



BERG Kompressoren GmbH
Compressed Air Technology | Air Separation

Operation and Maintenance Manual - Electrical part

Project name: KOMPBERG ZXF 132

Project number: 786-741-000

Index: EIE1112

Index version: 1

Power supply: 400V/50Hz/3ph

Power supply type: L1, L2, L3, PE

Controller: S7-1200

Last change: 11.05.2020

Number of pages: 20

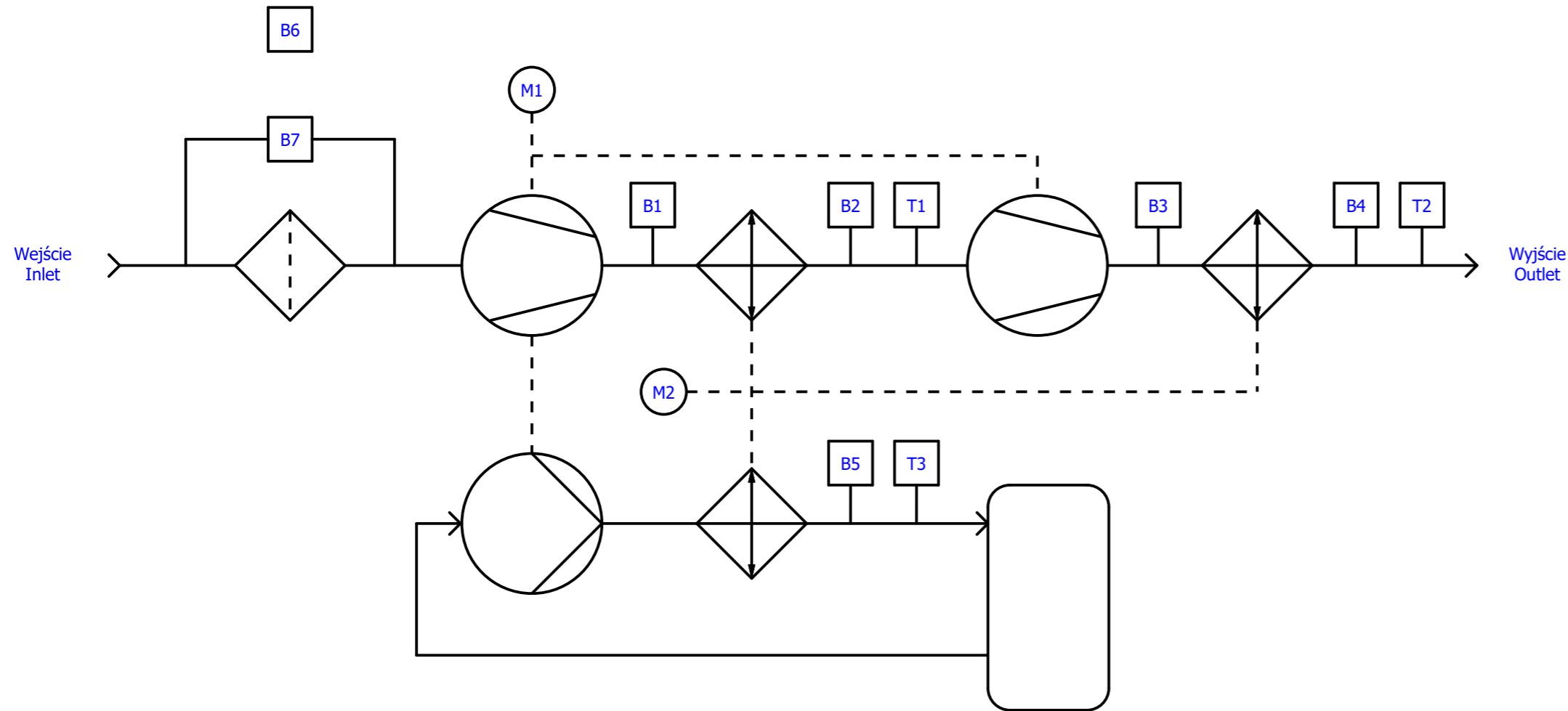
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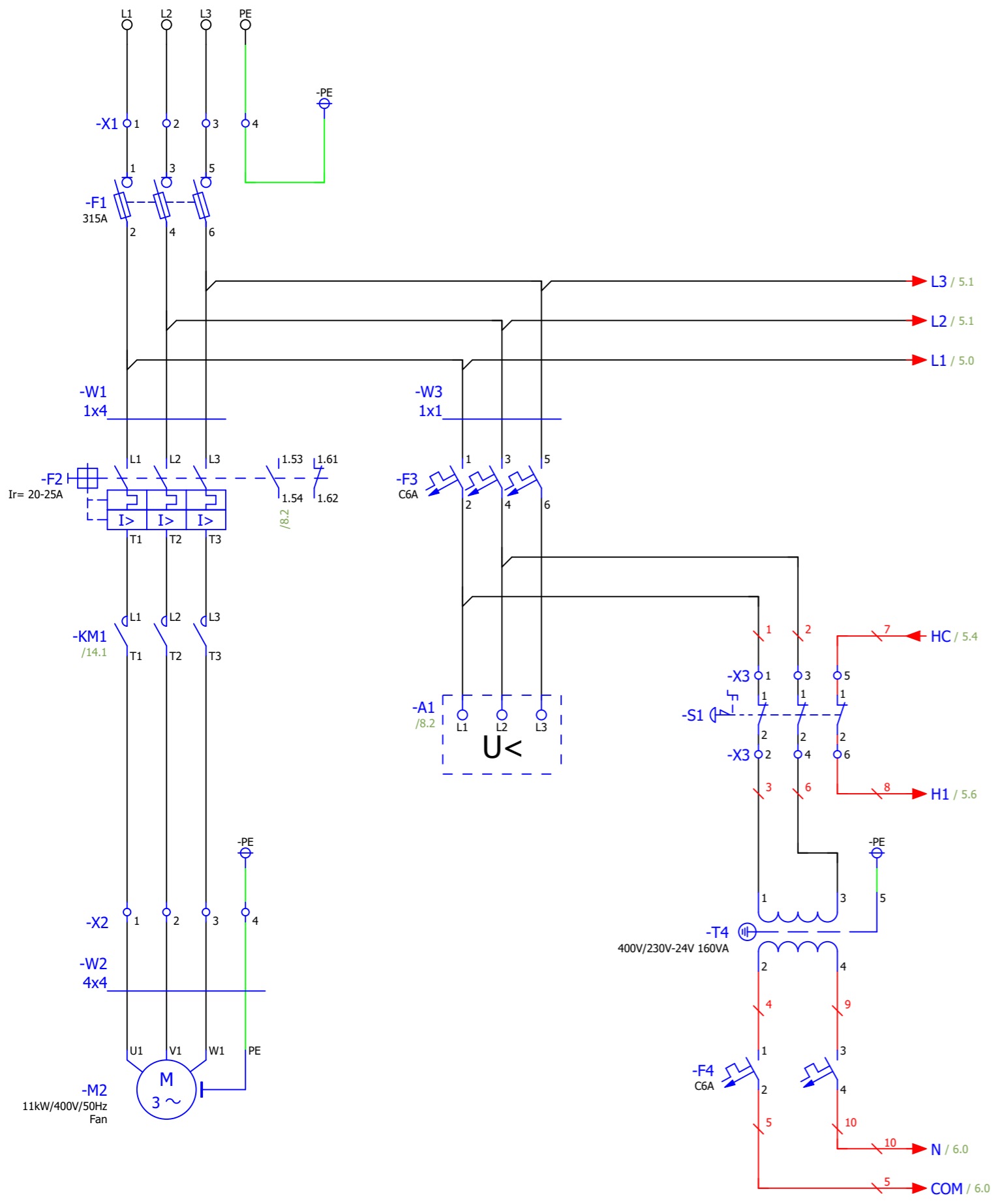


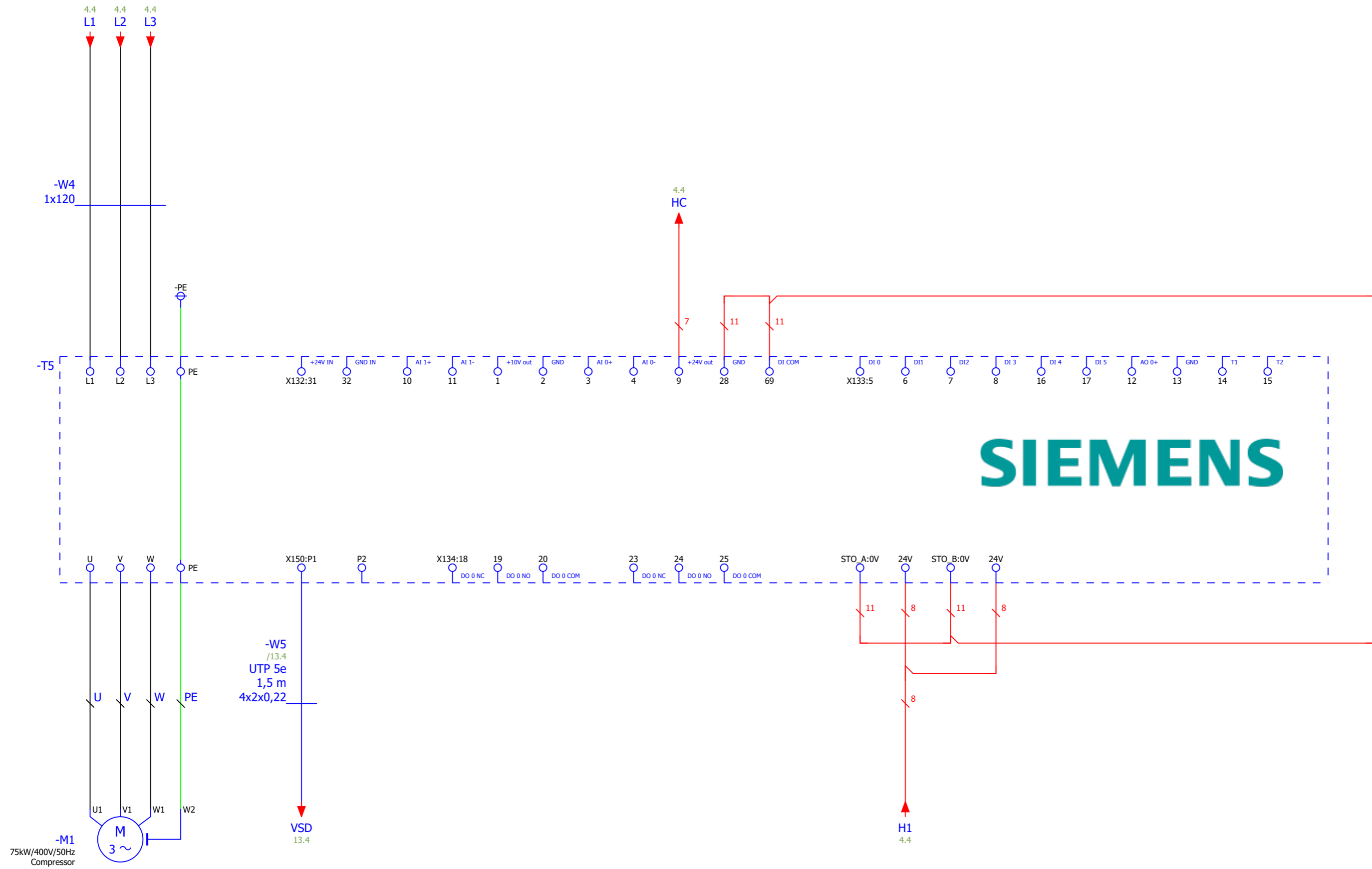
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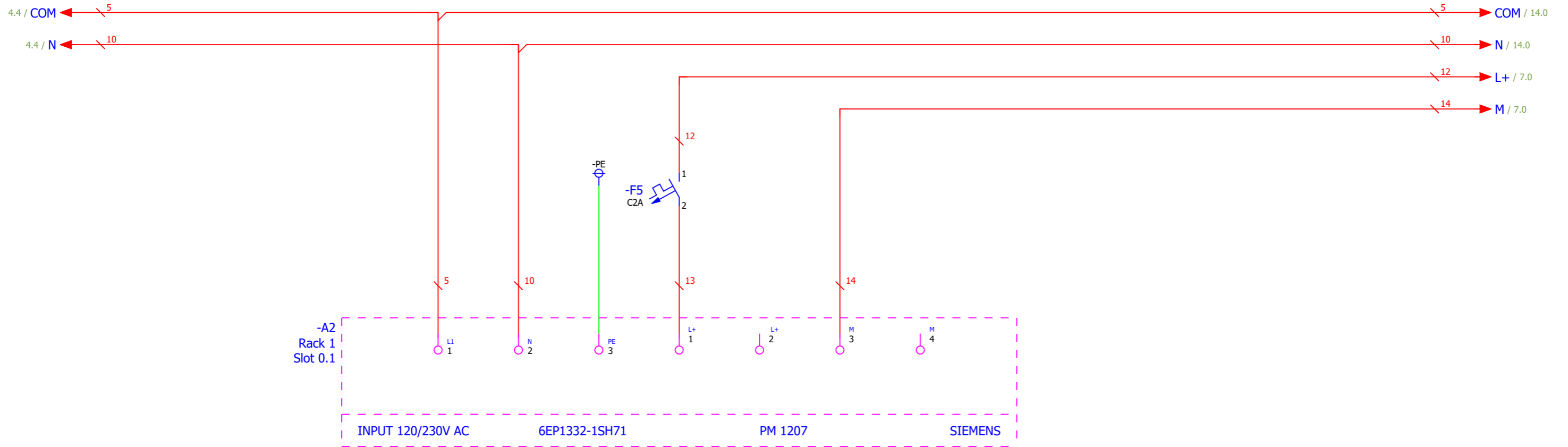
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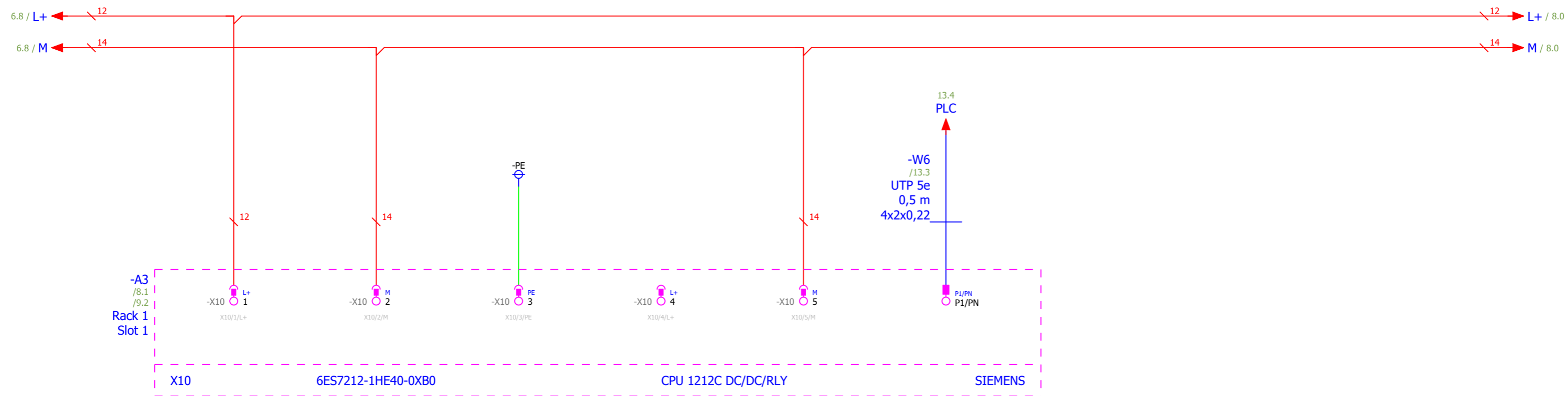


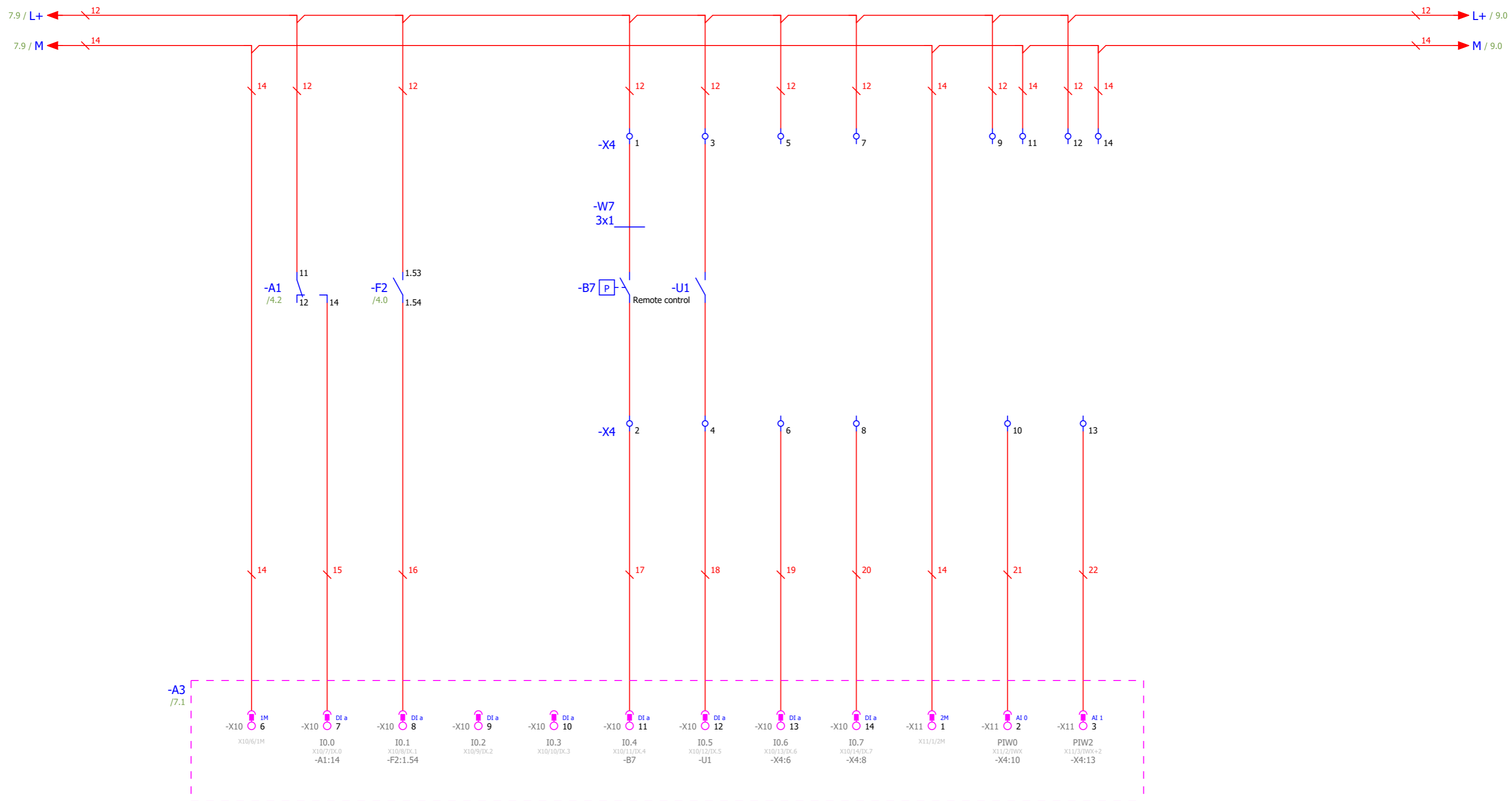


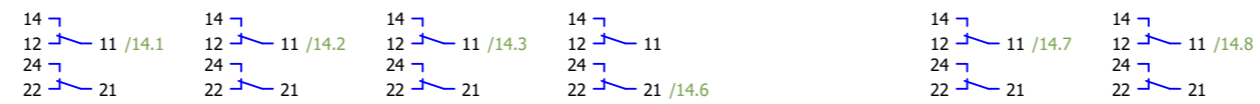
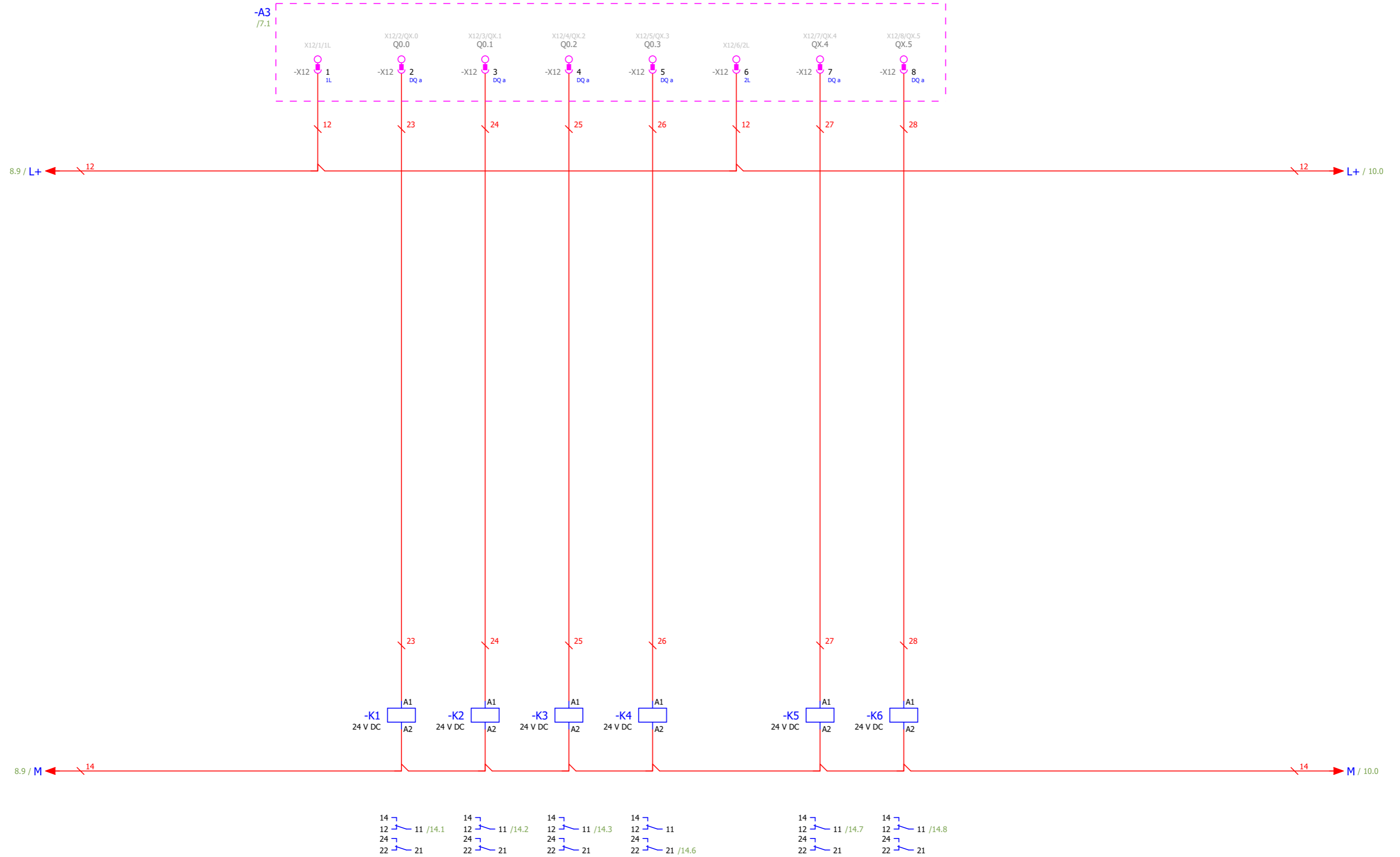


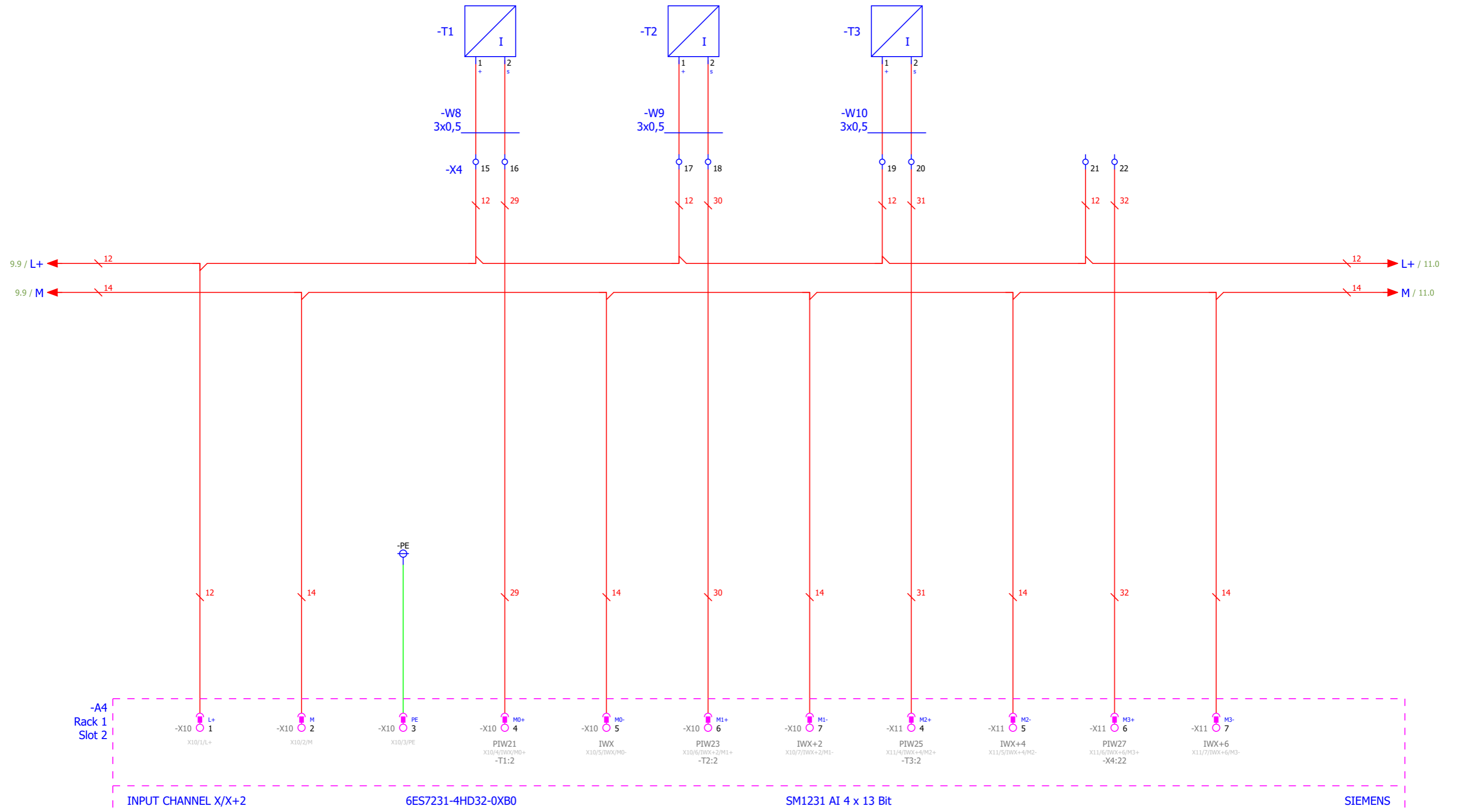


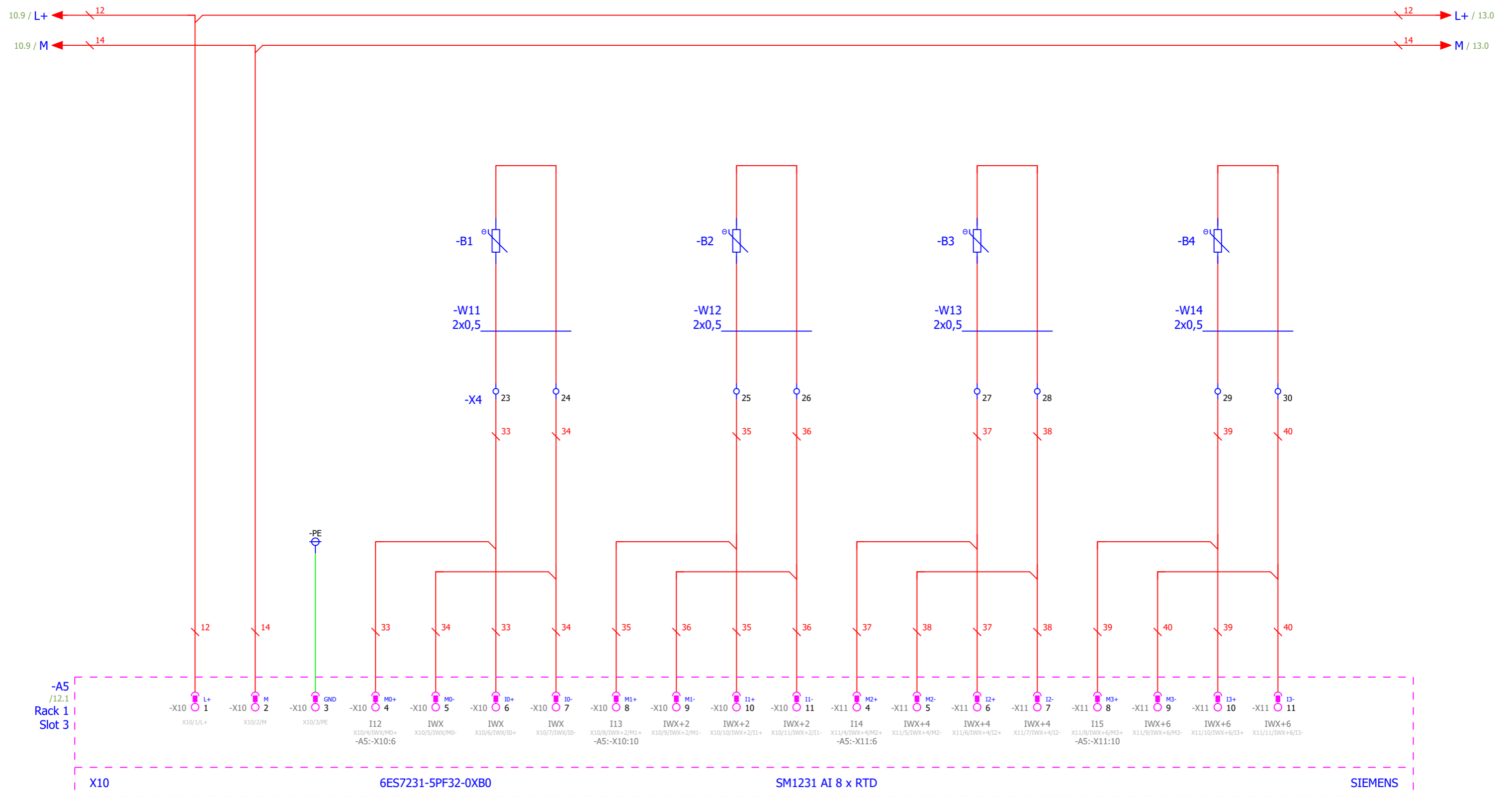


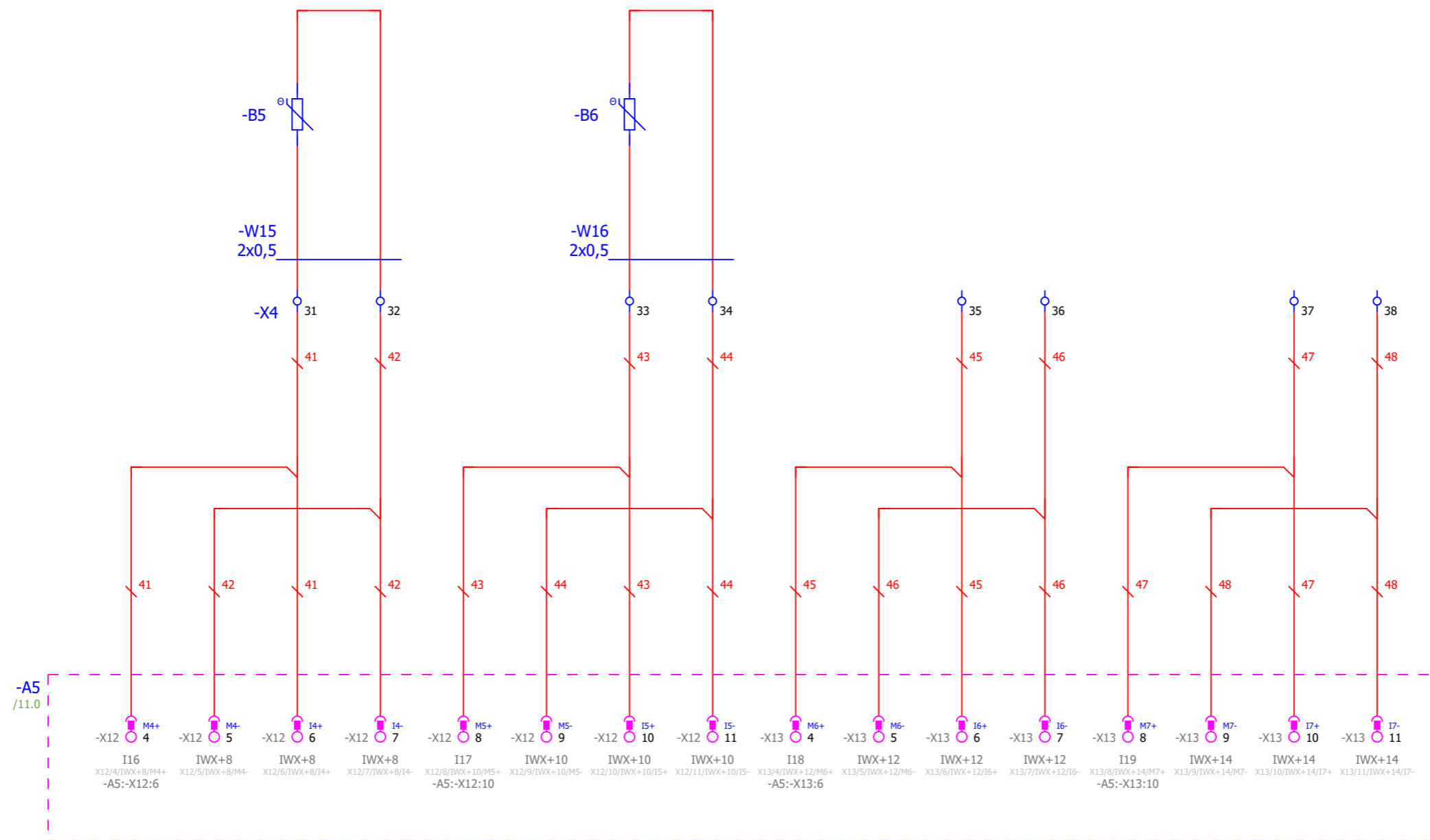


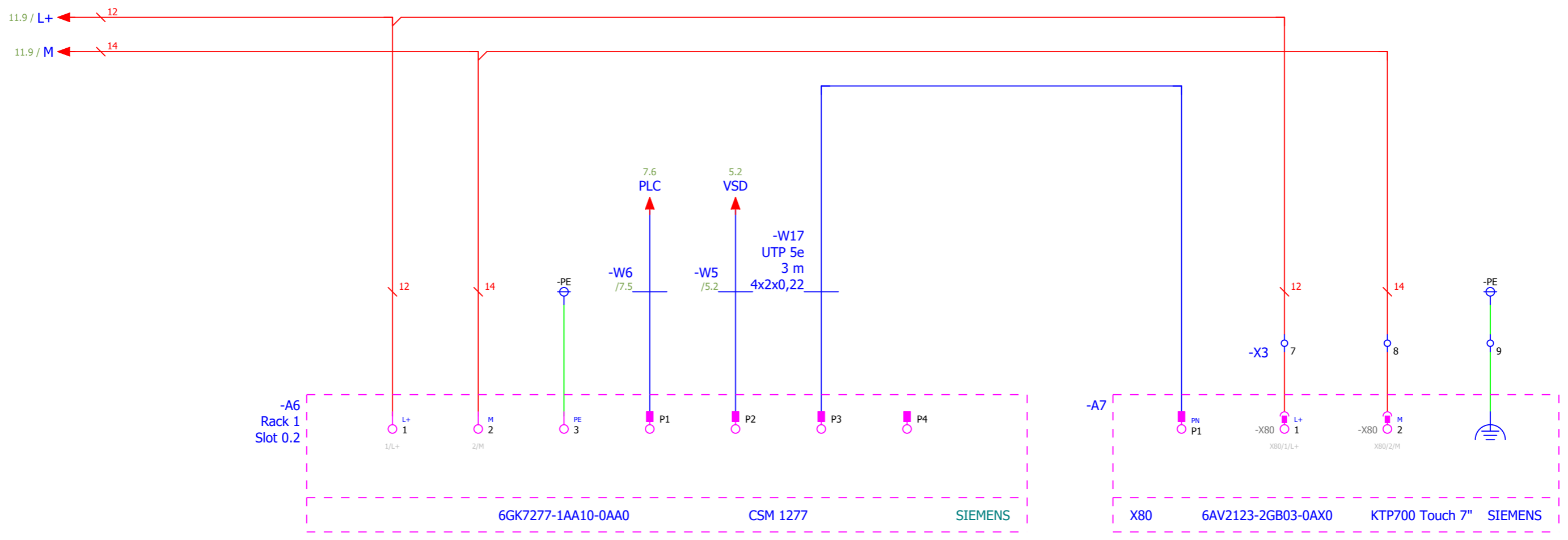


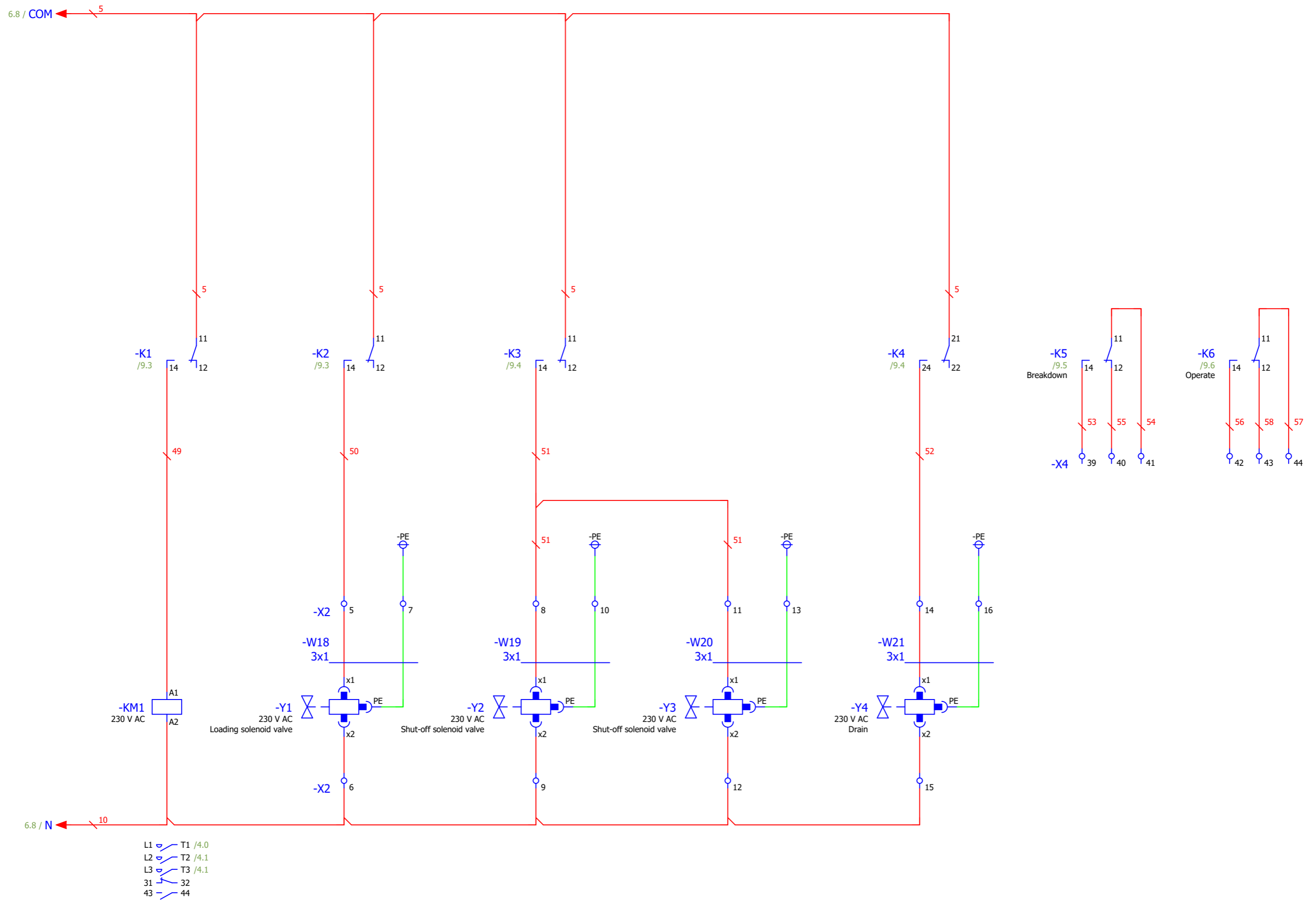












List of articles

Apparatus identifier	Function	Technical data	Manufacturer	Type number	Notes	Index	Quantity
-A1	Phase monitor		Siemens	3UG4512-1AR20		ECE0922	1
-A2	Power supply		Siemens	6EP1332-1SH71		ECE0924	1
-A3	PLC controller CPU1212C DC/DC/RLY		Siemens	6ES7212-1HE40-0XB0		ESM0085	1
-A4	Module SM1231 4xAI		Siemens	6ES7231-4HD32-0XB0		ESM0059	1
-A5	Module SM1231 8xRTD		Siemens	6ES7231-5PF32-0XB0		ESM0092	1
-A6	Switch CSM1277		Siemens	6GK7277-1AA10-0AA0		ECE0524	1
-A7	Operator panel KTP700		Siemens	6AV2123-2GB03-0AX0		ECE1245	1
-F1	Fuse switch		Aparator	RBK-2		ECE0213	1
-F1	Fuse link	315A	Aparator	WTNH-2 315A		ECE0447	3
-F2	Motor starter	Ir= 20-25A	Moeller	PKZM0-25		ECE0324	1
-F2	Auxiliary contact		Moeller	NHI-E-11-PKZ0		ECE0518	1
-F3	Overcurrent circuit-breaker	C6A		S303 C6		ECE0217	1
-F4	Overcurrent circuit-breaker	C6A		S302 C6		ECE0727	1
-F5	Overcurrent circuit-breaker	C2A		S301 C2		ECE0697	1
-K1	Relay	24 V DC	Finder	40.52 D24		ECE0300	1
-K1	Relay socket		Finder	95.75		ECE0320	1
-K2	Relay	24 V DC	Finder	40.52 D24		ECE0300	1
-K2	Relay socket		Finder	95.75		ECE0320	1
-K3	Relay	24 V DC	Finder	40.52 D24		ECE0300	1
-K3	Relay socket		Finder	95.75		ECE0320	1
-K4	Relay	24 V DC	Finder	40.52 D24		ECE0300	1
-K4	Relay socket		Finder	95.75		ECE0320	1
-K5	Relay	24 V DC	Finder	40.52 D24		ECE0300	1
-K5	Relay socket		Finder	95.75		ECE0320	1
-K6	Relay	24 V DC	Finder	40.52 D24		ECE0300	1
-K6	Relay socket		Finder	95.75		ECE0320	1
-KM1	Contactora	230 V AC	LS	MC-32a		ECE0993	1
-S1	Emergency stop button		Giovenzana	PPFN1R4N		ECE0017	1
-S1	Auxiliary contact		Giovenzana	PCW01		ECE0323	2
-T4	Transformer	400V/230V-24V 160VA		400V/230V-24V 160VA		ECE0754	1
-T5	Variable frequency drive		Siemens	6SL3220-2YE48-0UF0		ESO0116	1
-W1	Connecting wire			LGY 4 BK		EPW0072	10
-W2	Flexible cable			OW 4x4		EPW0064	5
-W3	Connecting wire			LGY 1 BK		EPW0063	10
-W4	Connecting wire			LGY 120 BK		EPW0047	30
-W4	Connecting wire			LGY 70 GNYE		EPW0066	10
-W5	Network cable			Patchcord UTP 5e 1,5m		PRO0445	1
-W6	Network cable			Patchcord UTP 5e 0,5m		PRO0491	1
-W7	Flexible cable			OW 3x1		EPW0005	3
-W8	Control cable			LIYY 3x0,5		EPW0052	5
-W9	Control cable			LIYY 3x0,5		EPW0052	5
-W10	Control cable			LIYY 3x0,5		EPW0052	5
-W17	Network cable			Patchcord UTP 5e 3m		PRO0490	1
-W18	Flexible cable			OW 3x1		EPW0005	3
-W19	Flexible cable			OW 3x1		EPW0005	3
-W20	Flexible cable			OW 3x1		EPW0005	3
-W21	Flexible cable			OW 3x1		EPW0005	3
-X1	Rail terminal block		Cabur	GPM150		ECE0450	4
-X2	Rail terminal block		Cabur	CBD6		ECE0229	3
-X2	Rail terminal block		Cabur	CBD2		ECE0376	8
-X2	PE rail terminal block		Cabur	TE2		ECE0275	4
-X2	PE rail terminal block		Cabur	TE6		ECE0230	1
-X3	Rail terminal block		Cabur	CBD2		ECE0376	8
-X3	PE rail terminal block		Cabur	TE2		ECE0275	1
-X4	Rail terminal block		Cabur	CBD2		ECE0376	44

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Designed by: mkowalka

Checked by: r.dawid

Berg Kompressoren GmbH
47807 Krefeld, Deutschland



Project name:

KOMPBERG ZXF 132

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400V/50Hz/3ph

Index:

EIE1112

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786-741-000

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Plan of terminals

		Terminal block X1						
		Target ID	Connection	Terminal	Bridge	Target ID	Connection	Position
Sort of connector	Connector type							
Rail terminal block	GPM150	-F1	1	1		L1		/4.0
Rail terminal block	GPM150	-F1	3	2		L2		/4.1
Rail terminal block	GPM150	-F1	5	3		L3		/4.1
Rail terminal block	GPM150	-PE		4		PE		/4.1

Plan of terminals

		Terminal block							
		X2							
Sort of connector	Connector type	Target ID	Connection	Terminal	Bridge	Target ID	Connection	Position	
Rail terminal block	CBD6	-M2	U1	1		-KM1	T1	/4.0	
Rail terminal block	CBD6	-M2	V1	2		-KM1	T2	/4.1	
Rail terminal block	CBD6	-M2	W1	3		-KM1	T3	/4.1	
PE rail terminal block	TE6	-M2	PE	4		-PE		/4.1	
Rail terminal block	CBD2	-Y1	x1	5		-K2	14	/14.2	
Rail terminal block	CBD2	-KM1	A2	6		-Y1	x2	/14.2	
PE rail terminal block	TE2	-Y1	PE	7			-PE		/14.2
Rail terminal block	CBD2	-Y2	x1	8			-K3	14	/14.3
Rail terminal block	CBD2			9			-Y2	x2	/14.3
PE rail terminal block	TE2	-Y2	PE	10			-PE		/14.4
Rail terminal block	CBD2	-Y3	x1	11					/14.5
Rail terminal block	CBD2			12			-Y3	x2	/14.5
PE rail terminal block	TE2	-Y3	PE	13			-PE		/14.5
Rail terminal block	CBD2	-Y4	x1	14			-K4	24	/14.6
Rail terminal block	CBD2			15			-Y4	x2	/14.6
PE rail terminal block	TE2	-Y4	PE	16			-PE		/14.6

Plan of terminals

		Terminal block						Position	
		Target ID	Connection	Terminal	Bridge	Target ID	Connection		
Sort of connector	Connector type								
Rail terminal block	CBD2	-S1	1	1		-A1	L1	/4.4	
Rail terminal block	CBD2	-T4	1	2		-S1	2	/4.4	
Rail terminal block	CBD2	-S1	1	3		-A1	L2	/4.4	
Rail terminal block	CBD2	-T4	3	4		-S1	2	/4.4	
Rail terminal block	CBD2	-S1	1	5		-T5-X132	9	/4.4	
Rail terminal block	CBD2	-T5-STO_A	24V	6		-S1	2	/4.4	
Rail terminal block	CBD2	-A7	-X80:1	7		-A6	1	/13.7	
Rail terminal block	CBD2	-A7	-X80:2	8		-A6	2	/13.8	
PE rail terminal block	TE2	-A7	-X80	9		-PE		/13.8	

Plan of terminals

		Terminal block							
		X4							
Sort of connector	Connector type	Target ID	Connection	Terminal	Bridge	Target ID	Connection	Position	
Rail terminal block	CBD2	-B7		1					
Rail terminal block	CBD2	-A3	-X10:11	2			-B7	1.53	/8.4
Rail terminal block	CBD2	-U1		3					/8.4
Rail terminal block	CBD2	-A3	-X10:12	4			-U1		/8.4
Rail terminal block	CBD2			5					/8.5
Rail terminal block	CBD2	-A3	-X10:13	6					/8.5
Rail terminal block	CBD2			7					/8.5
Rail terminal block	CBD2	-A3	-X10:14	8					/8.5
Rail terminal block	CBD2			9					/8.6
Rail terminal block	CBD2	-A3	-X11:2	10					/8.6
Rail terminal block	CBD2			11			-A3	-X11:1	/8.6
Rail terminal block	CBD2			12			-A3	-X12:1	/8.7
Rail terminal block	CBD2	-A3	-X11:3	13					/8.7
Rail terminal block	CBD2			14			-K1	A2	/8.7
Rail terminal block	CBD2	-A4	-X10:1	15			-T1	1	/10.3
Rail terminal block	CBD2	-A4	-X10:4	16			-T1	2	/10.3
Rail terminal block	CBD2			17			-T2	1	/10.4
Rail terminal block	CBD2	-A4	-X10:6	18			-T2	2	/10.4
Rail terminal block	CBD2			19			-T3	1	/10.6
Rail terminal block	CBD2	-A4	-X11:4	20			-T3	2	/10.6
Rail terminal block	CBD2	-A5	-X10:1	21					/10.7
Rail terminal block	CBD2	-A4	-X11:6	22					/10.7
Rail terminal block	CBD2	-A5	-X10:6	23			-B1		/11.3
Rail terminal block	CBD2	-A5	-X10:7	24			-B1		/11.3
Rail terminal block	CBD2	-A5	-X10:10	25			-B2		/11.4
Rail terminal block	CBD2	-A5	-X10:11	26			-B2		/11.5
Rail terminal block	CBD2	-A5	-X11:6	27			-B3		/11.6
Rail terminal block	CBD2	-A5	-X11:7	28			-B3		/11.6
Rail terminal block	CBD2	-A5	-X11:10	29			-B4		/11.8
Rail terminal block	CBD2	-A5	-X11:11	30			-B4		/11.8
Rail terminal block	CBD2	-A5	-X12:6	31			-B5		/12.2
Rail terminal block	CBD2	-A5	-X12:7	32			-B5		/12.2
Rail terminal block	CBD2	-A5	-X12:10	33			-B6		/12.4
Rail terminal block	CBD2	-A5	-X12:11	34			-B6		/12.4
Rail terminal block	CBD2	-A5	-X13:6	35					/12.5



Plan of terminals

Sort of connector		Connector type		Terminal block				Position
				X4				
		Target ID	Connection	Terminal	Bridge	Target ID	Connection	
Rail terminal block	CBD2	-A5	-X13:7	36				/12.6
Rail terminal block	CBD2	-A5	-X13:10	37				/12.7
Rail terminal block	CBD2	-A5	-X13:11	38				/12.7
Rail terminal block	CBD2			39	-K5		14	/14.7
Rail terminal block	CBD2			40	-K5		12	/14.7
Rail terminal block	CBD2			41	-K5		11	/14.7
Rail terminal block	CBD2			42	-K6		14	/14.8
Rail terminal block	CBD2			43	-K6		12	/14.8
Rail terminal block	CBD2			44	-K6		11	/14.8