

Geniox/DV Control system 04.07

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Units with external cabinet:
Geniox 10-18 are placed on top of the unit.
Geniox 20-31 are placed on front of the unit

Units with internal cabinet:

- AHU unit data.
- Heat exchanger type:
See data in the attached annex - Technial data
 - Heat coil type:
See data in the attached annex - Technial data
 - Cooling coil type:
See data in the attached annex - Technial data
 - Heat pump type:
See data in the attached annex - Technial data
 - Electrical data:
 - Total consumed power: Watch printed order
 - Fan fuse size: Watch printed order
 - Supply air fan cable resistance: Watch printed order
 - Extract air fan cable resistance: Watch printed order
 - Max pre-fuse: Watch printed order
 - lk max on fuse in unit: 10 kA

Manufacturer:

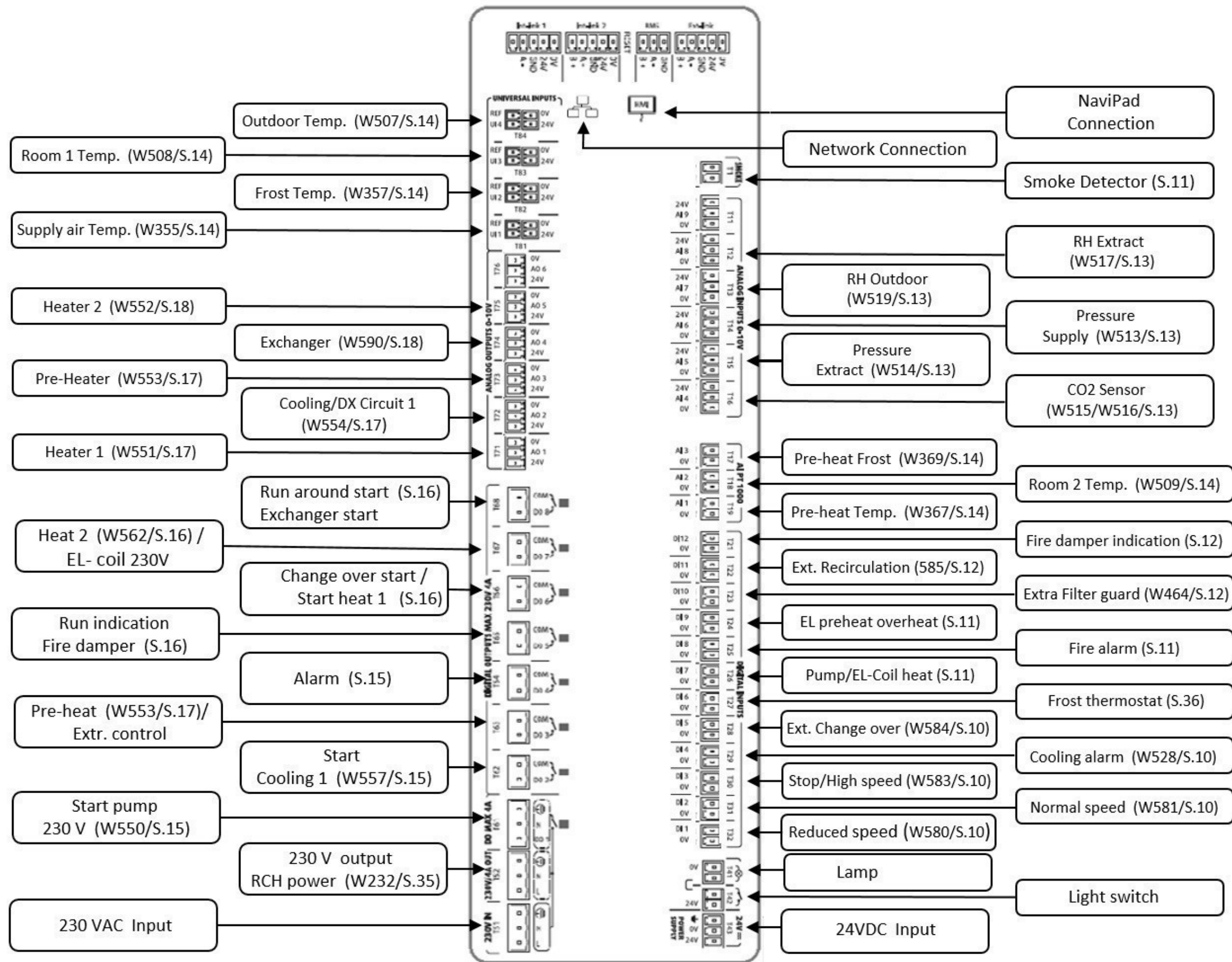
UAB Systemair
Linų g. 101, Ukmergė
Lithuania



Geniox
Access CU40 Controller

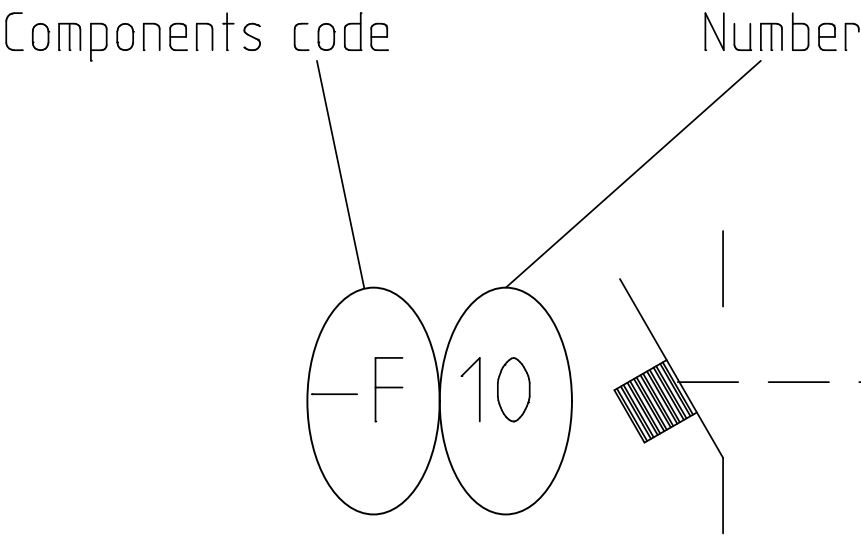
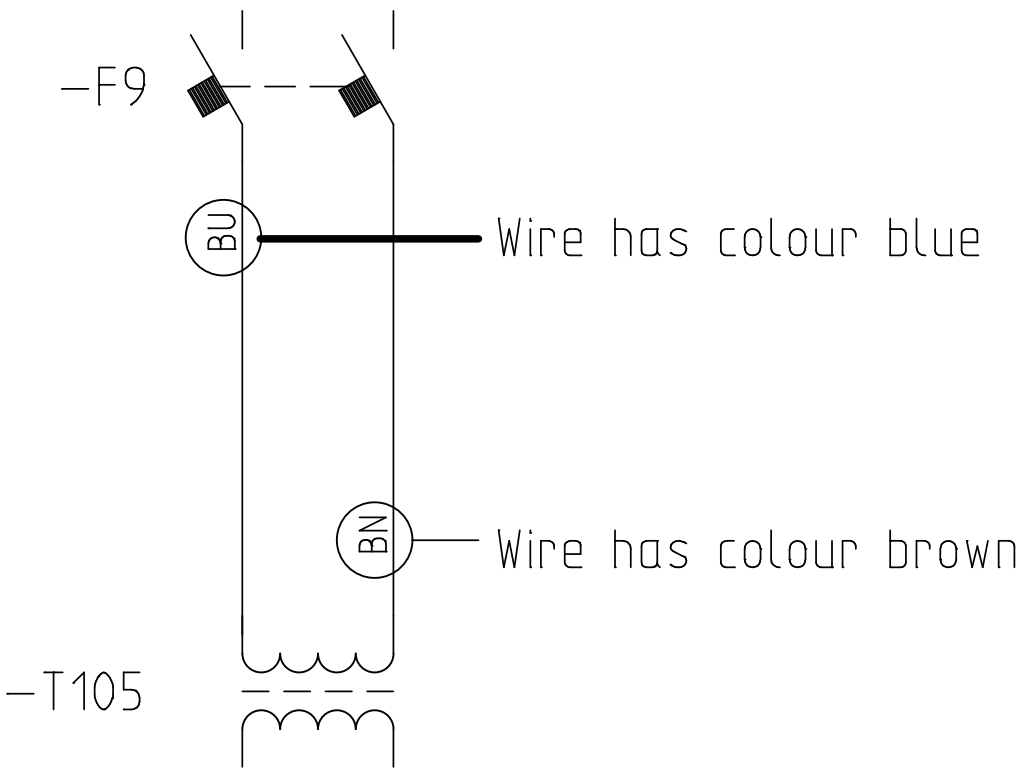
Frontpage

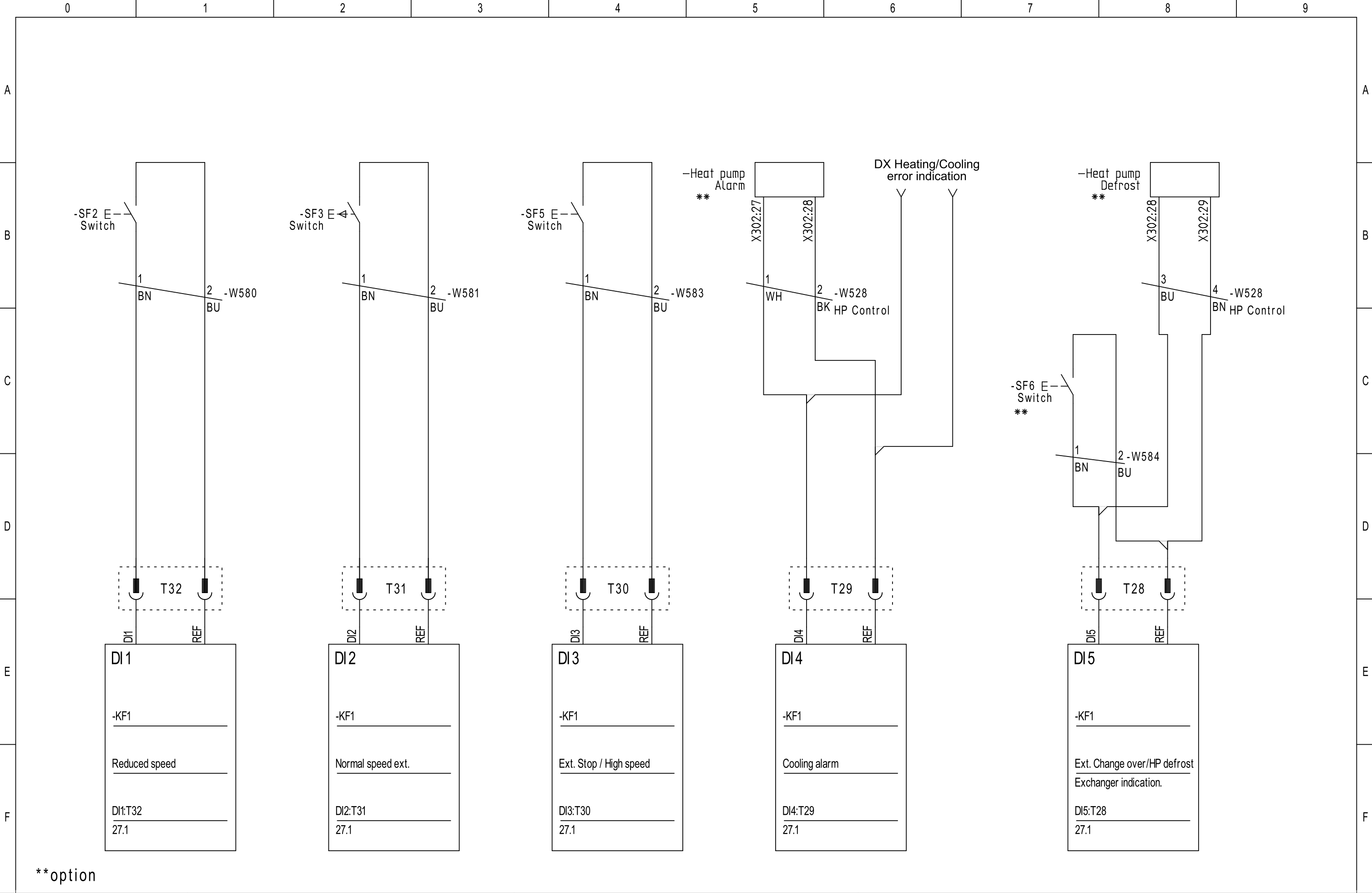
Project:	Geniox Control system 04.07_LT		Rev.: 01.00	Sheet: 1
Date: 2023-06-08	initials: EIPU	Total sheets: 4	Next sheet: 2	



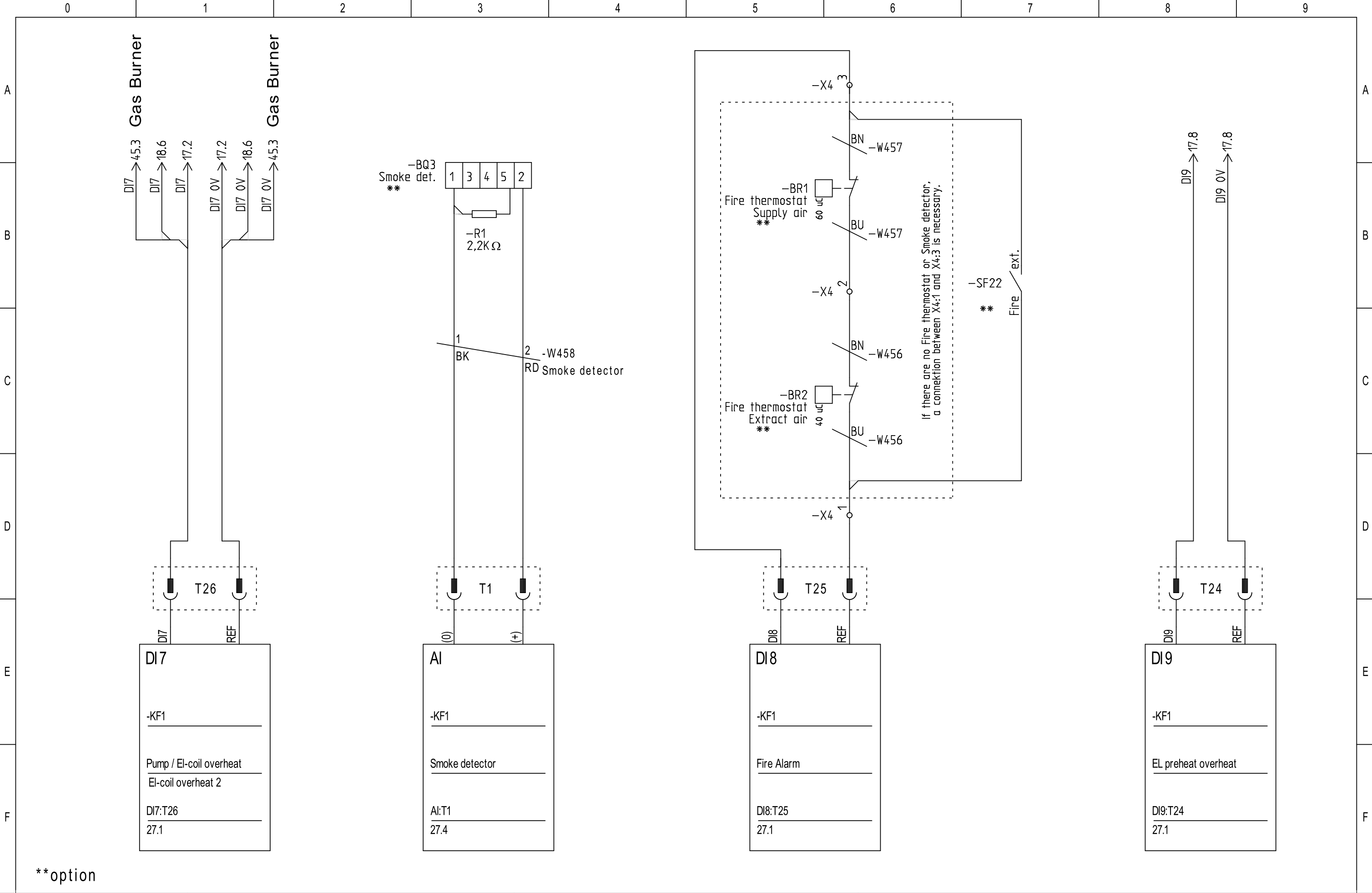
Labeling of wires
are marked with
terminal name

Components are marked with component codes
followed by a number according to IEC 61346-1 Chart 1

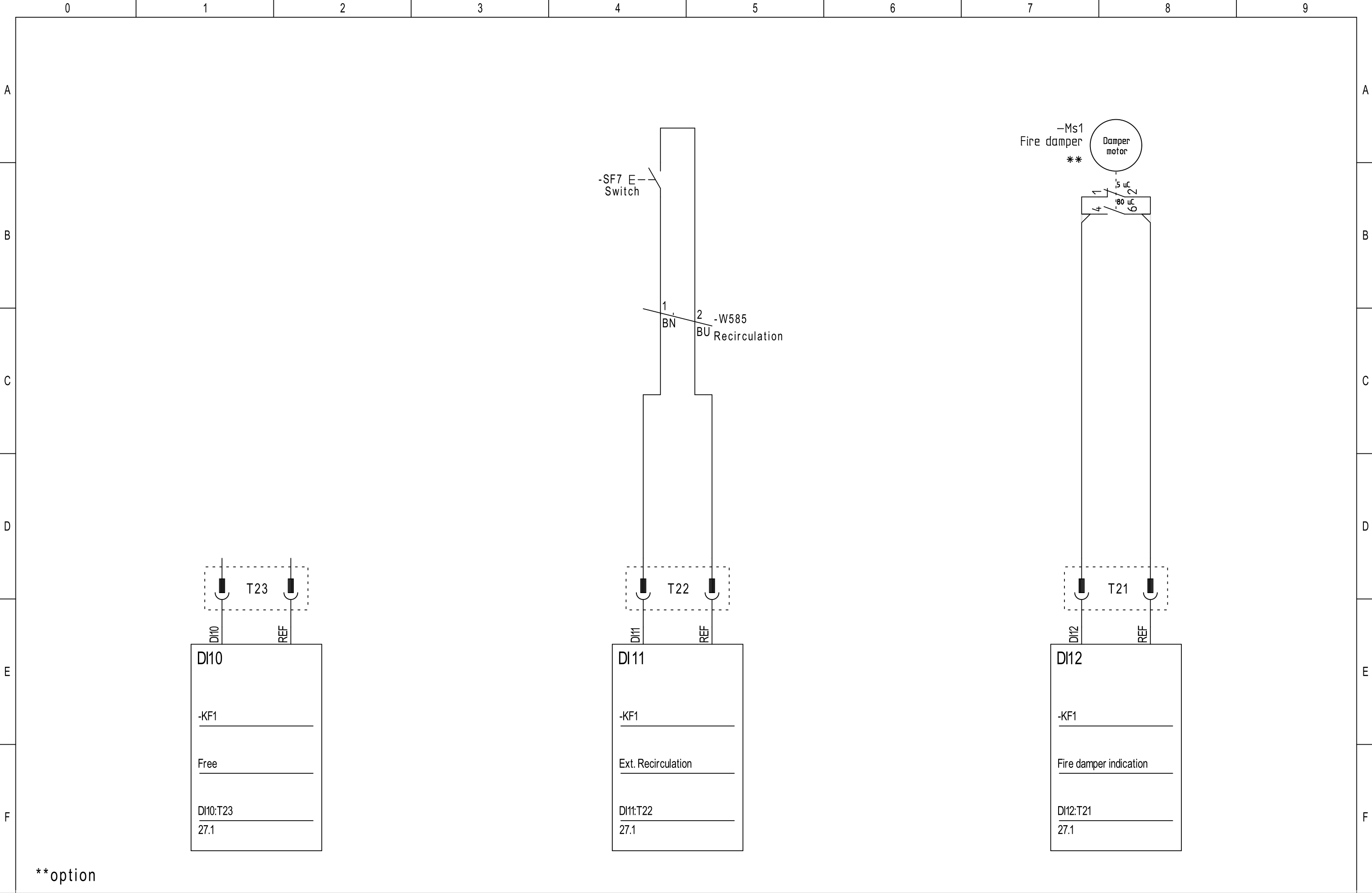




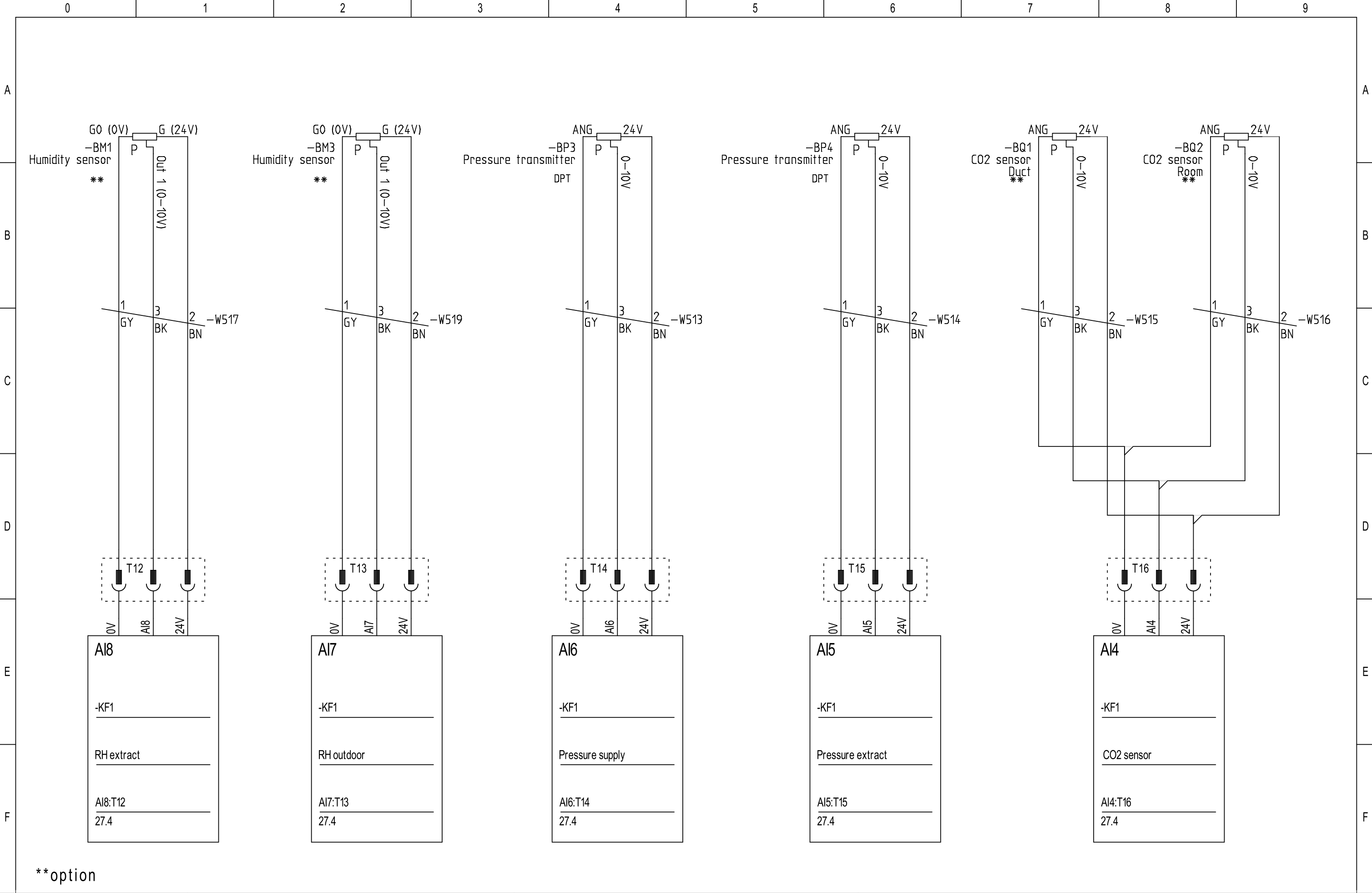
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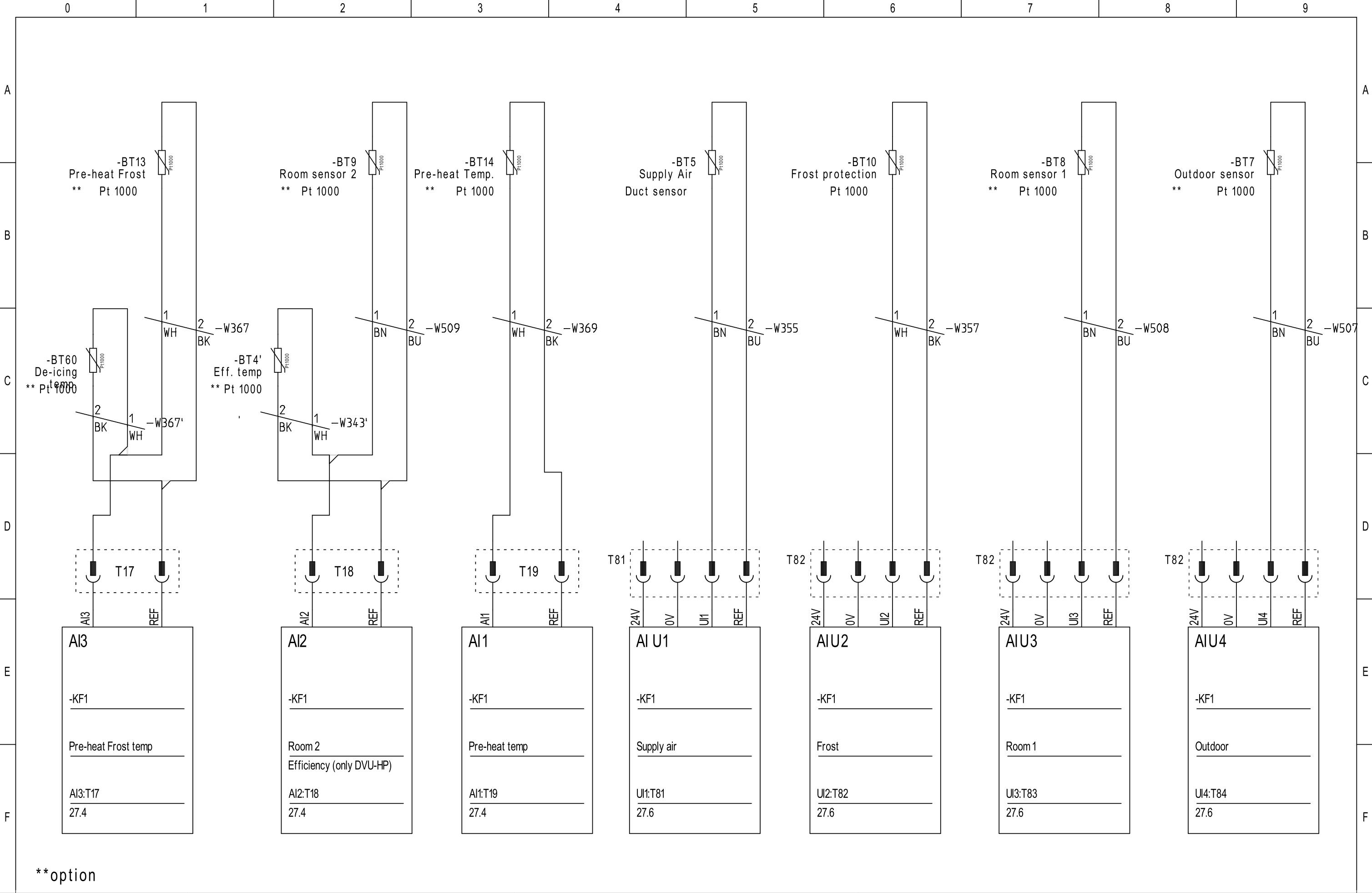
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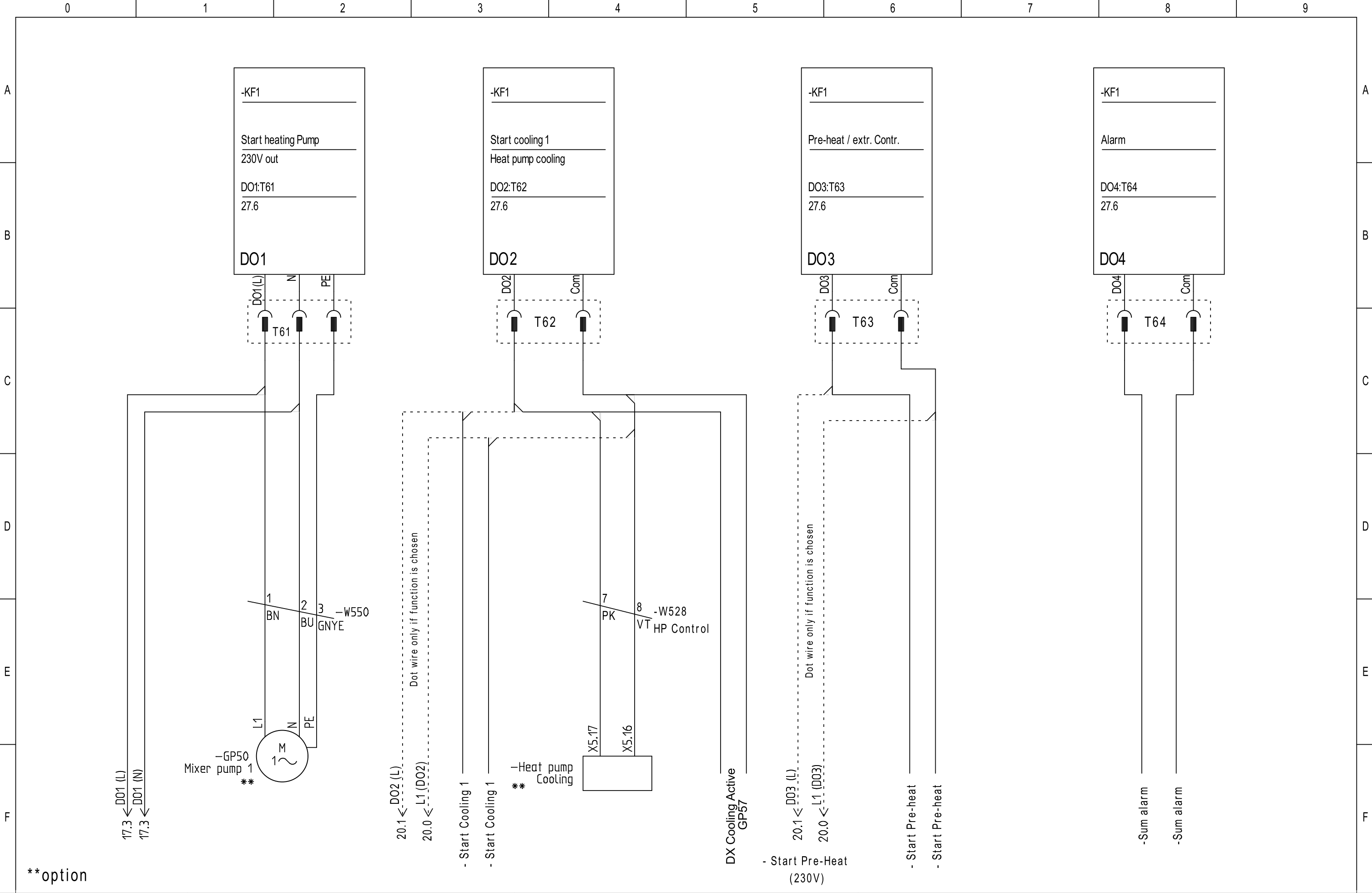
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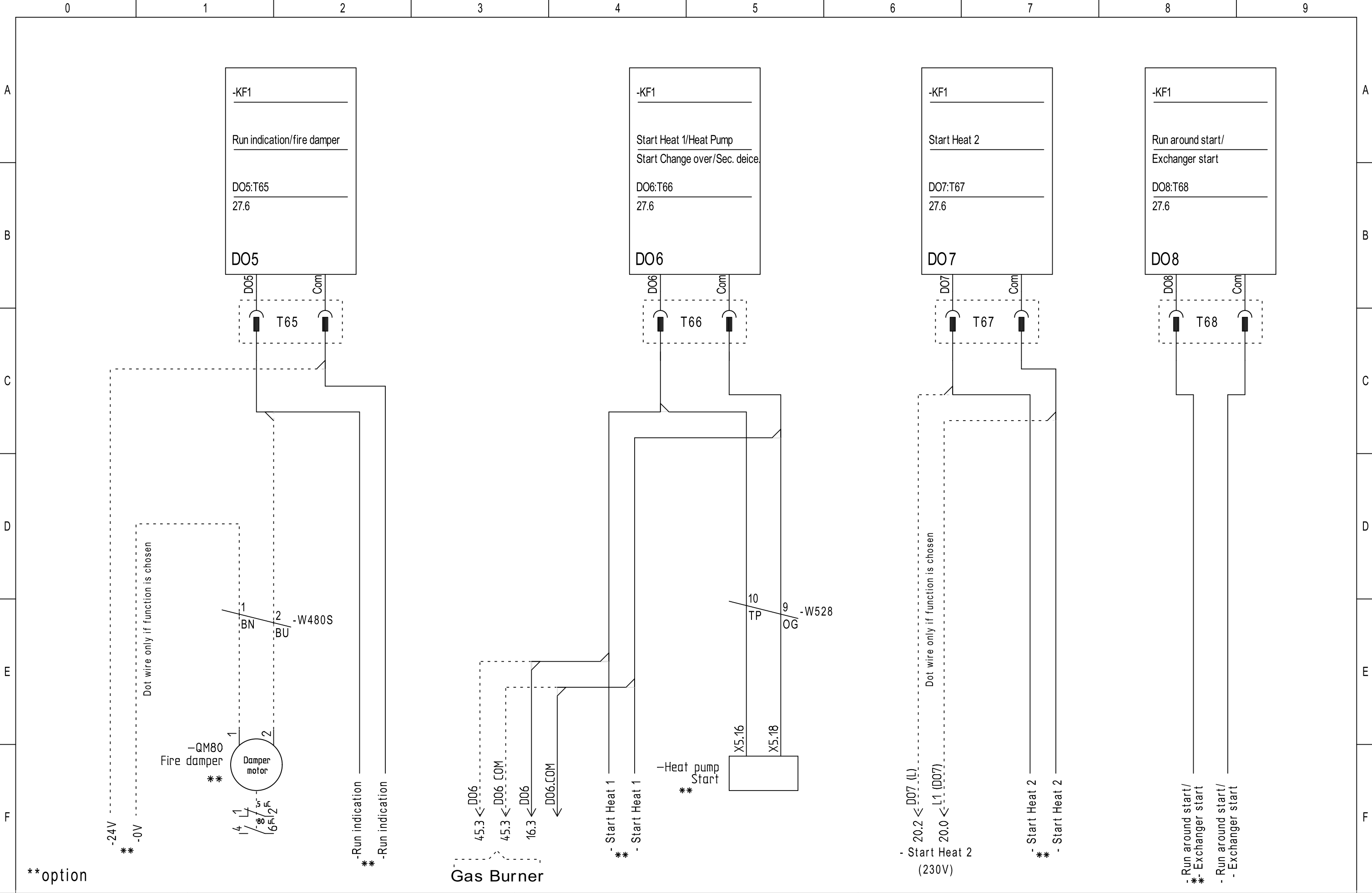
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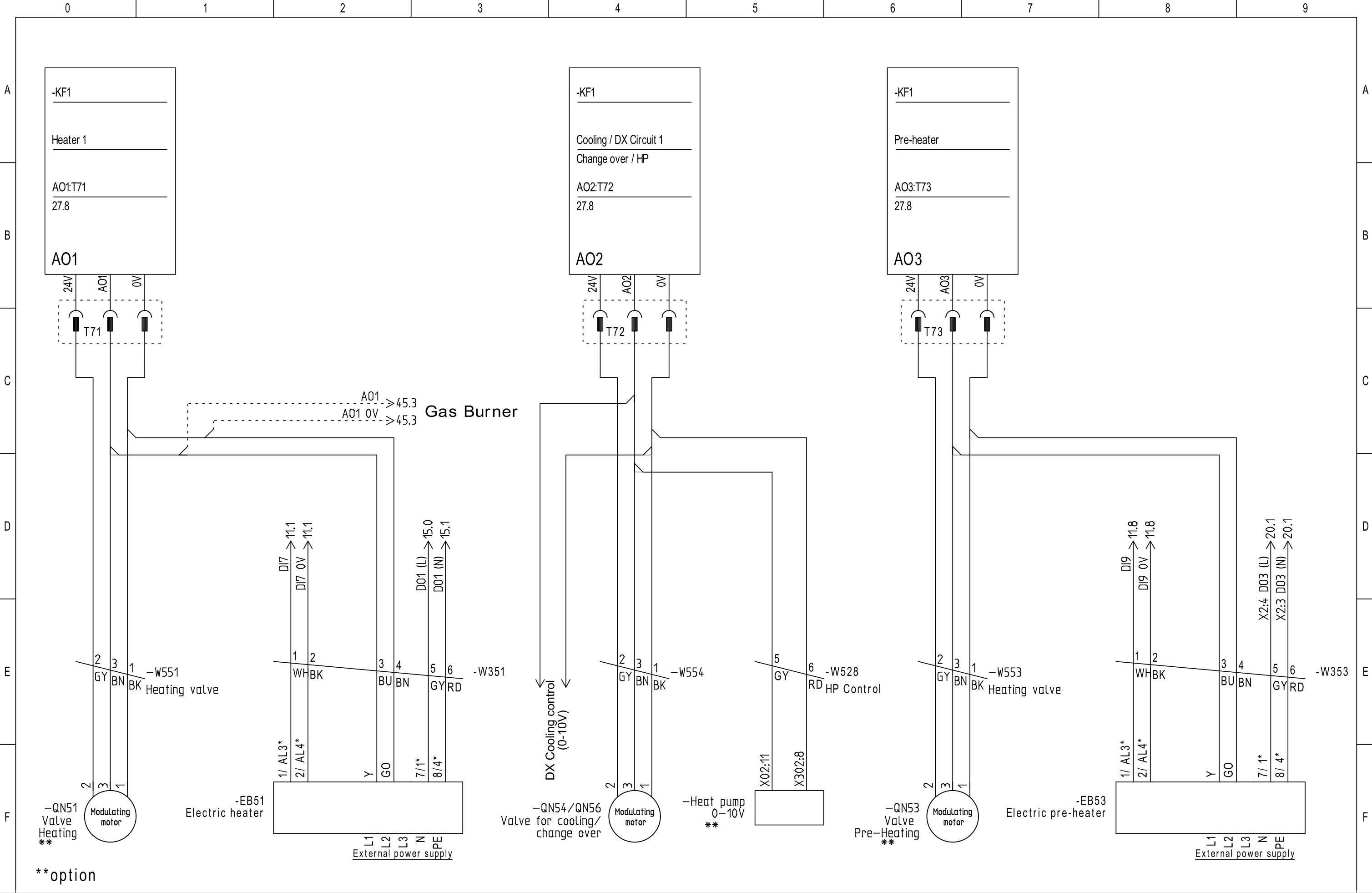


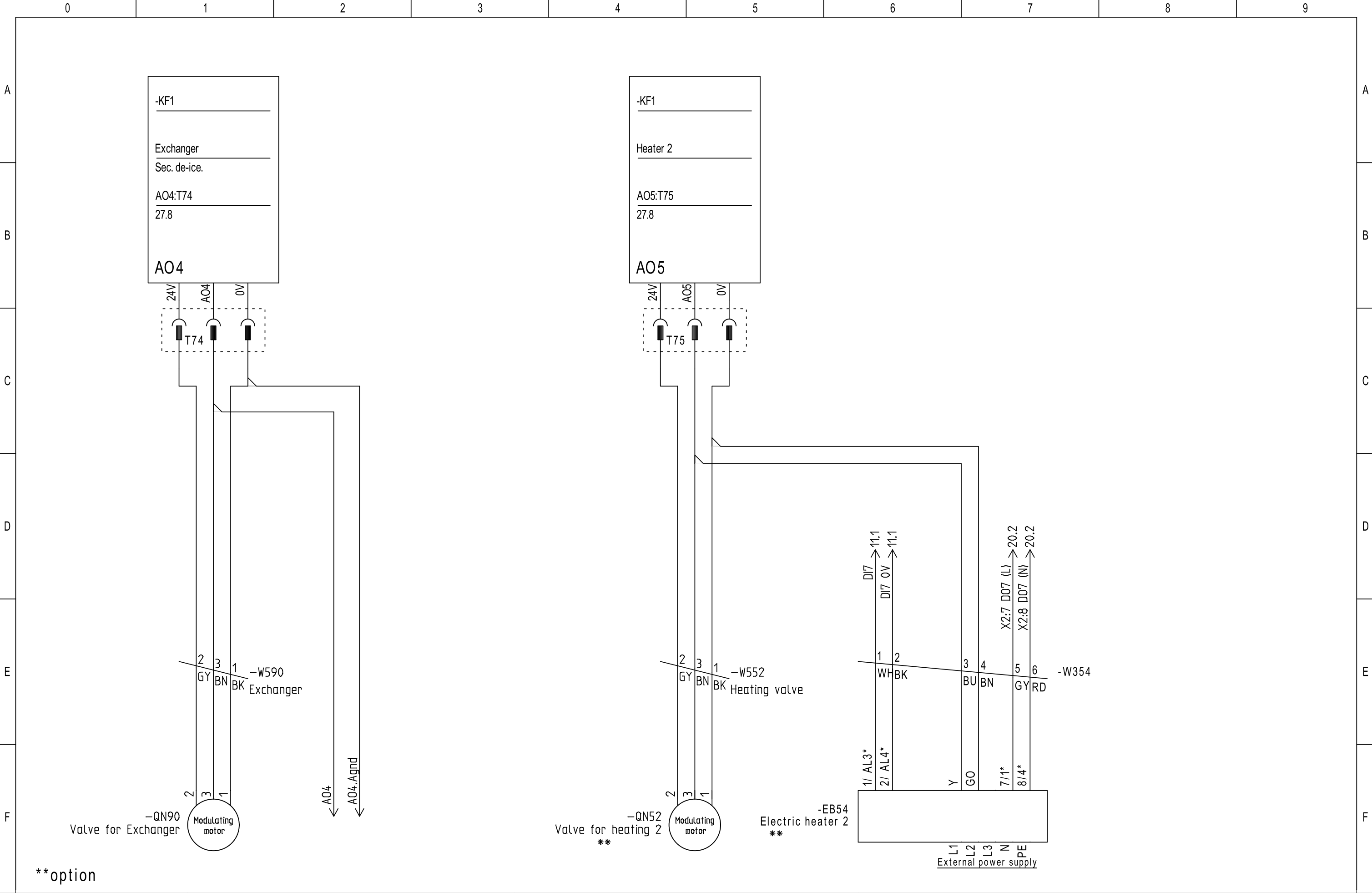
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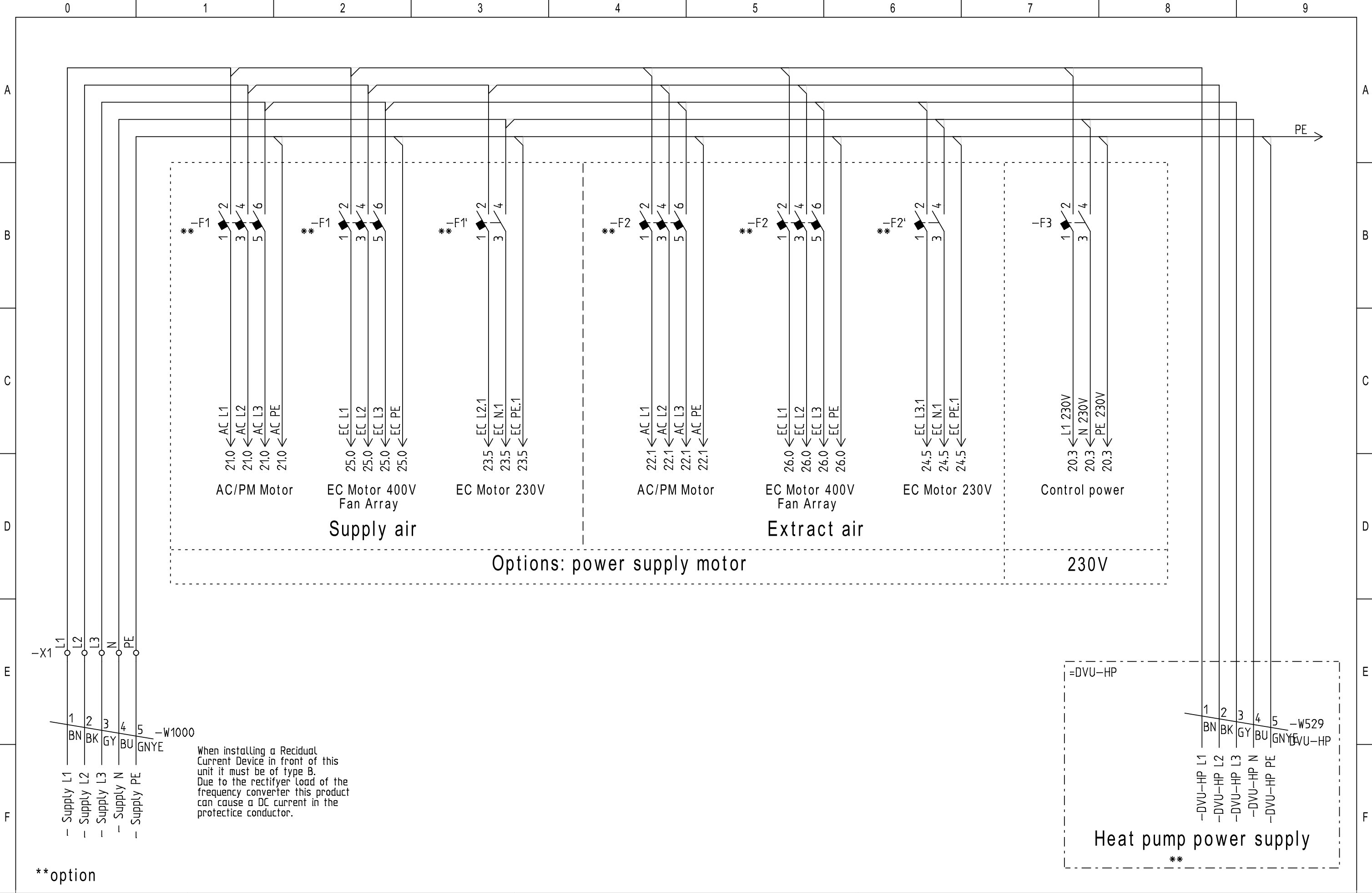


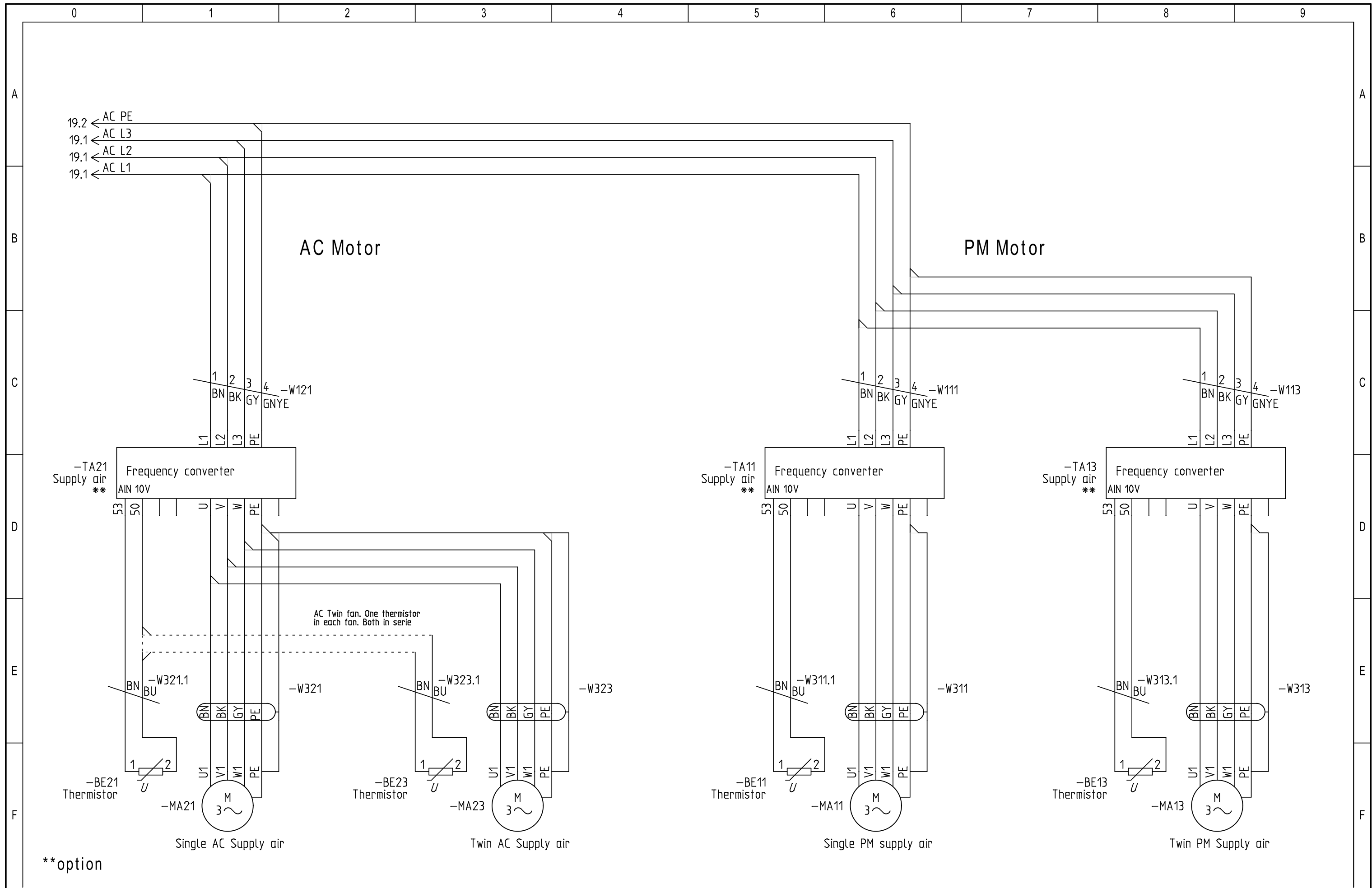
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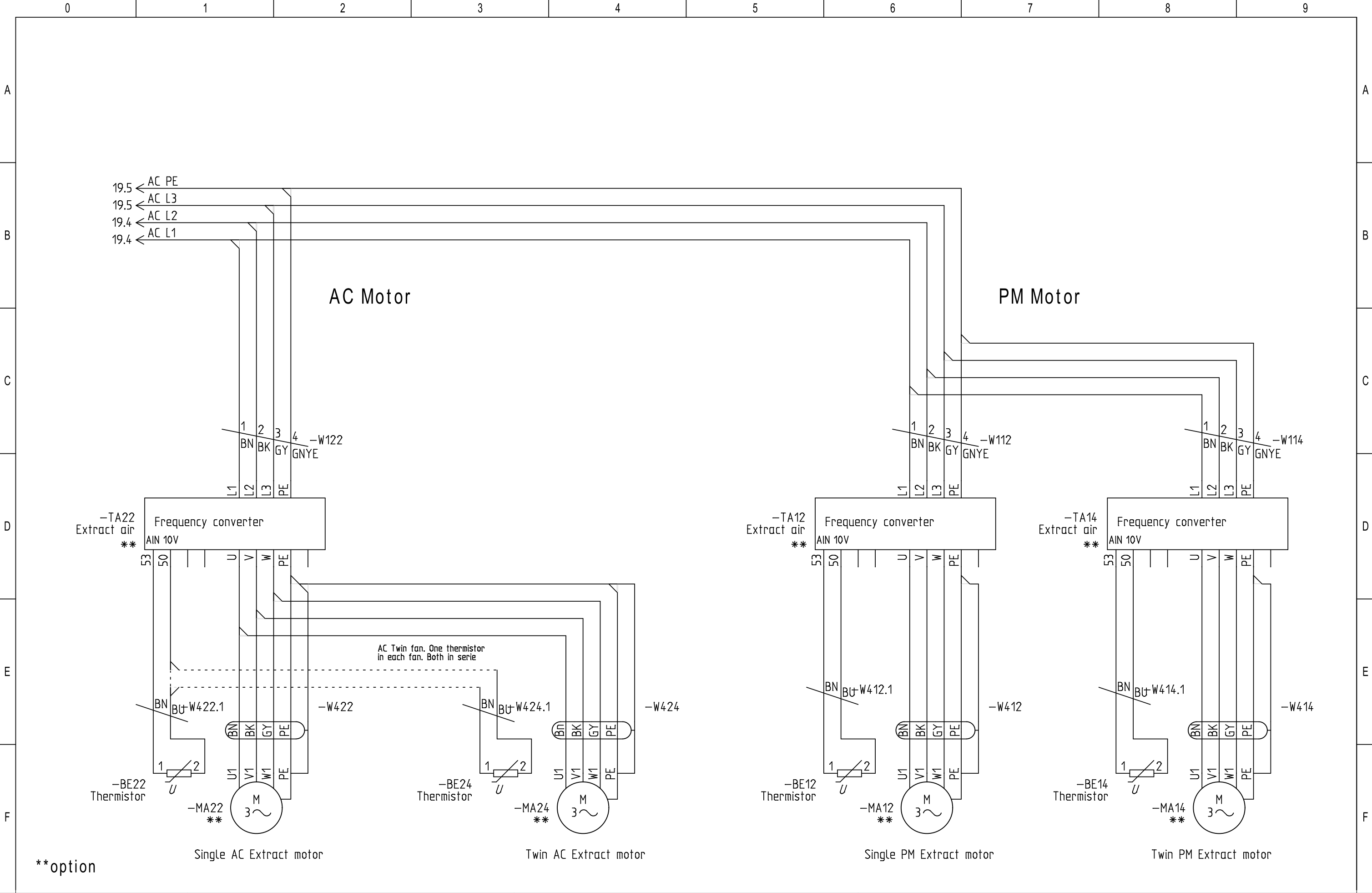


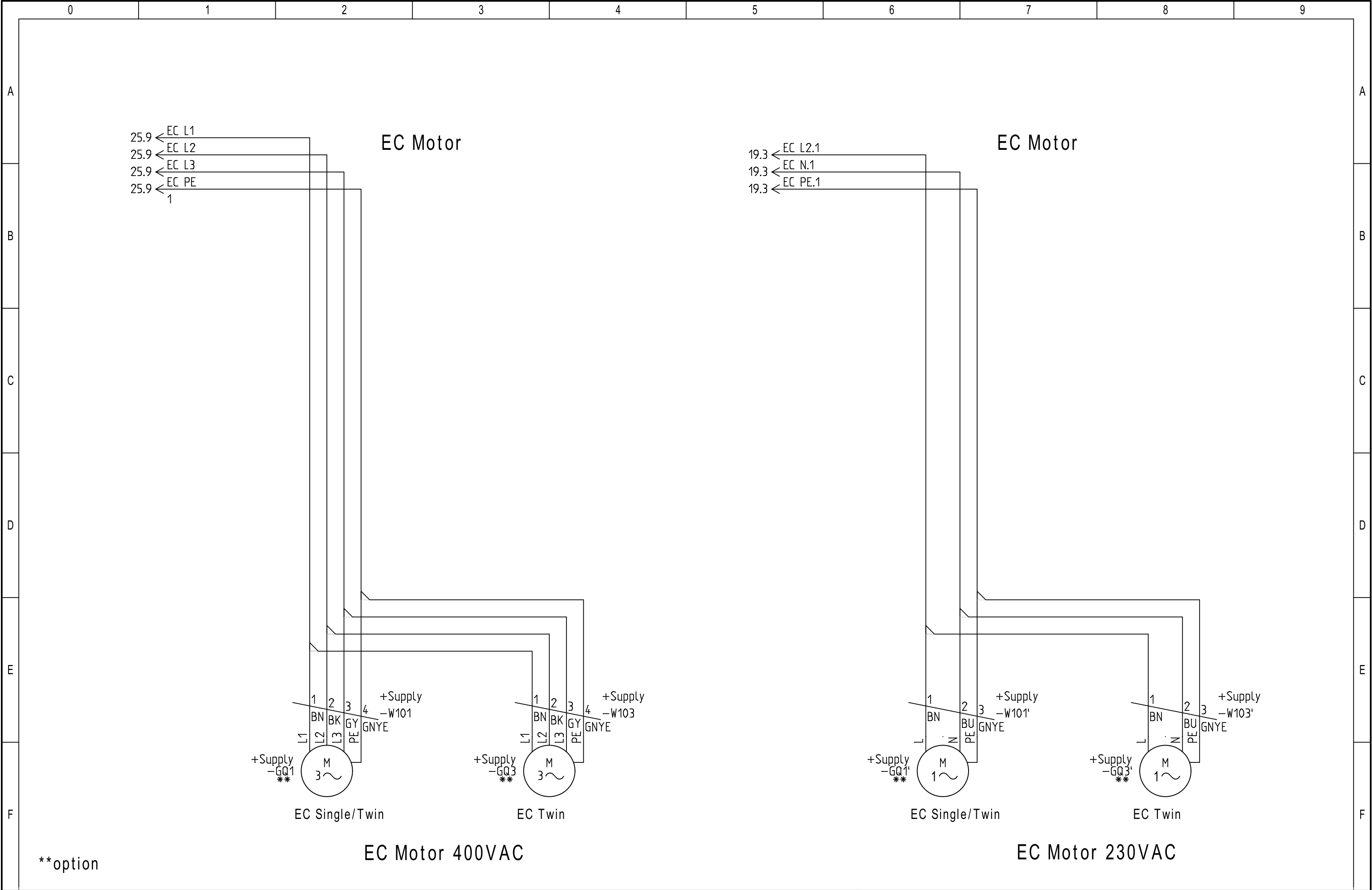




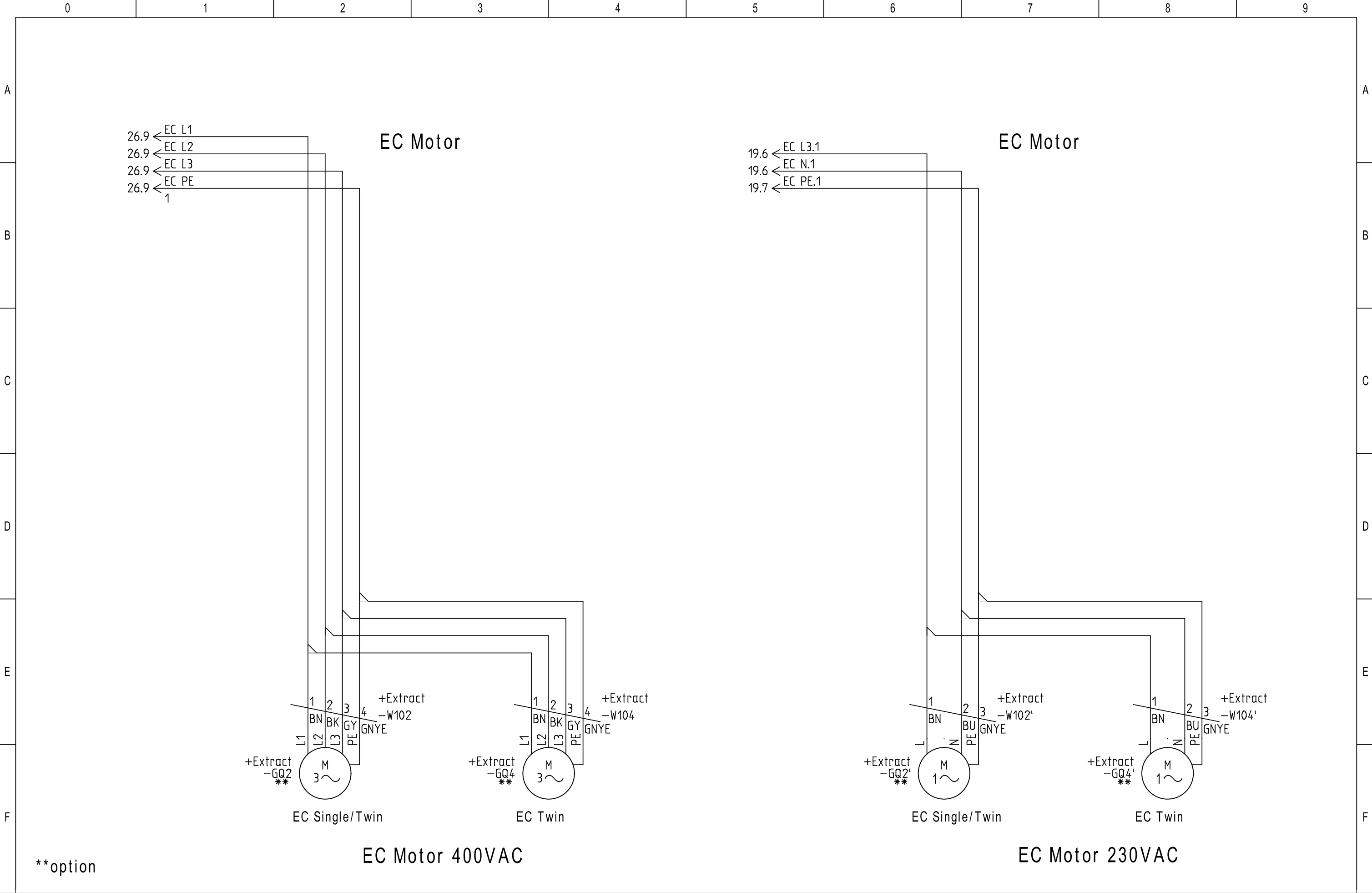








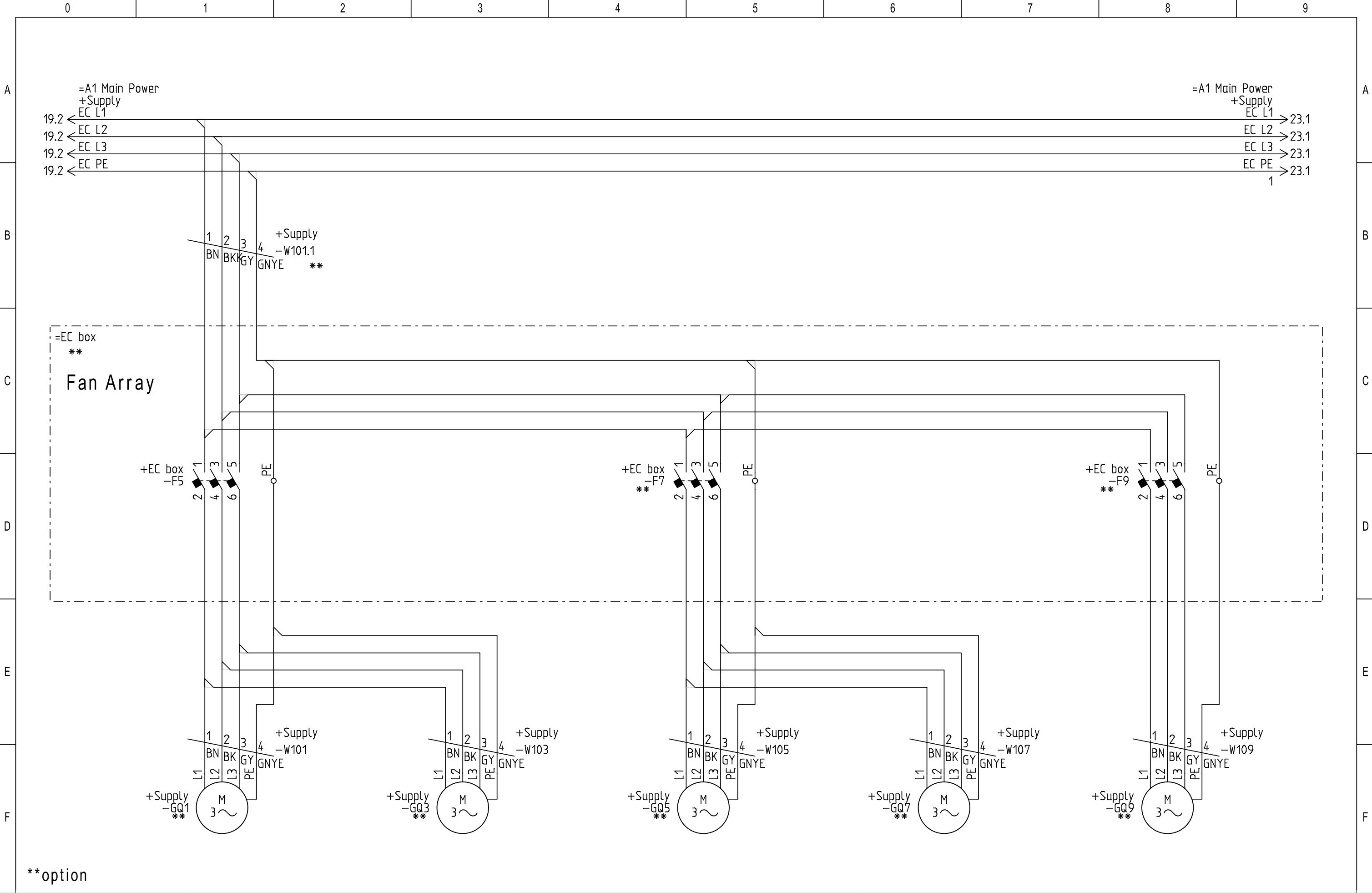
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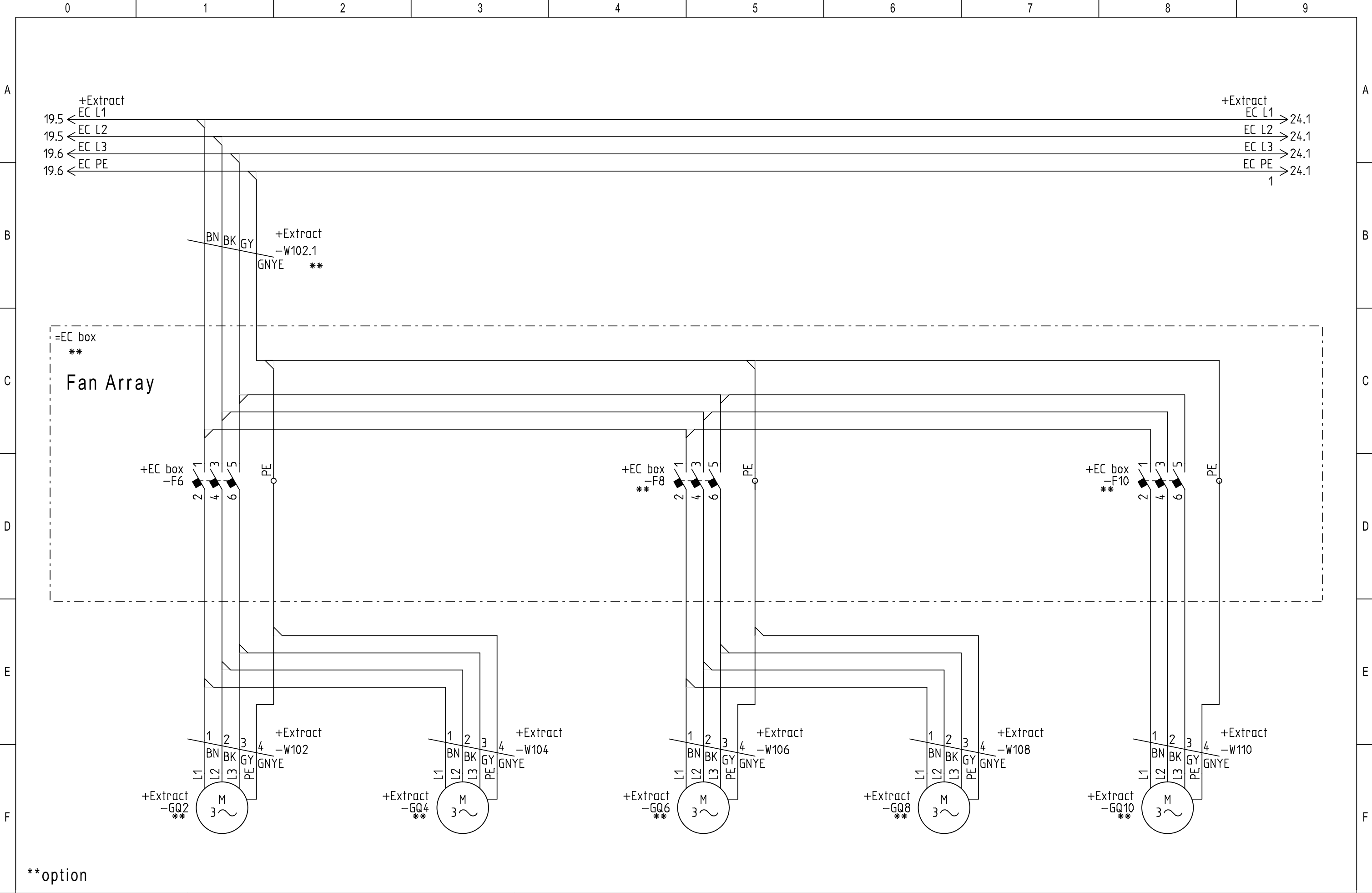


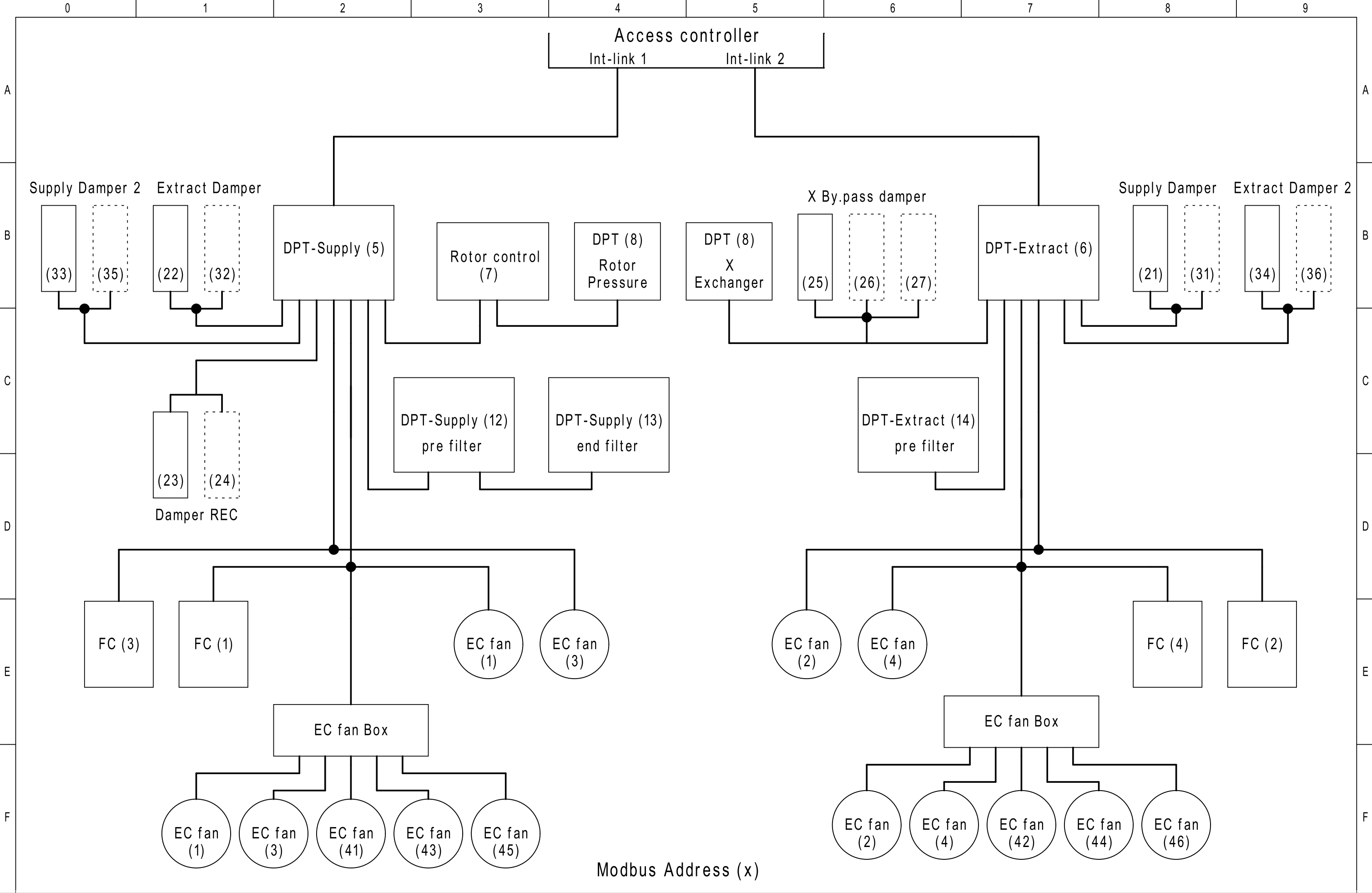
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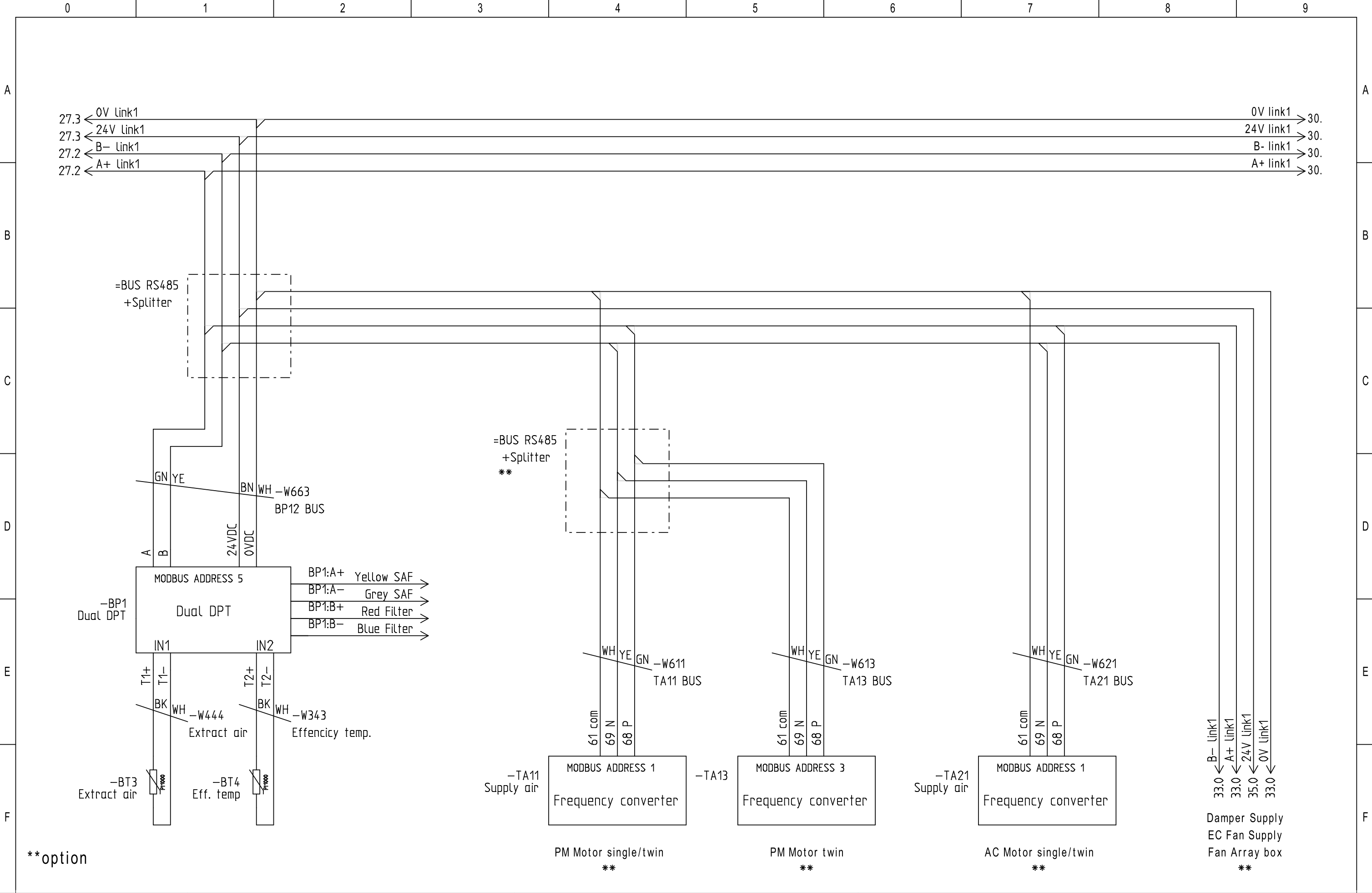
EC Motor 400VAC

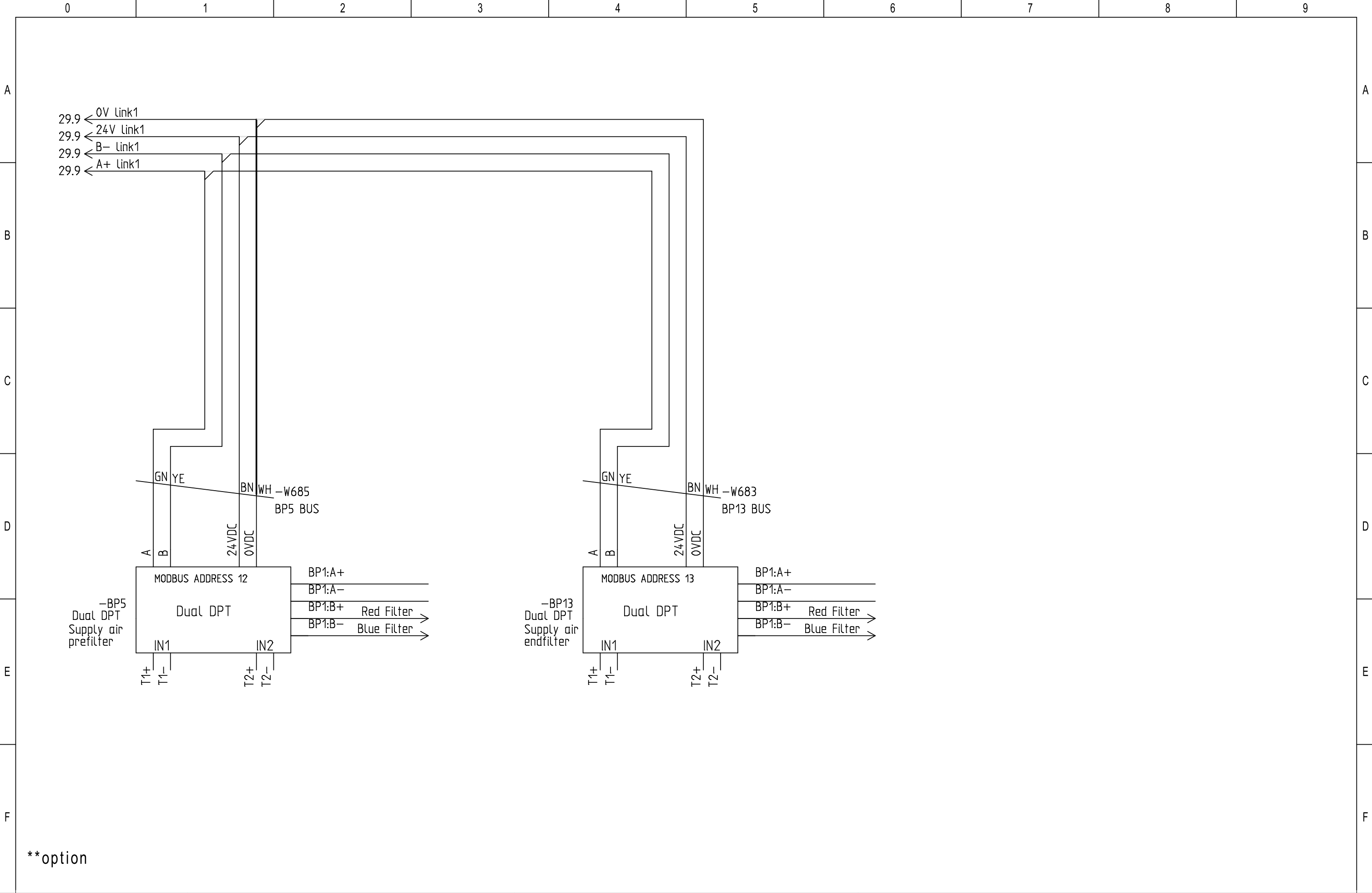
EC Motor 230VAC

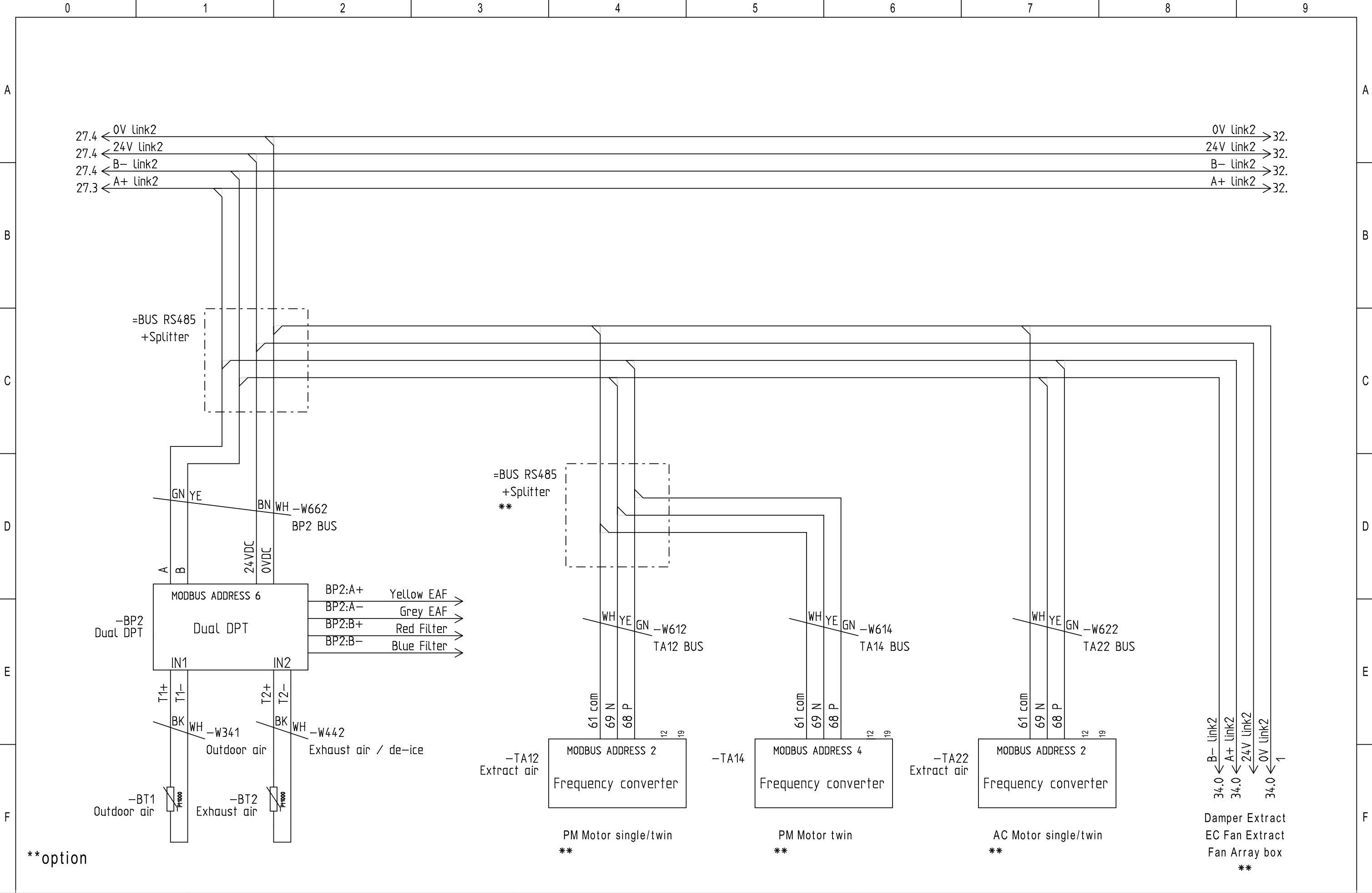


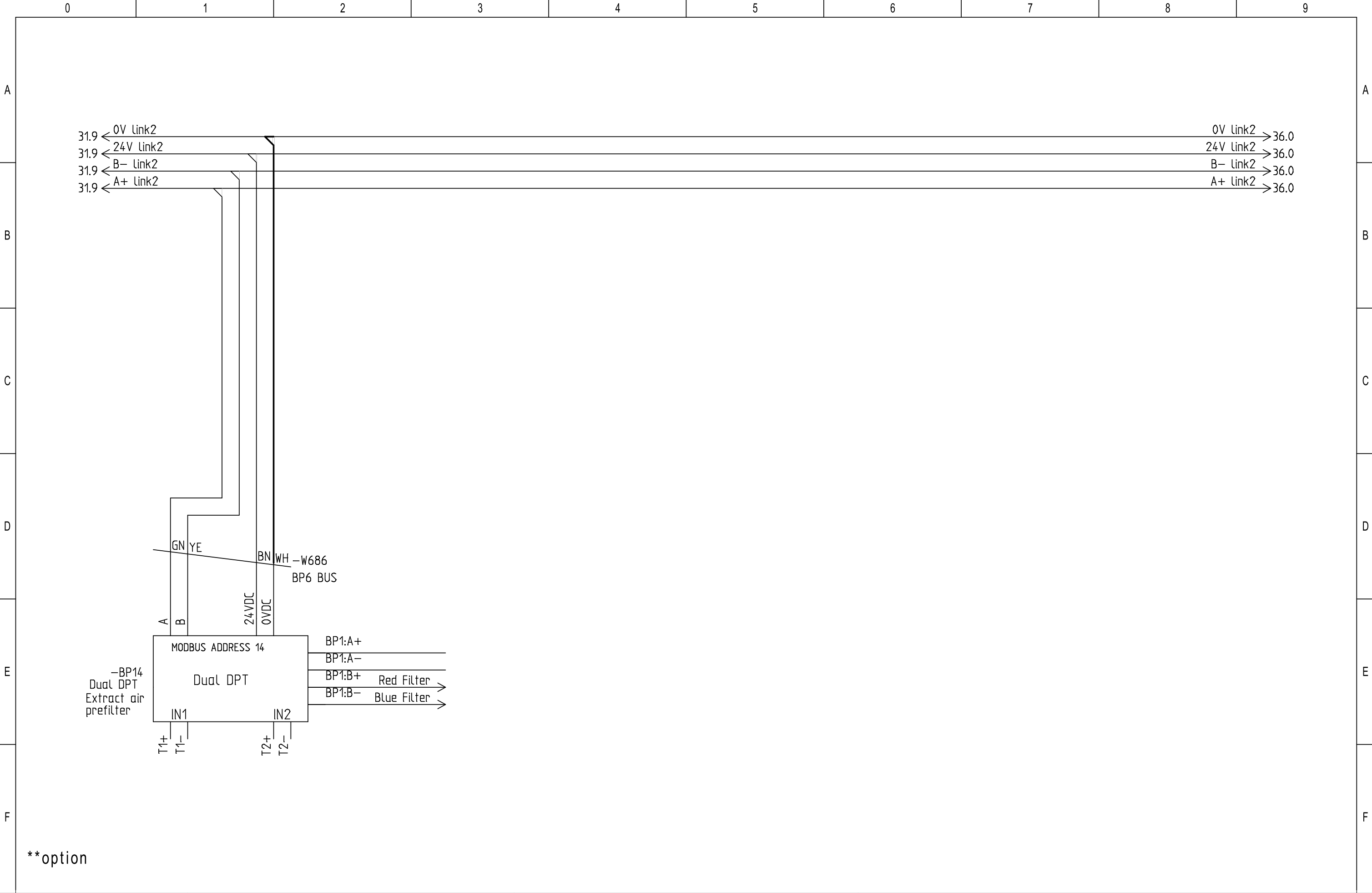


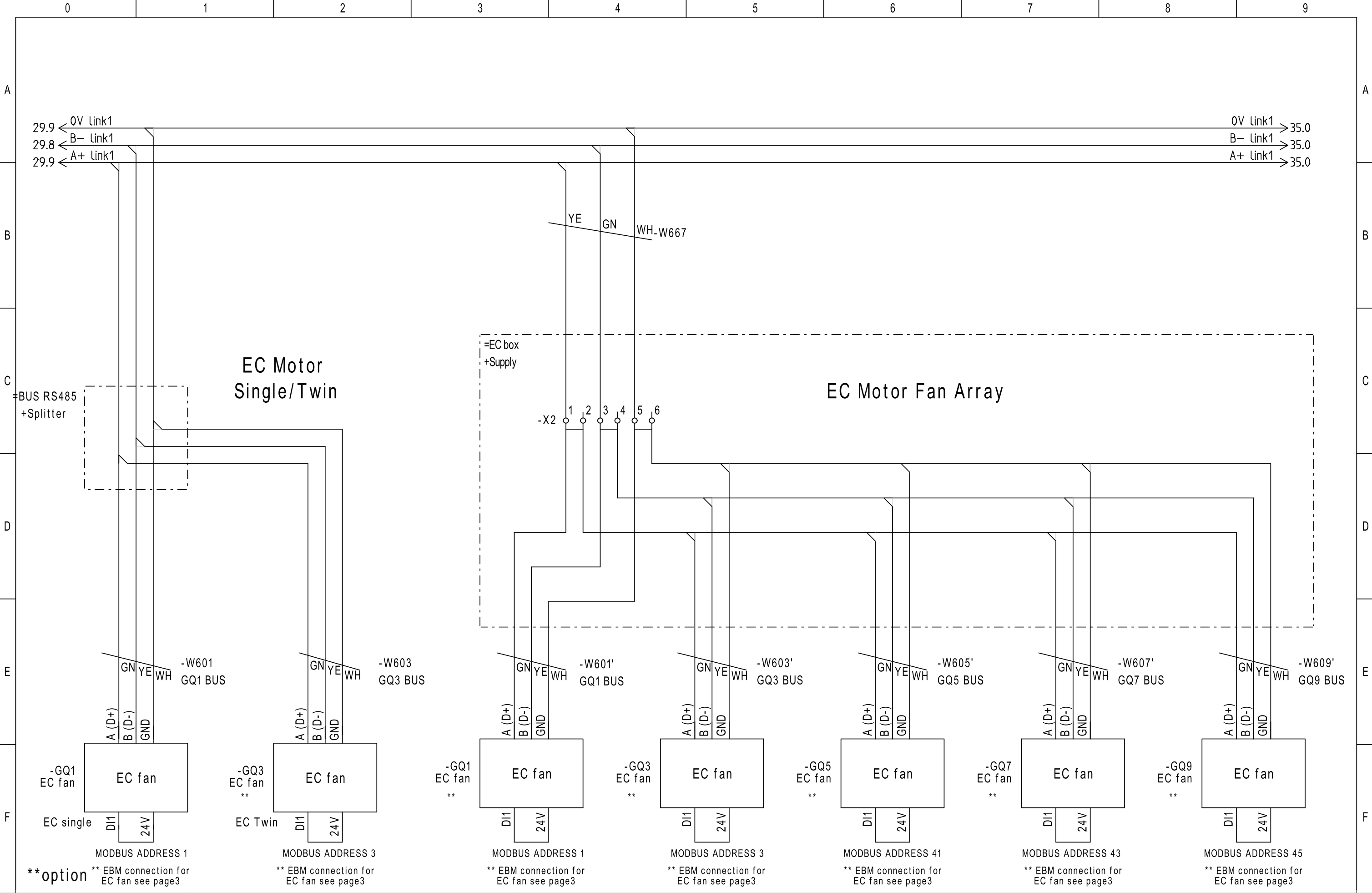


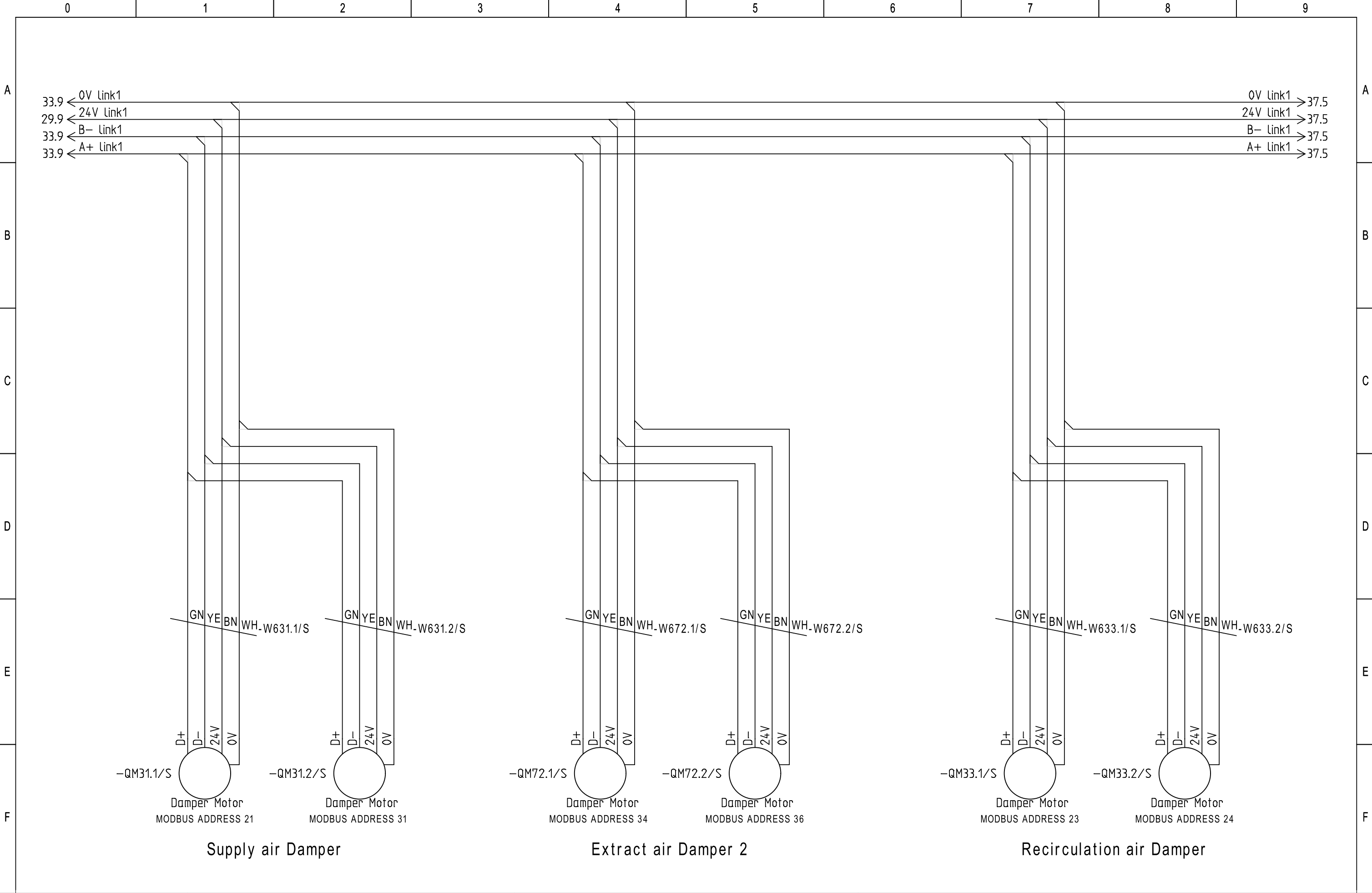


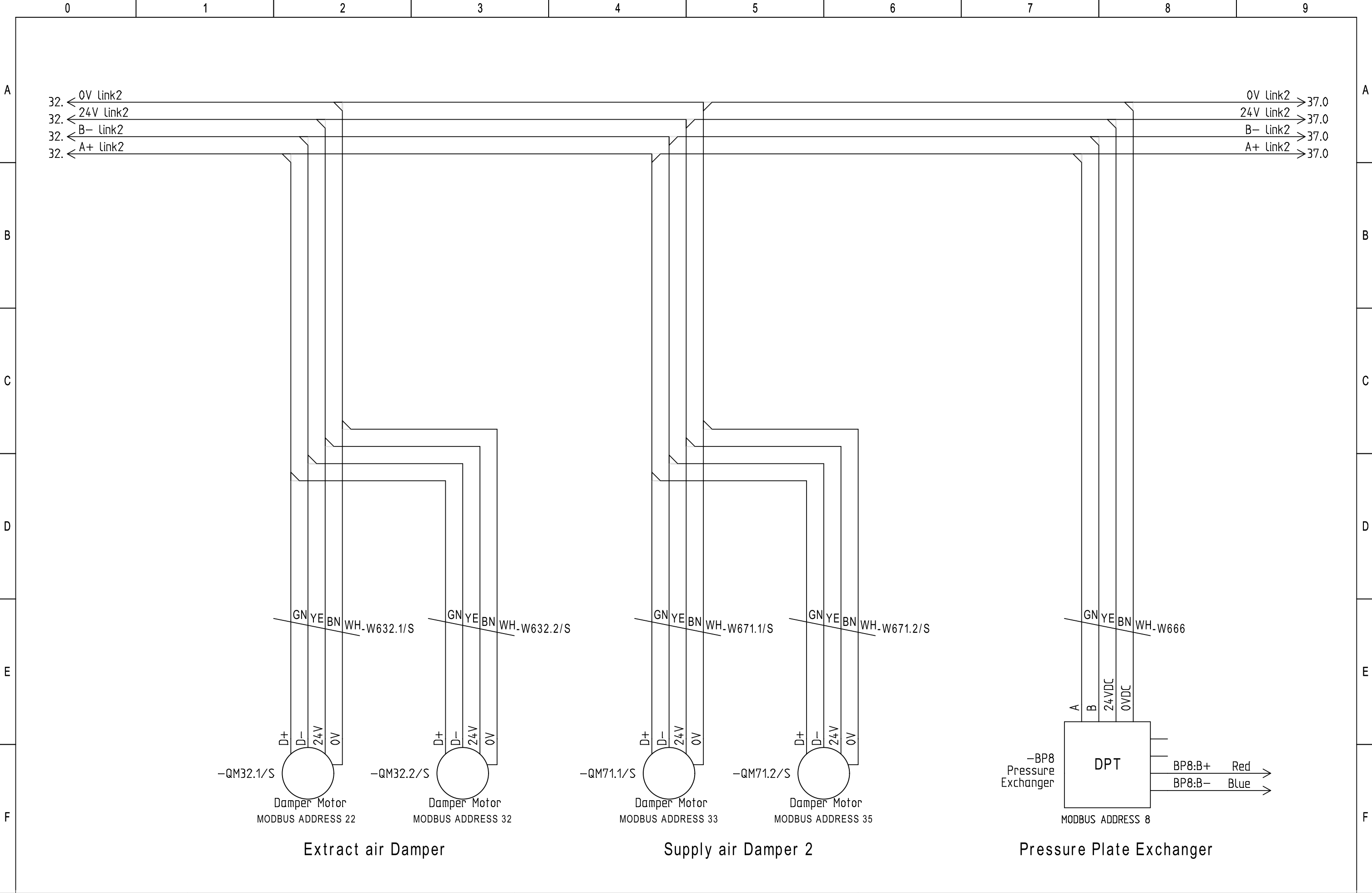


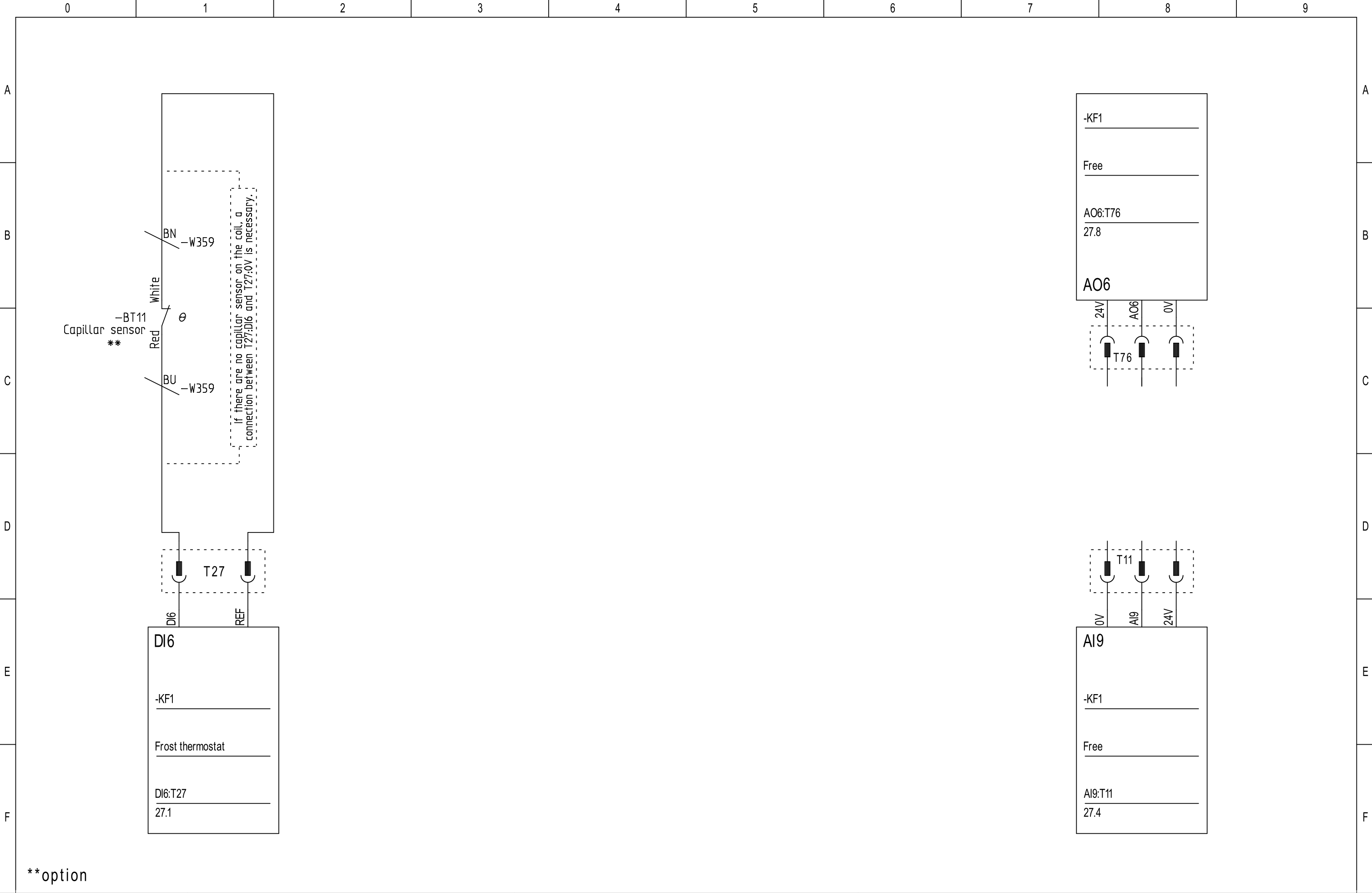


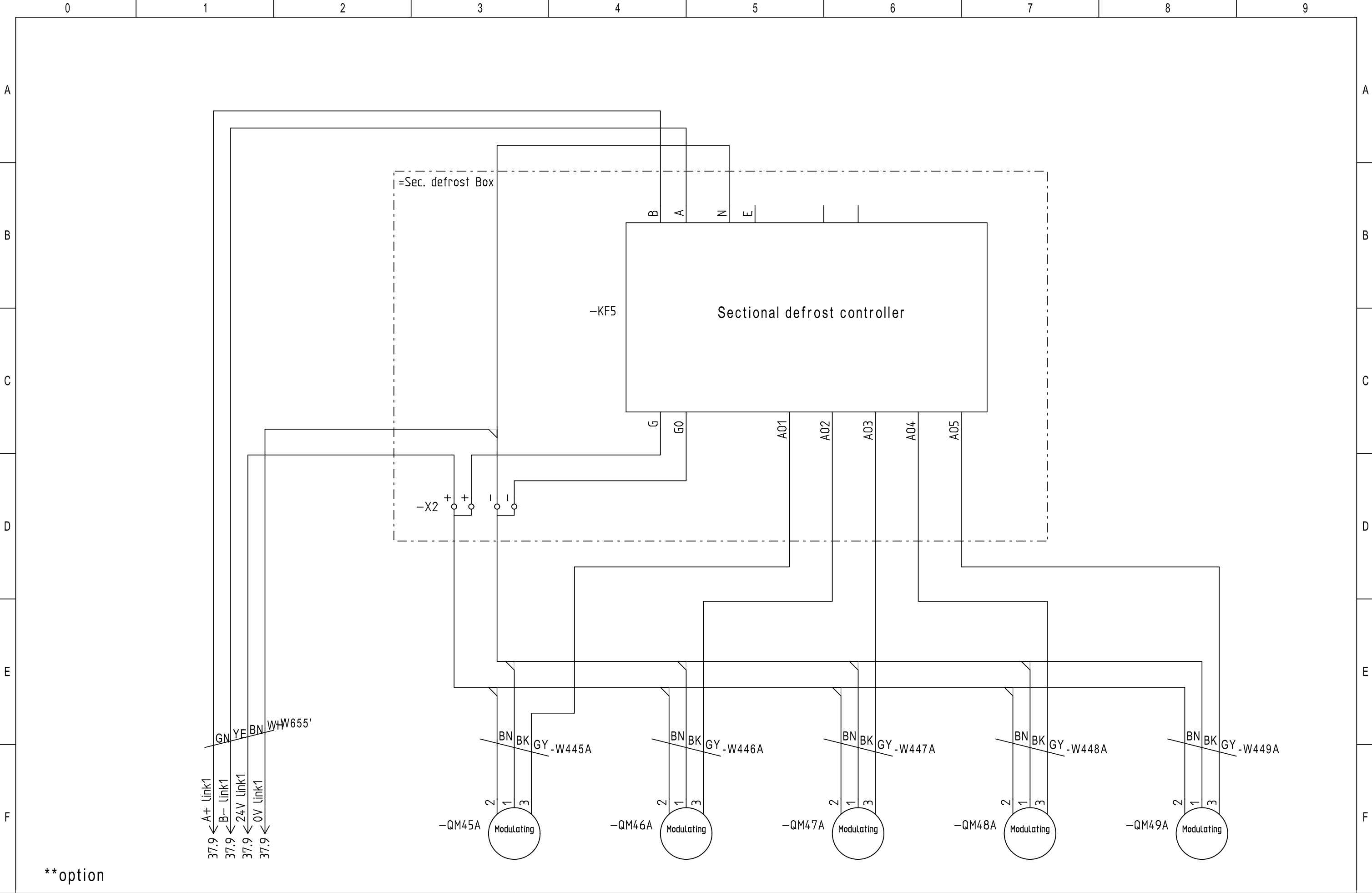












**option

Address list		Systemair settings of ECblue Modbus							
Address	Component: Code								
1	Supply air fan 1: GQ1 - TA11 - TA21	COM Baudrate: 9600Bd							
2	Extract air fan 1: GQ2 - TA12 - TA22								
3	Supply air fan 2: GQ3 - TA13 - TA21	COM Mode: 8N1							
4	Extract air fan 2: GQ4 - TA14 - TA22								
5	Dual pressure transmitter supply: BP1	BUS Address: Supply air, 1 and (3, Twin fans)							
6	Dual pressure transmitter extract: BP2								
7	RHC (Rotor drive system): TA2	Extract air, 2 and (4, Twin fans)							
8	Pressure Exchanger: BP7								
21	Supply air damper 1: QM31.1/S								
22	Extract air damper 1: QM32.1/S								
23	Recirculation damper 1: QM33.1/S	D1: 19D							
24	Recirculation damper 2: QM33.2/S	D1 is set to disable internal safety functions that protects the motor (fire mode)							
25	Plate exchanger by-pass: QM45	Normal speed control of the fan is possible in this mode.							
26	Plate exchanger "by-pass" 2: QM46	Function is active if D1 is open = no signal.							
27	Plate exchanger "by-pass" 3: QM47								
29	VVX by-pass supply: QM38								
30	VVX by-pass extract: QM39								
31	Supply damper 2: QM31.2/S								
32	Extract damper 2: QM32.2/S								
33	Supply damper 3: QM71.1/S								
34	Extract damper 3: QM72.1/S								
35	Supply damper 4: QM71.2/S								
36	Extract damper 4: QM72.2/S								
41	Supply fan 3: GQ5								
42	Extract fan 3: GQ6								
43	Supply fan 4: GQ7								
44	Extract fan 4: GQ8								
45	Supply fan 5: GQ9								
46	Extract fan 5: GQ10								

	0	1	2	3	4	5	6	7	8	9
A	Set-up Danfoss FC101 for Geniox-units with AC motors					Set-up Danfoss FC101 for Geniox-units with PM motors				
	Connections: Modbus Thermistor: Wire jumper:					Terminal 61(N) – 68(B) – 69(A) Terminal 50–53 Terminal 12–19 (no fire)				
	Systemair factory set-up is based on Danfoss initialisation.					Systemair factory set-up is based on Danfoss initialisation.				
B	14–22: Operation mode:					[2] Initialisation (Danfoss Initialisation)				
	Systemair factory set-up:									
	0–01: Language selection:					[1] Inverse				
	1–03: Torque characteristic:					[1] PM, non salient SPM				
	1–20: Motor Power:					According to motor plate / Schedule				
	1–24: Motor Current:					According to motor plate / Schedule				
	1–25: Motor Nominal Speed:					According to motor plate / Schedule				
	1–42: Motor Cable Length:					According to motor plate / Schedule				
	1–50: Motor Magnetisation at zero speed.:					According to motor plate / Schedule				
	1–52: Min. Speed Normal Magnetisation:					According to motor plate / Schedule				
	1–73: Flying Start:					According to motor plate / Schedule				
	1–90: Motor Thermal Protection:					According to motor plate / Schedule				
	1–93: Thermistor Source:					According to motor plate / Schedule				
	3–03: Maximum Reference:					According to motor plate / Schedule				
	3–15: Reference Resource 1:					[11] Local bus reference				
	3–16 + 3–17: Reference 2– and 3 Source:					[0] No function				
	3–41: Ramp 1 up and down:					According to PM Schedule				
	3–42: Ramp 1 Down time:					According to PM Schedule				
	4–14: Motor Speed High Limit:					According to motor plate / Schedule				
	4–19: Max. Output Frequency:					According to motor plate / Schedule				
	5–10: Terminal 18 Digital Input					[0] No operation				
	5–11: Terminal 19 Digital Input					[37] Fire mode				
	5–12: Terminal 27 Digital input:					[0] No operation				
	5–40.0: Function Relay:					[3] Drive ready/remote				
	5–40.1: Function Relay:					[3] Drive ready/remote				
	6–25: Terminal 54 High Reference:					According to motor plate / Schedule				
	8–01: Control Site					[0] Digital and ctrl.word				
	8–02: Control Source					[1] FC Port				
	8–03: Control Timeout Time					20 sec.				
	8–04: Control Timeout Function					[2] Stop				
	8–30: Protocol					[2] Modbus RTU				
	8–31: Address:					1–Supply #1. 3–Supply #2. 2–Extract #1. 4–Extract #2.				
	8–32: FC Port Baud Rate					[2] 9600 Baud				
	8–33: FC Port Parity					[2] No Parity, 1 stop Bit				
	14–20: Reset Mode:					[2] Automatic reset x 2				
	24–00: Fire mode function					[1] Enabled run forward				
	24–05: Fire mode Preset Reference					50%				
	24–09: Fire mode Alarm Handling					[1] Trip, Critical Alarms				
	0–50: LCP Copy:					[1] All to LCP (Copy of settings to panel)				
	To store Systemair factory settings from the control panel:									
F	0–50: LCP Copy:					[2] All from LCP				

0		1		2		3		4		5		6		7		8		9	
A																			A
B	Menu:	3-41	3-42	1-24	1-25	1-26	1-30	1-37	1-39	1-40	3-03	4-14	4-19	6-25					
	Motor Type	Ramp up	Ramp Down	Amp Name plate	Motor RPM rated	Nm Name plate	Ohm [Rf-0]	mH [Lf-0]	Poles	Bemf @ 1000	Max Hz	Max motor Hz	Max motor Hz	Max Hz					
	HPS 71 3800 18	30	20	1,9	3800	2,0	3,900	11,75	6	67	196	200	200	196					
	HPS 71 3700 28	30	20	3,0	3700	3,6	2,100	8,25	6	79	191	194	194	191					
	HPS 71 3300 18	30	20	1,9	3300	2,6	6,250	19,25	6	85	170	173	173	170					
C	HPS 71 3200 30	30	20	3,2	3200	4,2	2,000	8,05	6	84	161	168	168	161					
	HPS 71 2900 21	30	20	2,4	2900	3,3	4,550	15,40	6	91	143	152	152	143					
	HPS 71 2800 40	30	20	4,1	2800	6,1	1,750	7,15	6	100	144	147	147	144					
	HPS 71 2500 29	30	20	3,1	2500	5,0	3,700	13,00	6	105	129	131	131	129					
	HPS 71 2350 38	30	20	4,2	2350	7,3	2,400	10,85	6	115	120	123	123	120					
D	HPS 90 2650 64	30	30	7,0	2650	9,6	1,150	11,40	8	89	182	186	186	182					
	HPS 90 2350 76	30	30	8,1	2350	13,0	0,800	10,00	8	103	159	165	165	159					
	HPS 90 2100 63	30	30	6,7	2100	10,5	1,500	14,75	8	100	142	147	147	142					
	HPS 90 2050 100	30	30	10,7	2050	19,0	0,700	8,50	8	115	140	144	144	140					
	HPS 90 1850 84	30	30	8,9	1850	16,0	0,875	11,50	8	117	127	130	130	127					
E	HPS 90 1900 136	30	30	15,3	1900	26,0	0,575	7,25	8	110	127	133	133	127					
	HPS 90 1700 106	30	30	11,3	1700	22,0	0,575	7,25	8	121	116	119	119	116					
	HPS 112 1550 108	30	60	11,7	1550	32,0	0,750	8,75	6	178	80	81	81	80					
	HPS 112 1700 145	30	60	15,5	1700	39,0	0,465	5,45	6	162	88	89	89	88					
	HPS 112 1350 135	60	60	14,8	1350	44,0	0,570	6,95	6	206	69	71	71	69					
F	HPS 112 1500 187	60	60	19,2	1500	54,0	0,350	5,00	6	182	76	79	79	76					
	HPS 112 1000 140	60	60	15,0	1000	51,0	0,520	7,75	6	220	54	53	65	54					
	HPS 132 1250 199	60	60	21,3	1250	69,0	0,320	7,60	6	210	65	66	66	65					
	HPS 132 1000 202	60	60	21,6	1000	77,0	0,375	9,25	6	230	51	53	53	51					
	HPS 132 1150 300	60	60	32,1	1150	104,0	0,235	8,00	6	230	58	60	60	58					
	HPS 132 930 273	60	60	29,4	930	118,0	0,280	9,75	6	261	46	49	49	46					
		Geniox Access CU40 Controller				Frequency converter guide				Project: Geniox Control system 04.07_LT				Rev.: 01.00		Sheet: 44			
										Date: 15-08-2018				initials: EIPU		Total sheets: 39		Next sheet: 45	

