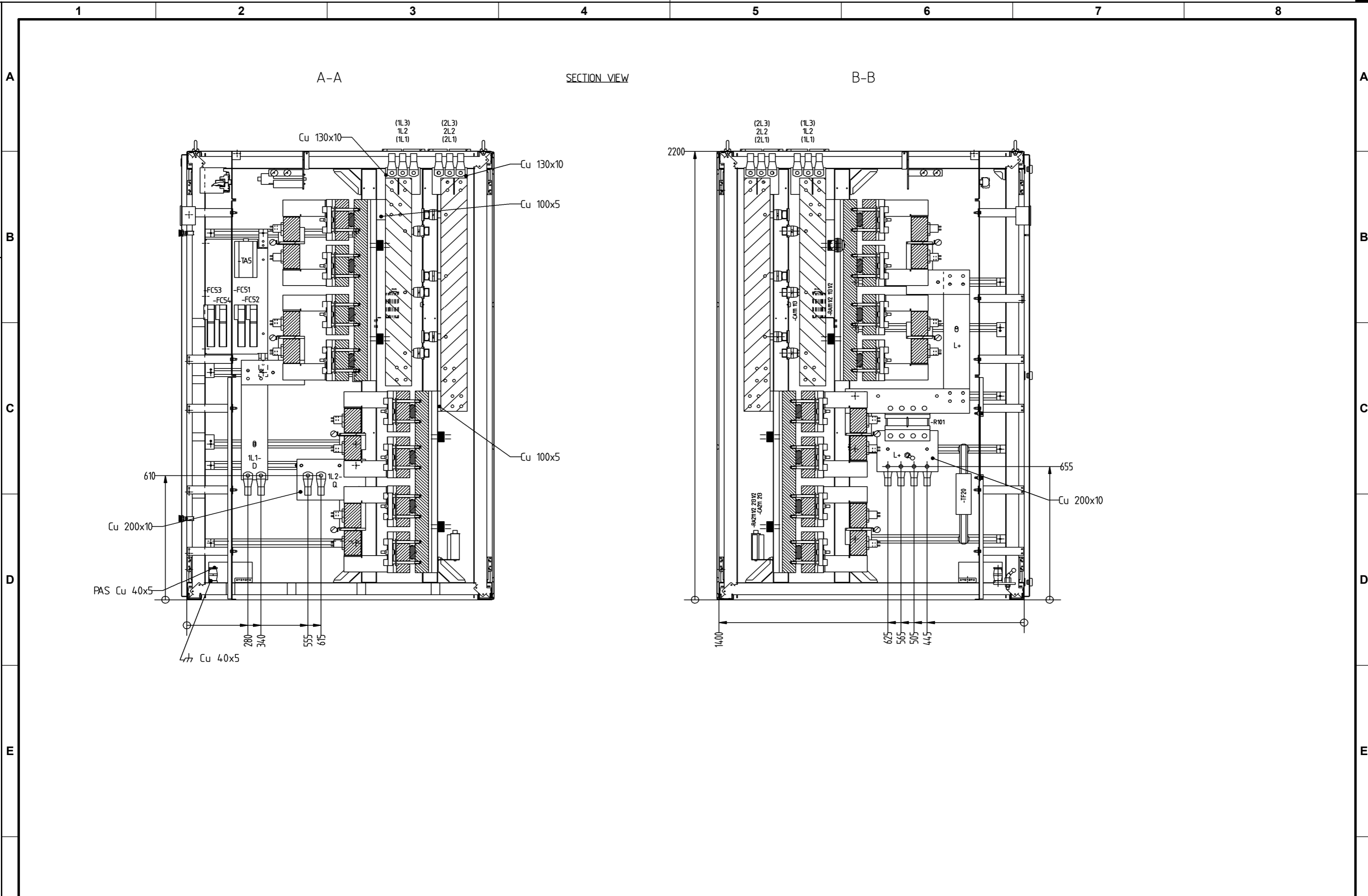
POS NO	DESCRIPTION	ARTICLE NUMBER	ORDER NO	MANUFACTURER	ITEM	QUANTITY	REMARK
0240	Wirewound resistor 22kOhm, tolerance +-10% Vishay factory number GWS50052202KLX000 lxd 330x32,5mm	A2V00002533856	VIY:GWS50052202KL000	Vishay Electronic GmbH	-RA170.1 / -RA170.2	2 PC	
0250	Micro-switch for, Bussmann semiconductor fuse, fits with support, for fuse 170H0067, 2 two-way-switch, 250V/2A, dimension diagram 170x0376	A2V00001058869	QHN:170H0099	Eaton Industries GmbH	-SF111 / -SF112 / -SF121 / -SF122 / -SF131 / -SF132 / -SF141 / -SF142 / -SF151 / -SF152 / -SF161 / -SF162 / -SF211 / -SF212 / -SF221 / -SF222 / -SF231 / -SF232 / -SF241 / -SF242 / -SF251 / -SF252 / -SF261 / -SF262	24 PC	
0260	Single-phase transformer performance:0,025 kVA primary:1600V/0,023A secondary 1:230V/0.11A connection:HSP-strands/terminals frequency:50/60Hz protection:IP 00 ISO.class:T40/B VDE standard:EN 61558-2-1 test voltage 6kV/1 min UNi 12kV according to EN-50124-1/1.3.2.7 Uo=248V	A2V00002507941	BSU:A.-NR: 2015/5728-1		-TA5	1 PC	
0270	Buffer amplifier Sitras PRO BA operating voltage: 24VDC rated voltage: 600-3000VDC 1 fiber optical output 3 analog output	A2V00001368112	A5E00739501	Siemens Mobility GmbH - SMO RI EL	-TF20	1 PC	
0280	Voltage relay Type: BA9054/013 AC25-250V AC/DC24-80V Contacts: 2 changeover contacts Auxiliary voltage: AC/DC 24-80V Start up delay: Without Measuring range: AC 25-250V Switching delay: 0-20s Approvals and Markings: UKCA, CCC Variant: Undervoltage relay. Energized on trip. Time delay at hysteresis value article-no: 0053641	A2V00003171591	DOL:0056783	E. Dold & Söhne KG	-TF50	1 PC	

1	FAT-Revision	CS	SBG	WW	02.09.24	Creat.	Thita	06.06.23	SMO RI EL COC TPS DC
						Check.	Seeberger	06.06.23	ProRail, Den Haag Noord
						Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V
Index	Remarks	Creat	Check	Appr	Date		Name	Date	Origin: /Replacement for: /Replaced by:

SIEMENS Siemens Mobility GmbH SMO RI EL COC TPS	RECTIFIER 1		=GLR1	&EPB000
	PARTS LIST		+GLR1	T / YT3
	PARTS LIST	C.6837	 EN	
		7000-2887-0	SCL ---	A52811-E7640-L193-1

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1	FAT-Revision	CS	SBG	WW	02.09.24	Creat.	Thita	06.06.23	SMO RI EL COC TPS DC
						Check.	Seeberger	06.06.23	ProRail, Den Haag Noord
						Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V
Index	Remarks	Creat	Check	Appr	Date	Name	Date	Origin: /Replacement for: /Replaced by:	

SIEMENS
Siemens Mobility GmbH
SMO RI EL COC TPS

RECTIFIER 1
SIDE VIEW
A-A
ARRANGEMENT DRAWING

								=GLR1	&ELU000
								+GLR1	U / YU3
C.6837									
7000-2887-0	SCL	---	A52811-E7640-V194-1	Page 3+	of 4				

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1	2	3	4	5	6	7	8
A							
B	<p>LABEL NO. 1 LAMINATED PLASTIC 105x37, WHITE SURFACE WITH BLACK LETTERS LETTER HEIGHT 10mm MAX. 11 TYPES LABEL PASTED</p>			<p>LABEL NO. 2 LABEL PASTED</p>			
C							

D							
E	<p>LABEL NO. 3 YELLOW LABEL PASTED</p>						
F							

1	FAT-Revision	CS	SBG	WW	02.09.24	Creat.	Thita	06.06.23	SMO RI EL COC TPS DC		RECTIFIER 1 LABELS			=GLR1	&ELU000	
						Check.	Seeberger	06.06.23	ProRail, Den Haag Noord					+GLR1	U / YU4	
						Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V							
Index	Remarks	Creat	Check	Appr	Date		Name	Date	Origin: /Replacement for: /Replaced by:	Siemens Mobility GmbH SMO RI EL COC TPS	ARRANGEMENT DRAWING	C.6837		EN		
1		2										7000-2887-0	SCL	---	A52811-E7640-V194-1	Page 4- of 4

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Connection information	-WDdc_GLR1_001, Cable, unspecified				Wire color	Legend: Terminals Quantity: 5	Accessories Separator Block separator Head cover Test socket		Bridges Ridge bridge Switch bridge Comb bridge		Connection Input-Output Bridge Z-Diode Plug NC contact Resistor Gate valve NO contact Fuse1 Diode Fuse2			Wire color									Connection information
	Terminal		Terminal Type				Quantity																
	1-5		WÖHNER UNIVERSAL CON. TERMINAL (01 285)				5																
		Terminal strip																					
		-XPAS																					
		Terminal Destination		Symbol				Name		CIRCUIT DIAGRAM		Terminal Destination											
		X						SH															

1	FAT-Revision	CS	SBG	WW	02.09.24	Creat.	Thita	06.06.23	SMO RI EL COC TPS DC		RECTIFIER 1				=GLR1	&EMA000	
						Check.	Seeberger	06.06.23	ProRail, Den Haag Noord			TERMINALS/PLUGS				+GLR1	V / YV2
						Appr.	Wenzel	06.06.23	RECTIFIER SITRAS ® REC, DC 1500V			-XPAS					
Index	Remarks	Creat	Check	Appr	Date		Name	Date	Origin: /Replacement for: /Replaced by:	Siemens Mobility GmbH	TERMINAL CONNECTION TABLE	C.6837		EN			
												7000-2887-0	SCL	---	A52811-E7640-S195-1	Page 2-	of 2