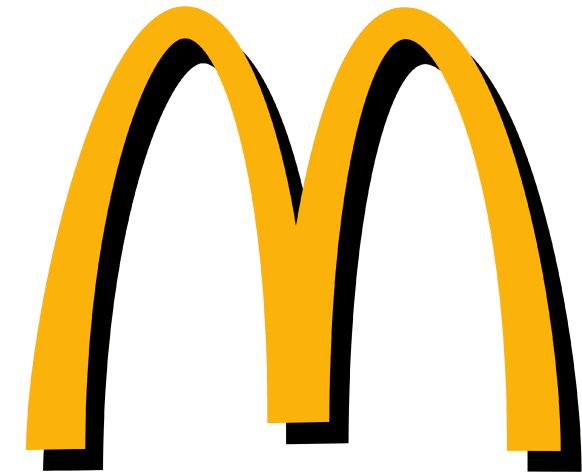




Customer	Rox Klimatechnik	End customer	Mc Donald´s DK - Kolding
Street	Langenbacher Str. 25	Street	
ZIP code / City	57586 Weitefeld	ZIP code / City	
Phone	+49 2743 807 0	Phone	
Fax	+49 2743 807 153	Fax	
E-mail	info@rox-online.de	E-mail	
Project number	4641a	Terminal strips	Wire colors
Customer number	7585	X01 = in front of main switch	primary current
Commission	Mc Donald´s DK - Kolding	X1 = primary current	230V AC / 230V/0
Project description	ventilation	X2 = control unit 230V	24V AC / 24V/0
Created on	10.10.2025	X3 = low voltage	24V+ / 24V -
power supply	bottom	X4 = analog signals	external voltage
door hinges	left and right	X5 = signal exchange with external unit	DDC
Cabinet size		X6 = bus line	measuring line
		X7 = external voltage	neutral conductor
		X8 = ex area	others
Edit date	10.10.2025	EN regulations	VDE
by (short name)	D. Preuß	HD 60364	VDE 0100
Number of pages	56	EN 61439-1	VDE 0660
			International IEC
			IEC 60364
			IEC 61439-1
		Before commissioning:	
		Compare the circuit diagram with the data plates and on-site terminal markings,	
		as well as the setting values of the motor protection switches.	

plant designation	component type	power in kW	electricity in A	voltage in V	rotation in U/min
supply air fan kitchen	GKHM 355-CII.118.6FF IE Gen3	4,44	6,80	400	3650
exhaust fan kitchen		1,70	2,60	400	1440
exhaust fan dishes		0,14	0,89	230	1338
heatpump 1 kitchen	DVM-S, AM040DXMDNG/EU	max 3,95	max 16,10	400	----
heatpump 2 kitchen	DVM-S, AM040DXMDNG/EU	max 3,95	max 16,10	400	----
supply air fan lobby	GKHM 355-CII.118.6FF IE Gen3	4,44	6,80	400	3650
exhaust fan lobby	GKHM 355-CII.118.6FF IE Gen3	4,44	6,80	400	3650
heatpump 1 lobby	DVM-S, AM040DXMDNG/EU	max 3,95	max 16,10	400	----
heatpump 2 lobby	DVM-S, AM040DXMDNG/EU	max 3,95	max 16,10	400	----
air cooling devices		max 23,00	max 60,00	230/400	----
others kitchen		2,00	4,00	400	
others lobby		2,00	4,00	400	
total		58	156,00	400	

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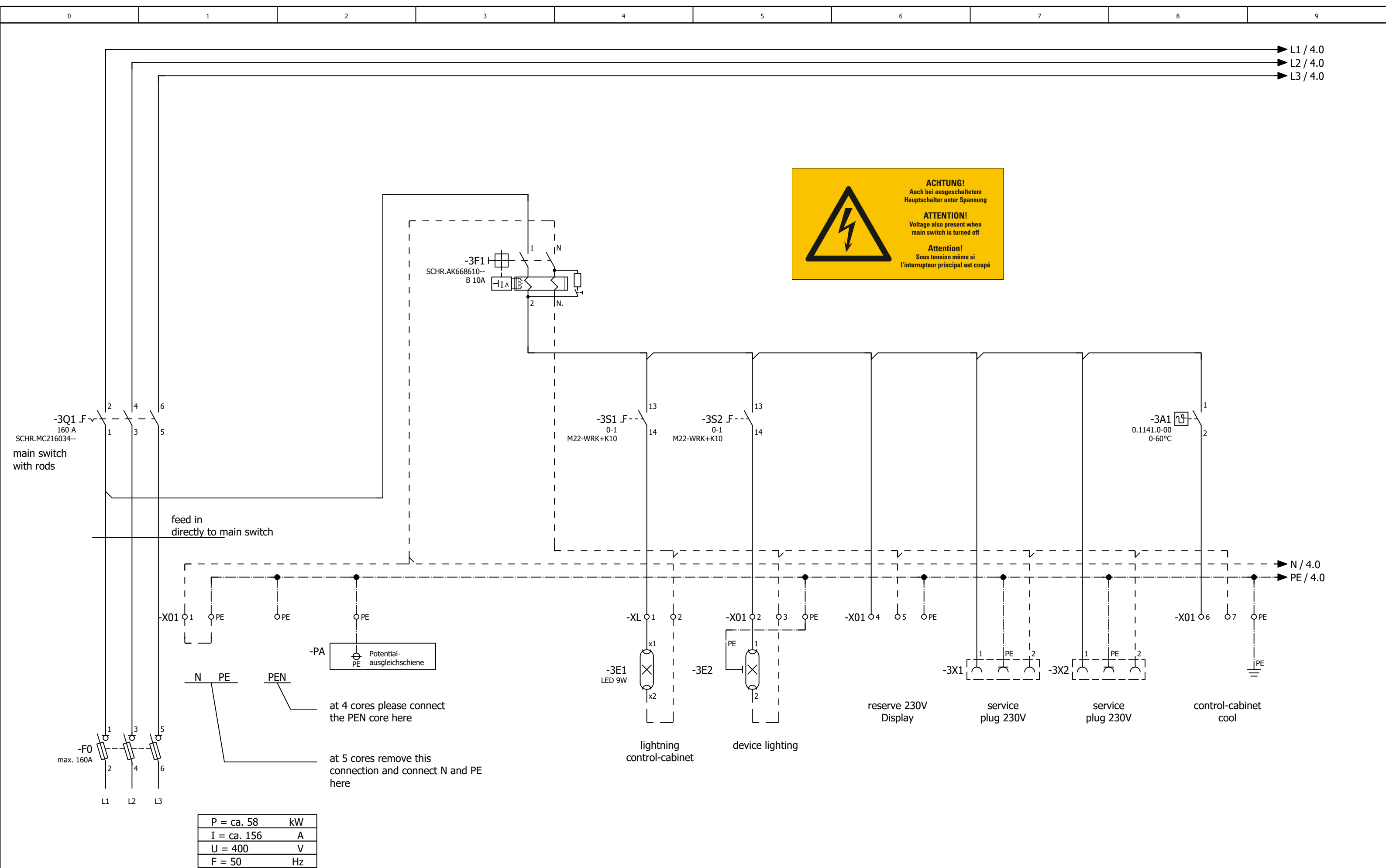
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=RLT_1/2	table of contents : =RLT_1/1 - =RLT_1/55		10.10.2025	daniel.preuss	X
=RLT_1/2.a	table of contents : =RLT_1/60 - =SSA/1		10.10.2025	daniel.preuss	X
=RLT_1/3	feed in		10.10.2025	daniel.preuss	
=RLT_1/4	phase monitoring		10.10.2025	daniel.preuss	
=RLT_1/5	control voltage 230V AC and 24V DC		10.10.2025	daniel.preuss	
=RLT_1/7	fault reset		10.10.2025	daniel.preuss	
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=RLT_1/20	heating pump heater valve kitchen		10.10.2025	daniel.preuss	
=RLT_1/21	heatpump 1 kitchen		10.10.2025	daniel.preuss	
=RLT_1/22	heatpump 2 kitchen		10.10.2025	daniel.preuss	
=RLT_1/23	heatpump 1 kitchen indoor unit		10.10.2025	daniel.preuss	
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=RLT_1/31	supply air fan lobby		10.10.2025	daniel.preuss	
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=RLT_1/36	flap drives lobby		10.10.2025	daniel.preuss	
=RLT_1/37	volume flow regulator		10.10.2025	daniel.preuss	
=RLT_1/38	gas detector		10.10.2025	daniel.preuss	
=RLT_1/41	heatpump 1 lobby		10.10.2025	daniel.preuss	
=RLT_1/42	heatpump 2 lobby		10.10.2025	daniel.preuss	
=RLT_1/43	heatpump 1 lobby indoor unit		10.10.2025	daniel.preuss	
=RLT_1/44	heatpump 2 lobby indoor unit		10.10.2025	daniel.preuss	
=RLT_1/50	unit discription general		10.10.2025	daniel.preuss	
=RLT_1/51	release kitchen ware		10.10.2025	daniel.preuss	
=RLT_1/55	air cooling devices		10.10.2025	daniel.preuss	

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=RLT_1/62	overview occupancy board 2		10.10.2025	daniel.preuss	
=RLT_1/65	overview DEOS module		10.10.2025	daniel.preuss	
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=RLT_1/68	CPU - digital outputs 8 x DO		10.10.2025	daniel.preuss	
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=RLT_1/70	CPU - analog outputs 4 x AO		10.10.2025	daniel.preuss	
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=KBL/1	cable overview : W-9A1 - W-32M1/3		10.10.2025	daniel.preuss	
=KBL/1.a	cable overview : W-32Q1 - W-74B6		10.10.2025	daniel.preuss	
=KBL/1.b	cable overview : W-74B7 - W-78B1		10.10.2025	daniel.preuss	
=SSA/1	cabinet view		10.10.2025	daniel.preuss	

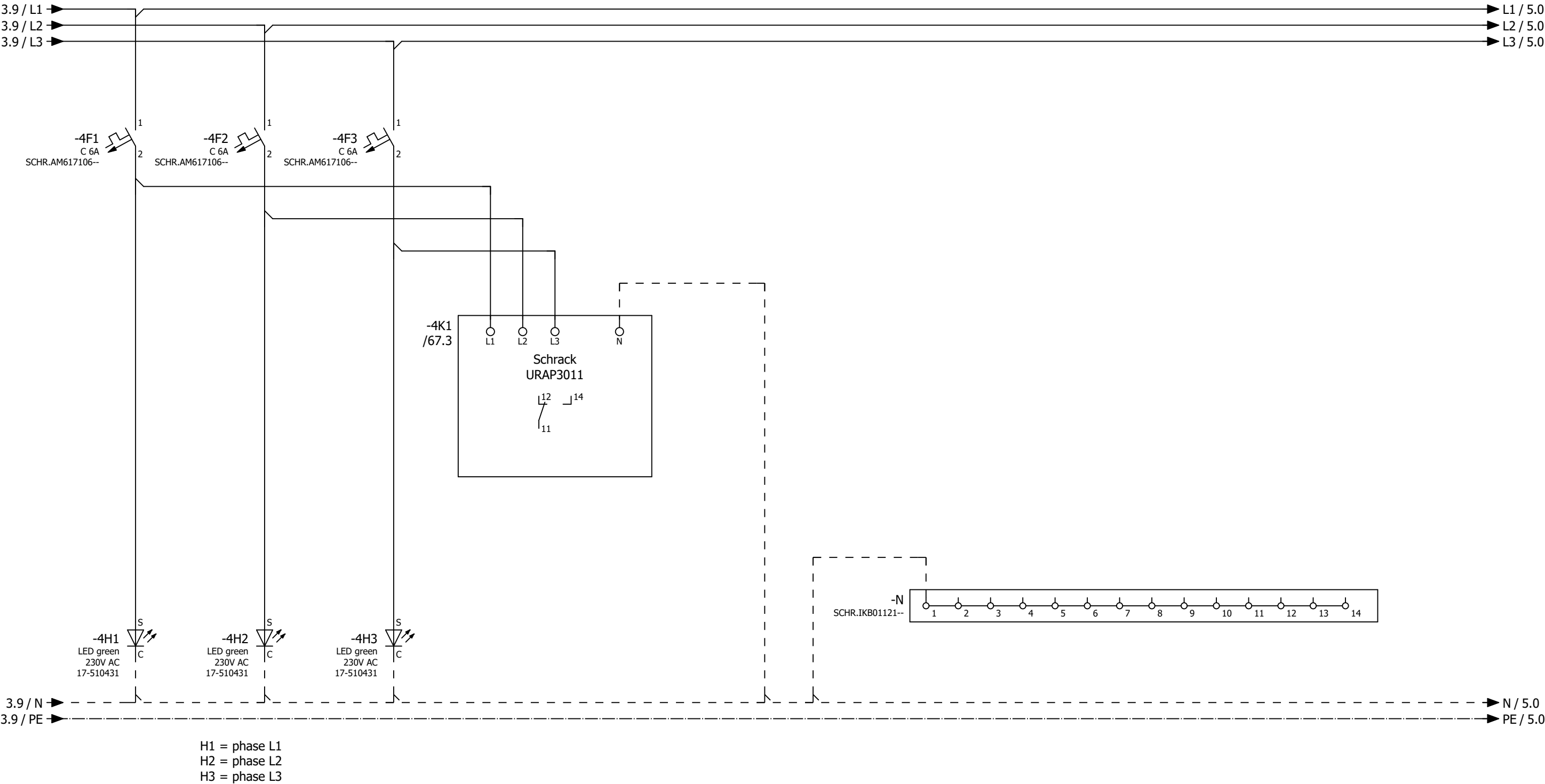


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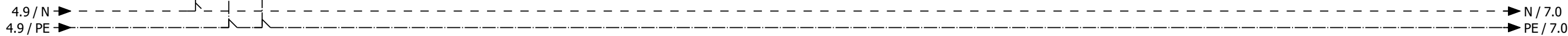
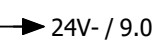
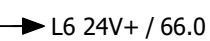
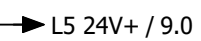
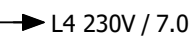
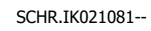
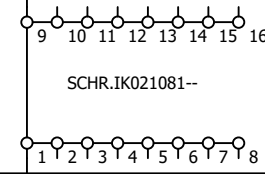
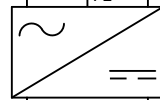
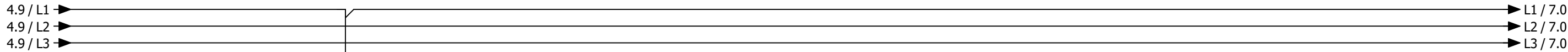
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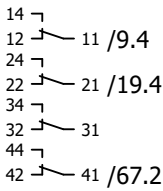
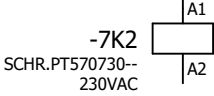
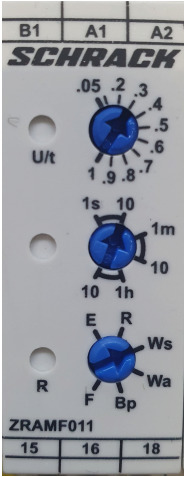
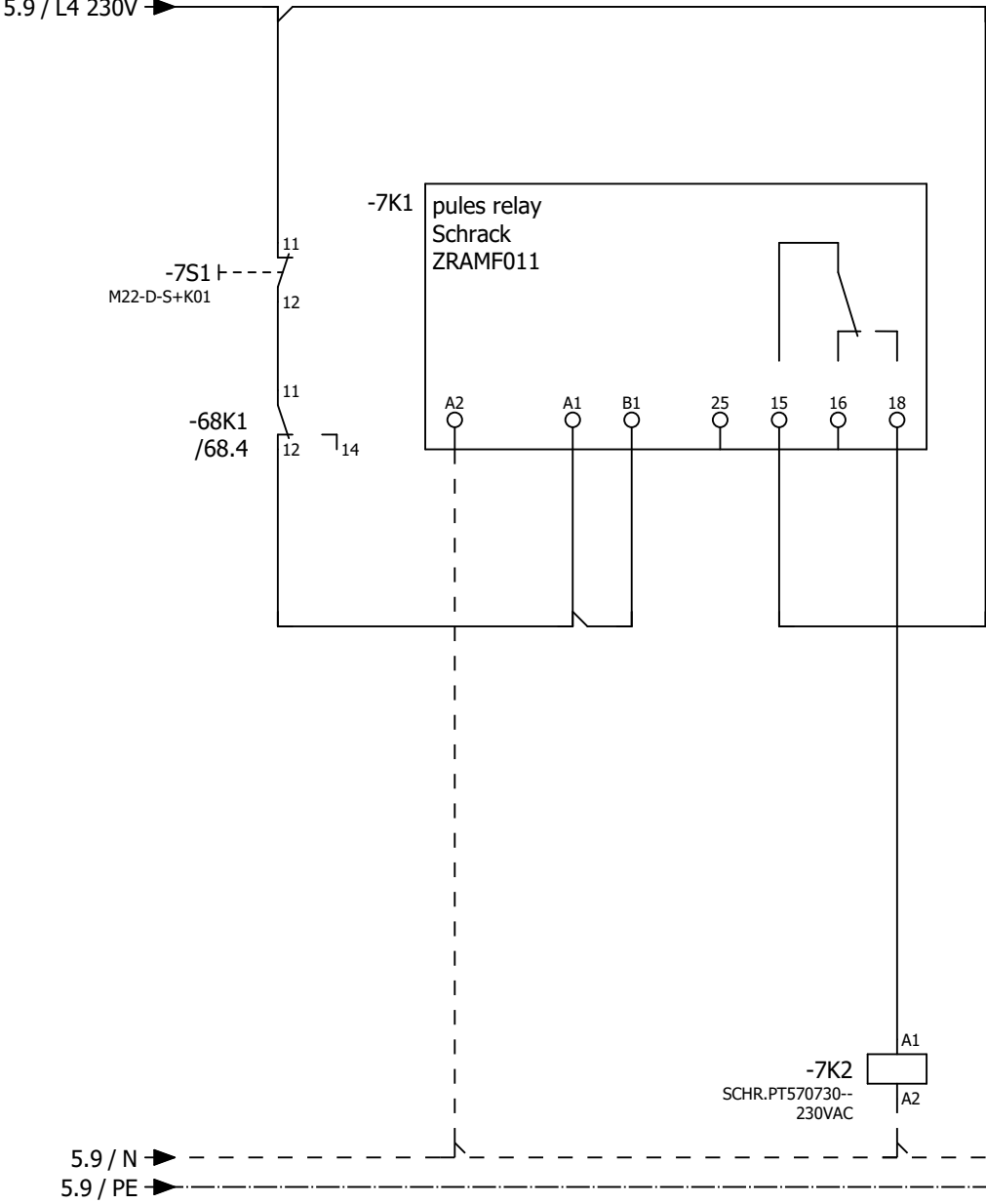
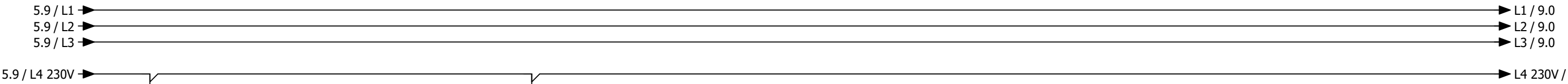
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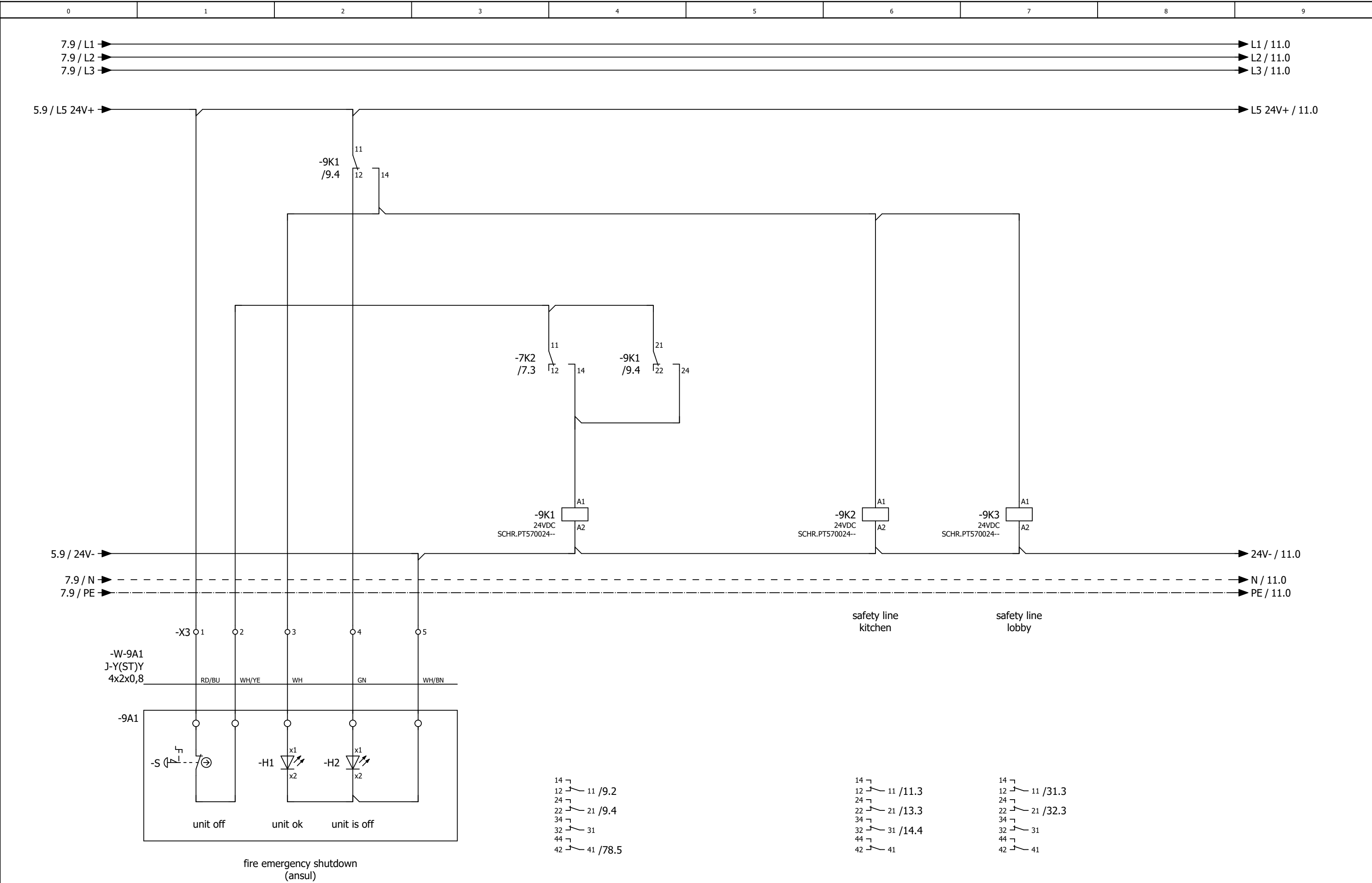


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control unit control system





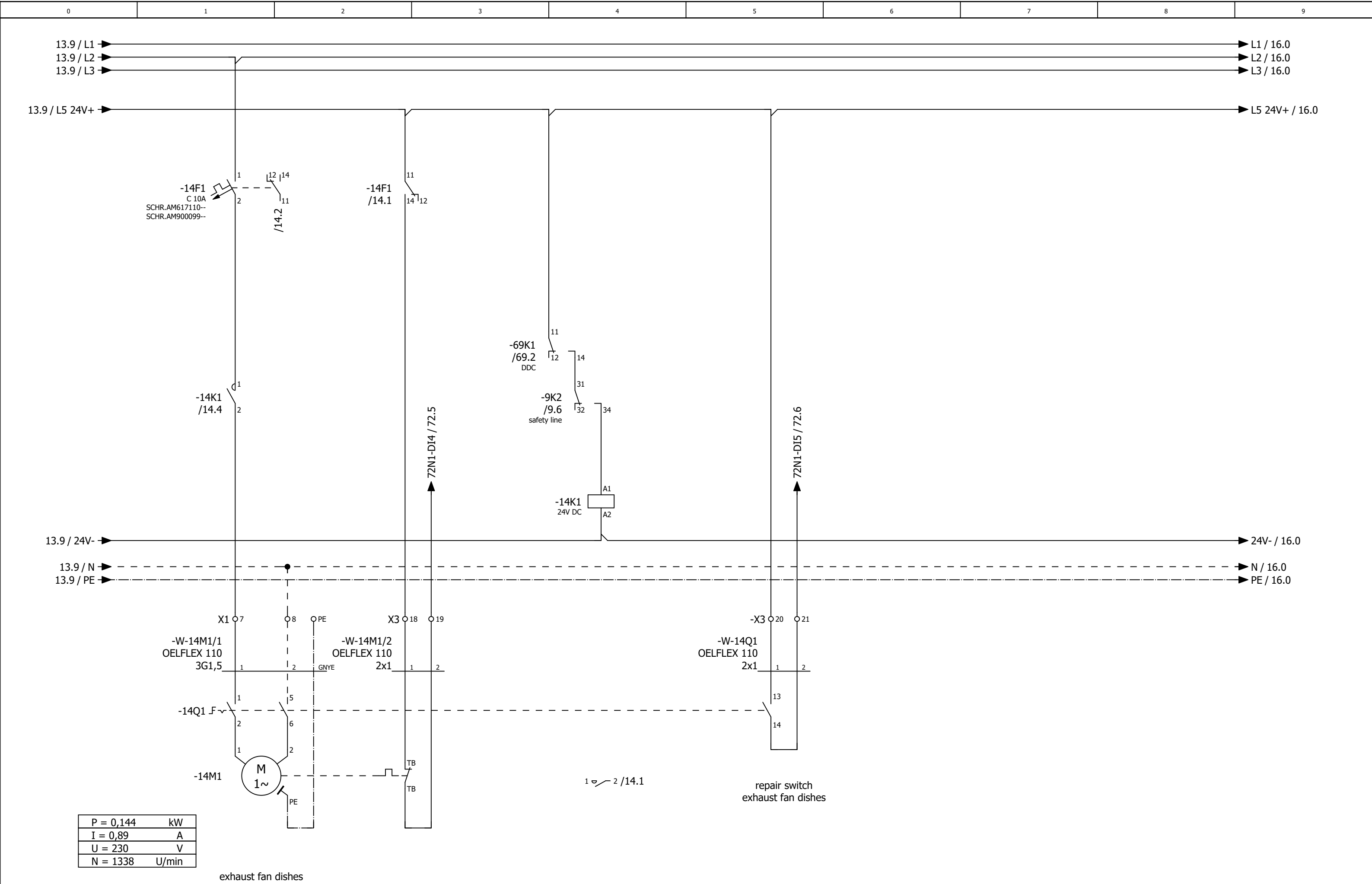
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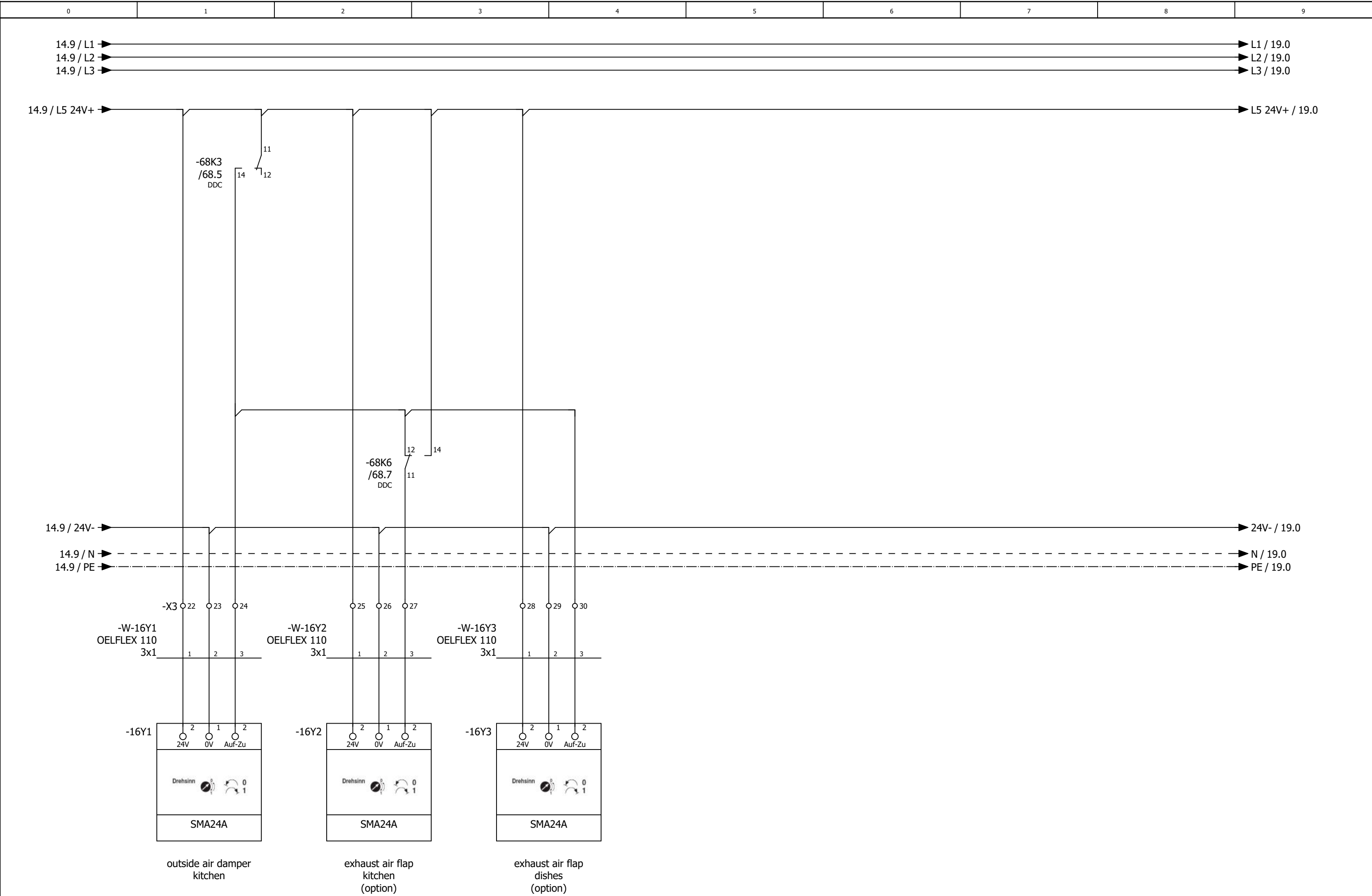
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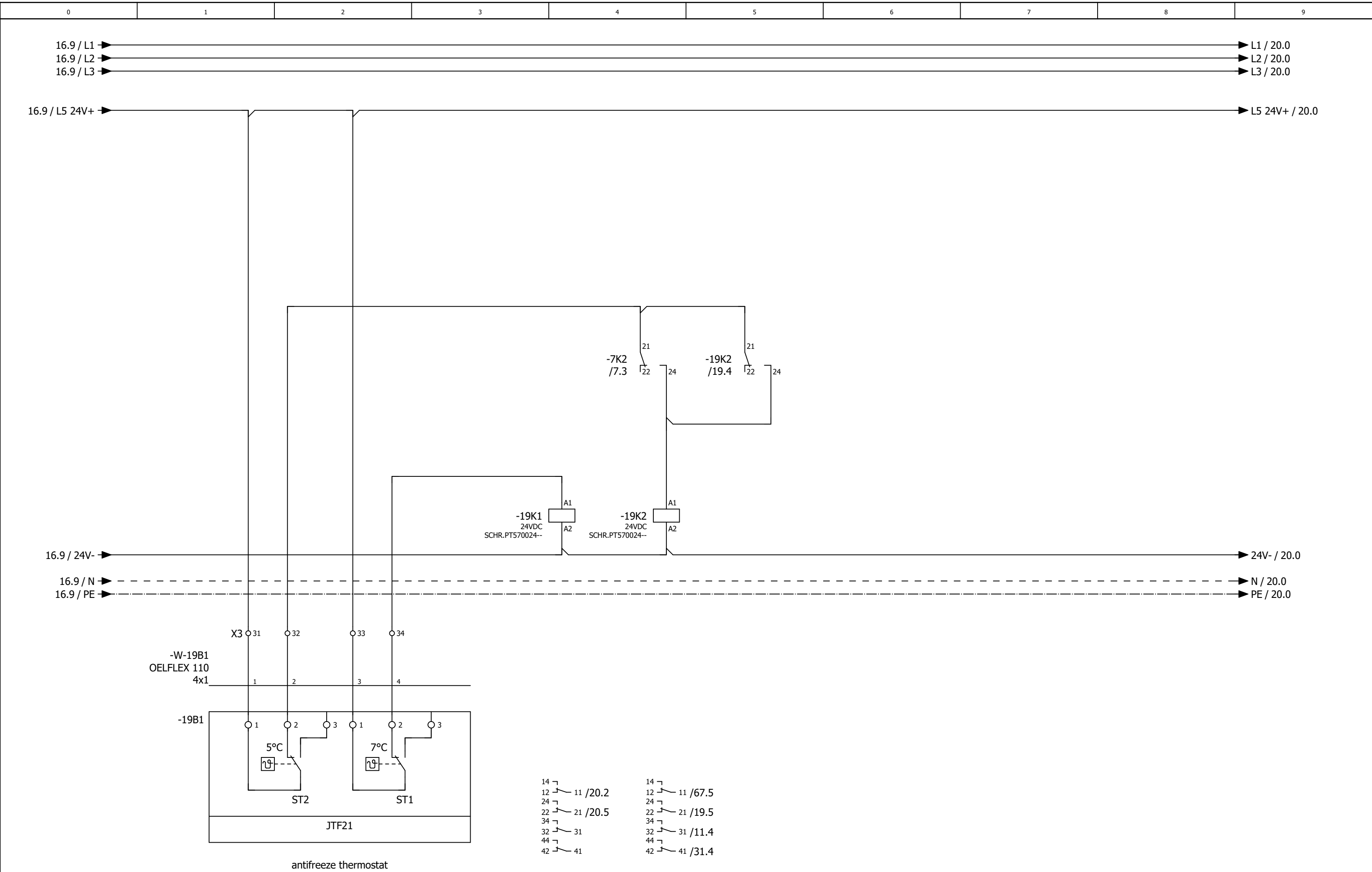
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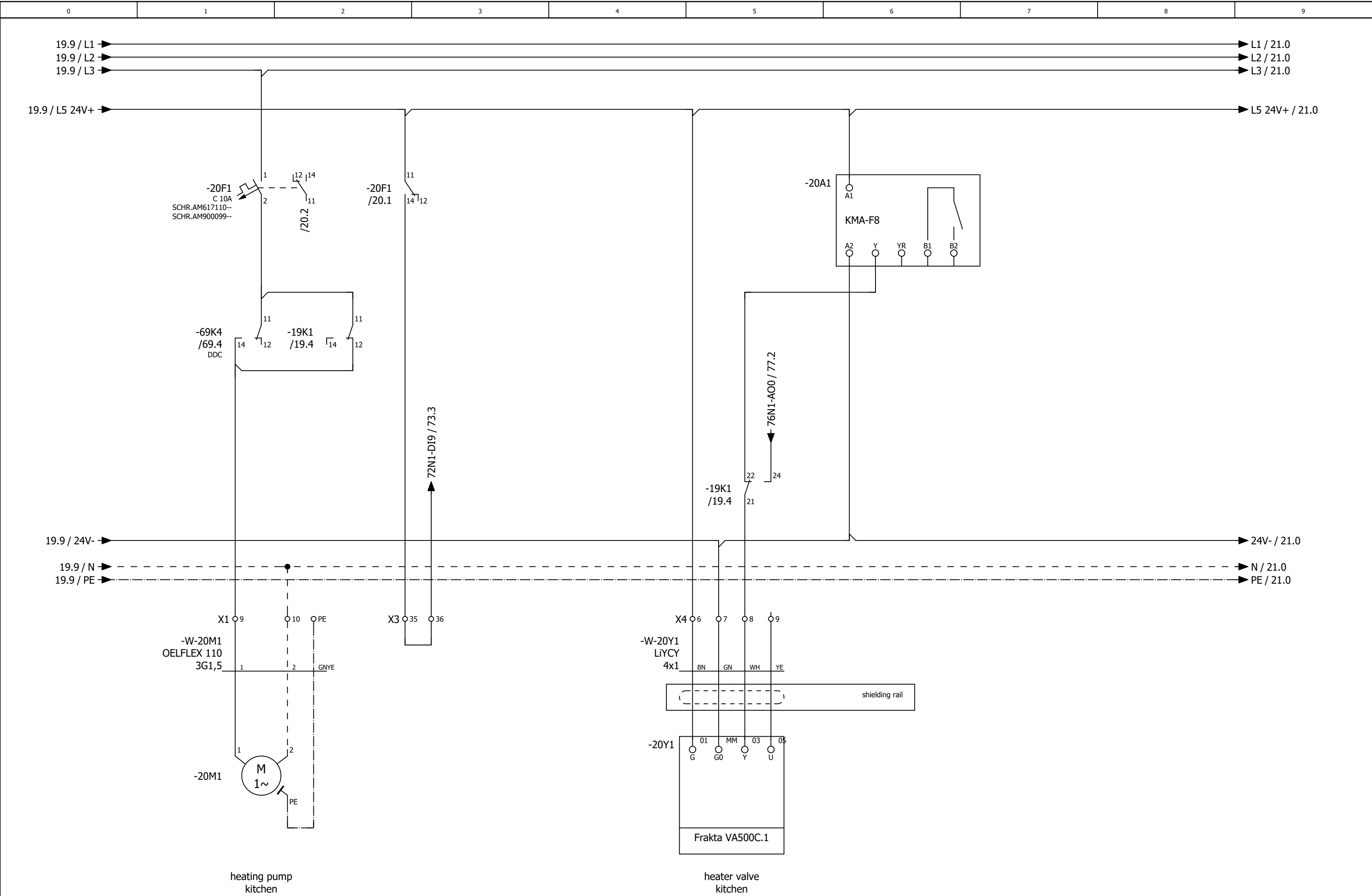
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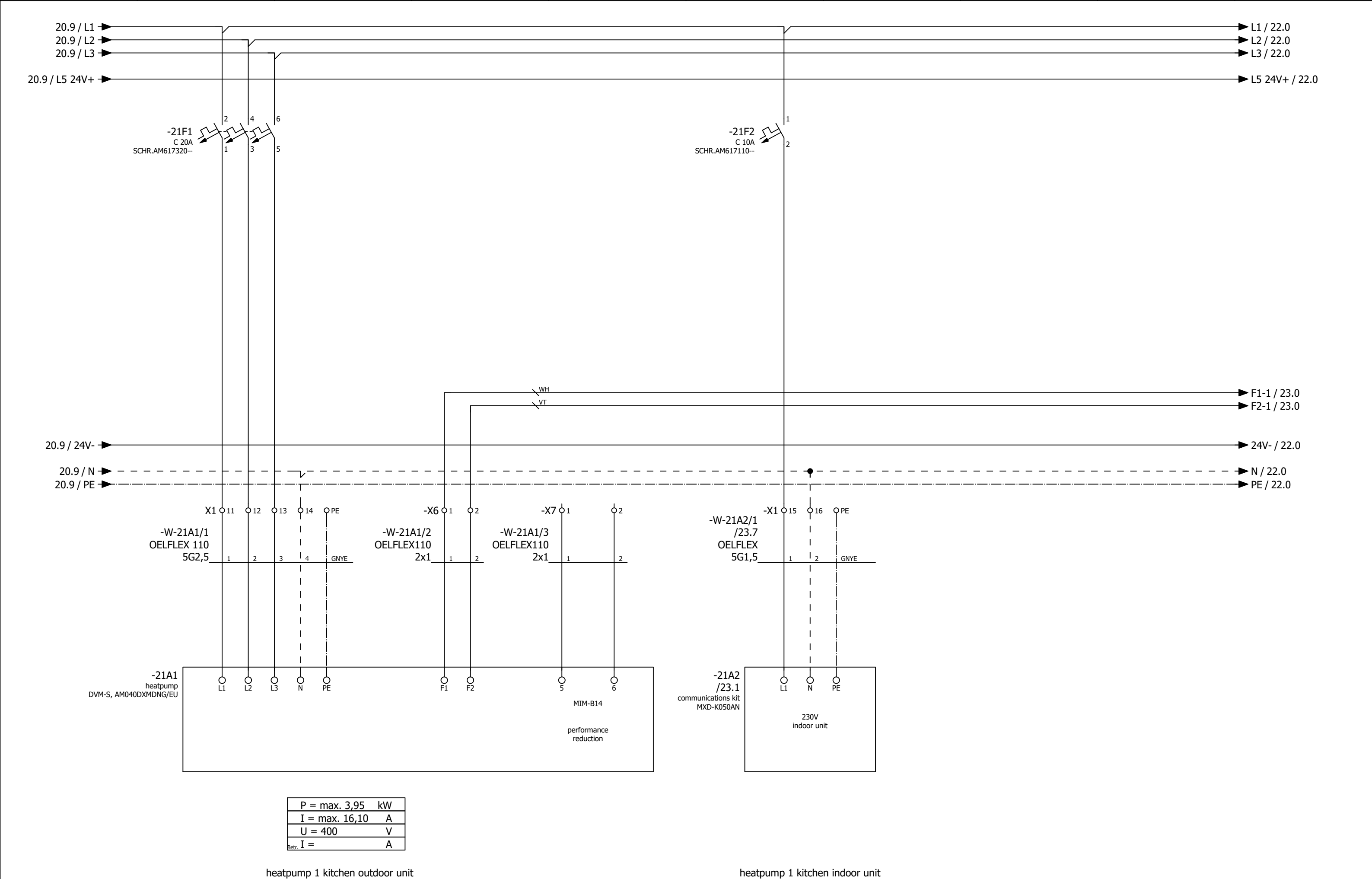


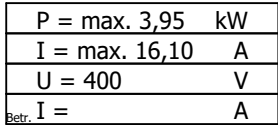




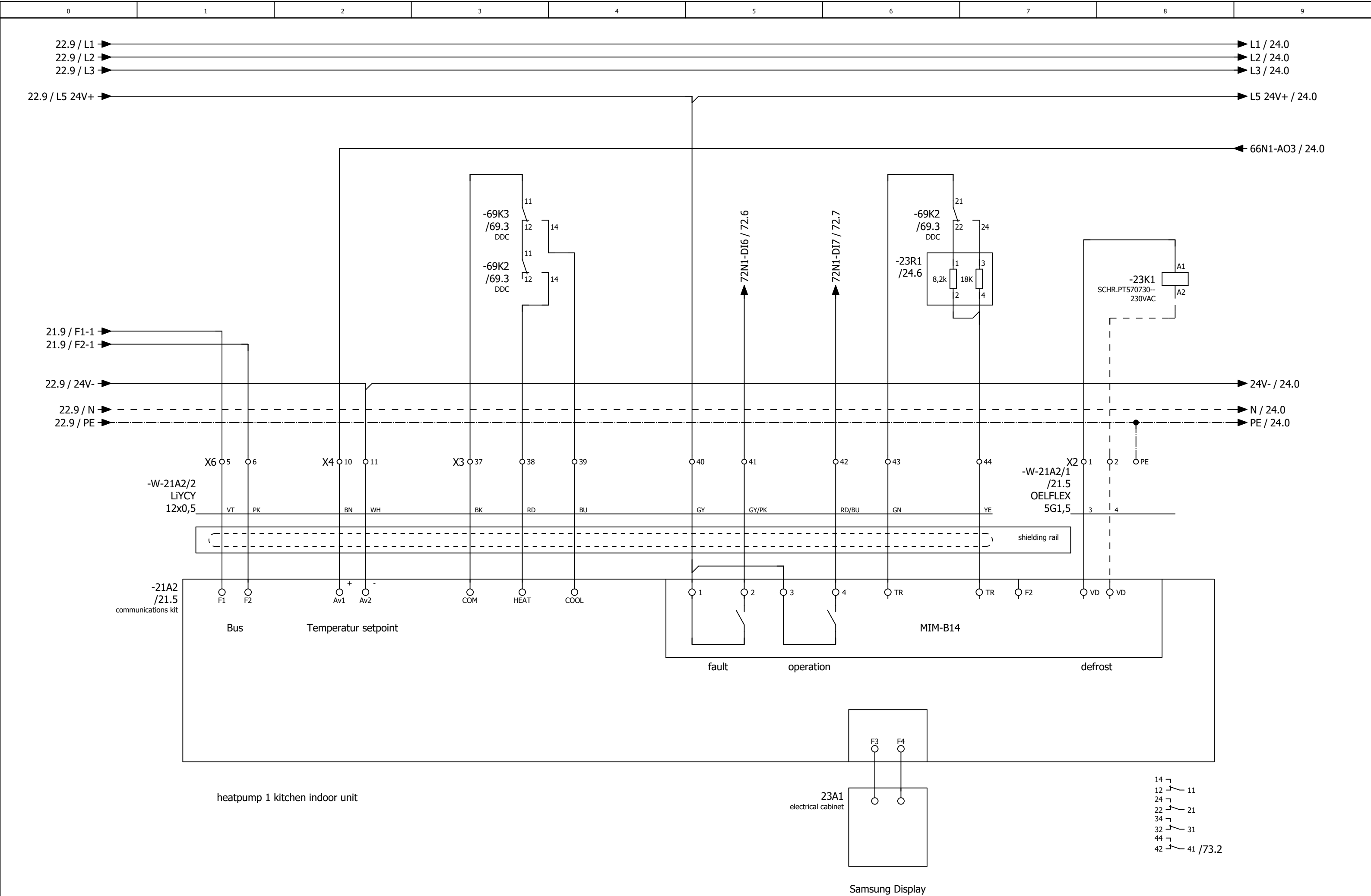


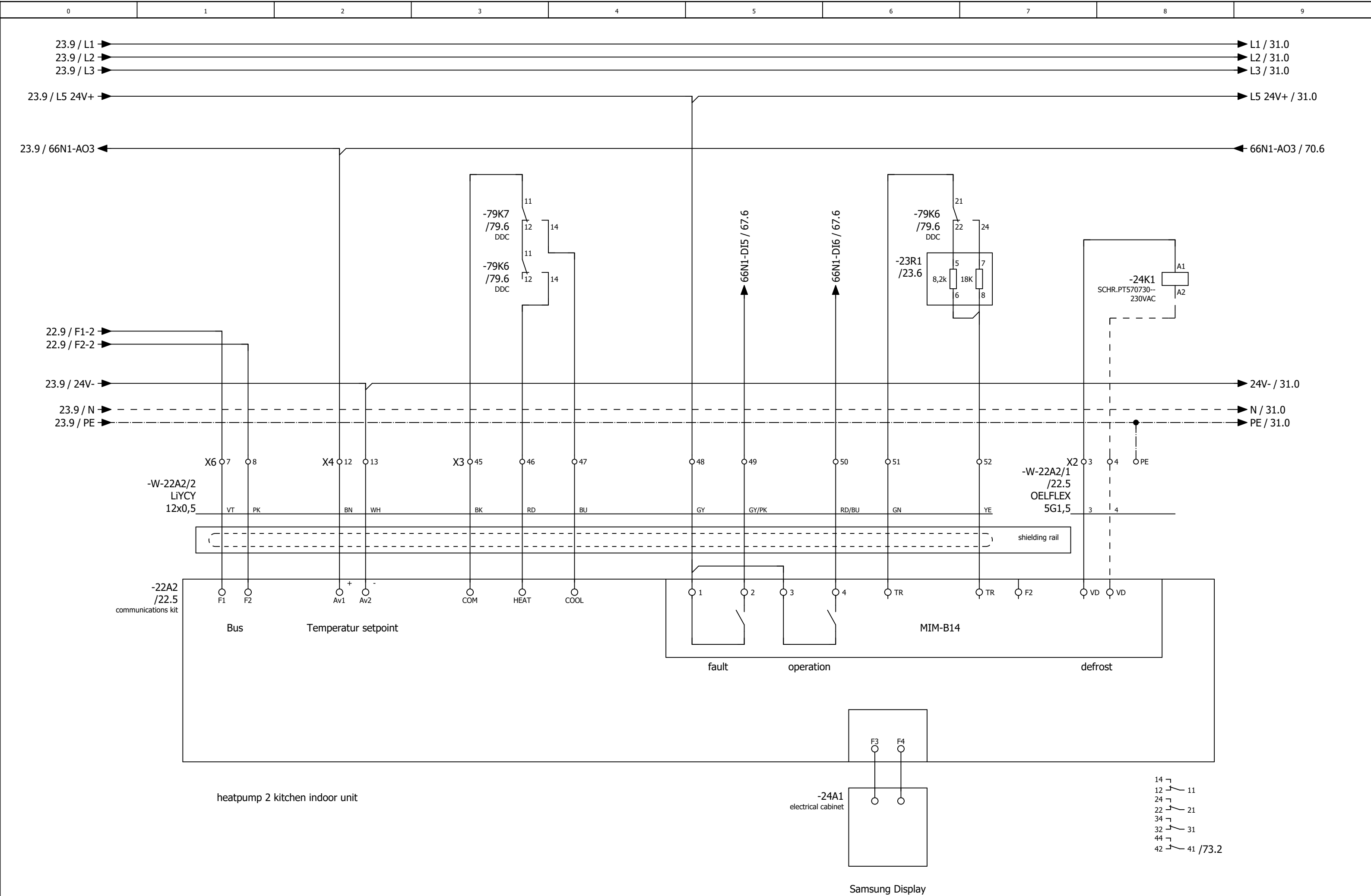
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heatpump 2 kitchen indoor unit



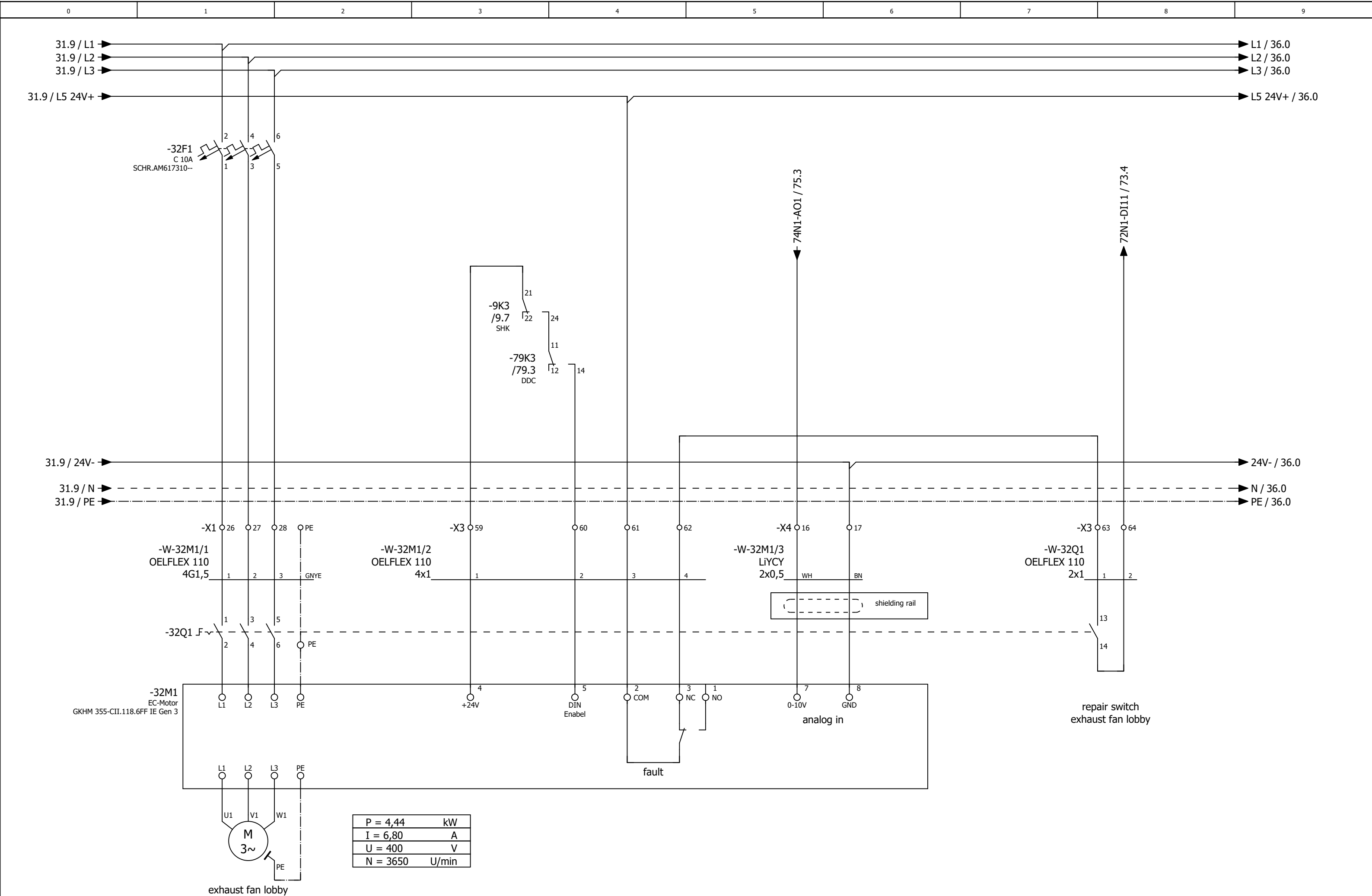


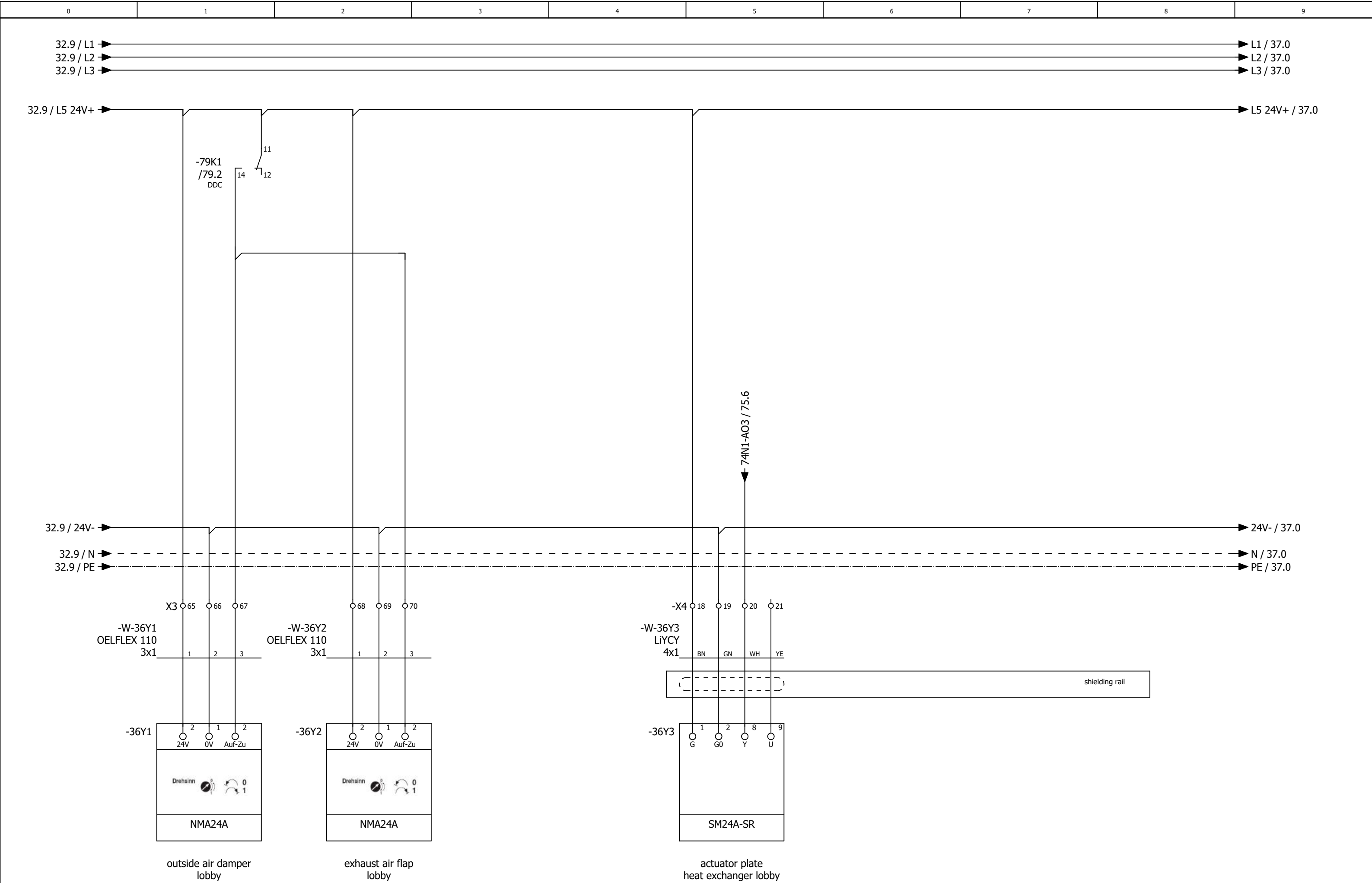
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AHU LOBBY

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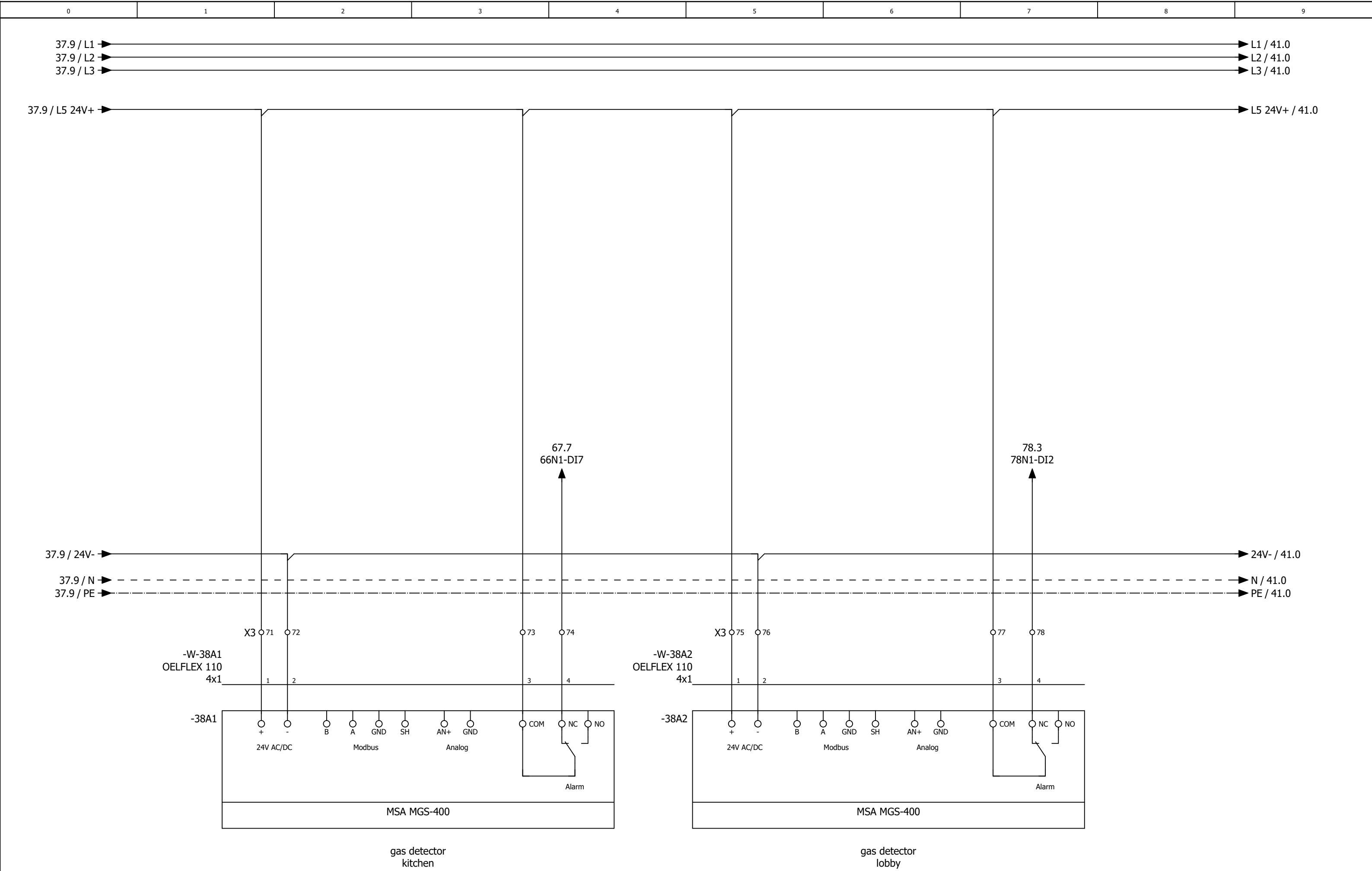




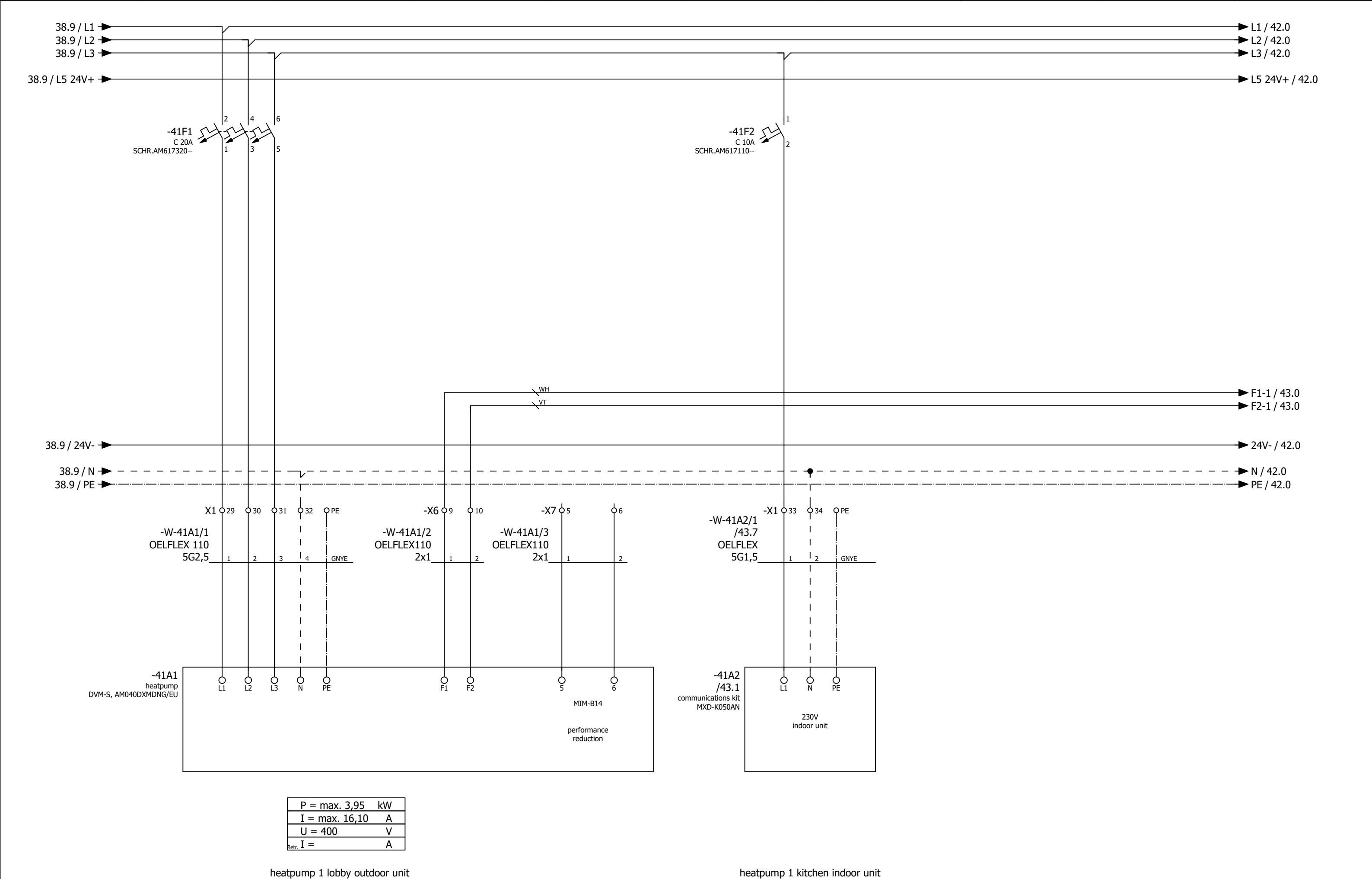




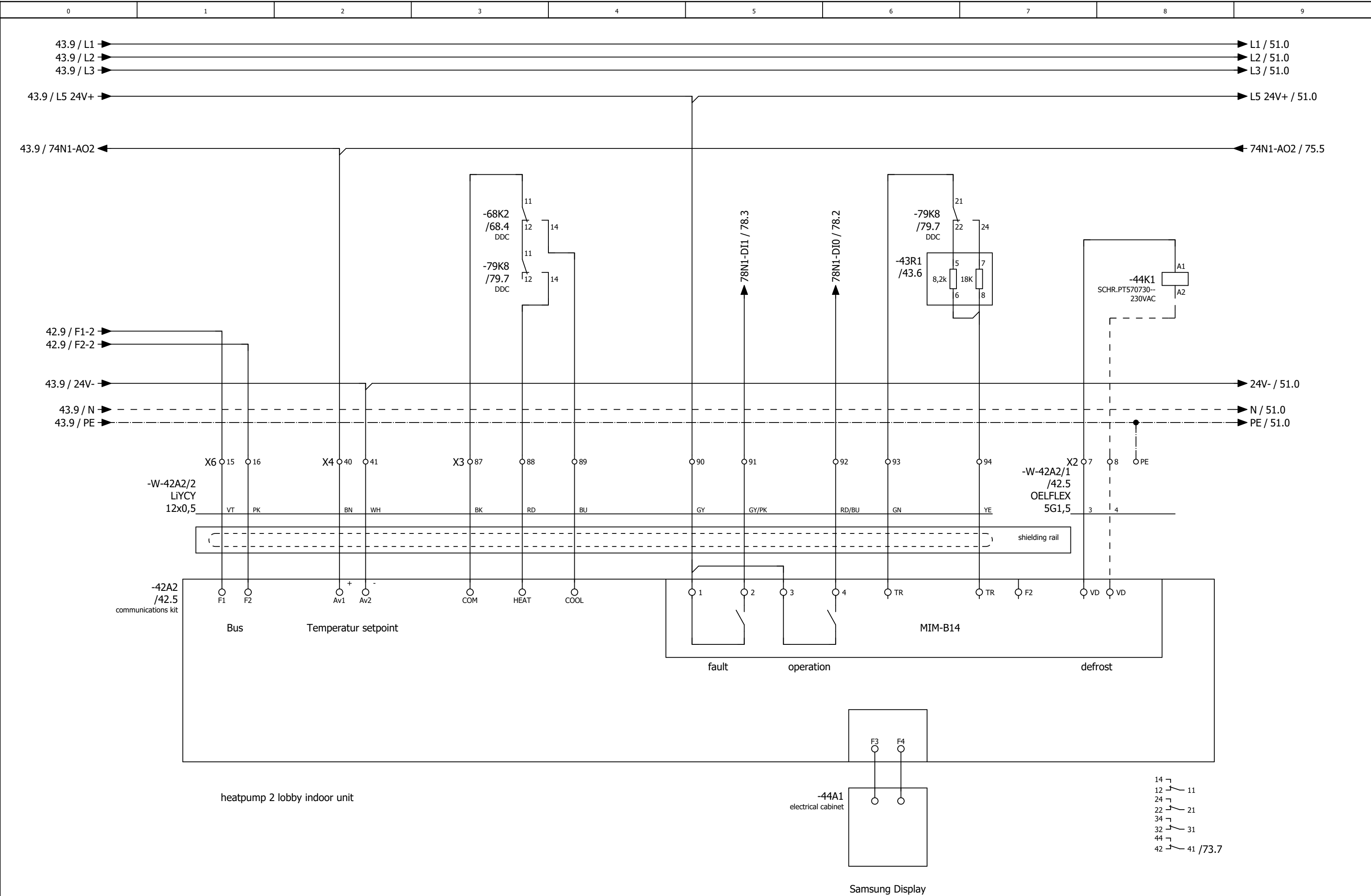
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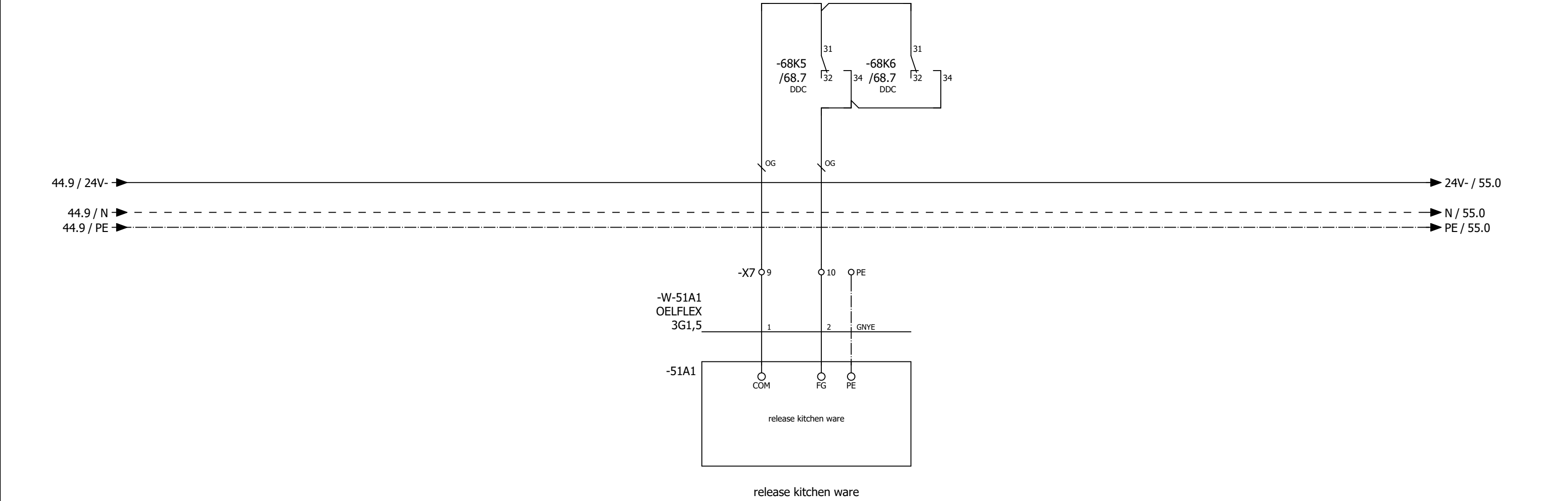
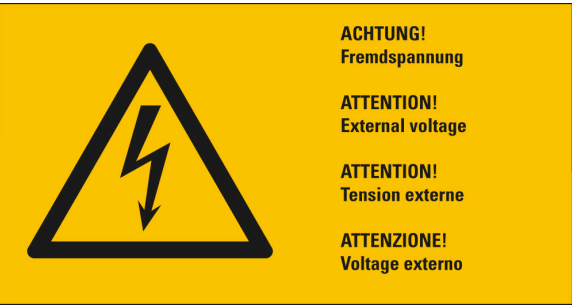
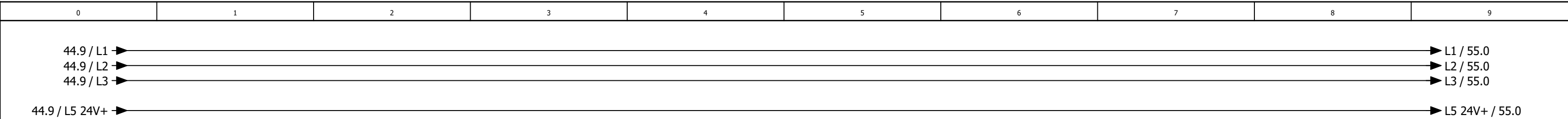


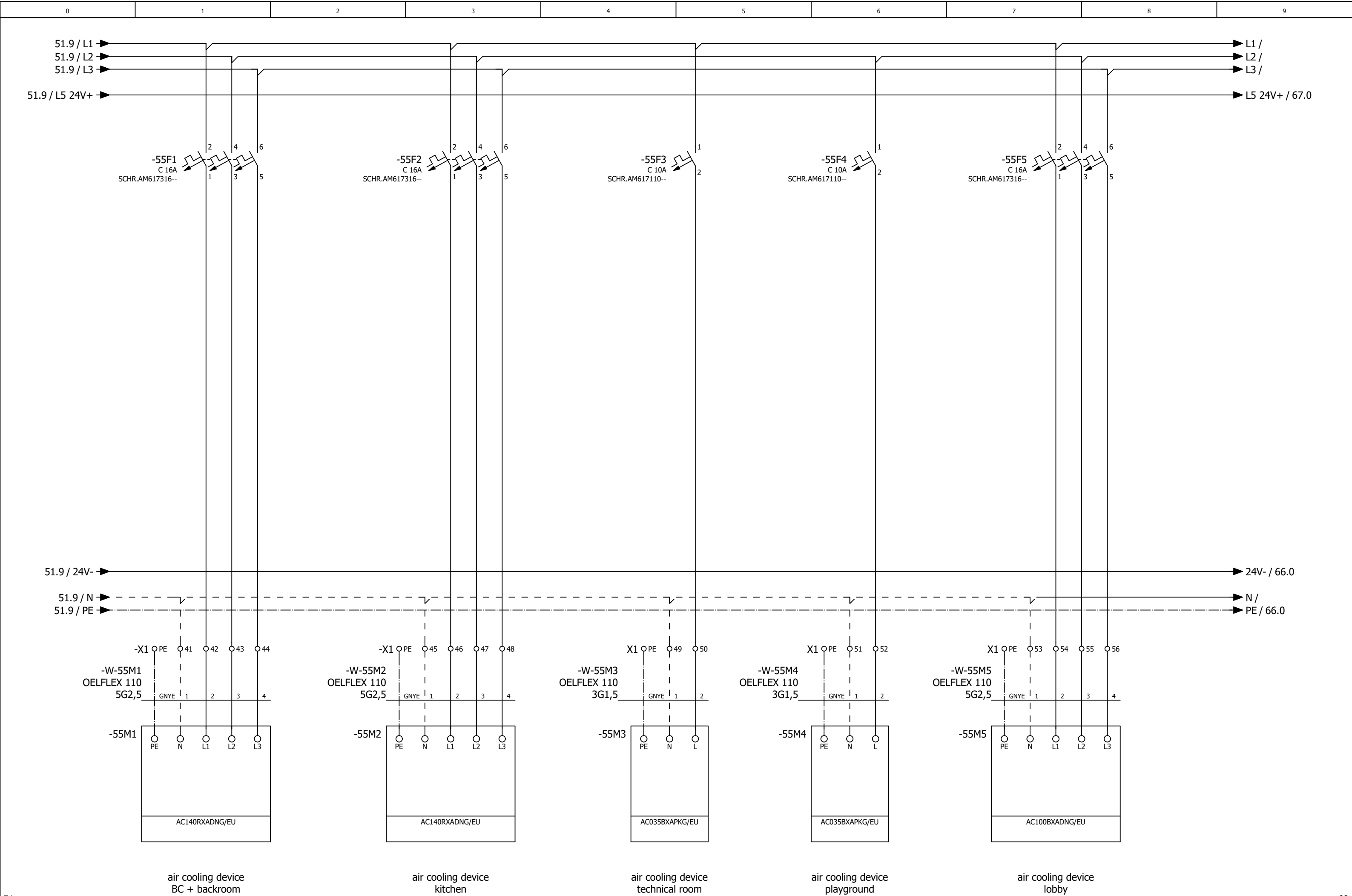
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unit discription general





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unit discription
DDC

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-66N1 /66.0	DEOS -600/5 OPEN High Power Controller											
	DI0	○	/67.2	start ventilation	DO0	○	/68.1	report AHU running	AI0	○	/71.1	differential pressire sensor supply air kitchen
	DI1	○	/67.3	fault reset	DO1	○	/68.2	report AHU fault	AI1	○	/71.2	reserve
	DI2	○	/67.3	phase monitoring	DO2	○	/68.3	report AHU maintenance	AI2	○	/71.3	reserve
	DI3	○	/67.4	exhaust fan kitchen switch in position manual	DO3	○	/68.4	fault reset	AI3	○	/71.4	outside temperature sensor kitchen
	DI4	○	/67.5	fault antifreeze kitchen	DO4	○	/68.4	heatpump 2 cooling lobby	AI4	○	/71.5	supply air temperature sensor behind heater kitchen
	DI5	○	/67.6	operation heatpump 2 kitchen	DO5	○	/68.5	flap drives kitchen	AI5	○	/71.6	supply air temperature sensor total
	DI6	○	/67.6	fault heatpump 2 kitchen	DO6	○	/68.6	supply air fan kitchen	AI6	○	/71.7	exhaust air temperature sensor kitchen (option)
	DI7	○	/67.7	fault gas detector kitchen	DO7	○	/68.7	exhaust fan kitchen	AI7	○	/71.8	room temperature sensor kitchen
					DO8	○	/69.2	exhaust fan dishes				
					DO9	○	/69.3	heatpump 1 kitchen heating				
					DO10	○	/69.3	heatpump 1 kitchen cooling	AO0	○	/70.2	setpoint supply air fan kitchen
					DO11	○	/69.4	heating pump	AO1	○	/70.3	setpoint exhaust fan kitchen
									AO2	○	/70.5	reserve
									AO3	○	/70.6	KVS Ventil Küche

-72N1 /72.1	DS-C-DI16 digital inputs modul 16 x DI		
DI0	○	/72.2	fault supply air fan kitchen
DI1	○	/72.3	fault repair switch supply air fan kitchen
DI2	○	/72.3	fault exhaust fan kitchen
DI3	○	/72.4	fault repair switch exhaust fan kitchen
DI4	○	/72.5	fault exhaust fan dishes
DI5	○	/72.6	fault repair switch exhaust fan dishes
DI6	○	/72.6	fault heatpump 1 kitchen
DI7	○	/72.7	operation heatpump 1 kitchen
DI8	○	/73.2	defrosting reverse cycle Heating systems 1+2 kitchen
DI9	○	/73.3	fault heating pump kitchen
DI10	○	/73.3	fault supply air fan/repair switch lobby
DI11	○	/73.4	fault exhaust fan/repair switch lobby
DI12	○	/73.5	operation heatpump 1 lobby
DI13	○	/73.6	fault heatpump 1 lobby
DI14	○	/73.6	defrosting reverse cycle Heating systems 1+2 lobby
DI15	○	/73.7	term extension

-74N1 /74.0	DS-C-AI8AO4 analog in / outputs modul 8 x AI / 4 x AO		
AI0	○	/74.1	differntial pressire sensor supply air lobby
AI1	○	/74.2	differntial pressire sensor exhaust air lobby
AI2	○	/74.3	differntial pressire sensor heat recovery lobby
AI3	○	/74.4	supply air temperature sensor behind heat recovery lobby
AI4	○	/74.5	supply air temperature sensor total lobby
AI5	○	/74.6	exhaust air temperature sensor lobby
AI6	○	/74.7	differntial pressire sensor outside airfilter lobby
AI7	○	/74.8	differntial pressire sensor exhaust airfilter lobby
A00	○	/75.2	setpoint supply air fan lobby
A01	○	/75.3	setpoint exhaust fan lobby
A02	○	/75.5	setpoint heatpumpe lobby
A03	○	/75.6	setpoint actuator heat recovery lobby

-76N1 /76.0	DS-C-AI8AO4 analog in / outputs modul 8 x AI / 4 x AO		
AI0	○	/76.1	room sensor temperature lobby
AI1	○	/76.1	room sensor CO² lobby
AI2	○	/76.3	differntial pressire sensor outside airfilter kitchen
AI3	○	/76.4	reserve
AI4	○	/76.5	reserve
AI5	○	/76.6	return tempeature sensor heater kitchen
AI6	○	/76.7	air channel pressure supply air lobby
AI7	○	/76.8	air channel pressure exhaust air lobby
A00	○	/77.2	heater valve kitchen
A01	○	/77.3	reserve
A02	○	/77.5	reserve
A03	○	/77.6	reserve

-78N1
/78.1

DS-C-DI8DO8T

digital in / outputs modul 8 x DI / 8 x DO

DI0

/78.2

operation heatpump 2 lobby

DI1

/78.3

fault heatpump 2 lobby

DI2

/78.3

fault gas detector lobby

DI3

/78.4

pressure switch

DI4

/78.5

cleaning mode

DI5

/78.6

fault fire emergency shutdown (ansul)

DI6

/78.6

reserve

DI7

/78.7

reserve

D00

/79.2

flap drives lobby

D01

/79.3

supply air fan lobby

D02

/79.3

exhaust fan lobby

D03

/79.4

heatpump 1 heating lobby

D04

/79.5

heatpump 1 cooling lobby

D05

/79.6

heatpump 2 heating kitchen

D06

/79.6

heatpump 2 cooling kitchen

D07

/79.7

heatpump 2 heating lobby

-80N1
/80.1

DS-C-AO4

analog outputs modul 4 x AO

AO0

/80.2

volume flow regulator 1 supply air lobby

AO1

/80.3

volume flow regulator 1 exhaust air lobby

AO2

/80.5

volume flow regulator 2 supply air lobby

AO3

/80.6

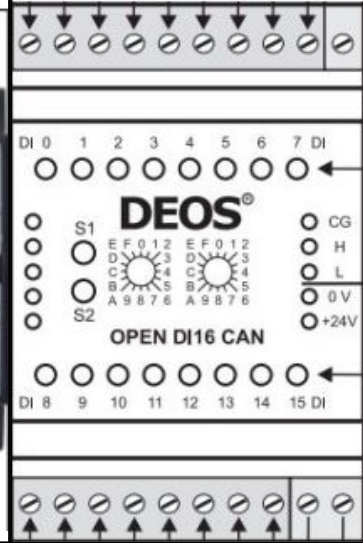
volume flow regulator 2 exhaust air lobby

0	1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---	---

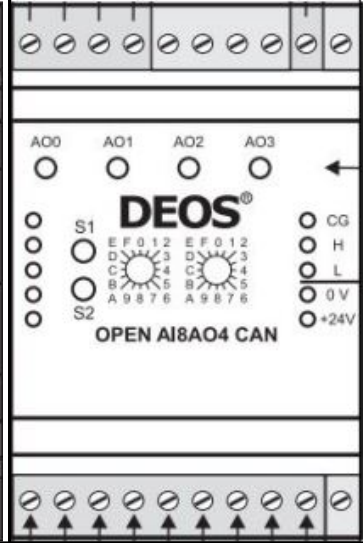
66N1
/66.0



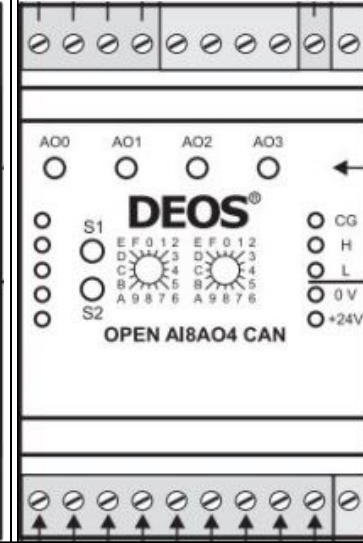
-72N1
/72.1



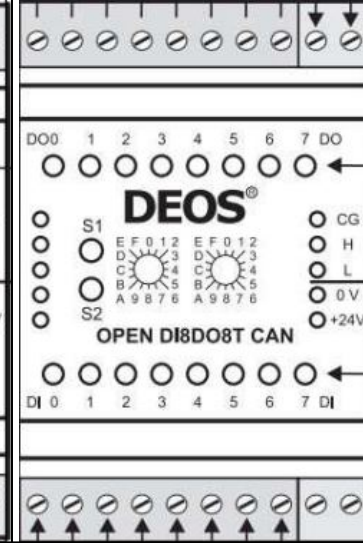
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/74.0



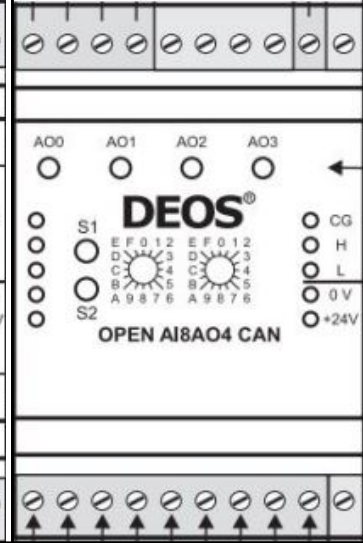
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/76.0



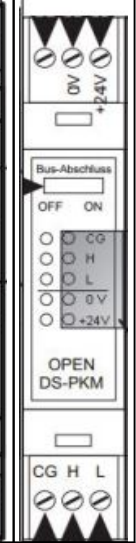
-78N1
/78.1



-80N1
/80.1



-66N3



62

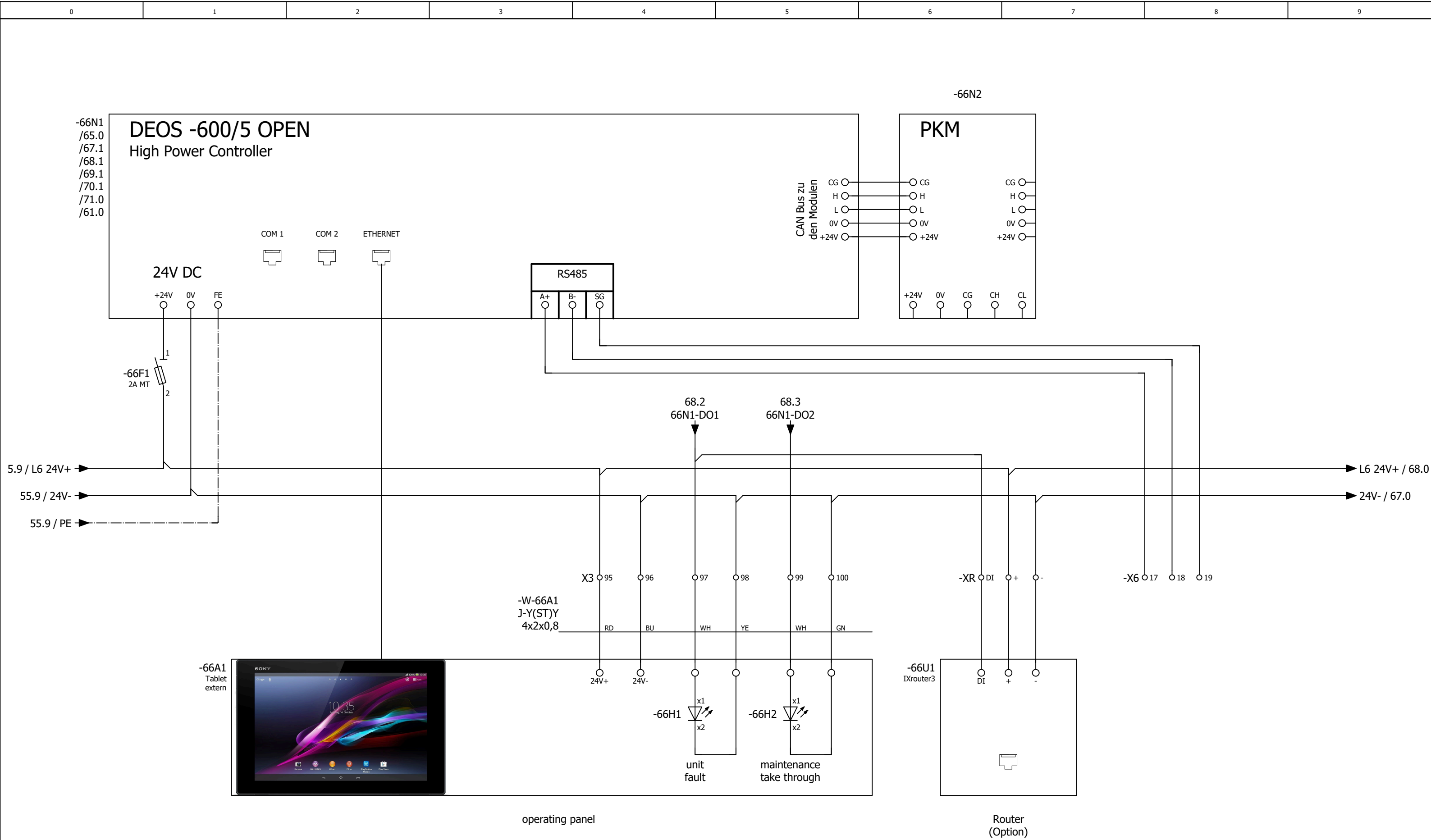
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			edited	daniel.preuss		
			checked	M. Wagner		
change	date	name	origin		replacement for	replaced by

overview
DEOS module

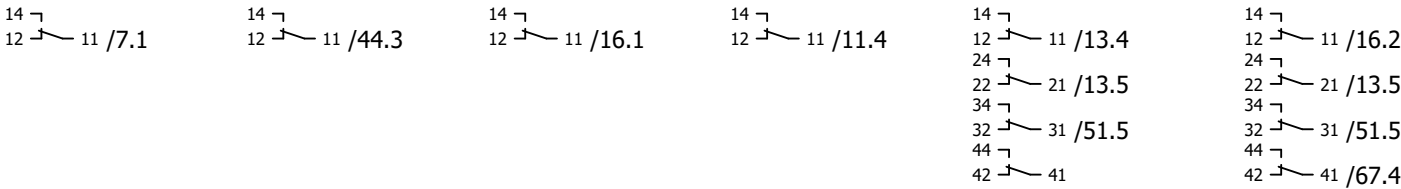
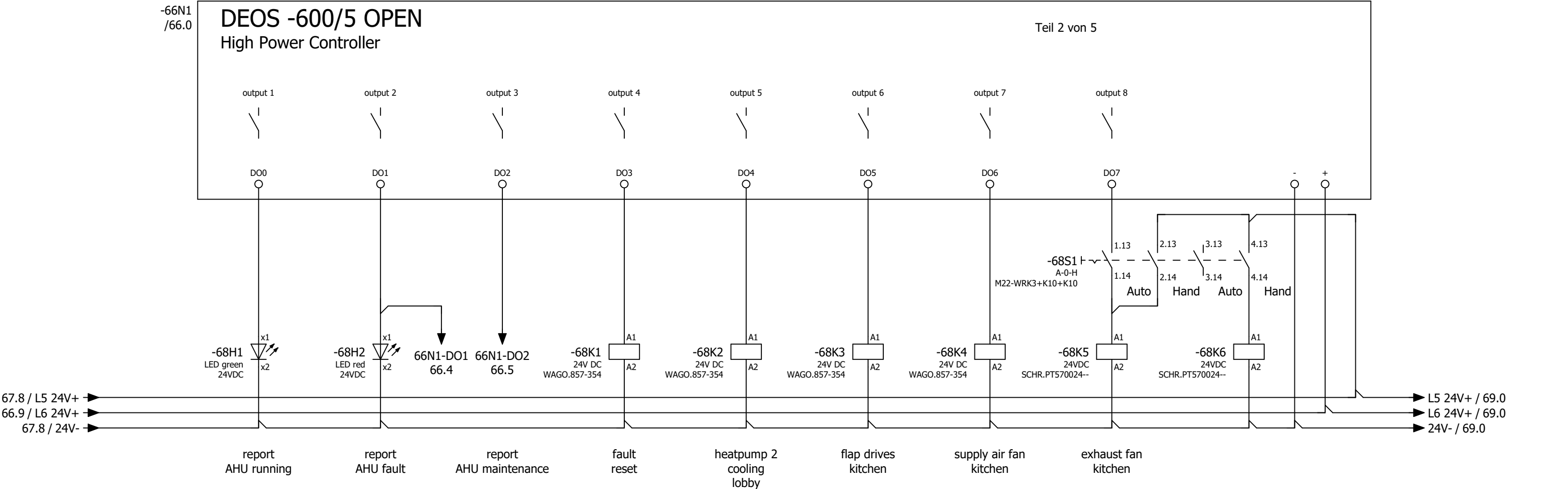
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custom no: 7585	4641a	

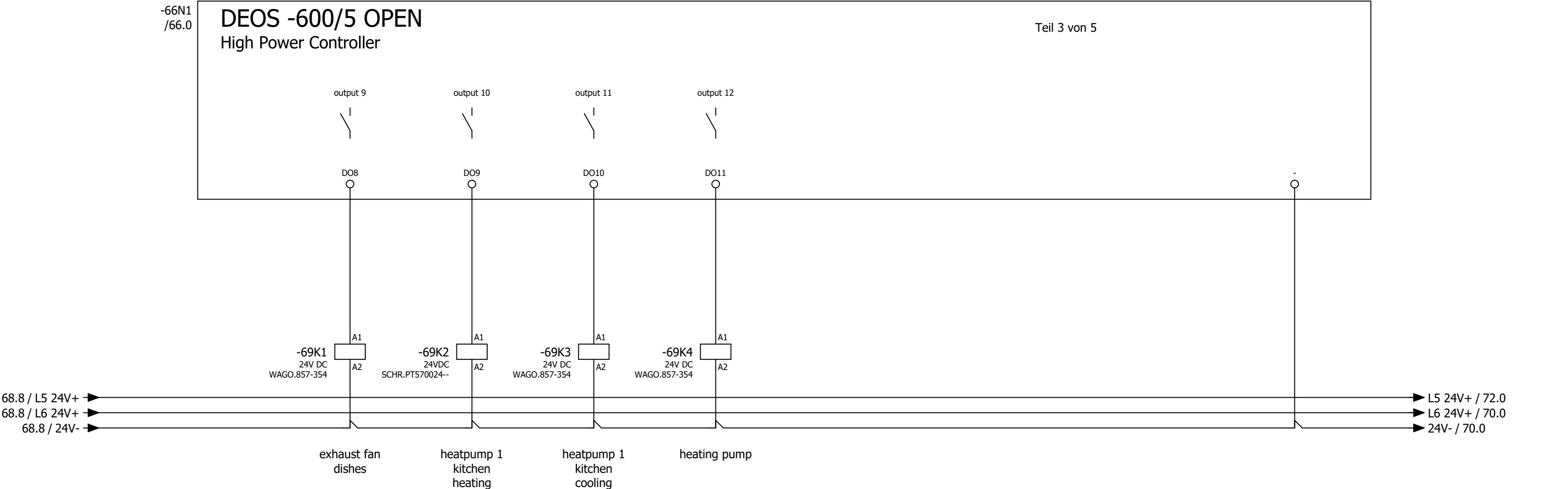
page 65
page 37/ 56

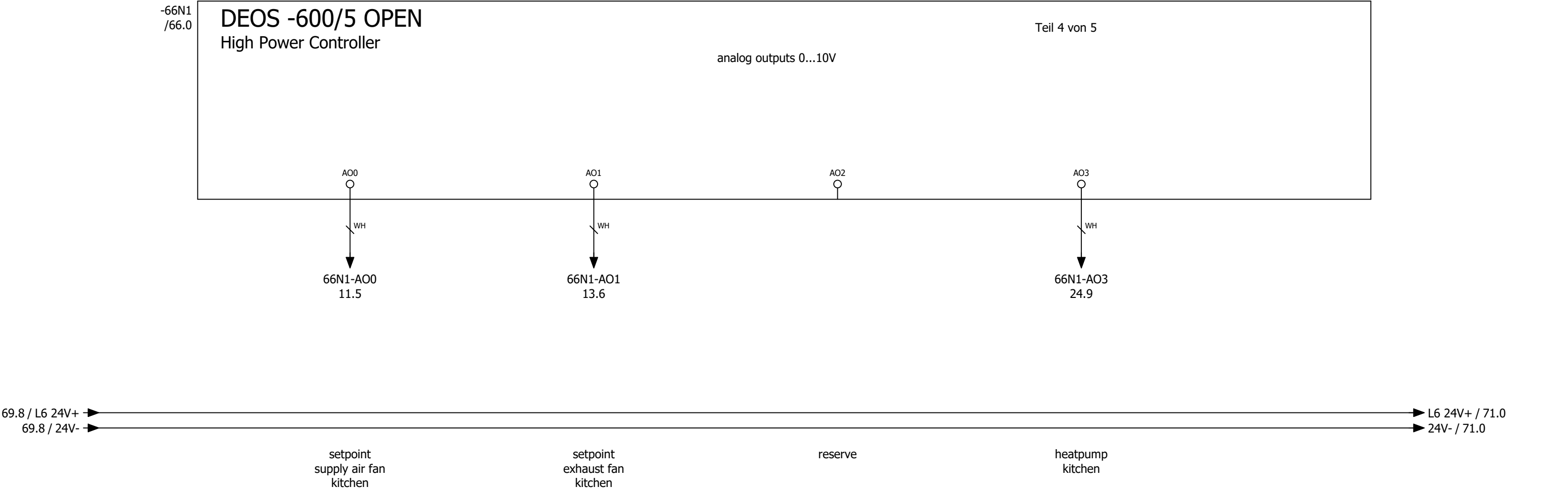
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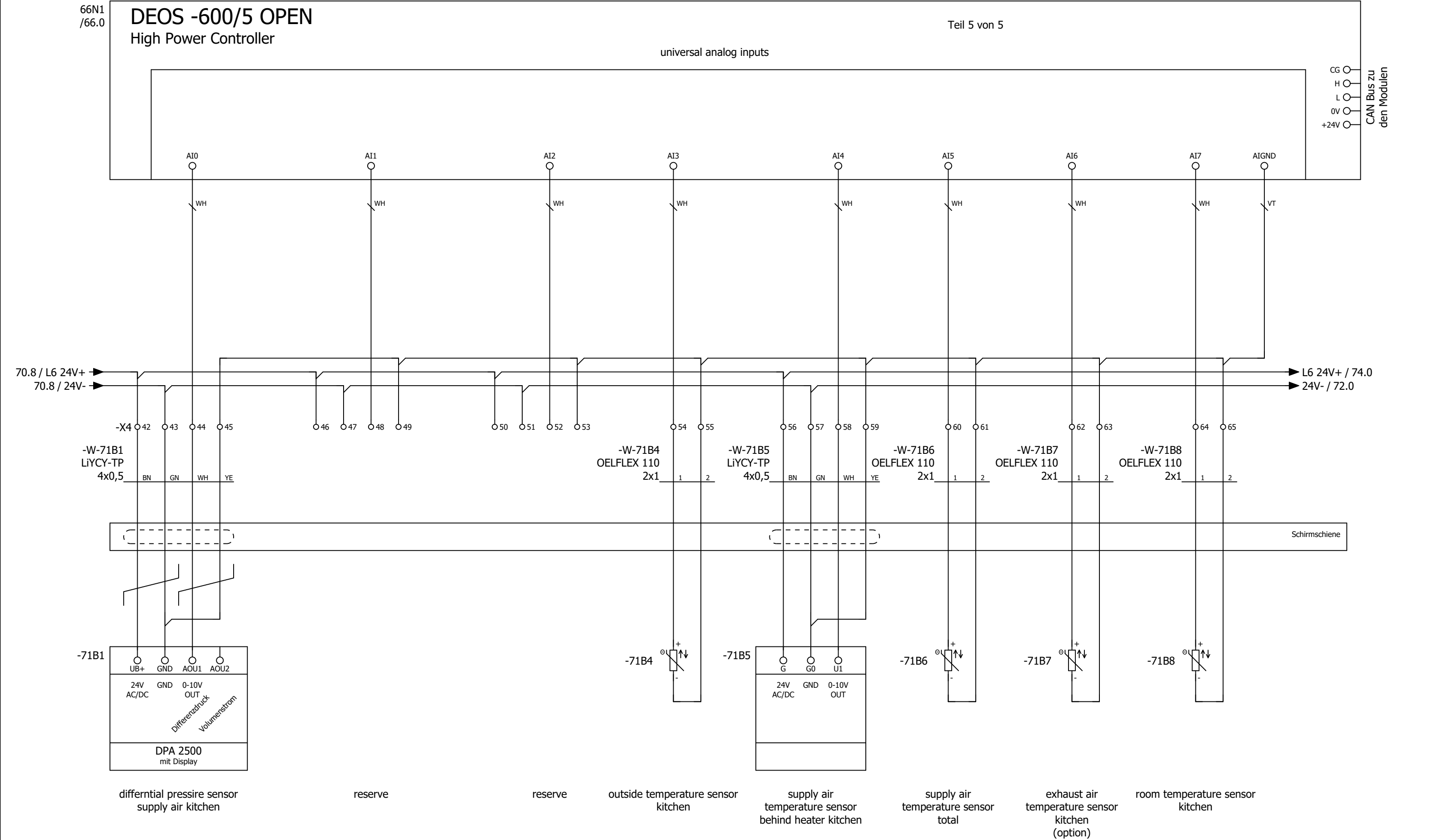


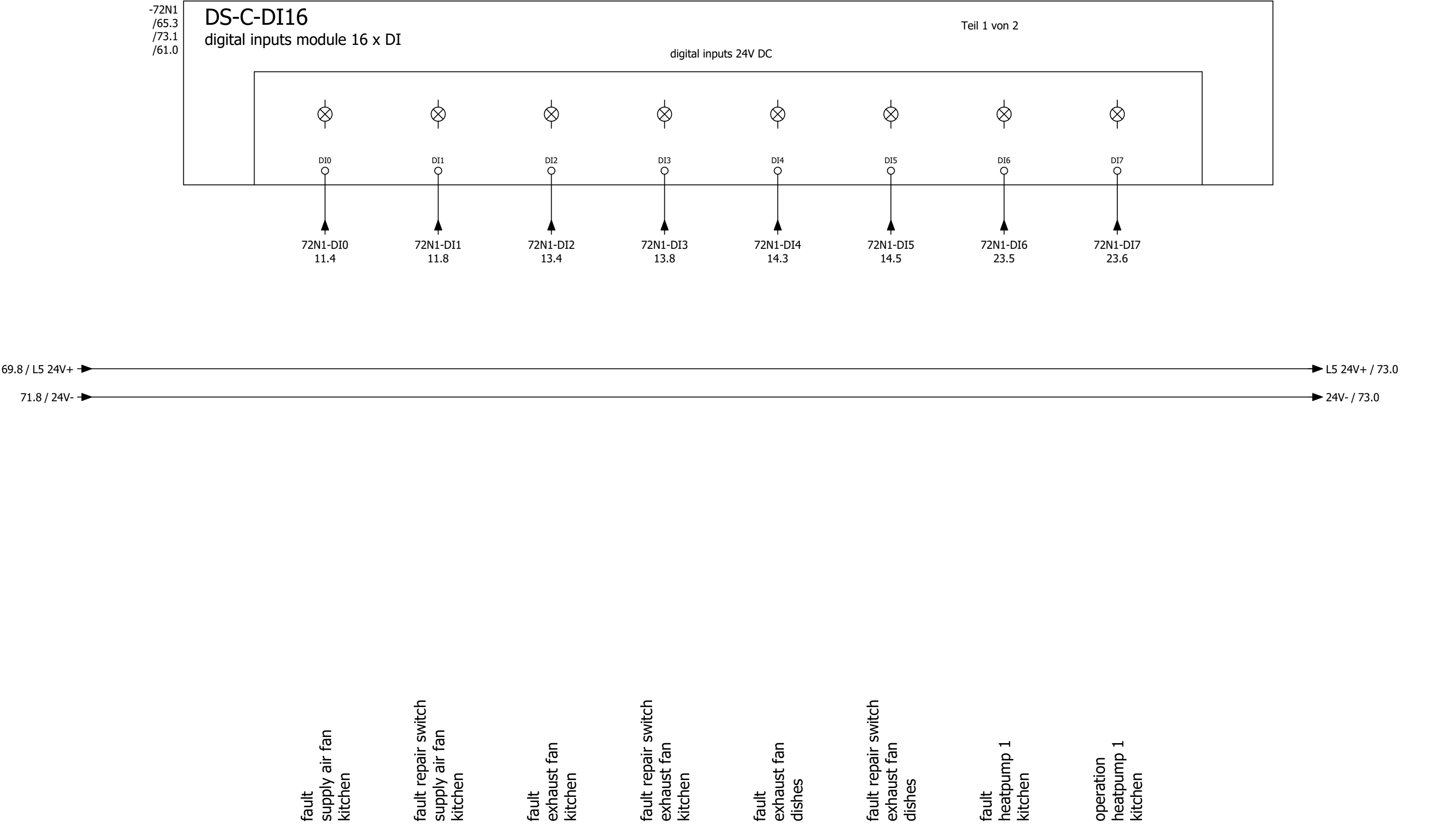




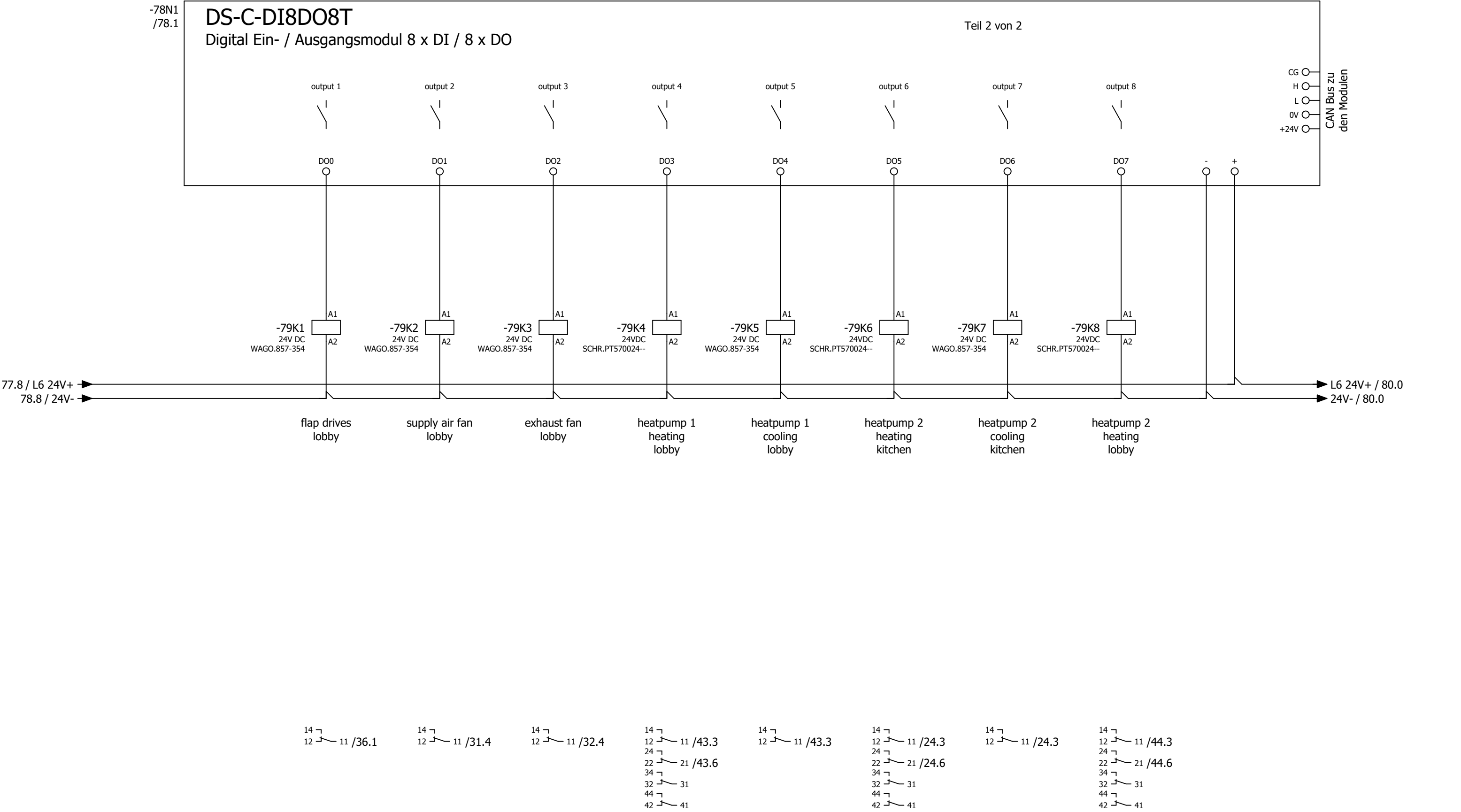














Kabelübersicht

F10_001

$$= \text{RLT_1}/80$$

1.a



cable overview : W-9A1 -
W-32M1/3

custom no: 7585

4641a

$$\begin{array}{r} = \text{KBL} \\ + \end{array}$$
page **1**

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0	1	2	3	4	5	6	7	8	9
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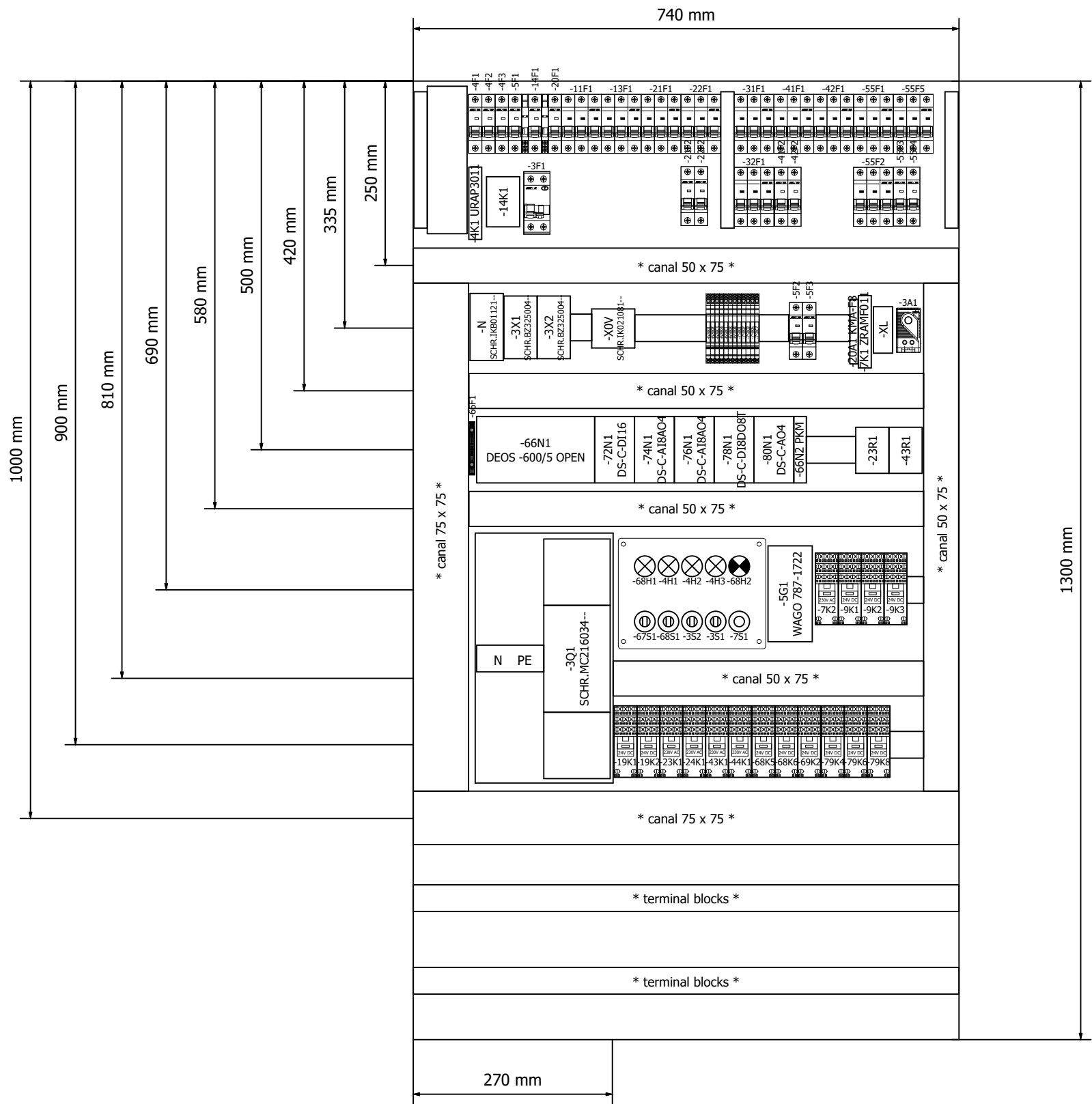
Kabelübersicht

F10_001

Kabelname	Quelle (von)	Ziel (bis)	Kabeltyp	alle Adern	verwendete Adern	Querschnitt [mm]	Länge [m]	Funktionstext	Grafikseite des Kabelplans
W-32Q1	X3	32Q1	OELFLEX 110	2	2	1		repair switch exhaust fan lobby	
W-36Y1	X3	36Y1	OELFLEX 110	3	3	1		outside air damper lobby	
W-36Y2	X3	36Y2	OELFLEX 110	3	3	1		exhaust air flap lobby	
W-36Y3	X4	36Y3	LiYCY	4	4	1		actuator plate heat exchanger lobby	
W-37Y1	X4	37Y1	LiYCY	4	4	1		volume flow regulator 1 supply air lobby	
W-37Y2	X4	37Y2	LiYCY	4	4	1		volume flow regulator 1 exhaust air lobby	
W-37Y3	X4	37Y3	LiYCY	4	4	1		volume flow regulator 2 supply air lobby	
W-37Y4	X4	37Y4	LiYCY	4	4	1		volume flow regulator 2 exhaust air lobby	
W-38A1	X3	38A1	OELFLEX 110	4	4	1		gas detector kitchen	
W-38A2	X3	38A2	OELFLEX 110	4	4	1		gas detector lobby	
W-41A1/1	X1	41A1	OELFLEX 110	5G	5	2,5		heatpump 1 lobby outdoor unit	
W-41A1/2	X6	41A1	OELFLEX110	2	2	1		=	
W-41A1/3	X7	41A1	OELFLEX110	2	2	1		=	
W-41A2/1	X1	41A2	OELFLEX	5G	5	1,5		heatpump 1 lobby indoor unit	
	X2								
W-42A1/1	X1	42A1	OELFLEX 110	5G	5	2,5		heatpump 2 lobby outdoor unit	
W-42A1/2	X6	42A1	OELFLEX110	2	2	1		=	
W-42A1/3	X7	42A1	OELFLEX110	2	2	1		=	
W-42A2/1	X1	42A2	OELFLEX	5G	5	1,5		heatpump 2 lobby indoor unit	
	X2								
W-41A2/2	X3	41A2	LiYCY	12	12	0,5		heatpump 1 lobby indoor unit	
	X4								
	X6								
W-42A2/2	X3	42A2	LiYCY	12	12	0,5		heatpump 2 lobby indoor unit	
	X4								
	X6								
W-51A1	X7	51A1	OELFLEX	3G	3	1,5		release kitchen ware	
W-55M1	X1	55M1	OELFLEX 110	5G	5	2,5		air cooling device BC+ backroom	
W-55M2	X1	55M2	OELFLEX 110	5G	5	2,5		air cooling device kitchen	
W-55M3	X1	55M3	OELFLEX 110	3G	3	1,5		air cooling device technical room	
W-55M4	X1	55M4	OELFLEX 110	3G	3	1,5		air cooling device playground	
W-55M5	X1	55M5	OELFLEX 110	5G	5	2,5		air cooling device lobby	
W-66A1	X3	66A1	J-Y(ST)Y	4x2	6	0,8		operating panel	
W-71B1	X4	71B1	LiYCY-TP	4	4	0,5		differential pressire sensor supply air kitchen	
W-71B4	X4	71B4	OELFLEX 110	2	2	1		outside temperature sensor kitchen	
W-71B5	X4	71B5	LiYCY-TP	4	4	0,5		supply air temperature sensor behind heater kitchen	
W-71B6	X4	71B6	OELFLEX 110	2	2	1		supply air temperature sensor total	
W-71B7	X4	71B7	OELFLEX 110	2	2	1		exhaust air temperatur sensor kitchen (option)	
W-71B8	X4	71B8	OELFLEX 110	2	2	1		room temperature sensor kitchen	
W-72W1	X3	72W1	OELFLEX 110	2	2	1		term extension	
W-74B1	X4	74B1	LiYCY-TP	4	4	0,5		differential pressire sensor supply air lobby	
W-74B2	X4	74B2	LiYCY-TP	4	4	0,5		differential pressire sensor exhaust air lobby	
W-74B3	X4	74B3	LiYCY-TP	4	4	0,5		differential pressire sensor heat recovery lobby	
W-74B4	X4	74B4	LiYCY-TP	4	4	0,5		supply air temperature sensor behind heat recovery lobby	
W-74B5	X4	74B5	OELFLEX 110	2	2	1		supply air temperature sensor total lobby	
W-74B6	X4	74B6	OELFLEX 110	2	2	1		exhaust air temperature sensor lobby	

F10_001

[illegible]



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