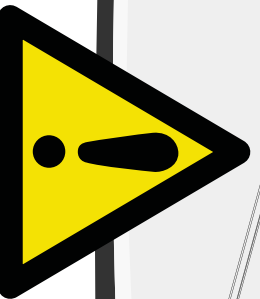
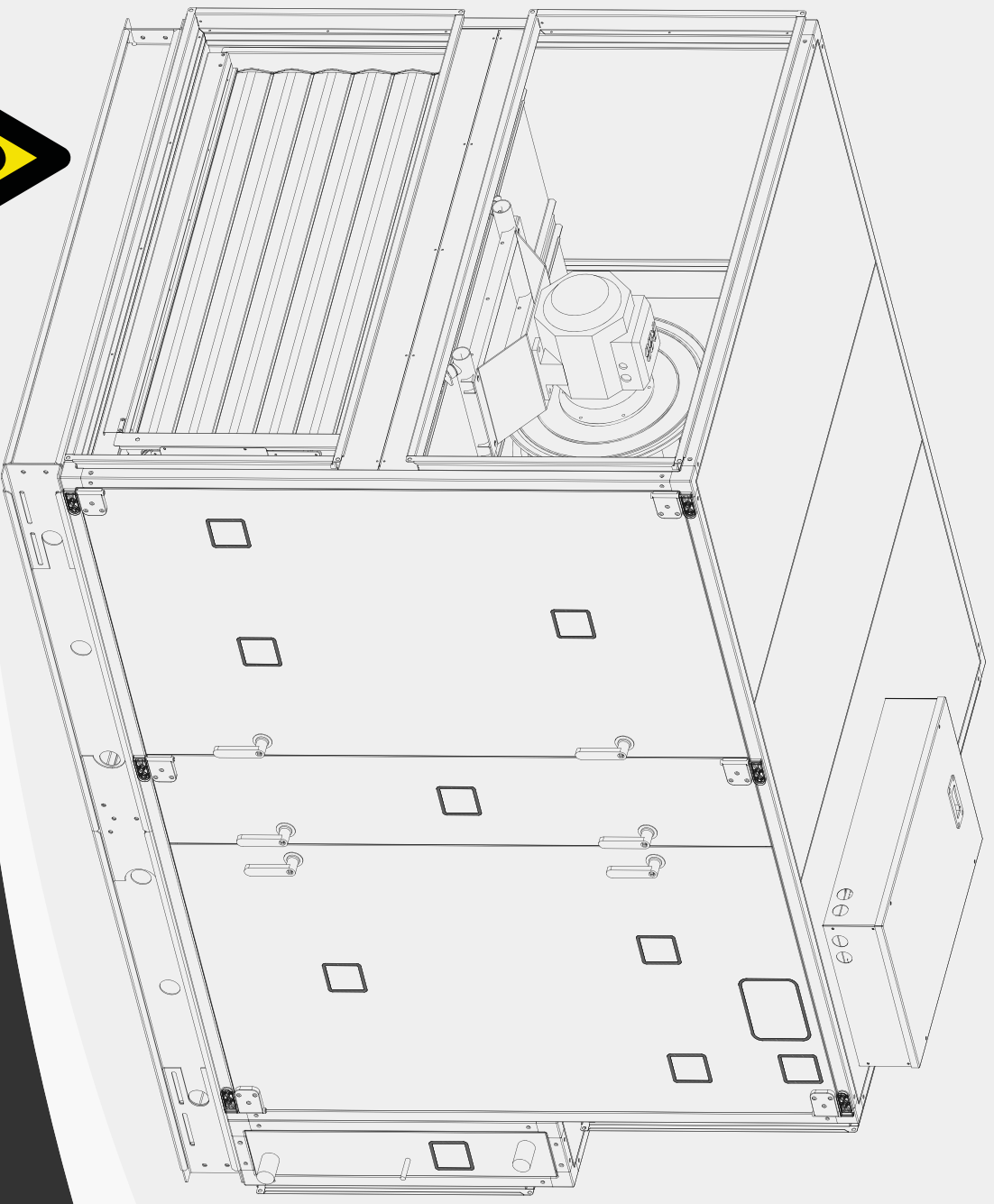
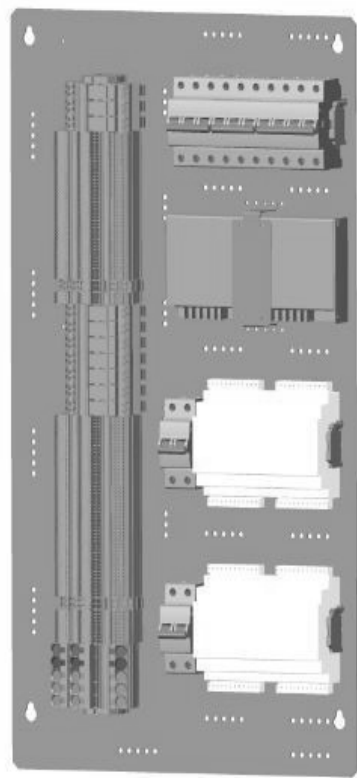


Danvent DV Annex 16 - Wiring diagrams



PDF file is listed as follows:

General description	1 - 9
Circuit diagram	10 - 44
Switchboard layout	45 - 49
Terminal matrix	60 - 69
Cable plan	70 - 99



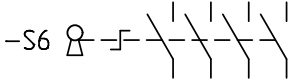
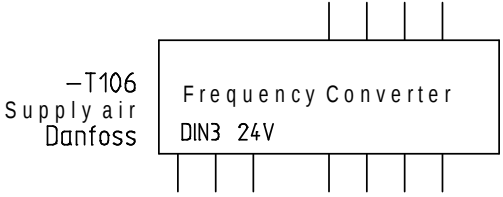
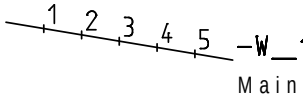
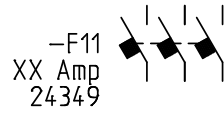
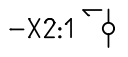
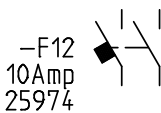
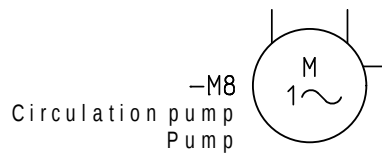
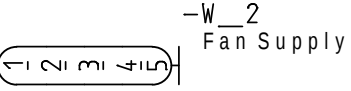
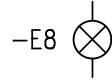
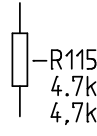
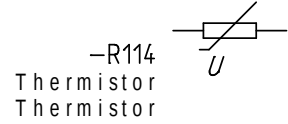
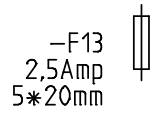
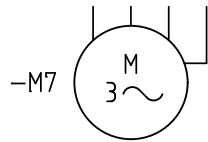
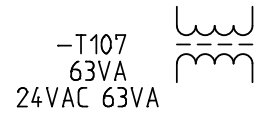
supplier:
Systemair A/S, Denmark
Ved Milepælen 7
8361 Hasselager

Units with external cabinet:
DV 10-40 are placed on top of the unit.
DV 50-240 are placed on front of the unit

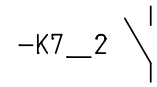
Units with internal cabinet:
Cabinet is always inside the unit.

Components according to functions
are mark with **

Symbols are according to IEC 60617.
On the following 2 pages there are descriptions of used symbols in the project.

	Switchgear, 4 pole		Frequency converter
	Main supplyCable		References
	Automatic tripping, 3-pole		Terminal
	Automatic tripping, 2-pole		Cirkulation pump
	Shielded cable		Lamp
	Resistor		Info text
	Thermistor		Fuse
	Motor three phase + PE		Transformer

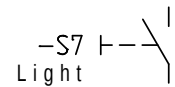
Symbols are according to IEC 60617.
These pages are descriptions of used symbols in the project.



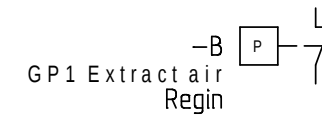
Relay contacts, normally open



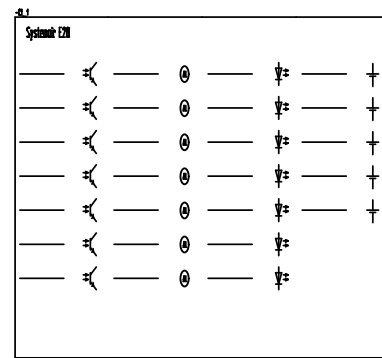
Switchgear



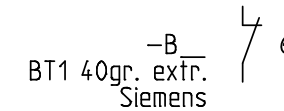
Switchgear



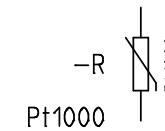
Switchgear



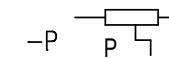
Corrigo E28



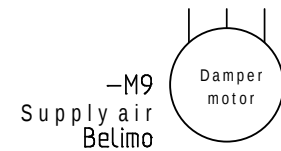
fireguard



Temperature (measuring)



Pressure



D a m p e r m o t o r

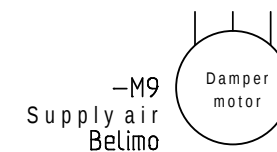
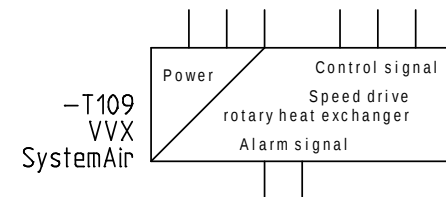
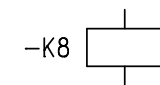


Plate exchanger damper motor



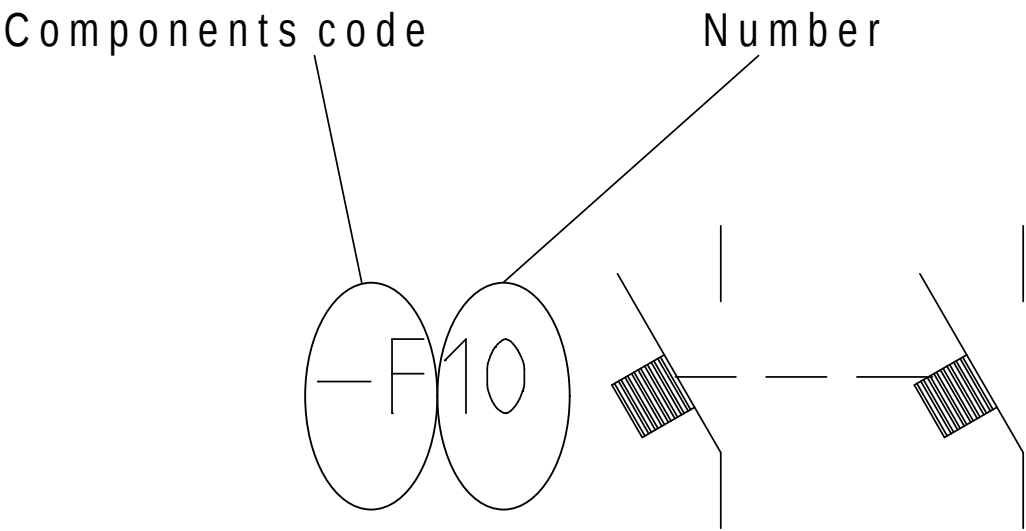
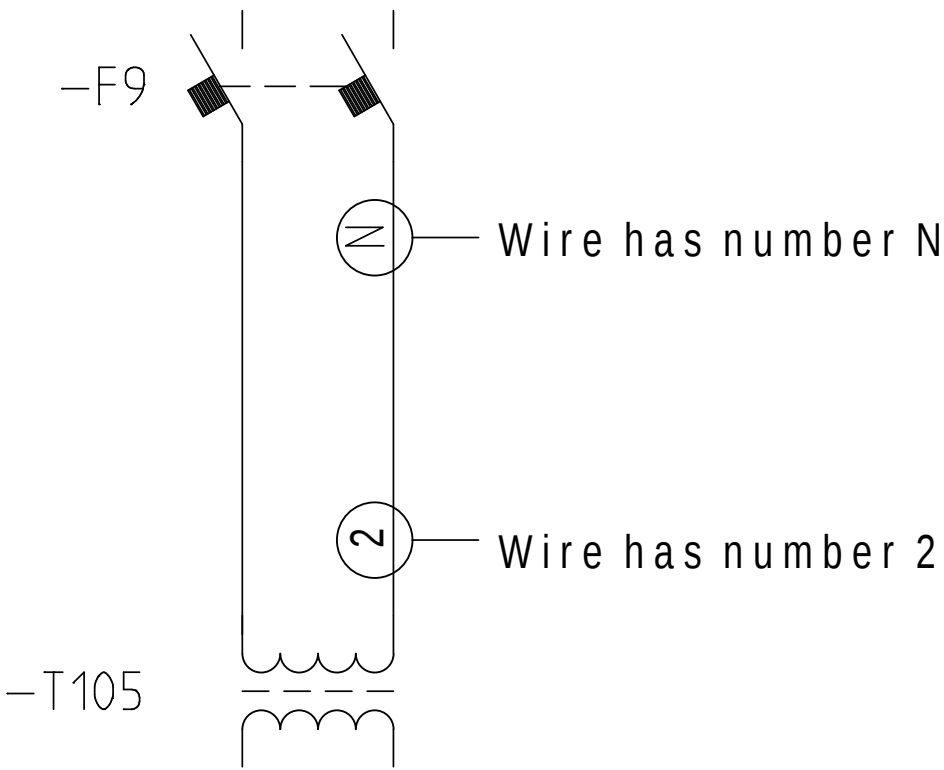
Rotary heat exchanger



Relay

Labeling of wires
Cables are marked with
terminal name

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



Component codes used
in the project

- S = switchgear
- F = automatic tripping
- M = pump / Damper motor / valve motor
- R = temperature sensors
- T = VLT Converter / transformer
- P = lamps
- C = controller
- B = fire guard / pressure guard / pressure transducer

- W = cables
- K = relay coils
- X = terminal
- U = cabinet

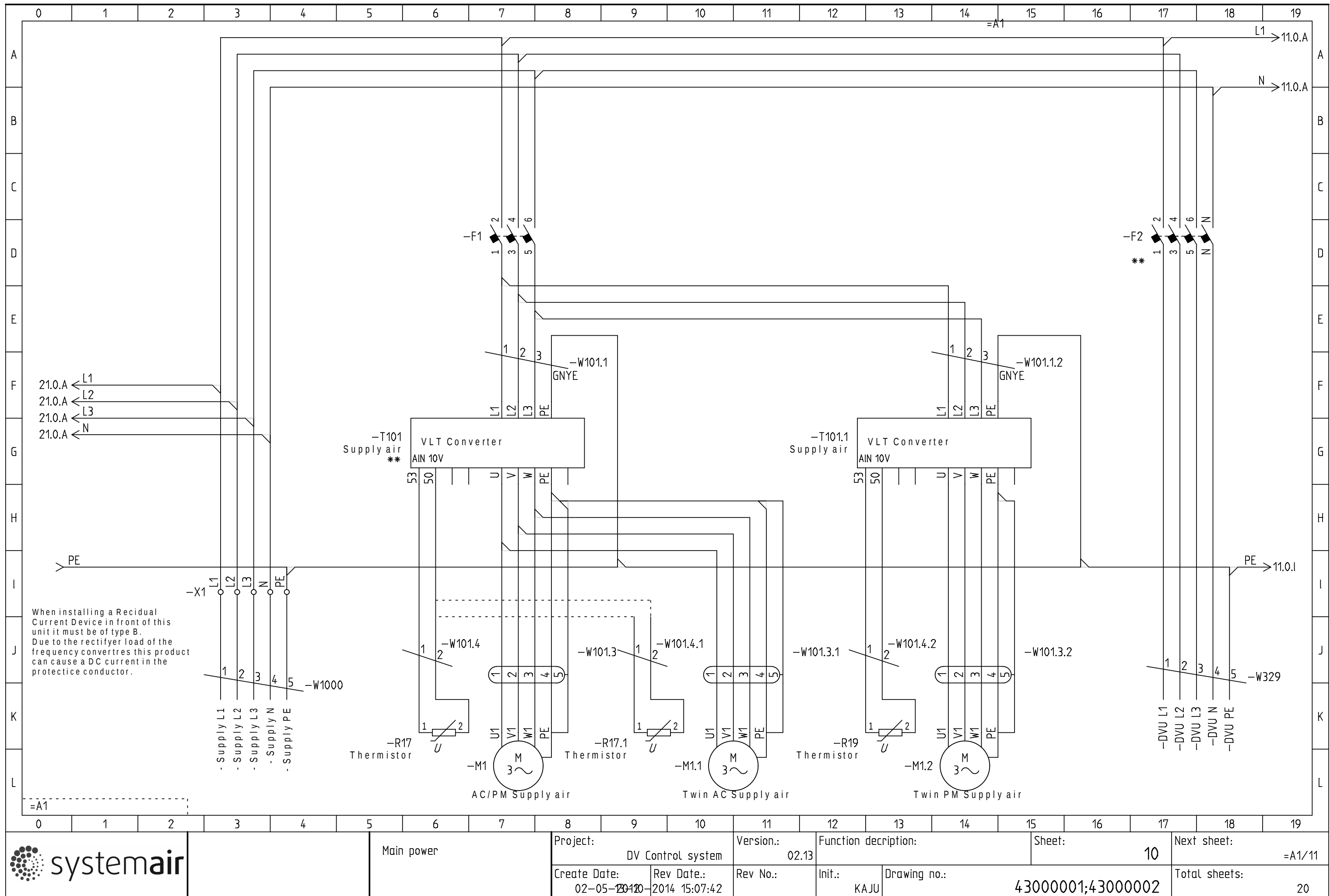
Data for the unit

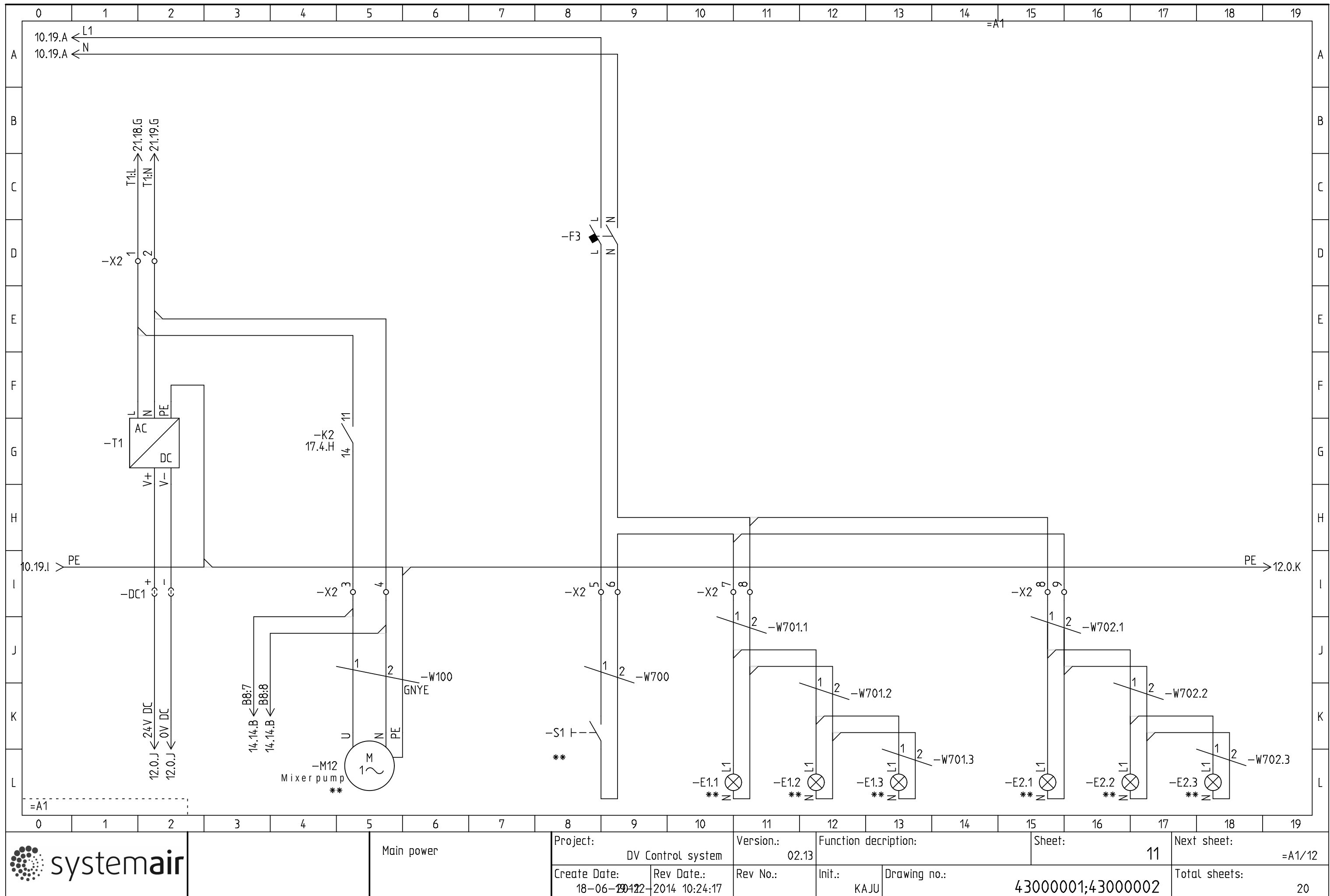
Max load look in order paper

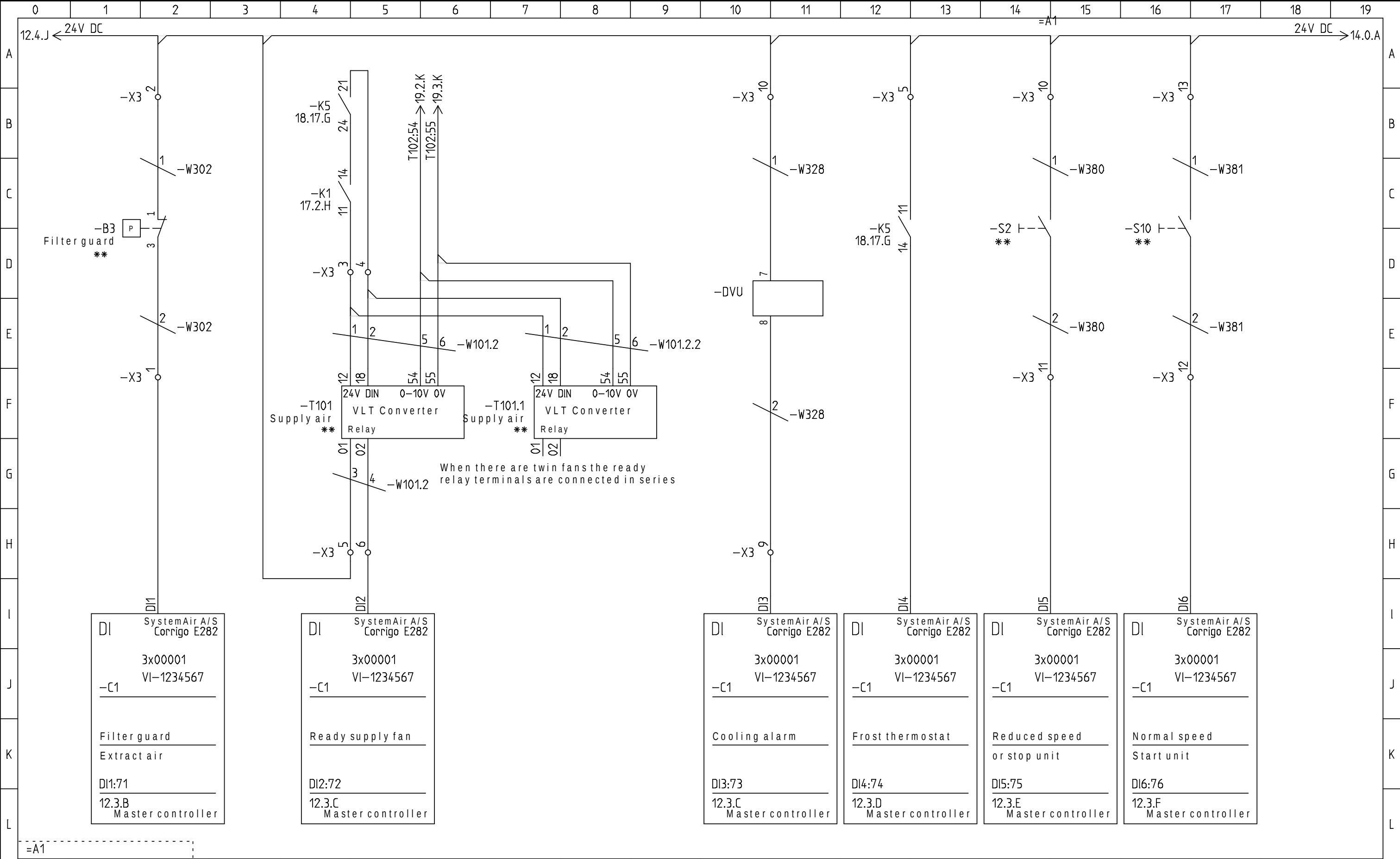
Max pre-fuse look in order paper

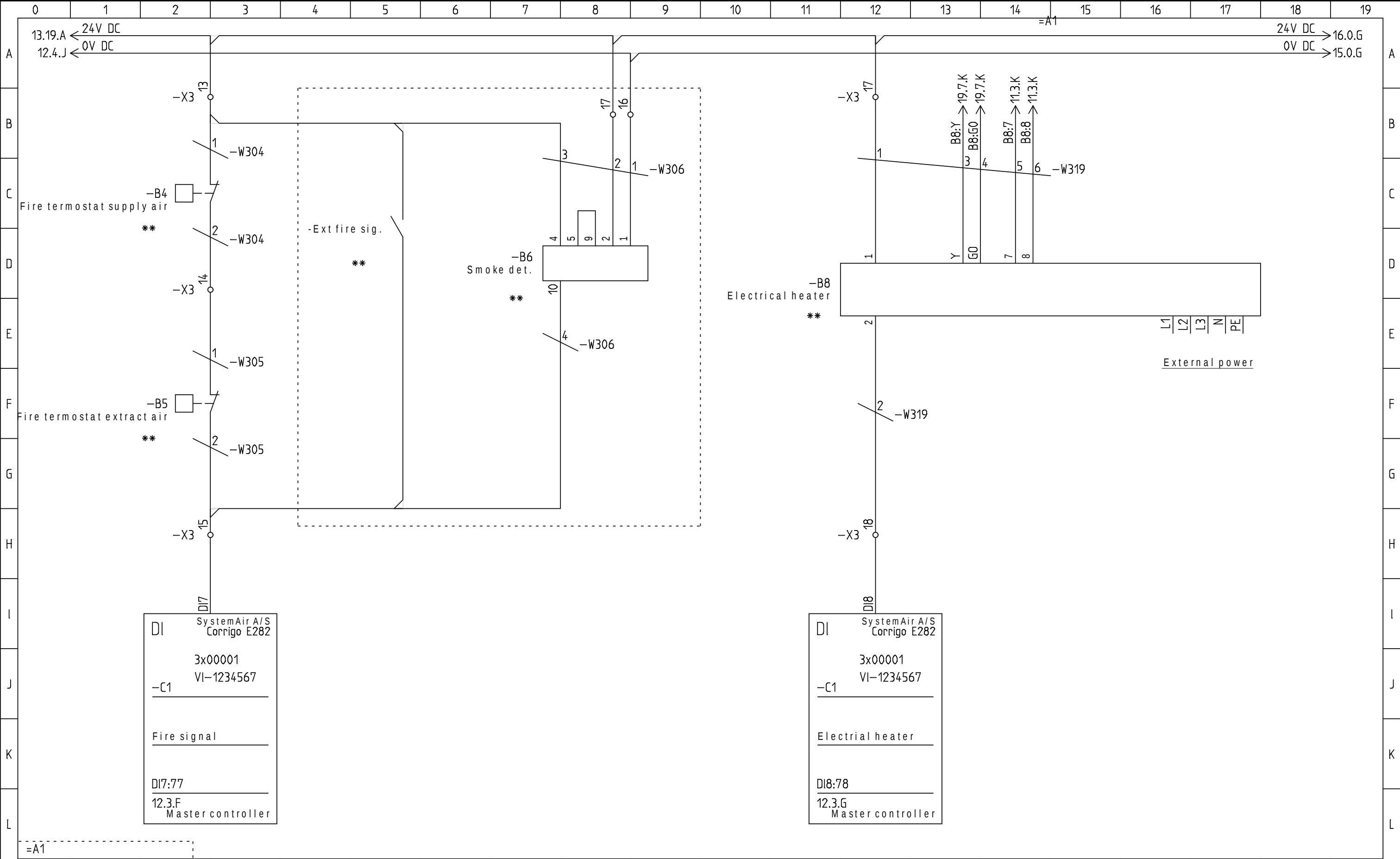
Ik max. 16kAmp

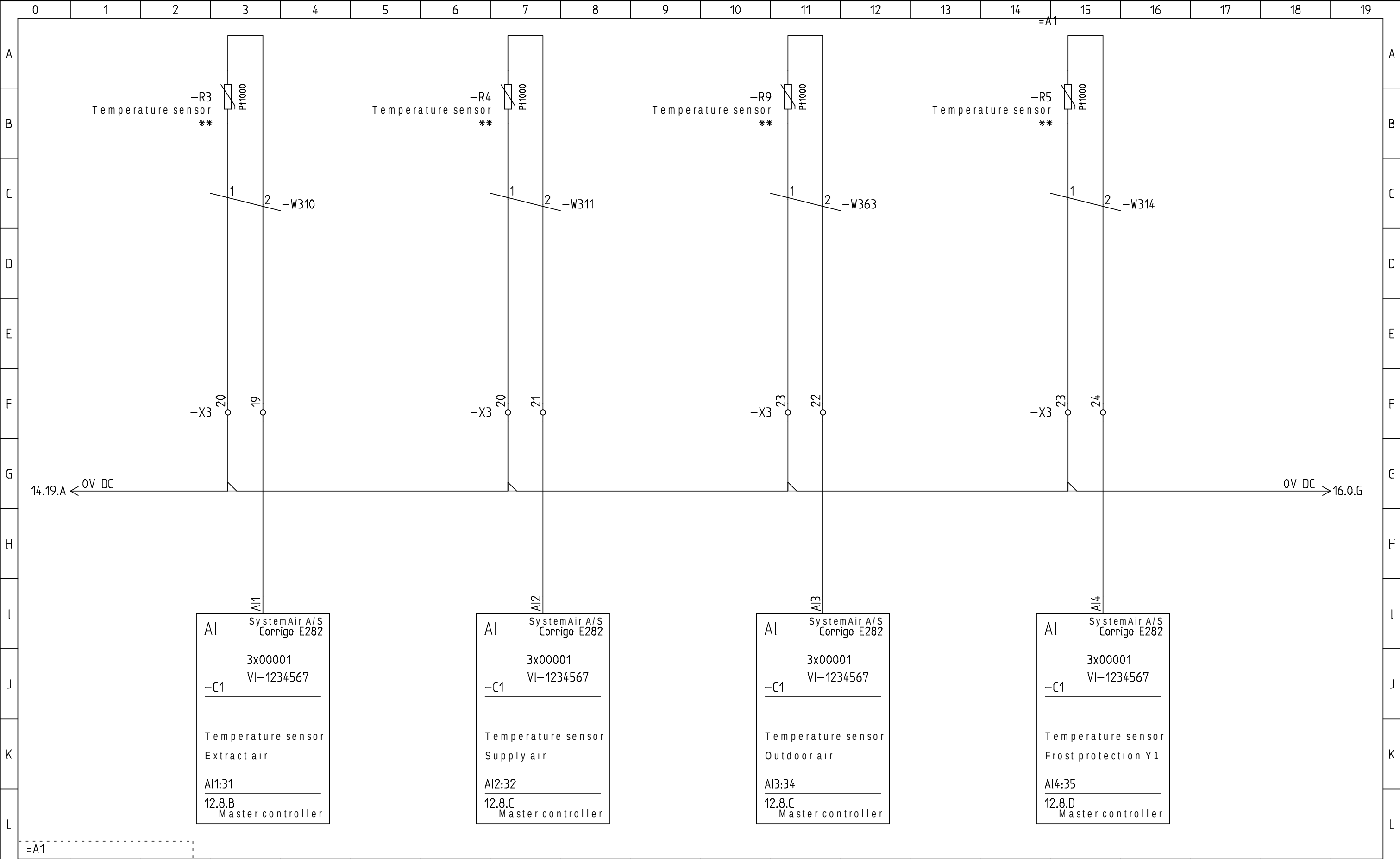
RCD type B











Analog input

Project:

DV Control system

Version.:

02.13

Function description:

Sheet:

15

Next sheet:

=A1/16

Create Date:

20-06-2012

Rev Date.:

2014 10:24:17

Rev No.:

Init.:

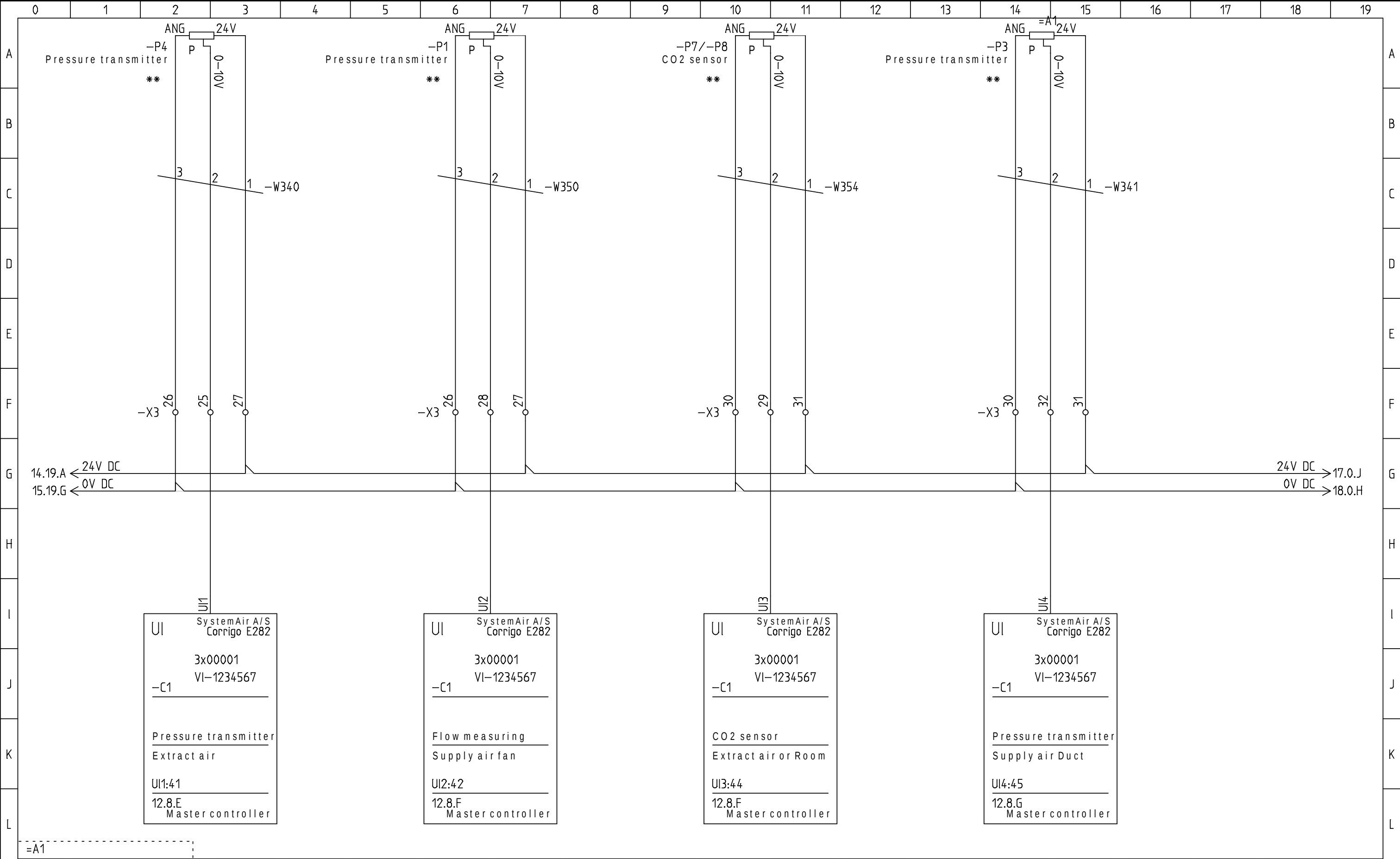
KAJU

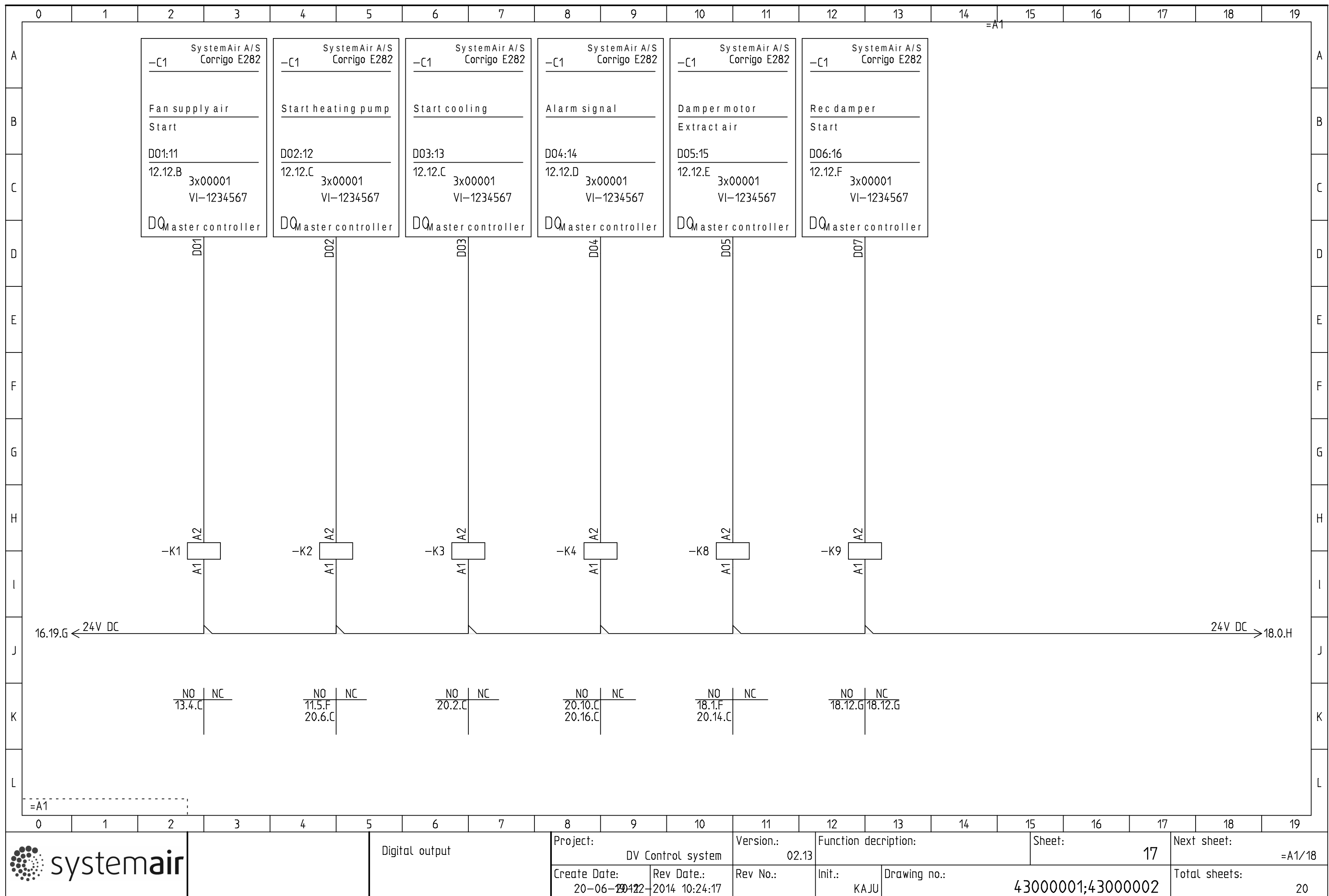
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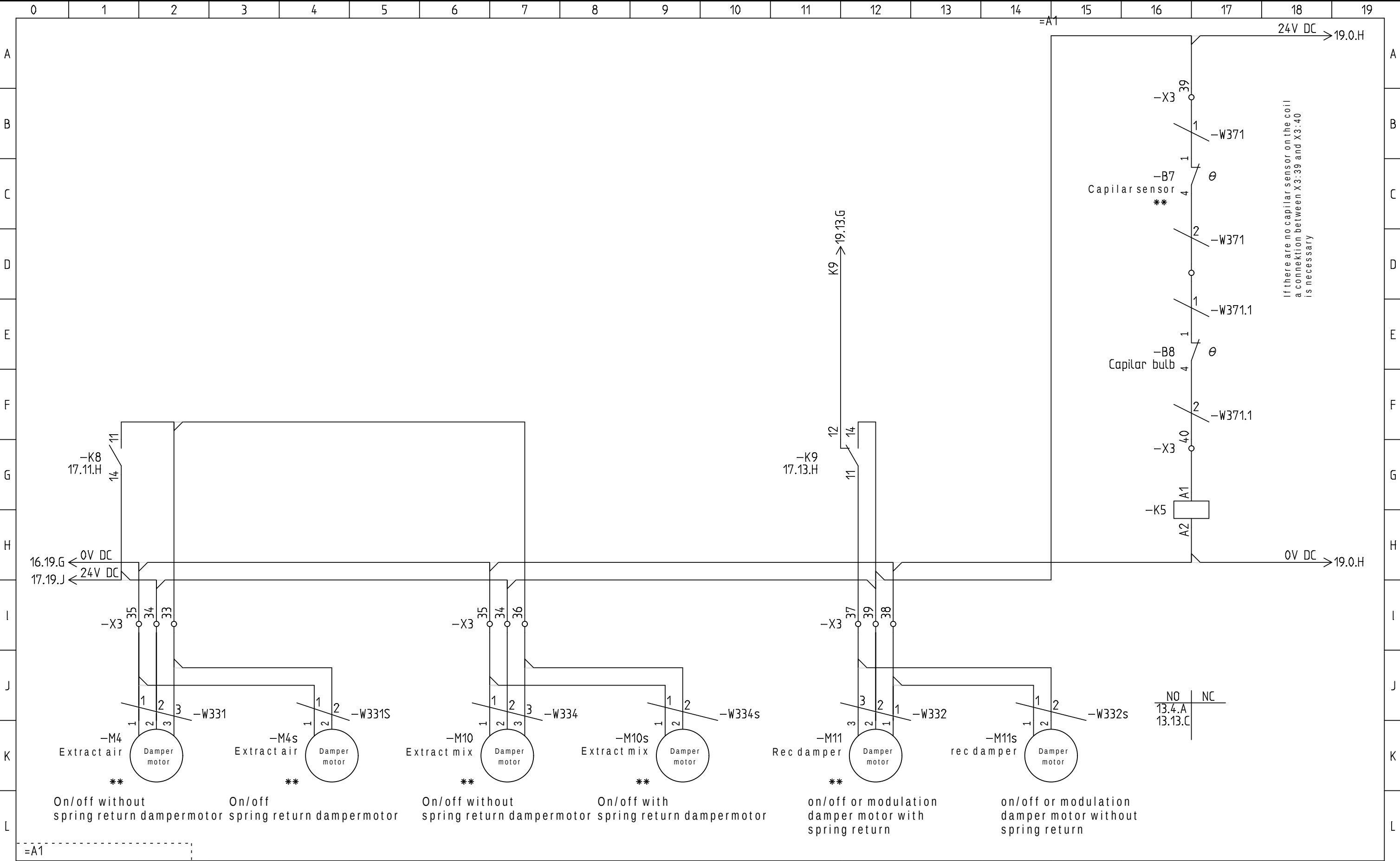
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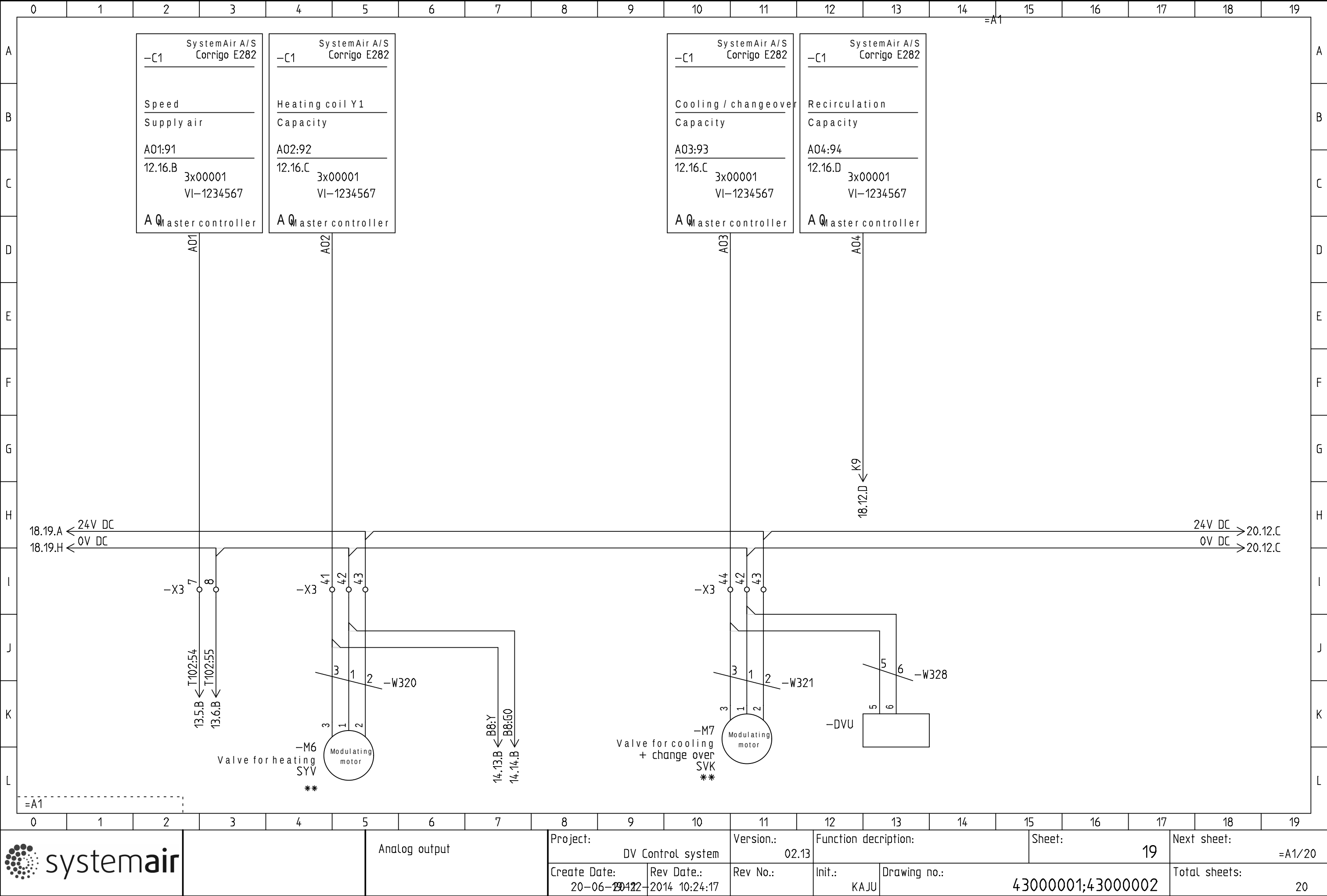
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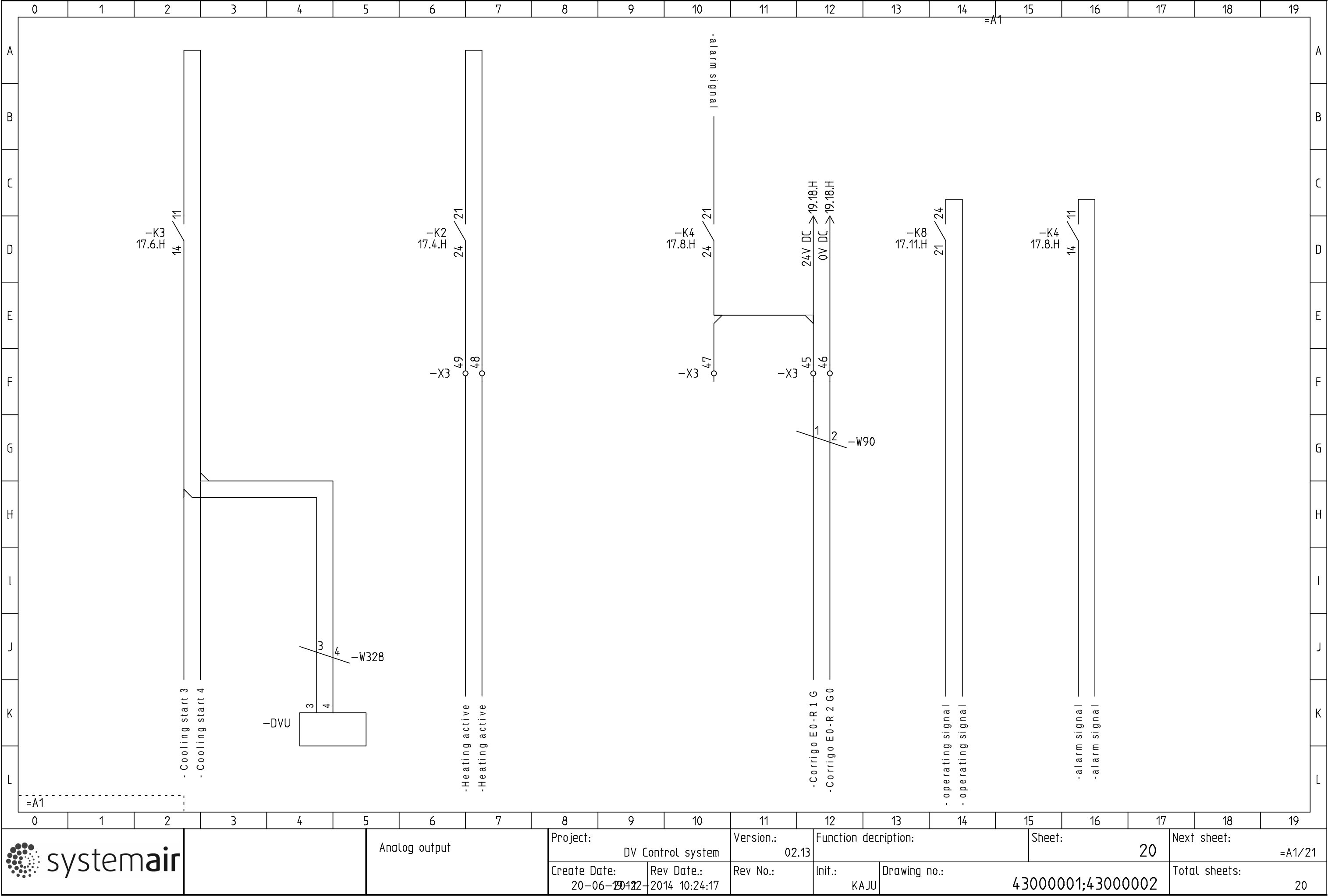
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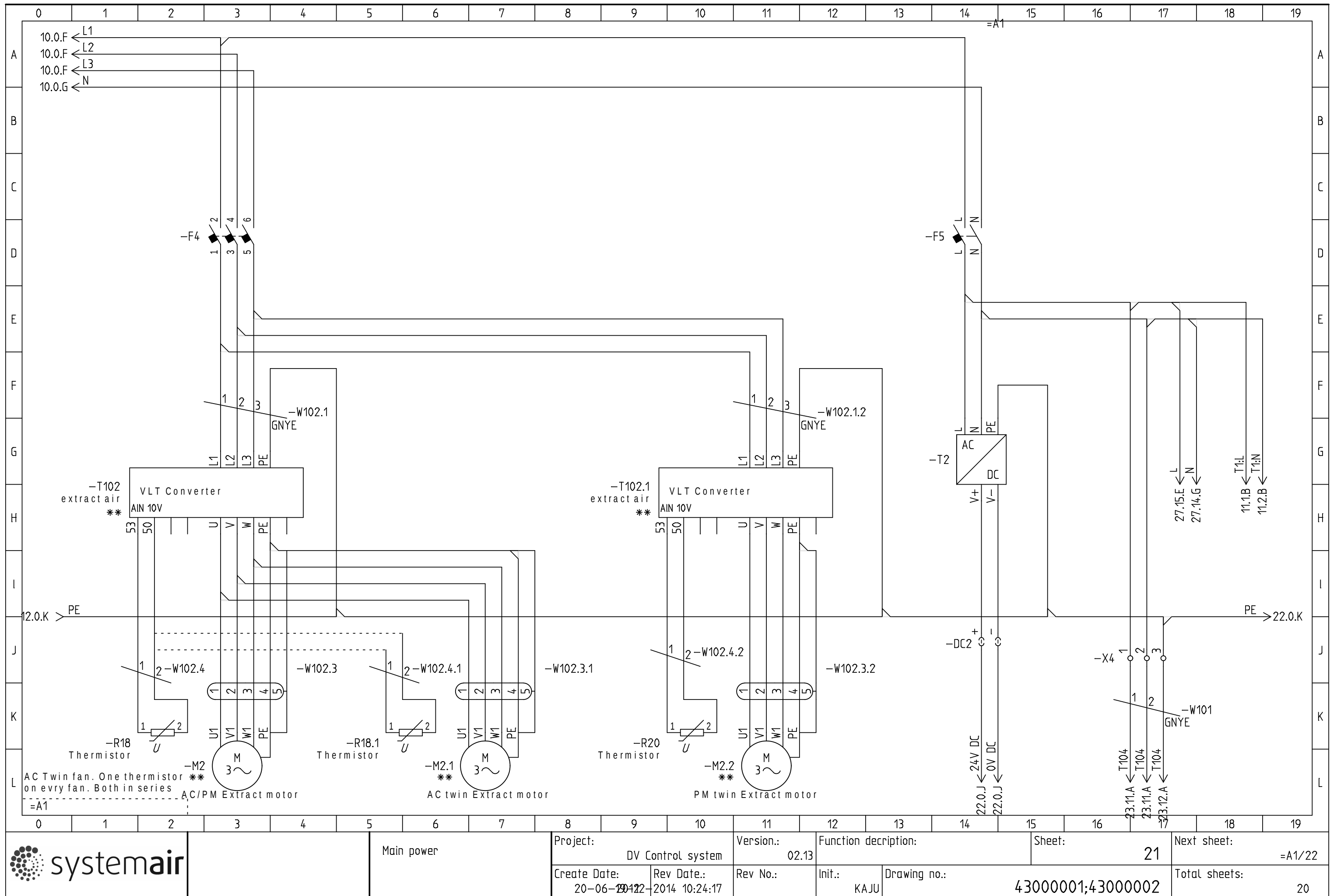


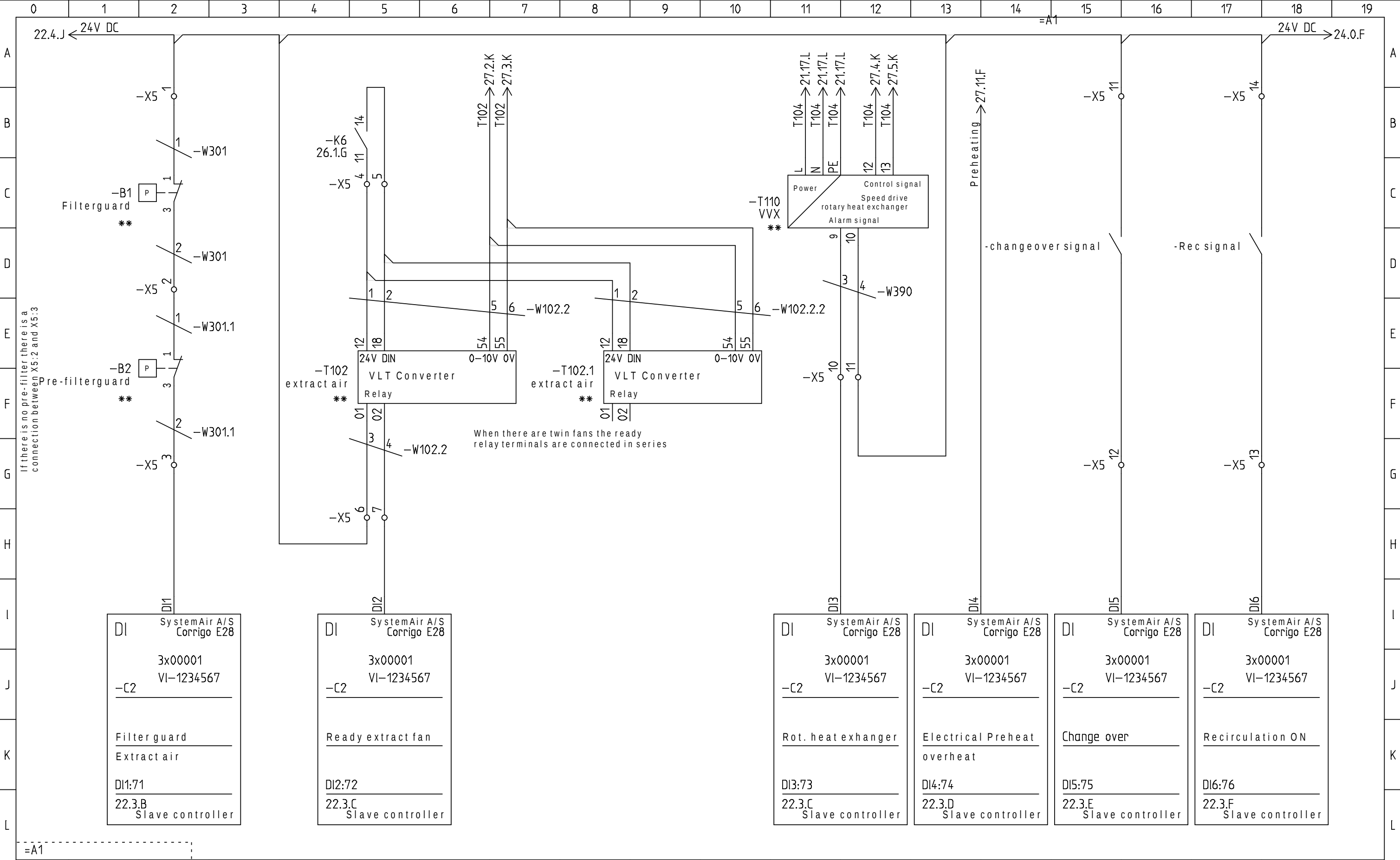


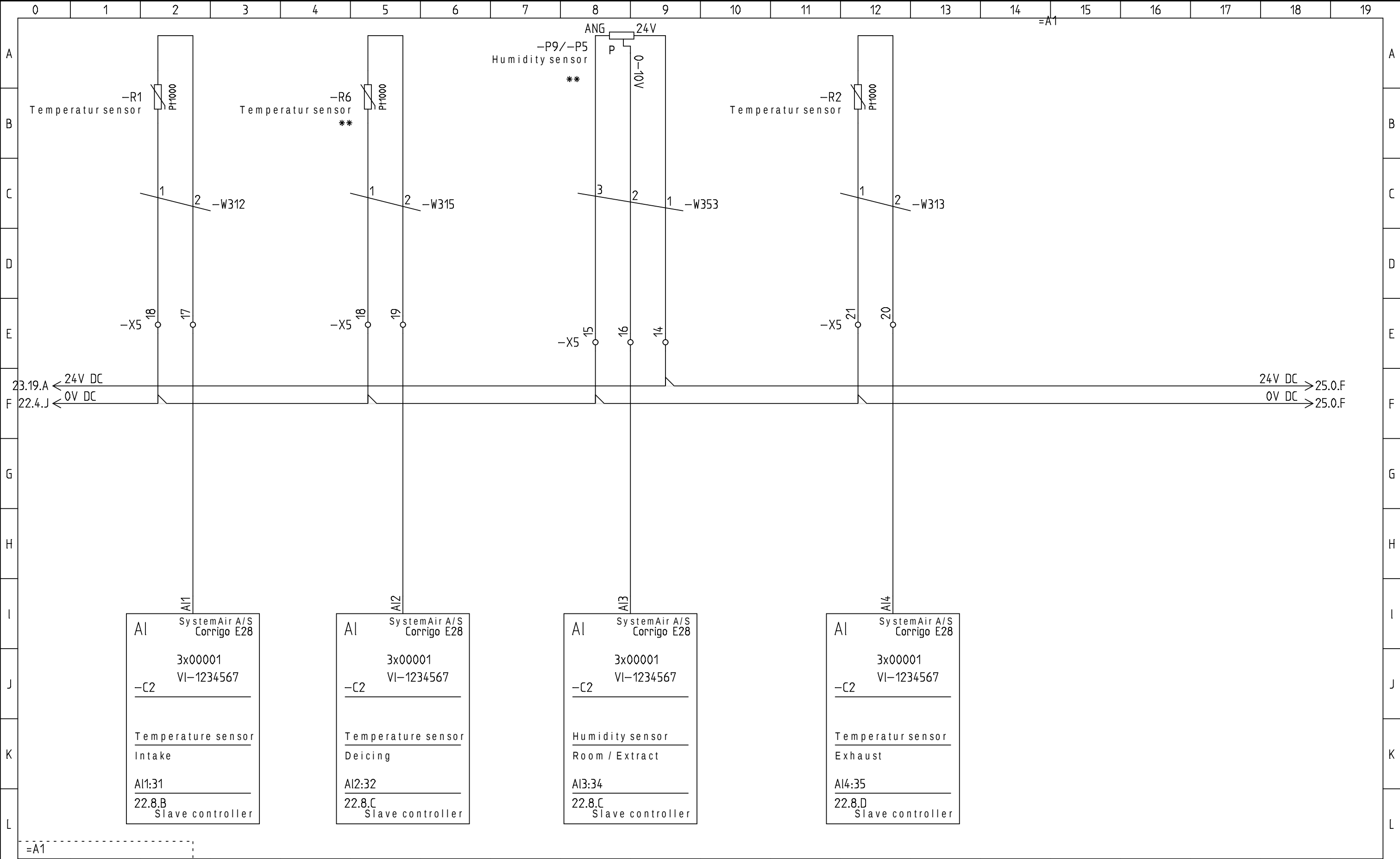


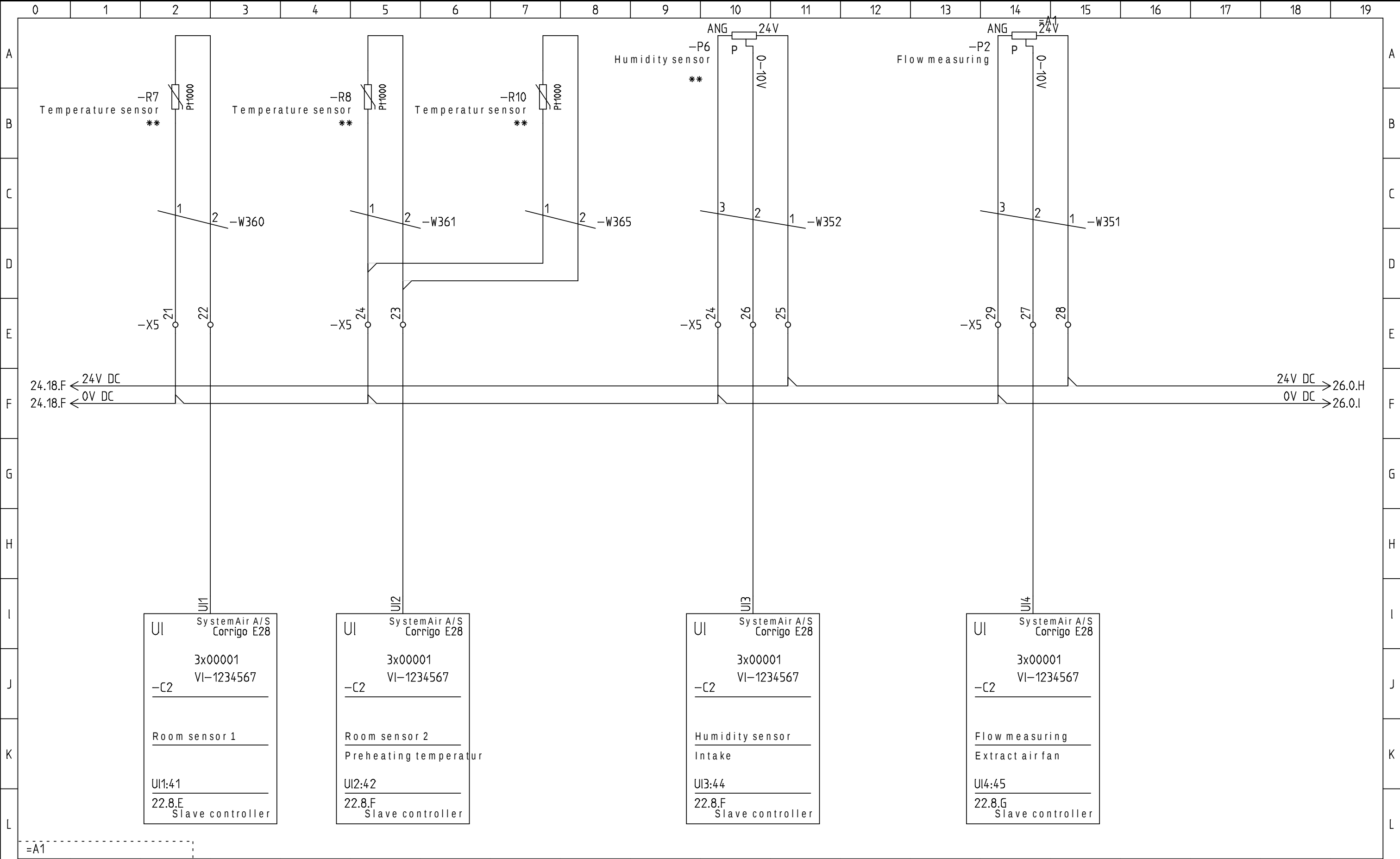


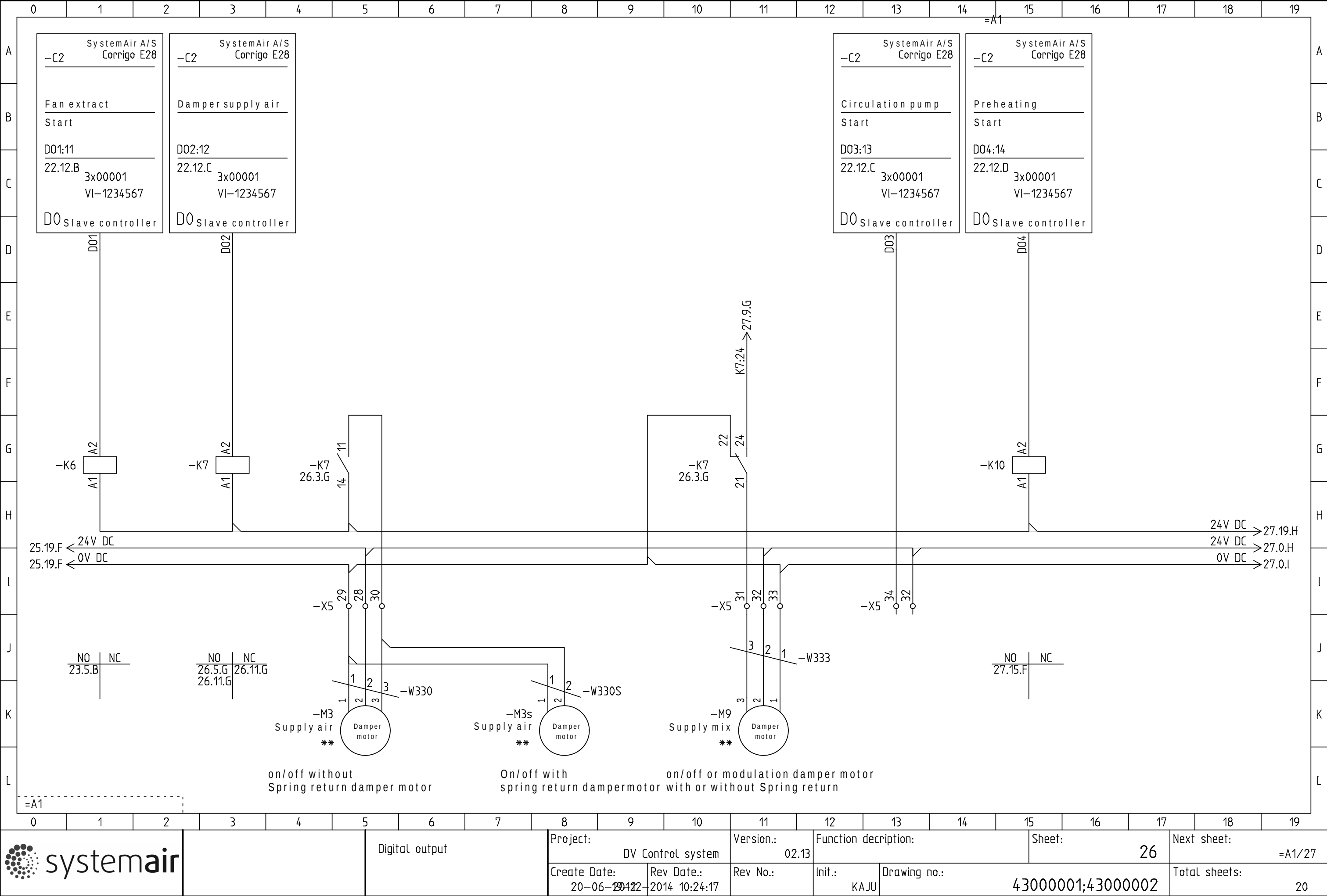












Digital output

Project:

DV Control system

Version.:

02.13

Function decription:

Sheet:

26

Next sheet:

=A1/27

Create Date:

20-06-2012

Rev Date.:

2014 10:24:17

Rev No.:

Init.:

KAJU

Drawing no.:

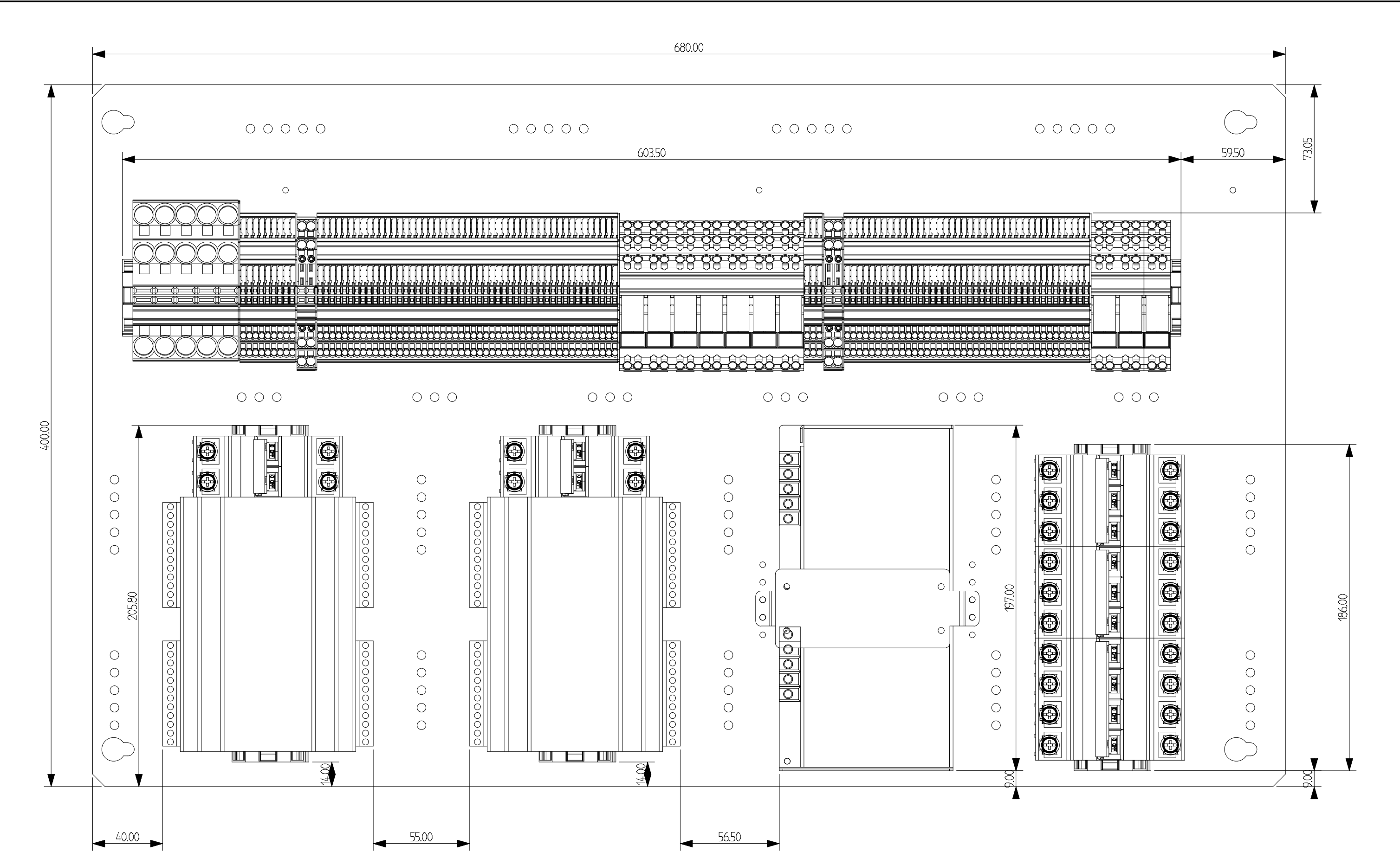
43000001;43000002

Total sheets:

20

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19										
A											=FC																			
B	Set-up Danfoss FC101 for DV-units with AC motors										Set-up Danfoss FC101 for DV-units with PM motors																			
C	Connections:										Connections:																			
D	0–10V: Terminal 54-55 Start: Terminal 12-18 Thermistor: Terminal 50-53 Drive ready: Terminal 1-2										0–10V: Terminal 54-55 Start: Terminal 12-18 Thermistor: Terminal 50-53 Drive ready: Terminal 1-2																			
E	Systemair factory set-up is based on Danfoss initialisation.										Systemair factory set-up is based on Danfoss initialisation.																			
F	14–22: Operation mode: [2] Initialisation (Danfoss Initialisation)										14–22: Operation mode: [2] Initialisation (Danfoss Initialisation)																			
G	Systemair factory set-up:										Systemair factory set-up:																			
H	0-01: Language selection: 1-03: Torque characteristic: 1-20: Motor Power: 1-24: Motor Current: 1-25: Motor Nominal Speed: 1-42: Motor Cable Length: 1-50: Motor Magnetisation at zero speed.: 1-52: Min. Speed Normal Magnetisation: 1-73: Flying Start: 1-90: Motor Thermal Protection: 3-15: Reference 1 Source: 1-93: Thermistor Source: 3-03: Maximum Reference: 3-16 + 3-17: Reference 2- and 3 Source: 3-41 + 3-42: Ramp 1 up and down: 4-14: Motor Speed High Limit: 4-19: Max. Output Frequency: 5-12: Terminal 27 Digital input: 5-40.0: Function Relay: 5-40.1: Function Relay: 6-25: Terminal 54 High Reference: 14-20: Reset Mode: 0-50: LCP Copy:										Single fan: [3] Auto-Energy optim. With twin fan set-up: [1] Variable Torque According to motor plate / order papers With twin fan set-up total power must be used According to motor plate / order papers With twin fan set-up total current must be used According to motor plate / order papers 3m 0 % 10 Hz [0] Disabled [2] Thermistor trip [2] Analog input AI54 [1] Analog input AI53 Max. Hz from order papers [0] No function 20 Sec. 90Hz 90Hz [0] No operation [3] Drive ready/remote [3] Drive ready/remote Max. Hz from order papers [2] Automatic reset x 2 [1] All to LCP (Copy of settings to panel)										0-01: Language selection: 1-06: Clockwise Direction: 1-10: Motor Construction: 1-24: Motor Current: 1-25: Motor Nominal Speed: 1-26: Motor Cont. Rated torque: 1-30: Stator Resistance (Rs): 1-37: d-axis inductance (Ld): 1-39: Motor Poles: 1-40: Back EMF at 1000 RPM: 1-42: Motor Cable Length: 1-90: Motor Thermal Protection: 3-15: Reference 1 Source: 1-93: Thermistor Source: 3-03: Maximum Reference: 3-16 + 3-17: Reference 2- and 3 Source: 3-41: Ramp 1 Up Time: 3-42: Ramp 1 Down Time: 4-14: Motor Speed High Limit: 4-19: Max. Output Frequency: 5-12: Terminal 27 Digital input: 5-40.0: Function Relay: 5-40.1: Function Relay: 6-25: Terminal 54 High Reference: 14-20: Reset Mode: 0-50: LCP Copy:									
I																														
J																														
K	To store Systemair factory settings from the control panel:										To store Systemair factory settings from the control panel:																			
L	0–50: LCP Copy: [2]										0–50: LCP Copy: [2]																			
	=FC																													
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									Create Date:		Rev Date.:	Rev No.:		Init.:	Drawing no.:		Total sheets:													
		09–11–2012	2014 10:24:17			KAJU	43000001;43000002		20																					

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	Parameter:	124	125	126	130	137	139	140	341	342	303	625	414	419						
B	Motor Type Number	Amp Name plate	Motor RPM rated	Nm Name plate	Ohm [Rf-f]	mH [Lf-f]	Poles	Bemf @ 1000	Ramp up	Ramp Down	Max Hz		Max motor Hz							
C	HPS 71 3800 18	1,8	3800	2	7,20	0,64	6	255	30	30	215	215	219	219						
	HPS 71 3700 28	2,8	3700	3,6	3,16	0,75	6	291	30	30	191	191	204	204						
	HPS 71 3300 18	1,8	3300	2,6	11,50	0,81	6	280	30	30	170	170	182	182						
D	HPS 71 3200 30	3	3200	4,2	3,70	0,80	6	268	30	30	161	161	176	176						
	HPS 71 2900 21	2,1	2900	3,3	9,00	0,91	6	276	30	30	143	143	160	160						
E	HPS 71 2800 40	4	2800	6,1	3,35	0,91	6	267	30	30	144	144	154	154						
	HPS 71 2500 29	2,9	2500	5	6,00	1,00	6	262	30	30	129	129	138	138						
	HPS 71 2350 38	3,8	2350	7,3	4,60	1,10	6	271	30	30	120	120	129	129						
F	HPS 90 2650 64	6,4	2650	9,6	2,50	0,83	8	230	30	30	182	182	194	194						
	HPS 90 2350 76	7,6	2350	13	1,60	0,98	8	241	30	30	159	159	172	172						
	HPS 90 2100 63	6,3	2100	10,5	3,00	0,96	8	212	30	30	142	142	154	154						
G	HPS 90 2050 100	10	2050	19	1,40	1,10	8	236	30	30	140	140	150	150						
	HPS 90 1850 84	8,4	1850	16	2,10	1,05	8	203	30	30	127	127	136	136						
H	HPS 90 1900 136	13,6	1900	26	1,15	1,05	8	209	30	30	127	127	139	139						
	HPS 90 1700 106	11	1700	22	1,15	1,15	8	199	30	30	116	116	125	125						
I	HPS 112 1550 108	10,9	1550	32	1,50	1,70	6	276	30	30	80	80	85	85						
	HPS 112 1700 145	14,5	1700	39	0,93	1,55	6	276	30	30	88	88	94	94						
	HPS 112 1350 135	13,5	1350	44	0,98	1,88	6	266	30	30	69	69	74	74						
J	HPS 112 1500 187	18,7	1500	54	0,59	1,67	6	262	30	30	76	76	83	83						
	HPS 112 1000 140	14	1000	51	0,95	2,10	6	242	30	30	54	54	55	55						
K	HPS 132 1250 199	19,9	1250	69	0,51	2,00	6	262	30	30	65	65	69	69						
	HPS 132 1000 202	20,2	1000	77	0,63	2,20	6	230	30	30	51	51	65	65						
	HPS 132 1150 300	30	1150	104	0,47	2,20	6	265	30	30	58	58	65	65						
L	HPS 132 930 273	27,3	930	118	0,56	2,50	6	243	30	30	46	46	65	65						
	=FC																			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
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Create Date: 19-11-2012								Rev Date.: 2014 10:24:17		Rev No.:		Init.: KAJU		Drawing no.: 43000001;43000002				Total sheets: 20		



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Function (=)	Location (+)	Sheet	Kind of Document	Description					Revision date
		1	Document list						08-10-2014
		2	Document list						08-10-2014
		3	Document list						08-10-2014
		4	Document list						08-10-2014
		1	Project cover sheet	General Description Pages					08-10-2014 12:56:09
		2	Project cover sheet	General Description Symbols					08-10-2014 12:56:09
		3	Project cover sheet	General Description Symbols					08-10-2014 12:56:09
		4	Project cover sheet	General Description Wires					08-10-2014 12:56:09
		5	Project cover sheet	General Description					08-10-2014 12:56:09
=A1		10	Circuit Diagram IEC	Main power					08-10-2014 12:56:09
=A1		11	Circuit Diagram IEC	Main power					08-10-2014 12:56:09
=A1		12	Circuit Diagram IEC	Corrigo E28					08-10-2014 12:56:09
=A1		13	Circuit Diagram IEC	Digital input					08-10-2014 12:56:09
=A1		14	Circuit Diagram IEC	Digital input					08-10-2014 12:56:09
=A1		15	Circuit Diagram IEC	Analog input					08-10-2014 12:56:09
=A1		16	Circuit Diagram IEC	Universal input					08-10-2014 12:56:09
=A1		17	Circuit Diagram IEC	Digital output					08-10-2014 12:56:09
=A1		18	Circuit Diagram IEC	Digital output					08-10-2014 12:56:09
=A1		19	Circuit Diagram IEC	Analog output					08-10-2014 12:56:09
=A1		20	Circuit Diagram IEC	Analog output					08-10-2014 12:56:09
=A1		21	Circuit Diagram IEC	Main power					08-10-2014 12:56:09
=A1		22	Circuit Diagram IEC	Corrigo E28					08-10-2014 12:56:09
=A1		23	Circuit Diagram IEC	Digital input					08-10-2014 12:56:09
=A1		24	Circuit Diagram IEC	Analog input					08-10-2014 12:56:09
=A1		25	Circuit Diagram IEC	Universal input					08-10-2014 12:56:09
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=A1		27	Circuit Diagram IEC	Analog output					08-10-2014 12:56:09
=FC		30	Circuit Diagram IEC						08-10-2014 12:56:09
=FC		31	Circuit Diagram IEC						08-10-2014 12:56:09
		45	Cabinets	Switchboard					08-10-2014 12:56:09
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				Date:	Rev.:	Init.:	Drawing no.:	Total sheets:	
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List of Documents									
Function (=)	Location (+)	Sheet	Kind of Document	Description					Revision date
		1	Terminal list	=A1–X1					08–10–2014 13:00:36
		2	Terminal list	=A1–X2					08–10–2014 13:00:36
		3	Terminal list	=A1–X3					08–10–2014 13:00:36
		4	Terminal list	=A1–X3					08–10–2014 13:00:36
		5	Terminal list	=A1–X4					08–10–2014 13:00:36
		6	Terminal list	=A1–X5					08–10–2014 13:00:36
		7	Terminal list	=A1–X5					08–10–2014 13:00:36
		40	Cable–Core list						08–10–2014 13:00:38
		41	Cable–Core list						08–10–2014 13:00:38
		42	Cable–Core list						08–10–2014 13:00:38
		43	Cable–Core list						08–10–2014 13:00:38
		44	Cable–Core list						08–10–2014 13:00:38
		45	Cable–Core list						08–10–2014 13:00:38
		46	Cable–Core list						08–10–2014 13:00:38
		47	Cable–Core list						08–10–2014 13:00:38
		48	Cable–Core list						08–10–2014 13:00:38
		49	Cable–Core list						08–10–2014 13:00:38
		50	Cable–Core list						08–10–2014 13:00:38
		51	Cable–Core list						08–10–2014 13:00:38
		1	PLC I/O list						08–10–2014 13:00:39
		2	PLC I/O list						08–10–2014 13:00:39
=A1		60	Terminal Matrix	–X1					08–10–2014 13:00:39
=A1		61	Terminal Matrix	–X2					08–10–2014 13:00:39
=A1		62	Terminal Matrix	–X3					08–10–2014 13:00:39
=A1		63	Terminal Matrix	–X3					08–10–2014 13:00:39
=A1		64	Terminal Matrix	–X4					08–10–2014 13:00:39
=A1		65	Terminal Matrix	–X5					08–10–2014 13:00:39
=A1		66	Terminal Matrix	–X5					08–10–2014 13:00:39
		70	Cable plan						08–10–2014 13:00:49
		71	Cable plan						08–10–2014 13:00:49
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		72	Cable plan						08-10-2014 13:00:49
		73	Cable plan						08-10-2014 13:00:49
		74	Cable plan						08-10-2014 13:00:49
		75	Cable plan						08-10-2014 13:00:49
		76	Cable plan						08-10-2014 13:00:49
		77	Cable plan						08-10-2014 13:00:49
		78	Cable plan						08-10-2014 13:00:49
		79	Cable plan						08-10-2014 13:00:49
		80	Cable plan						08-10-2014 13:00:49
		81	Cable plan						08-10-2014 13:00:49
		82	Cable plan						08-10-2014 13:00:49
		83	Cable plan						08-10-2014 13:00:49
		84	Cable plan						08-10-2014 13:00:49
		85	Cable plan						08-10-2014 13:00:49
		86	Cable plan						08-10-2014 13:00:49
		87	Cable plan						08-10-2014 13:00:49
		88	Cable plan						08-10-2014 13:00:49
		89	Cable plan						08-10-2014 13:00:49
		90	Cable plan						08-10-2014 13:00:49
		91	Cable plan						08-10-2014 13:00:49
		92	Cable plan						08-10-2014 13:00:49
=A1		90	Terminal Plan	-X1					08-10-2014 13:01:14
=A1		91	Terminal Plan	-X2					08-10-2014 13:01:14
=A1		92	Terminal Plan	-X3					08-10-2014 13:01:14
=A1		93	Terminal Plan	-X3					08-10-2014 13:01:14
=A1		94	Terminal Plan	-X3					08-10-2014 13:01:14
=A1		95	Terminal Plan	-X3					08-10-2014 13:01:14
=A1		96	Terminal Plan	-X3					08-10-2014 13:01:14
=A1		97	Terminal Plan	-X3					08-10-2014 13:01:14
=A1		98	Terminal Plan	-X3					08-10-2014 13:01:14
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								Total sheets: 4	

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[illegible]

List of Terminals: -X3										
Connection 1		Terminal	Connection 2		Type	Comment			Sheet	Cell
=A1–B3:3		1	=A1–C1:DI1		1492–K2				13	2.E
=A1–C1:1 G		2	=A1–B3:1		1492–K2				13	2.A
=A1–K1:11		3	=A1–T101:12		1492–K2				13	4.D
=A1–K5:21		4	=A1–T101.1:18		1492–K2				13	5.D
=A1–X3:10		5	=A1–T101:01		1492–K2				13	4.H
=A1–C1:DI2		6	=A1–T101:02		1492–K2				13	5.H
=A1–C1:A01		7	=A1–T101:54		1492–K2				19	2.I
=A1–K5:A2		8	=A1–T101:55		1492–K2				19	3.I
=A1–DVU:8		9	=A1–C1:DI3		1492–K2				13	11.H
=A1–X3:13		10	=A1–S2		1492–K2				13	15.A
=A1–C1:DI5		11	=A1–S2		1492–K2				13	15.F
=A1–C1:DI6		12	=A1–S10		1492–K2				13	17.F
=A1–X3:13		13	=A1–B4		1492–K2				14	2.A
=A1–B5		14	=A1–B4		1492–K2				14	2.D
=A1–C1:DI7		15	=A1–B6:10		1492–K2				14	2.H
=A1–C1:2 G0		16	=A1–B6:1		1492–K2				14	8.B
=A1–X3:17		17	–B8:1		1492–K2				14	12.A
=A1–C1:DI8		18	–B8:2		1492–K2				14	12.H
=A1–C1:AI1		19	=A1–R3		1492–K2				15	3.F
=A1–X3:16		20	=A1–R3		1492–K2				15	3.F
=A1–C1:AI2		21	=A1–R4		1492–K2				15	7.F
=A1–C1:AI3		22	=A1–R9		1492–K2				15	11.F
=A1–X3:23		23	=A1–R9		1492–K2				15	11.F
=A1–C1:AI4		24	=A1–R5		1492–K2				15	15.F
=A1–C1:UI1		25	=A1–P4:0–10V		1492–K2				16	2.F
=A1–X3:23		26	=A1–P4:ANG		1492–K2				16	2.F
=A1–X3:17		27	=A1–P4:24V		1492–K2				16	3.F
=A1–C1:UI2		28	=A1–P1:0–10V		1492–K2				16	6.F
=A1–C1:UI3		29	=A1–P7/–P8:0–10V		1492–K2				16	11.F
=A1–X3:26		30	=A1–P7/–P8:ANG		1492–K2				16	10.F
		=A1–X3		Project:		Function decription:		Sheet:		Next sheet:
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List of Terminals: -X5										
Connection 1		Terminal	Connection 2		Type	Comment			Sheet	Cell
=A1–C2:1 G		1	=A1–B1:1		1492–K2				23	2.A
=A1–B1:3		2	=A1–B2:1		1492–K2				23	2.D
=A1–B2:3		3	=A1–C2:DI1		1492–K2				23	2.G
=A1–K6:11		4	=A1–T102.1:12		1492–K2				23	5.C
=A1–K6:14		5	=A1–T102:18		1492–K2				23	5.C
=A1–X5:11		6	=A1–T102:01		1492–K2				23	5.H
=A1–C2:DI2		7	=A1–T102:02		1492–K2				23	5.H
=A1–C2:A01		8	=A1–T102.1:54		1492–K2				27	2.I
=A1–X5:36		9	=A1–T102.1:55		1492–K2				27	3.I
=A1–C2:DI3		10	=A1–T110:9		1492–K2				23	12.F
=A1–X5:11		11	=A1–T110:10		1492–K2				23	12.F
=A1–changeover signal		12	=A1–C2:DI5		1492–K2				23	16.G
=A1–Rec signal		13	=A1–C2:DI6		1492–K2				23	18.G
=A1–X5:14		14	=A1–P9/–P5:24V		1492–K2				24	9.E
=A1–X5:21		15	=A1–P9/–P5:ANG		1492–K2				24	8.E
=A1–C2:AI3		16	=A1–P9/–P5:0–10V		1492–K2				24	8.E
=A1–C2:AI1		17	=A1–R1		1492–K2				24	2.E
=A1–X5:18		18	=A1–R1		1492–K2				24	2.E
=A1–C2:AI2		19	=A1–R6		1492–K2				24	5.E
=A1–C2:AI4		20	=A1–R2		1492–K2				24	12.E
=A1–X5:15		21	=A1–R2		1492–K2				24	12.E
=A1–C2:UI1		22	=A1–R7		1492–K2				25	2.E
=A1–C2:UI2		23	=A1–R8		1492–K2				25	5.E
=A1–X5:24		24	=A1–R8		1492–K2				25	5.E
=A1–X5:14		25	=A1–P6:24V		1492–K2				25	11.E
=A1–C2:UI3		26	=A1–P6:0–10V		1492–K2				25	10.E
=A1–C2:UI4		27	=A1–P2:0–10V		1492–K2				25	14.E
=A1–X5:25		28	=A1–P2:24V		1492–K2				25	15.E
=A1–X5:24		29	=A1–P2:ANG		1492–K2				25	14.E
=A1–K7:11		30	=A1–M3s:2		1492–K2				26	5.I
		=A1–X5	Project:			Function decription:		Sheet:		Next sheet:
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List of Cable Cores										
Cablename (-)	Wire	Connection 1	Connection 2		Description	Sheet	Path			
-W90	1	=A1-X3:45	=A1-Corrigo E0-R 1 G		Remote panel	20	12.G			
-W90	2	=A1-X3:46	=A1-Corrigo E0-R 2 G0		Remote panel	20	12.G			
-W90	3	=A1-C1:50 B	=A1-Corrigo E0-R		Remote panel	12	6.J			
-W90	4	=A1-C1:51 A	=A1-Corrigo E0-R		Remote panel	12	6.J			
-W90	5	=A1-C1:52 N	=A1-Corrigo E0-R		Remote panel	12	6.J			
-W100	1	=A1-X2:3	=A1-M12:U		Mixing pump	11	5.J			
-W100	2	=A1-X2:4	=A1-M12:N		Mixing pump	11	5.J			
-W100	3	=A1PE	=A1-M12:PE		Mixing pump	11	5.J			
-W101	1	=A1-X4:1	=A1-T110:L		VVX Power	21	17.K			
-W101	2	=A1-X4:2	=A1-T110:N		VVX Power	21	17.K			
-W101	3	=A1-X4:3	=A1-T110:PE		VVX Power	21	17.K			
-W101.1	1	=A1-F1:1	=A1-T101:L1		VLT Supplyair	10	7.F			
-W101.1	2	=A1-F1:3	=A1-T101:L2		VLT Supplyair	10	7.F			
-W101.1	3	=A1-F1:5	=A1-T101:L3		VLT Supplyair	10	7.F			
-W101.1	4	=A1PE	=A1-T101:PE		VLT Supplyair	10	8.F			
-W101.1.2	1	=A1-F1:1	=A1-T101.1:L1		VLT Supplyair	10	14.F			
-W101.1.2	2	=A1-F1:3	=A1-T101.1:L2		VLT Supplyair	10	14.F			
-W101.1.2	3	=A1-F1:5	=A1-T101.1:L3		VLT Supplyair	10	14.F			
-W101.1.2	4	=A1PE	=A1-T101.1:PE		VLT Supplyair	10	15.F			
-W101.2	1	=A1-X3:3	=A1-T101:12		VLT control supply	13	4.E			
				Project:		Function decription:		Sheet:		Next sheet:
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Cablename (-)	Wire	Connection 1	Connection 2	Description	Sheet	Path			
-W101.2	2	=A1-X3:4	=A1-T101:18	VLT control supply	13	5.E			
-W101.2	3	=A1-X3:5	=A1-T101:01	VLT control supply	13	4.G			
-W101.2	4	=A1-X3:6	=A1-T101:02	VLT control supply	13	5.G			
-W101.2	5	=A1-X3:7	=A1-T101:54	VLT control supply	13	5.E			
-W101.2	6	=A1-X3:8	=A1-T101:55	VLT control supply	13	6.E			
-W101.2.2	1	=A1-X3:3	=A1-T101.1:12	VLT control supply	13	7.E			
-W101.2.2	2	=A1-X3:4	=A1-T101.1:18	VLT control supply	13	7.E			
-W101.2.2	5	=A1-X3:7	=A1-T101.1:54	VLT control supply	13	8.E			
-W101.2.2	6	=A1-X3:8	=A1-T101.1:55	VLT control supply	13	8.E			
-W101.3	1	=A1-T101:U	=A1-M1:U1	motor supplyair	10	7.J			
-W101.3	2	=A1-T101:V	=A1-M1:V1	motor supplyair	10	7.J			
-W101.3	3	=A1-T101:W	=A1-M1:W1	motor supplyair	10	7.J			
-W101.3	4	=A1-T101:PE	=A1-M1:PE	motor supplyair	10	8.J			
-W101.3	5	=A1-T101:PE	=A1-M1:PE	motor supplyair	10	8.J			
-W101.3.1	1	=A1-T101:U	=A1-M1.1:U1	motor supplyair	10	10.J			
-W101.3.1	2	=A1-T101:V	=A1-M1.1:V1	motor supplyair	10	11.J			
-W101.3.1	3	=A1-T101:W	=A1-M1.1:W1	motor supplyair	10	11.J			
-W101.3.1	4	=A1-T101:PE	=A1-M1.1:PE	motor supplyair	10	11.J			
-W101.3.1	5	=A1-T101:PE	=A1-M1.1:PE	motor supplyair	10	11.J			
-W101.3.2	1	=A1-T101.1:U	=A1-M1.2:U1	motor supplyair	10	14.J			
			Project: DV Control system		Function decription:		Sheet: 41		Next sheet: 42
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List of Cable Cores										
Cablename (-)	Wire	Connection 1	Connection 2		Description	Sheet	Path			
-W101.3.2	2	=A1-T101.1:V	=A1-M1.2:V1		motor supplyair	10	14.J			
-W101.3.2	3	=A1-T101.1:W	=A1-M1.2:W1		motor supplyair	10	14.J			
-W101.3.2	4	=A1-T101.1:PE	=A1-M1.2:PE		motor supplyair	10	15.J			
-W101.3.2	5	=A1-T101.1:PE	=A1-M1.2:PE		motor supplyair	10	15.J			
-W101.4	1	=A1-T101:53	=A1-R17:1		Supply thermistor	10	6.J			
-W101.4	2	=A1-T101:50	=A1-R17:2		Supply thermistor	10	6.J			
-W101.4.1	1		=A1-R17.1:1		Supply thermistor	10	9.J			
-W101.4.1	2		=A1-R17.1:2		Supply thermistor	10	9.J			
-W101.4.2	1	=A1-T101.1:53	=A1-R19:1		Supply thermistor	10	13.J			
-W101.4.2	2	=A1-T101.1:50	=A1-R19:2		Supply thermistor	10	13.J			
-W102.1	1	=A1-F4:1	=A1-T102:L1		VLT extract power	21	3.F			
-W102.1	2	=A1-F4:3	=A1-T102:L2		VLT extract power	21	3.F			
-W102.1	3	=A1-F4:5	=A1-T102:L3		VLT extract power	21	3.F			
-W102.1	4	=A1PE	=A1-T102:PE		VLT extract power	21	3.F			
-W102.1.2	1	=A1-F4:1	=A1-T102.1:L1		VLT extract power	21	11.F			
-W102.1.2	2	=A1-F4:3	=A1-T102.1:L2		VLT extract power	21	11.F			
-W102.1.2	3	=A1-F4:5	=A1-T102.1:L3		VLT extract power	21	11.F			
-W102.1.2	4	=A1PE	=A1-T102.1:PE		VLT extract power	21	12.F			
-W102.2	1	=A1-X5:4	=A1-T102:12		VLT control extract	23	5.D			
-W102.2	2	=A1-X5:5	=A1-T102:18		VLT control extract	23	5.E			
				Project:		Function decription:		Sheet:		Next sheet:
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Cablename (-)	Wire	Connection 1	Connection 2	Description	Sheet	Path				
-W102.2	3	=A1-X5:6	=A1-T102:01	VLT control extract	23	5.G				
-W102.2	4	=A1-X5:7	=A1-T102:02	VLT control extract	23	5.G				
-W102.2	5	=A1-X5:8	=A1-T102:54	VLT control extract	23	6.E				
-W102.2	6	=A1-X5:9	=A1-T102:55	VLT control extract	23	7.E				
-W102.2.2	1	=A1-X5:4	=A1-T102.1:12	VLT control extract	23	8.D				
-W102.2.2	2	=A1-X5:5	=A1-T102.1:18	VLT control extract	23	8.E				
-W102.2.2	5	=A1-X5:8	=A1-T102.1:54	VLT control extract	23	10.E				
-W102.2.2	6	=A1-X5:9	=A1-T102.1:55	VLT control extract	23	10.E				
-W102.3	1	=A1-T102:U	=A1-M2:U1	motorcable power	21	3.K				
-W102.3	2	=A1-T102:V	=A1-M2:V1	motorcable power	21	3.K				
-W102.3	3	=A1-T102:W	=A1-M2:W1	motorcable power	21	3.K				
-W102.3	4	=A1-T102:PE	=A1-M2:PE	motorcable power	21	3.K				
-W102.3	5		=A1-M2:PE	motorcable power	21	4.J				
-W102.3.1	1	=A1-T102:U	=A1-M2.1:U1	motorcable power	21	6.K				
-W102.3.1	2	=A1-T102:V	=A1-M2.1:V1	motorcable power	21	7.K				
-W102.3.1	3	=A1-T102:W	=A1-M2.1:W1	motorcable power	21	7.K				
-W102.3.1	4	=A1-T102:PE	=A1-M2.1:PE	motorcable power	21	7.K				
-W102.3.1	5	=A1-T102:PE	=A1-M2.1:PE	motorcable power	21	7.J				
-W102.3.2	1	=A1-T102.1:U	=A1-M2.2:U1	motorcable power	21	11.K				
-W102.3.2	2	=A1-T102.1:V	=A1-M2.2:V1	motorcable power	21	11.K				
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List of Cable Cores									
Cablename (-)	Wire	Connection 1	Connection 2		Description	Sheet	Path		
-W102.3.2	3	=A1-T102.1:W	=A1-M2.2:W1		motorcable power	21	11.K		
-W102.3.2	4	=A1-T102.1:PE	=A1-M2.2:PE		motorcable power	21	12.K		
-W102.3.2	5	=A1-T102.1:PE	=A1-M2.2:PE		motorcable power	21	12.J		
-W102.4	1	=A1-T102:53	=A1-R18:1		Extract thermistor	21	1.J		
-W102.4	2	=A1-T102:50	=A1-R18:2		Extract thermistor	21	2.J		
-W102.4.1	1		=A1-R18.1:1		Extract thermistor	21	5.J		
-W102.4.1	2		=A1-R18.1:2		Extract thermistor	21	5.J		
-W102.4.2	1	=A1-T102.1:53	=A1-R20:1		Extract thermistor	21	10.J		
-W102.4.2	2	=A1-T102.1:50	=A1-R20:2		Extract thermistor	21	10.J		
-W301	1	=A1-X5:1	=A1-B1:1		Filterguard supply	23	2.B		
-W301	2	=A1-X5:2	=A1-B1:3		Filterguard supply	23	2.D		
-W301.1	1	=A1-X5:2	=A1-B2:1		Pre-filterguard supply	23	2.E		
-W301.1	2	=A1-X5:3	=A1-B2:3		Pre-filterguard supply	23	2.F		
-W302	1	=A1-X3:2	=A1-B3:1		Filterguard Extract	13	2.C		
-W302	2	=A1-X3:1	=A1-B3:3		Filterguard Extract	13	2.E		
-W304	1	=A1-X3:13	=A1-B4		Fire thermostat supply air	14	2.B		
-W304	2	=A1-X3:14	=A1-B4		Fire thermostat supply air	14	2.D		
-W305	1	=A1-X3:14	=A1-B5		Fire thermostat extract air	14	2.E		
-W305	2	=A1-X3:15	=A1-B5		Fire thermostat extract air	14	2.G		
-W306	1	=A1-X3:16	=A1-B6:1		Smokedetector	14	8.C		
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List of Cable Cores

Cablename (-)	Wire	Connection 1	Connection 2	Description	Sheet	Path
- W 3 0 6	2	= A 1 - X 3 : 1 7	= A 1 - B 6 : 2	Smokedetector	14	8 . C
- W 3 0 6	3	= A 1 - X 3 : 1 3	= A 1 - B 6 : 4	Smokedetector	14	7 . C
- W 3 0 6	4	= A 1 - X 3 : 1 5	= A 1 - B 6 : 1 0	Smokedetector	14	7 . E
- W 3 1 0	1	= A 1 - X 3 : 2 0	= A 1 - R 3	Temperatur sensor extract	15	3 . C
- W 3 1 0	2	= A 1 - X 3 : 1 9	= A 1 - R 3	Temperatur sensor extract	15	3 . C
- W 3 1 1	1	= A 1 - X 3 : 2 0	= A 1 - R 4	Temperatur sensor supply air	15	7 . C
- W 3 1 1	2	= A 1 - X 3 : 2 1	= A 1 - R 4	Temperatur sensor supply air	15	7 . C
- W 3 1 2	1	= A 1 - X 5 : 1 8	= A 1 - R 1	Temperatur sensor intake	24	2 . C
- W 3 1 2	2	= A 1 - X 5 : 1 7	= A 1 - R 1	Temperatur sensor intake	24	2 . C
- W 3 1 3	1	= A 1 - X 5 : 2 1	= A 1 - R 2	Temperatur sensor exhaust	24	12 . C
- W 3 1 3	2	= A 1 - X 5 : 2 0	= A 1 - R 2	Temperatur sensor exhaust	24	12 . C
- W 3 1 4	1	= A 1 - X 3 : 2 3	= A 1 - R 5	Frost protection heating coil	15	15 . C
- W 3 1 4	2	= A 1 - X 3 : 2 4	= A 1 - R 5	Frost protection heating coil	15	15 . C
- W 3 1 5	1	= A 1 - X 5 : 1 8	= A 1 - R 6	Deicing for plate heat	24	5 . C
- W 3 1 5	2	= A 1 - X 5 : 1 9	= A 1 - R 6	Deicing for plate heat	24	5 . C
- W 3 1 9	1	= A 1 - X 3 : 1 7	- B 8 : 1	Electrical heating coil	14	12 . B
- W 3 1 9	2	= A 1 - X 3 : 1 8	- B 8 : 2	Electrical heating coil	14	12 . F
- W 3 1 9	3	= A 1 - X 3 : 4 1	- B 8 : Y	Electrical heating coil	14	13 . C
- W 3 1 9	4	= A 1 - X 3 : 4 2	- B 8 : G O	Electrical heating coil	14	14 . C
- W 3 1 9	5	= A 1 - X 2 : 3	- B 8 : 7	Electricalheating coil	14	14 . C
</						

List of Cable Cores										
Cablename (-)	Wire	Connection 1	Connection 2	Description	Sheet	Path				
- W 3 1 9	6	= A 1 - X 2 : 4	- B 8 : 8	Electrical heating coil	14	14.C				
- W 3 2 0	1	= A 1 - X 3 : 4 2	= A 1 - M 6 : 1	Heating valve	19	5.J				
- W 3 2 0	2	= A 1 - X 3 : 4 3	= A 1 - M 6 : 2	Heating valve	19	5.K				
- W 3 2 0	3	= A 1 - X 3 : 4 1	= A 1 - M 6 : 3	Heating valve	19	4.J				
- W 3 2 1	1	= A 1 - X 3 : 4 2	= A 1 - M 7 : 1	Cooling valve	19	11.J				
- W 3 2 1	2	= A 1 - X 3 : 4 3	= A 1 - M 7 : 2	Cooling valve	19	11.K				
- W 3 2 1	3	= A 1 - X 3 : 4 4	= A 1 - M 7 : 3	Cooling valve	19	11.J				
- W 3 2 2	1	= A 1 - X 5 : 3 6	= A 1 - M 8 : 1	Bypass plate heating	27	7.K				
- W 3 2 2	2	= A 1 - X 5 : 3 7	= A 1 - M 8 : 2	Bypass plate heating	27	7.K				
- W 3 2 2	3	= A 1 - X 5 : 3 5	= A 1 - M 8 : 3	Bypass plate heating	27	7.K				
- W 3 2 8	1	= A 1 - X 3 : 1 0	= A 1 - D V U : 7	DVU Control	13	11.C				
- W 3 2 8	2	= A 1 - X 3 : 9	= A 1 - D V U : 8	DVU Control	13	11.F				
- W 3 2 8	3	= A 1 - K 3 : 1 4	= A 1 - D V U : 3	DVU Control	20	4.J				
- W 3 2 8	4	= A 1 - K 3 : 1 1	= A 1 - D V U : 4	DVU Control	20	4.J				
- W 3 2 8	5	= A 1 - X 3 : 4 4	= A 1 - D V U : 5	DVU Control	19	13.J				
- W 3 2 8	6	= A 1 - X 3 : 4 2	= A 1 - D V U : 6	DVU Control	19	13.J				
- W 3 2 9	1	= A 1 - F 2 : 1	= A 1 - D V U L 1	DVU supply	10	17.J				
- W 3 2 9	2	= A 1 - F 2 : 3	= A 1 - D V U L 2	DVU supply	10	17.J				
- W 3 2 9	3	= A 1 - F 2 : 5	= A 1 - D V U L 3	DVU supply	10	18.J				
- W 3 2 9	4	= A 1 - F 2 : N	= A 1 - D V U N	DVU supply	10	18.J				
			Project:		Function decription:		Sheet:		Next sheet:	
			DV Control system				46		47	
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List of Cable Cores									
Cablename (-)	Wire	Connection 1	Connection 2		Description	Sheet	Path		
-W329	5	=A1PE	=A1-DVUPE		DVU supply	10	18.J		
-W330	1	=A1-X5:29	=A1-M3:1		Supply air damper on/off	26	5.K		
-W330	2	=A1-X5:28	=A1-M3:2		Supply air damper on/off	26	5.K		
-W330	3	=A1-X5:30	=A1-M3:3		Supply air damper on/off	26	5.K		
-W330S	1	=A1-X5:29	=A1-M3s:1		Supply air damper springreturn	26	8.K		
-W330S	2	=A1-X5:30	=A1-M3s:2		Supply air damper springreturn	26	8.K		
-W331	1	=A1-X3:35	=A1-M4:1		Extract air damper on/off	18	1.J		
-W331	2	=A1-X3:34	=A1-M4:2		Extract air damper on/off	18	2.J		
-W331	3	=A1-X3:33	=A1-M4:3		Extract air damper on/off	18	2.J		
-W331S	1	=A1-X3:35	=A1-M4s:1		Extract air damper spring	18	4.J		
-W331S	2	=A1-X3:33	=A1-M4s:2		Extract air damper spring	18	4.J		
-W332	1	=A1-X3:38	=A1-M11:1		Rec mix damper	18	12.J		
-W332	2	=A1-X3:39	=A1-M11:2		Rec mix damper	18	12.J		
-W332	3	=A1-X3:37	=A1-M11:3		Rec mix damper	18	12.J		
-W332s	1	=A1-X3:38	=A1-M11s:1			18	14.J		
-W332s	2	=A1-X3:37	=A1-M11s:2			18	15.J		
-W333	1	=A1-X5:33	=A1-M9:1		Supply air mix damper	26	11.J		
-W333	2	=A1-X5:32	=A1-M9:2		Supply air mix damper	26	11.J		
-W333	3	=A1-X5:31	=A1-M9:3		Supply air mix damper	26	11.J		
-W334	1	=A1-X3:35	=A1-M10:1		mix extract damper on/off	18	6.J		
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List of Cable Cores											
Cablename (-)	Wire	Connection 1	Connection 2	Description	Sheet	Path					
-W334	2	=A1-X3:34	=A1-M10:2	mix extract damper on/off	18	7.J					
-W334	3	=A1-X3:36	=A1-M10:3	mix extract damper on/off	18	7.J					
-W334s	1	=A1-X3:35	=A1-M10s:1	Mix extract damper spring	18	9.J					
-W334s	2	=A1-X3:36	=A1-M10s:2	Mix extract damper spring	18	9.J					
-W340	1	=A1-X3:27	=A1-P4:24V	Pressure extract air external	16	3.C					
-W340	2	=A1-X3:25	=A1-P4:0-10V	Pressure extract air external	16	2.C					
-W340	3	=A1-X3:26	=A1-P4:ANG	Pressure extract air external	16	2.C					
-W341	1	=A1-X3:31	=A1-P3:24V	Pressure supply external	16	15.C					
-W341	2	=A1-X3:32	=A1-P3:0-10V	Pressure supply external	16	15.C					
-W341	3	=A1-X3:30	=A1-P3:ANG	Pressure supply external	16	14.C					
-W350	1	=A1-X3:27	=A1-P1:24V	Flow measuring supply	16	7.C					
-W350	2	=A1-X3:28	=A1-P1:0-10V	Flow measuring supply	16	6.C					
-W350	3	=A1-X3:26	=A1-P1:ANG	Flow measuring supply	16	6.C					
-W351	1	=A1-X5:28	=A1-P2:24V	Flow measuring extract	25	15.C					
-W351	2	=A1-X5:27	=A1-P2:0-10V	Flow measuring extract	25	14.C					
-W351	3	=A1-X5:29	=A1-P2:ANG	Flow measuring extract	25	14.C					
-W352	1	=A1-X5:25	=A1-P6:24V	Humidity sensor supplyair	25	11.C					
-W352	2	=A1-X5:26	=A1-P6:0-10V	Humidity sensor supplyair	25	10.C					
-W352	3	=A1-X5:24	=A1-P6:ANG	Humidity sensor supplyair	25	10.C					
-W353	1	=A1-X5:14	=A1-P9/-P5:24V	Humidity sensor external	24	9.C					
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List of Cable Cores

Cablename (-)	Wire	Connection 1	Connection 2	Description	Sheet	Path
- W 3 5 3	2	= A 1 - X 5 : 1 6	= A 1 - P 9 / - P 5 : 0 - 1 0 V	Humidity sensor external	24	8 . C
- W 3 5 3	3	= A 1 - X 5 : 1 5	= A 1 - P 9 / - P 5 : A N G	Humidity sensor external	24	8 . C
- W 3 5 4	1	= A 1 - X 3 : 3 1	= A 1 - P 7 / - P 8 : 2 4 V	CO 2 Sensor	16	11 . C
- W 3 5 4	2	= A 1 - X 3 : 2 9	= A 1 - P 7 / - P 8 : 0 - 1 0 V	CO 2 Sensor	16	11 . C
- W 3 5 4	3	= A 1 - X 3 : 3 0	= A 1 - P 7 / - P 8 : A N G	CO 2 Sensor	16	10 . C
- W 3 6 0	1	= A 1 - X 5 : 2 1	= A 1 - R 7	Room sensor no.1	25	2 . C
- W 3 6 0	2	= A 1 - X 5 : 2 2	= A 1 - R 7	Room sensor no.1	25	2 . C
- W 3 6 1	1	= A 1 - X 5 : 2 4	= A 1 - R 8	Room sensor no.2	25	5 . C
- W 3 6 1	2	= A 1 - X 5 : 2 3	= A 1 - R 8	Room sensor no.2	25	5 . C
- W 3 6 3	1	= A 1 - X 3 : 2 3	= A 1 - R 9	Outdoor sensor	15	11 . C
- W 3 6 3	2	= A 1 - X 3 : 2 2	= A 1 - R 9	Outdoor sensor	15	11 . C
- W 3 6 5	1	= A 1 - R 1 0	= A 1 - X 5 : 2 4	Pre-heat temperatur sensor	25	7 . C
- W 3 6 5	2	= A 1 - R 1 0	= A 1 - X 5 : 2 3	Pre-heat temperatur sensor	25	8 . C
- W 3 7 1	1	= A 1 - X 3 : 3 9	= A 1 - B 7 : 1	Capilarsensor	18	17 . B
- W 3 7 1	2	= A 1 - X 3 : 5 0	= A 1 - B 7 : 4	Capilarsensor	18	17 . D
- W 3 7 1 . 1	1	= A 1 - B 8 : 1	= A 1 - X 3 : 5 0	Capilarsensor bulb	18	17 . E
- W 3 7 1 . 1	2	= A 1 - X 3 : 4 0	= A 1 - B 8 : 4	Capilarsensor bulb	18	17 . F
- W 3 8 0	1	= A 1 - X 3 : 1 0	= A 1 - S 2	Reduced speed	13	15 . C
- W 3 8 0	2	= A 1 - X 3 : 1 1	= A 1 - S 2	Reduced speed	13	15 . E
- W 3 8 1	1	= A 1 - X 3 : 1 3	= A 1 - S 1 0	Normal speed	13	17 . C
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List of Cable Cores									
Cablename (-)	Wire	Connection 1	Connection 2	Description	Sheet	Path			
-W381	2	=A1-X3:12	=A1-S10	Normal speed	13	17.E			
-W390	1	=A1-X5:35	=A1-T110:12	Rot. heat recovery	27	4.K			
-W390	2	=A1-X5:36	=A1-T110:13	Rot. heat recovery	27	5.K			
-W390	3	=A1-X5:10	=A1-T110:9	Rot. heat recovery	23	12.D			
-W390	4	=A1-X5:11	=A1-T110:10	Rot. heat recovery	23	12.D			
-W700	1	=A1-X2:5	=A1-S1	Light switch	11	8.J			
-W700	2	=A1-X2:6	=A1-S1	Light switch	11	9.J			
-W701.1	1	=A1-X2:7	=A1-E1.1:L1	Light P20	11	11.J			
-W701.1	2	=A1-X2:8	=A1-E1.1:N	Light P20	11	11.J			
-W701.2	1	=A1-E1.1:L1	=A1-E1.2:L1	Light P20	11	12.K			
-W701.2	2	=A1-E1.1:N	=A1-E1.2:N	Light P20	11	12.K			
-W701.3	1	=A1-E1.2:L1	=A1-E1.3:L1	Light P20	11	13.L			
-W701.3	2	=A1-E1.2:N	=A1-E1.3:N	Light P20	11	13.L			
-W702.1	1	=A1-X2:8	=A1-E2.1:L1	Light P21	11	15.J			
-W702.1	2	=A1-X2:9	=A1-E2.1:N	Light P21	11	16.J			
-W702.2	1	=A1-E2.1:L1	=A1-E2.2:L1		11	17.K			
-W702.2	2	=A1-E2.1:N	=A1-E2.2:N		11	17.K			
-W702.3	1	=A1-E2.2:L1	=A1-E2.3:L1		11	18.L			
-W702.3	2	=A1-E2.2:N	=A1-E2.3:N		11	18.L			
-W900	1	=A1-X5:38	-B9:1	Pre-heating	27	11.J			
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List of Cable Cores									
Cablename (-)	Wire	Connection 1	Connection 2	Description	Sheet	Path			
-W900	2	=A1-X5:37	-B9:2	Pre-heating	27	12.J			
-W900	3	=A1-X5:39	-B9:Y	Pre-heating	27	13.J			
-W900	4	=A1-X5:36	-B9:G0	Pre-heating	27	14.J			
-W900	5	=A1-X5:40	-B9:8	Pre-heating	27	14.J			
-W900	6	=A1-K10:14	-B9:7	Pre-heating	27	15.J			
-W1000	1	=A1-X1:L1	=A1- Supply L1	Main supply	10	3.J			
-W1000	2	=A1-X1:L2	=A1- Supply L2	Main supply	10	3.J			
-W1000	3	=A1-X1:L3	=A1- Supply L3	Main supply	10	3.J			
-W1000	4	=A1-X1:N	=A1- Supply N	Main supply	10	3.K			
-W1000	5	=A1-X1:PE	=A1- Supply PE	Main supply	10	4.K			
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			Date: 08-10-2014	Rev.:	Init.: KAJU	Drawing no.: 43000001;43000002	Total sheets: 12		

List of PLC I/O

Function (=)	Location (+)	PLC (-)	Operand	Symbol Adress	Comment	Con. No.	MODBUS	BACKnet	Connection	Sheet	Cell
=A1		−C1	A1:31	Temperature sensor	Extract air	A11	3x00001	VI−1234567	=A1−X3:19	15	3.I
=A1		−C1	A12:32	Temperature sensor	Supply air	A12	3x00001	VI−1234567	=A1−X3:21	15	7.I
=A1		−C1	A13:34	Temperature sensor	Outdoor air	A13	3x00001	VI−1234567	=A1−X3:22	15	11.I
=A1		−C1	A14:35	Temperature sensor	Frost protection Y1	A14	3x00001	VI−1234567	=A1−X3:24	15	15.I
=A1		−C1	A01:91	Speed	Supply air	A01	3x00001	VI−1234567	=A1−X3:7	19	2.D
=A1		−C1	A02:92	Heating coil Y1	Capacity	A02	3x00001	VI−1234567	=A1−X3:41	19	4.D
=A1		−C1	A03:93	Cooling / changeover	Capacity	A03	3x00001	VI−1234567	=A1−X3:44	19	11.D
=A1		−C1	A04:94	Recirculation	Capacity	A04	3x00001	VI−1234567	=A1−K9:12	19	13.D
=A1		−C1	DI1:71	Filter guard	Extract air	DI1	3x00001	VI−1234567	=A1−X3:1	13	2.I
=A1		−C1	DI2:72	Ready supply fan		DI2	3x00001	VI−1234567	=A1−X3:6	13	5.I
=A1		−C1	DI3:73	Cooling alarm		DI3	3x00001	VI−1234567	=A1−X3:9	13	11.I
=A1		−C1	DI4:74	Frost thermostat		DI4	3x00001	VI−1234567	=A1−K5:14	13	13.I
=A1		−C1	DI5:75	Reduced speed	or stop unit	DI5	3x00001	VI−1234567	=A1−X3:11	13	15.I
=A1		−C1	DI6:76	Normal speed	Start unit	DI6	3x00001	VI−1234567	=A1−X3:12	13	17.I
=A1		−C1	DI7:77	Fire signal		DI7	3x00001	VI−1234567	=A1−X3:15	14	2.I
=A1		−C1	DI8:78	Electrial heater		DI8	3x00001	VI−1234567	=A1−X3:18	14	12.I
=A1		−C1	D01:11	Fan supply air	Start	D01	3x00001	VI−1234567	=A1−K1:A2	17	2.D
=A1		−C1	D02:12	Start heating pump		D02	3x00001	VI−1234567	=A1−K2:A2	17	4.D
=A1		−C1	D03:13	Start cooling		D03	3x00001	VI−1234567	=A1−K3:A2	17	6.D
=A1		−C1	D04:14	Alarm signal		D04	3x00001	VI−1234567	=A1−K4:A2	17	8.D
=A1		−C1	D05:15	Damper motor	Extract air	D05	3x00001	VI−1234567	=A1−K8:A2	17	11.D
=A1		−C1	D06:16	Rec damper	Start	D07	3x00001	VI−1234567	=A1−K9:A2	17	13.D
=A1		−C1	UI1:41	Pressure transmitter	Extract air	UI1	3x00001	VI−1234567	=A1−X3:25	16	2.I
=A1		−C1	UI2:42	Flow measuring	Supply air fan	UI2	3x00001	VI−1234567	=A1−X3:28	16	6.I
=A1		−C1	UI3:44	CO2 sensor	Extract air or Room	UI3	3x00001	VI−1234567	=A1−X3:29	16	11.I
=A1		−C1	UI4:45	Pressure transmitter	Supply air Duct	UI4	3x00001	VI−1234567	=A1−X3:32	16	15.I
=A1		−C2	A1:31	Temperature sensor	Intake	A11	3x00001	VI−1234567	=A1−X5:17	24	2.I
=A1		−C2	A12:32	Temperature sensor	Deicing	A12	3x00001	VI−1234567	=A1−X5:19	24	5.I
=A1		−C2	A13:34	Humidity sensor	Room / Extract	A13	3x00001	VI−1234567	=A1−X5:16	24	8.I
=A1		−C2	A14:35	Temperatur sensor	Exhaust	A14	3x00001	VI−1234567	=A1−X5:20	24	12.I
					Project:		Function decription:		Sheet:		Next sheet:
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Function (=)	Location (+)	PLC (-)	Operand	Symbol Adress	Comment	Con. No.	MODBUS	BACKnet	Connection		Sheet	Cell
=A1		-C2	A01:91	Speed	Extract air	A01	3x00001	VI-1234567	=A1-X5:8		27	2.D
=A1		-C2	A02:92	Heat recovery	capacity	A02	3x00001	VI-1234567	=A1-X5:35		27	4.D
=A1		-C2	A03:93	Split	Y2	A03	3x00001	VI-1234567	=A1-K7:24		27	9.D
=A1		-C2	A04:94	Preheater		A04	3x00001	VI-1234567	=A1-X5:39		27	13.D
=A1		-C2	Dl1:71	Filter guard	Extract air	DI1	3x00001	VI-1234567	=A1-X5:3		23	2.I
=A1		-C2	Dl2:72	Ready extract fan		DI2	3x00001	VI-1234567	=A1-X5:7		23	5.I
=A1		-C2	Dl3:73	Rot. heat exchanger		DI3	3x00001	VI-1234567	=A1-X5:10		23	12.I
=A1		-C2	Dl4:74	Electrical Preheat	overheat	DI4	3x00001	VI-1234567	=A1-X5:38		23	14.I
=A1		-C2	Dl5:75	Change over		DI5	3x00001	VI-1234567	=A1-X5:12		23	16.I
=A1		-C2	Dl6:76	Recirculation ON		DI6	3x00001	VI-1234567	=A1-X5:13		23	18.I
=A1		-C2	D01:11	Fan extract	Start	D01	3x00001	VI-1234567	=A1-K6:A2		26	1.D
=A1		-C2	D02:12	Damper supply air		D02	3x00001	VI-1234567	=A1-K7:A2		26	3.D
=A1		-C2	D03:13	Circulation pump	Start	D03	3x00001	VI-1234567	=A1-X5:34		26	13.D
=A1		-C2	D04:14	Preheating	Start	D04	3x00001	VI-1234567	=A1-K10:A2		26	15.D
=A1		-C2	UI1:41	Room sensor 1		UI1	3x00001	VI-1234567	=A1-X5:22		25	2.I
=A1		-C2	UI2:42	Room sensor 2	Preheating temperatur	UI2	3x00001	VI-1234567	=A1-X5:23		25	5.I
=A1		-C2	UI3:44	Humidity sensor	Intake	UI3	3x00001	VI-1234567	=A1-X5:26		25	10.I
=A1		-C2	UI4:45	Flow measuring	Extract air fan	UI4	3x00001	VI-1234567	=A1-X5:27		25	14.I
					Project: DV Control system		Function decription:		Sheet: 2		Next sheet:	
					Date: 13-10-2014	Rev.: 	Init.: KAJU	Drawing no.: 43000001;43000002		Total sheets: 2		

Terminal Strip:
-X3

[illegible]

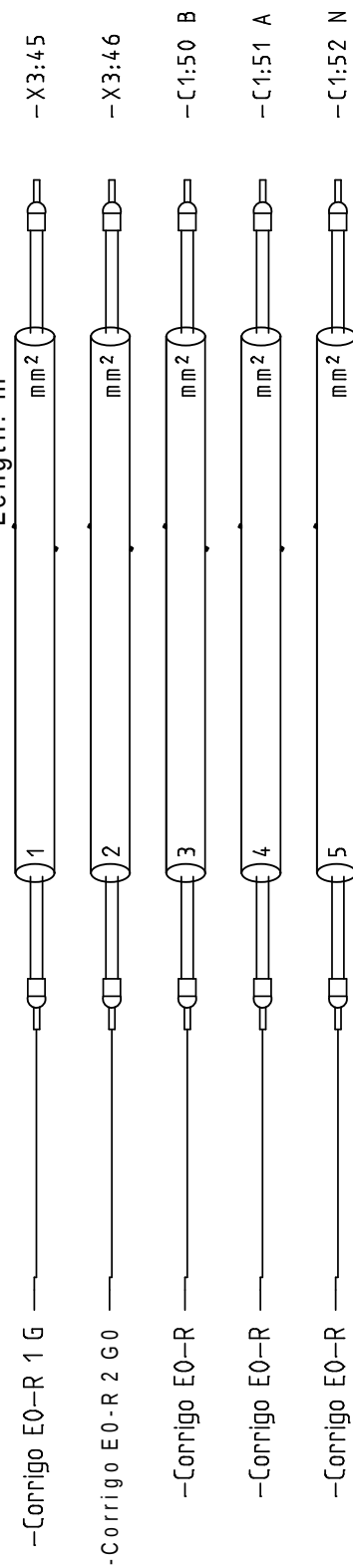
[illegible]

[illegible]

A1-W90

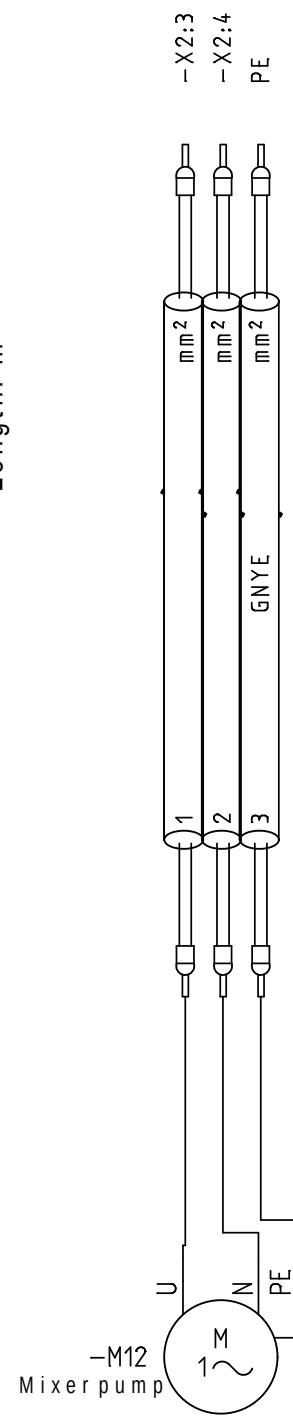
Description: Remote panel

Type: Not delivered
Dimension:
Length: m


$$=A1-W100$$

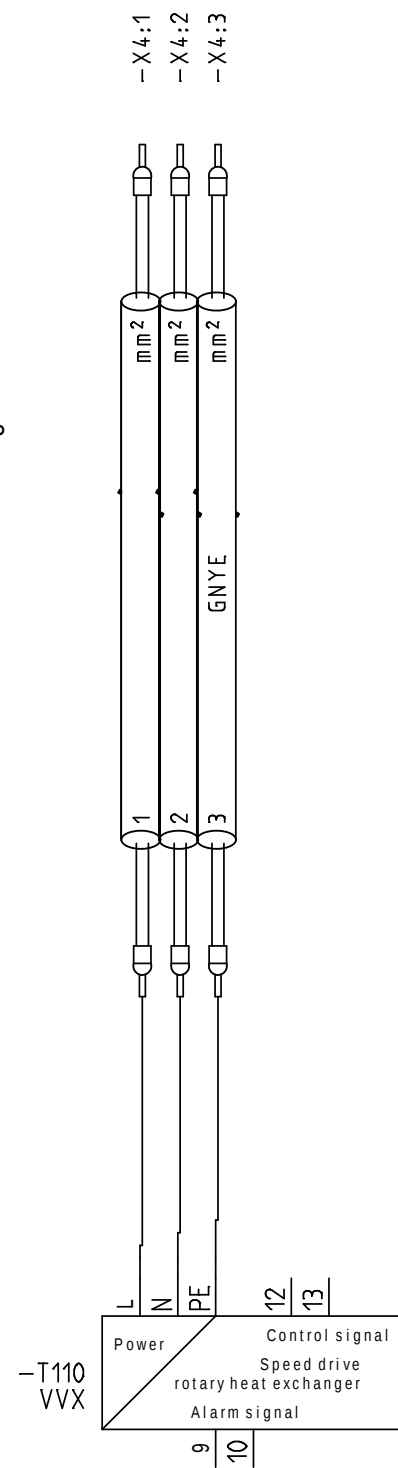
Description: Mixing pump

Type: Y-OZ
Dimension:
Length: m


$$= A^1 - W^1 O^1$$

Description: VVX Power

Type: Y-OZ
Dimension:
Length: m

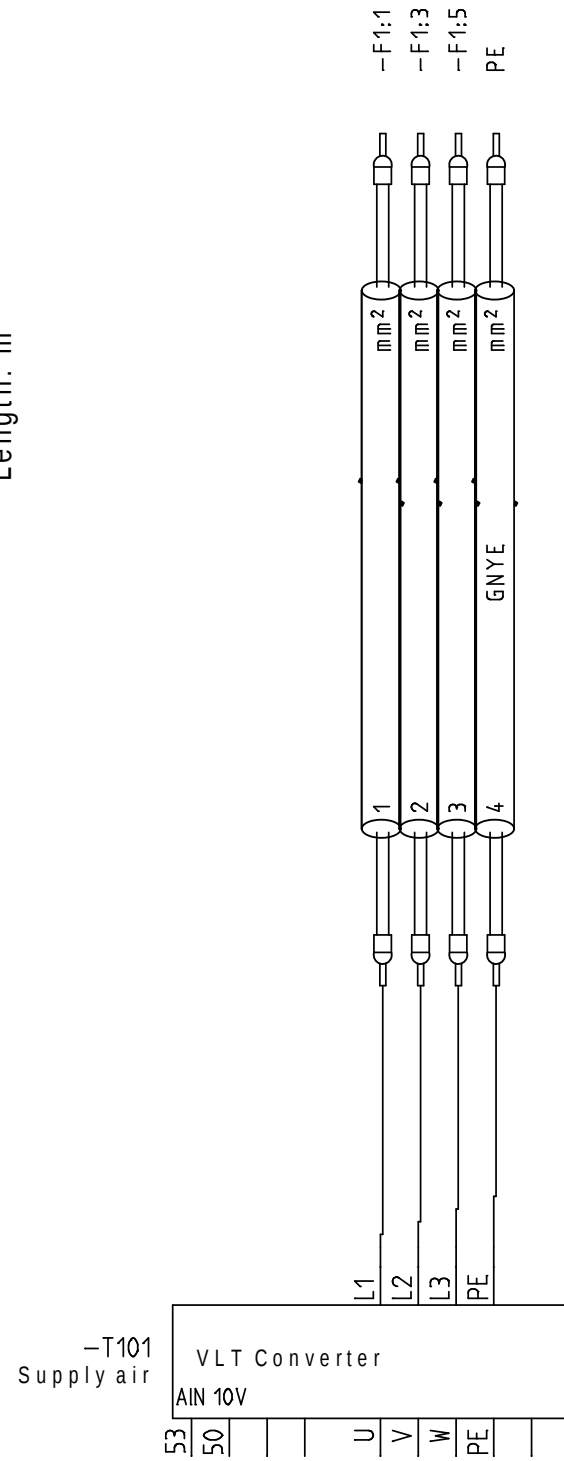
[illegible]



==A1-W1011_a

Description: VLT Supplyair

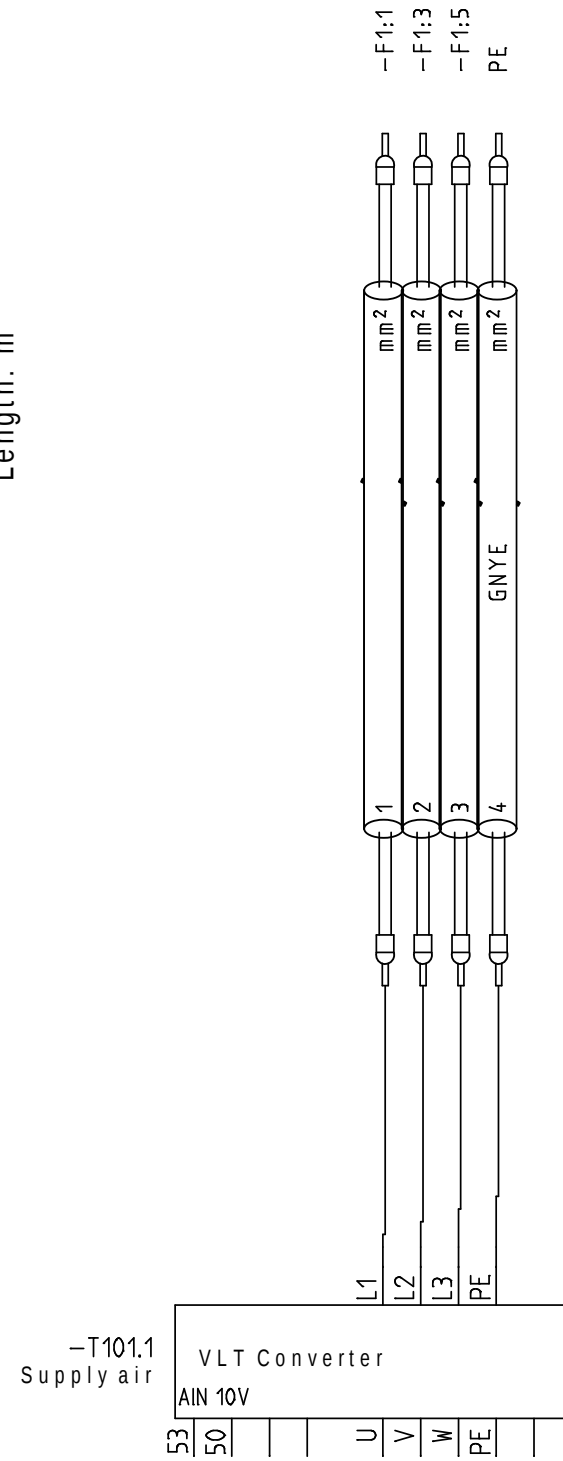
Type: Y-OZ
Dimension:
Length: m



=A1-W10112

Description: VLT Supplyair

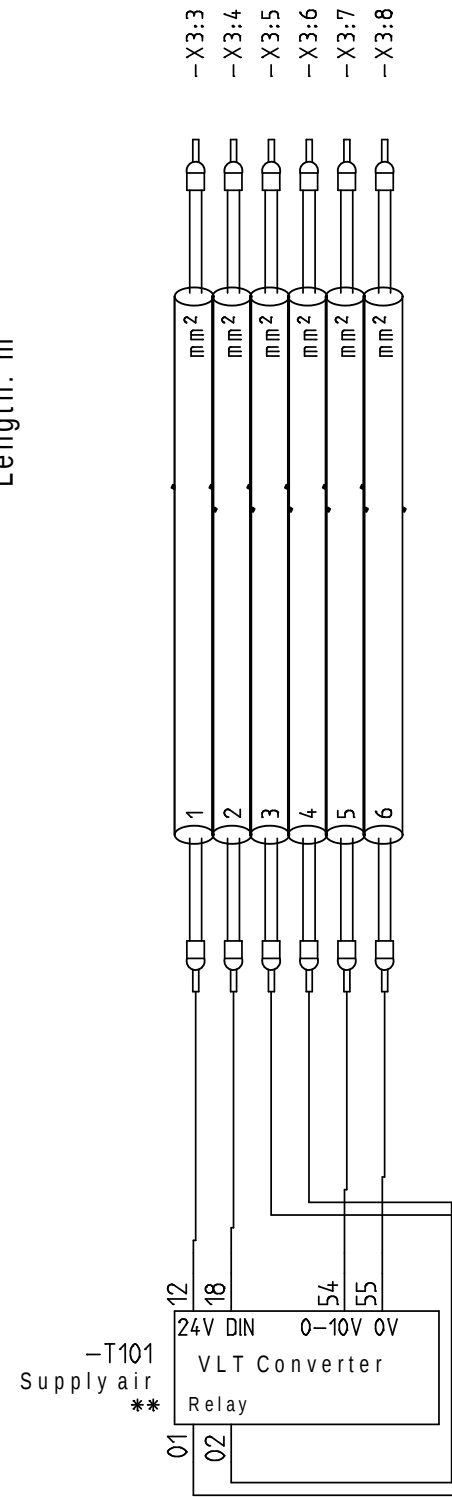
Type: Y-OZ
Dimension:
Length: m



=A1-W1012

Description: VLT control supply

Type: Y-OZ
Dimension:
Length: m

[illegible]

A1-W10122

Type: Y-OZ
Dimension:
Length: m



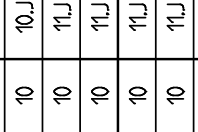
=A1-W1013

Type: Y-OZ
Dimension:
Length: m



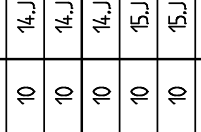
W10131

Type: Y-OZ
Dimension:
Length: m



=A1-W10132

Type: Y-OZ
Dimension:
Length: m



$$=A1-W1014^a$$

Type: Y-OZ
Dimension:
Length: m



Type: Y-OZ
Dimension:
Length: m



Type: Y-OZ
Dimension:
Length: m

[illegible]



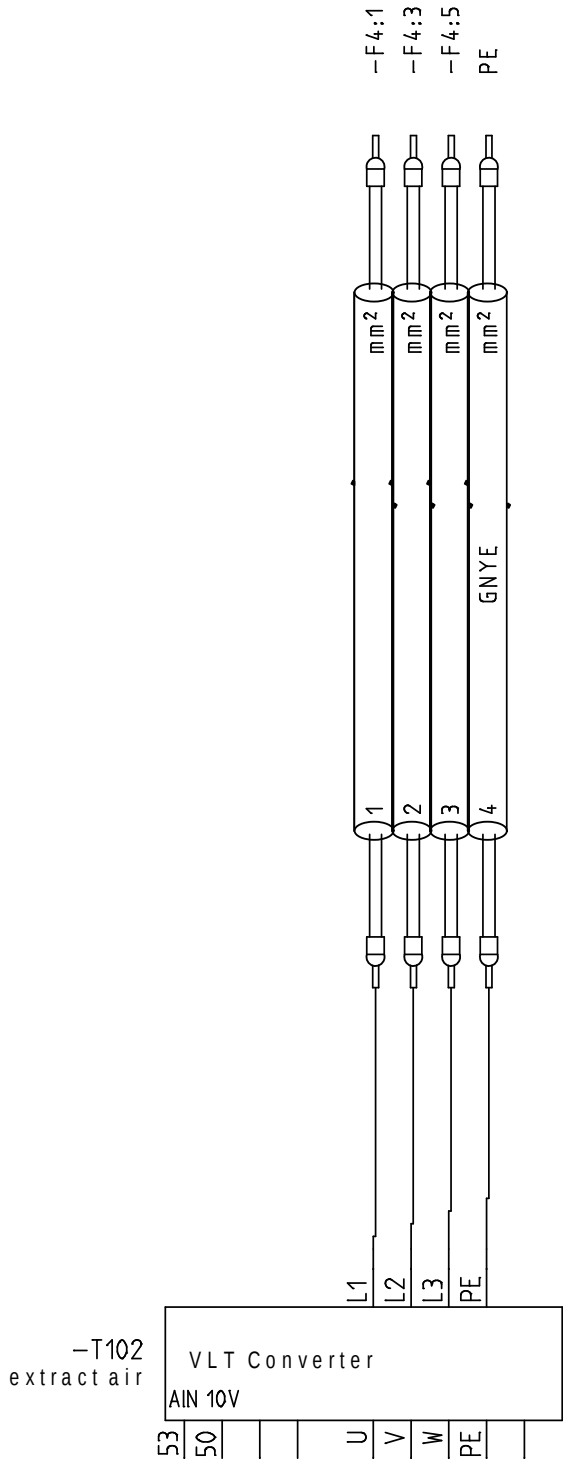
Cabelplan

=A1-W102.1

Description: VLT extract power

Type: Y-OZ
Dimension:
Length: m

Path
Sheet

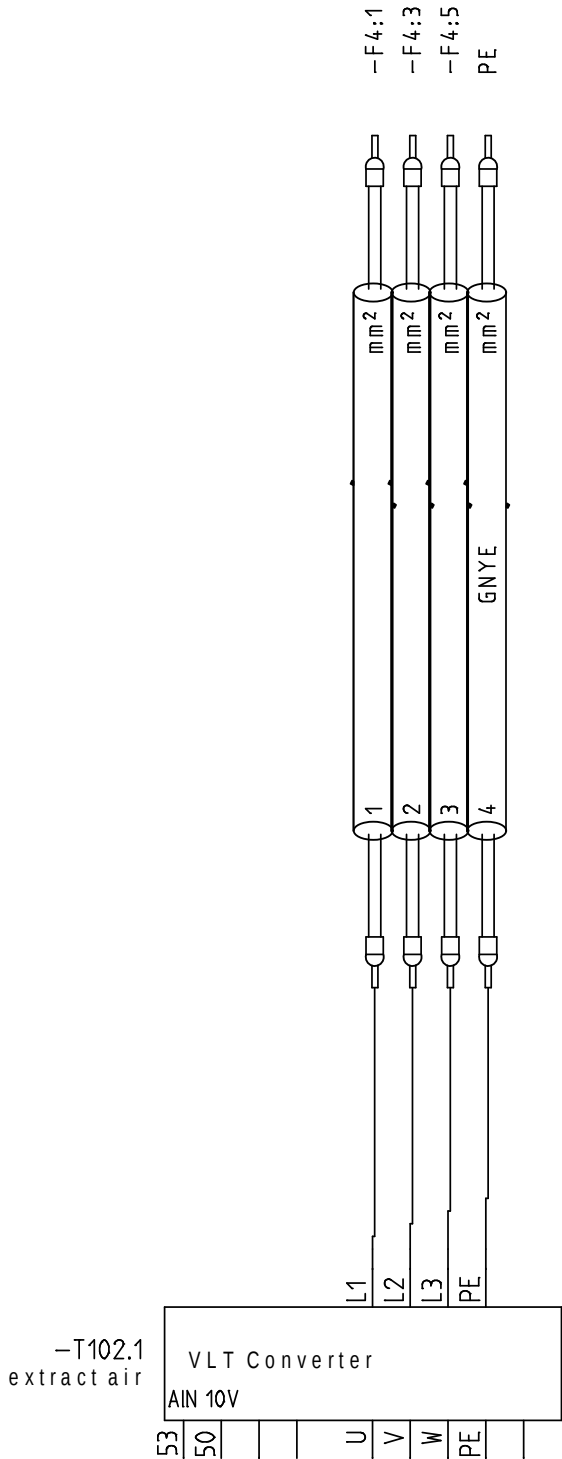


=A1-W102.12

Description: VLT extract power

Type: Y-OZ
Dimension:
Length: m

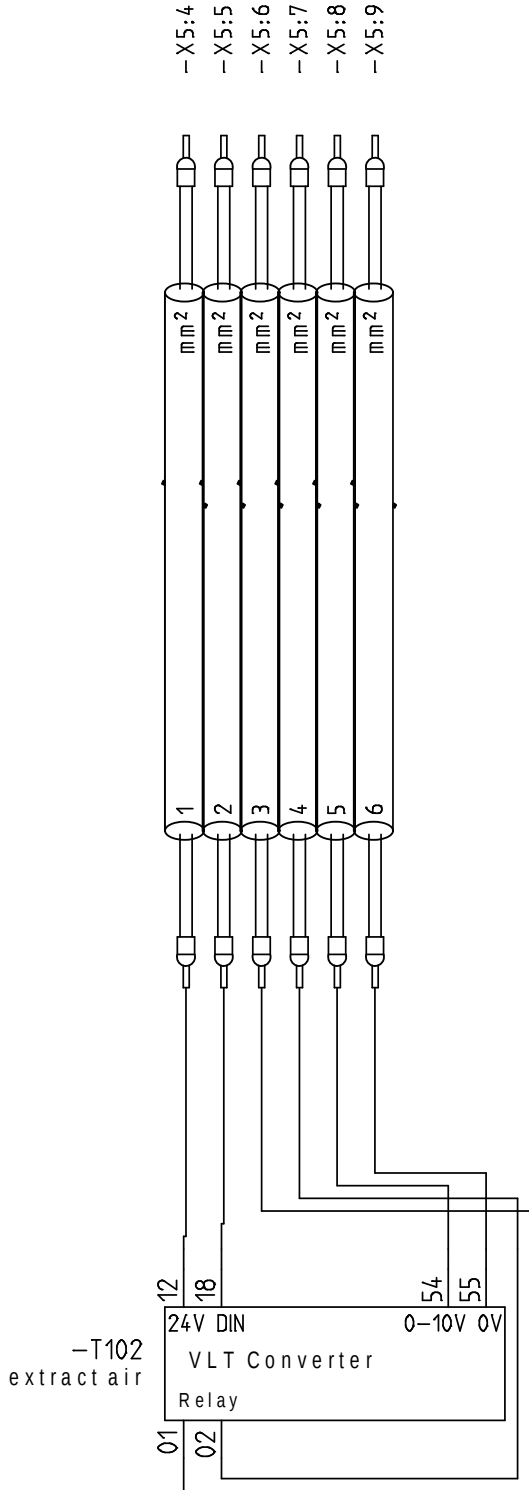
-T102.1
extract air



=A1-W102.2

Description: VLT control extract

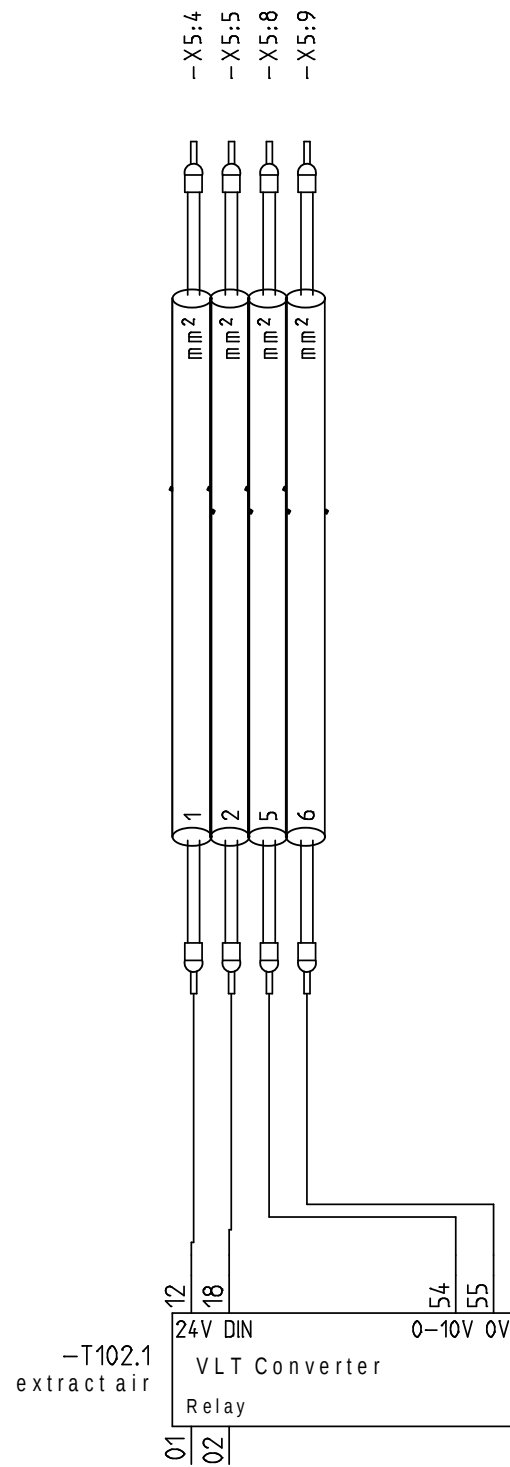
Type:
Dimension:
Length: m



A1-W10222

Description: VLT control extract

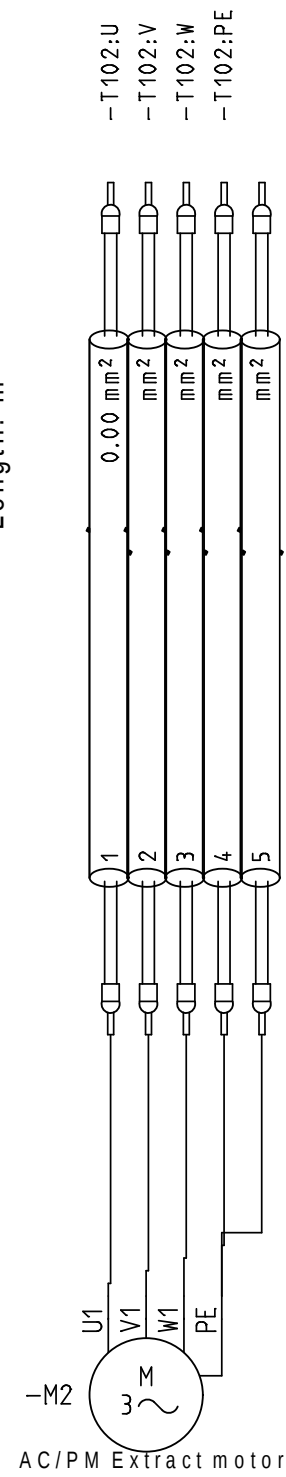
Type:
Dimension:
Length: m



=A1-W1023

Description: motorcable power

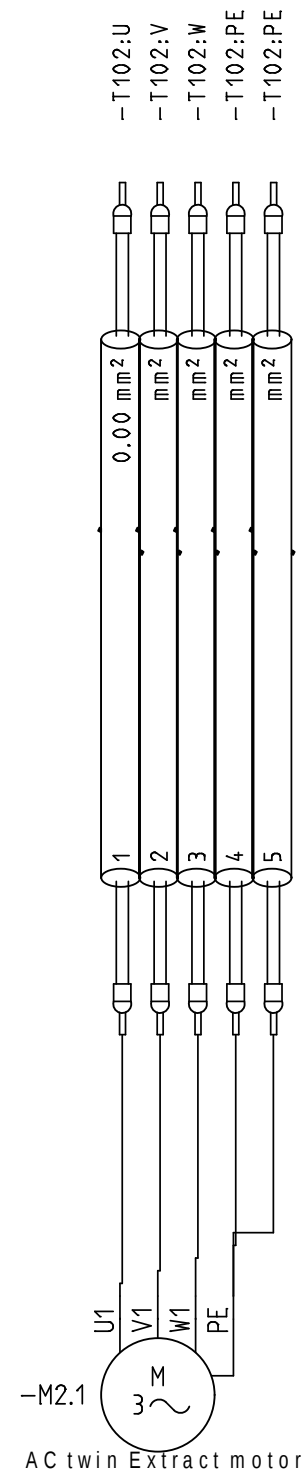
Type: Y-OZ
Dimension:
Length: m



A1-W10231

Description: motor cable power

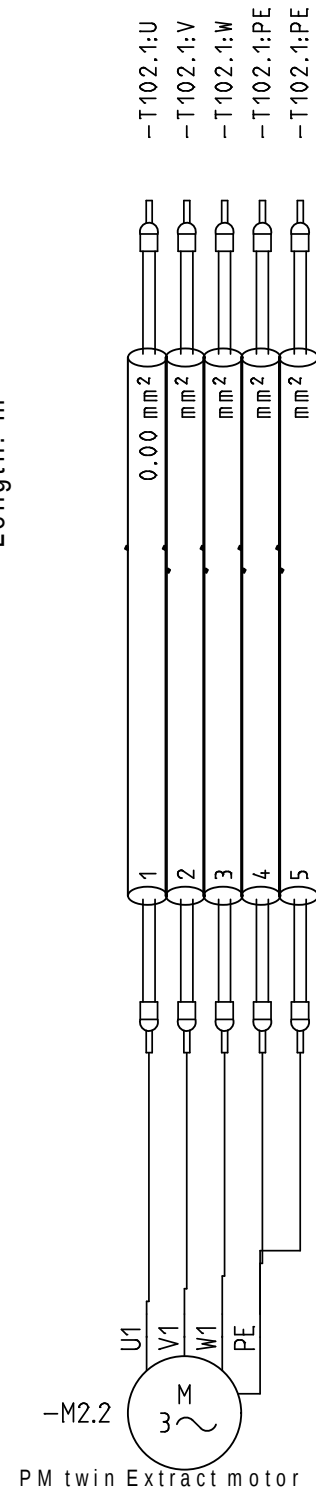
Type: Y-OZ
Dimension:
Length: m



=A1-W10232

Description: motorcable power

Type: Y-OZ
Dimension:
Length: m

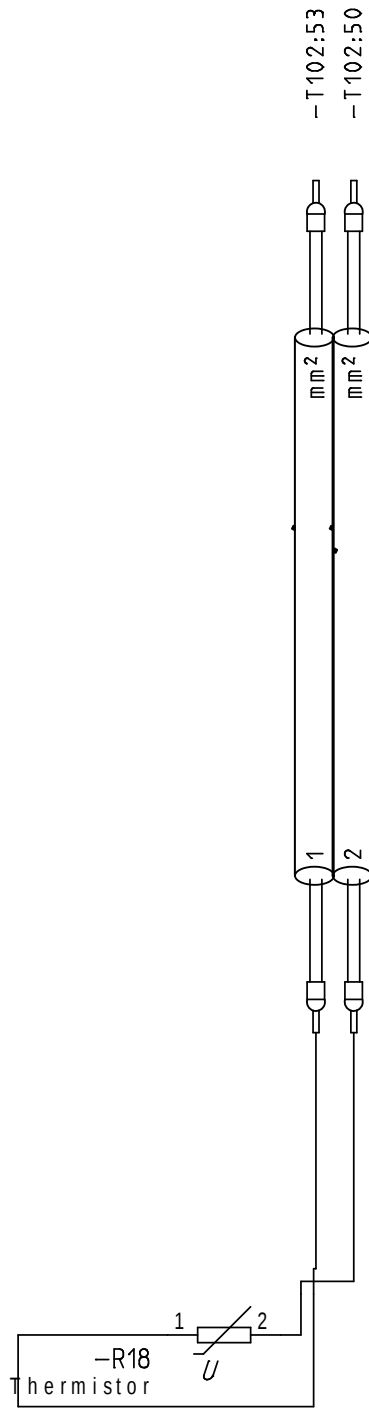
[illegible]

Cabelplan

A1-W1024

Description: Extract thermistor

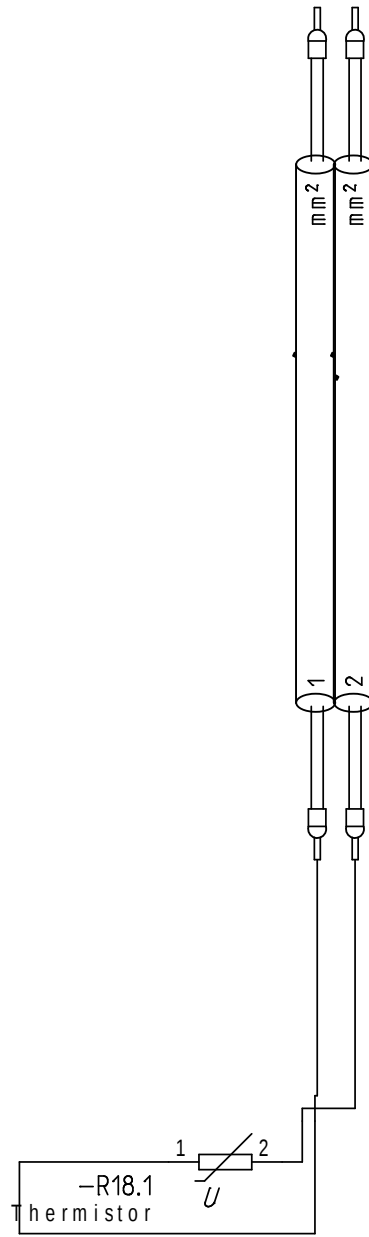
Type: Y-OZ
Dimension:
Length: m



A1-W10241

Description: Extract thermistor

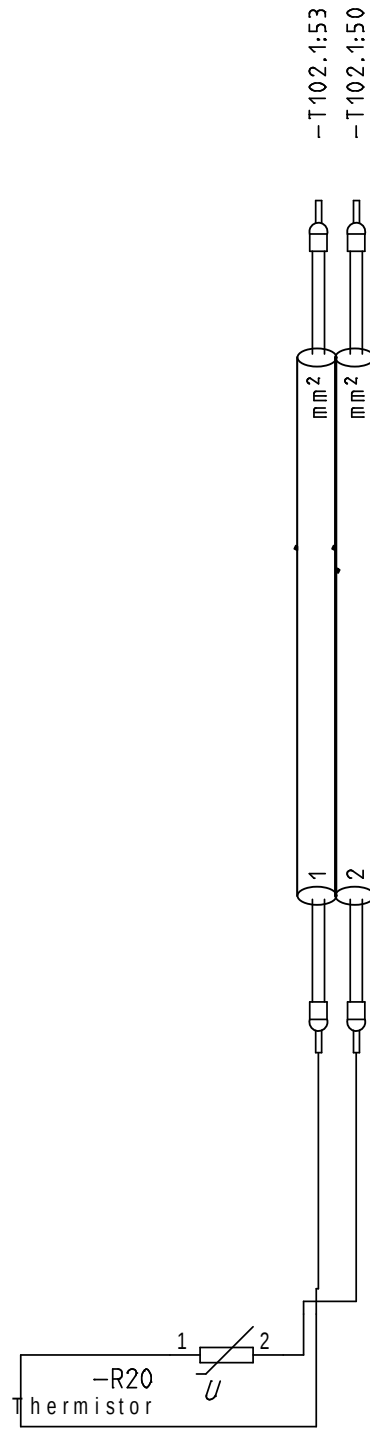
Type: Y-OZ
Dimension:
Length: m



=A1-W102.42

Description: Extract thermistor

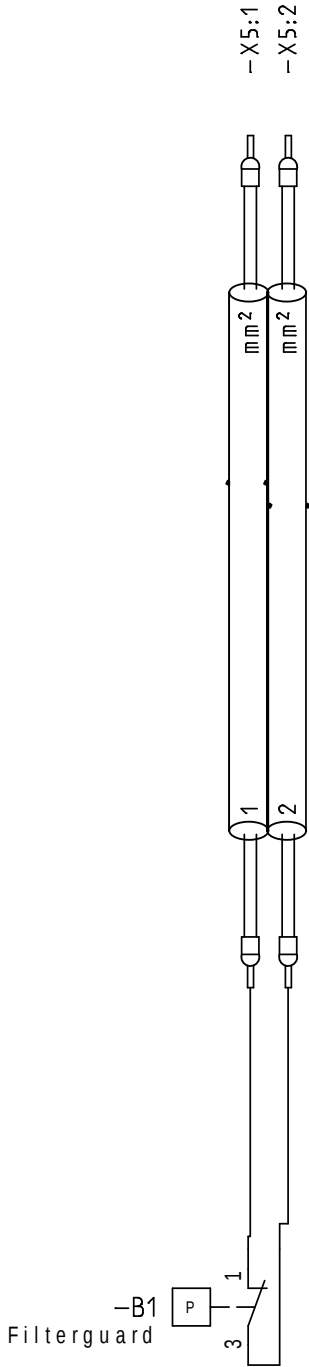
Type: Y-OZ
Dimension:
Length: m

[illegible]

=A1-W301

Description: Filterguard supply

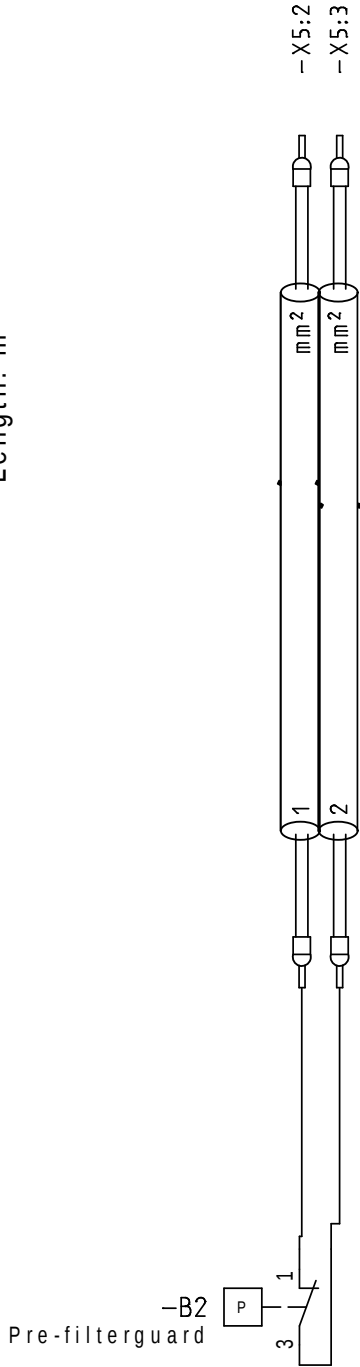
Type:
Dimension:
Length: m



=A1-W301.1

Description: Pre-filterguard supply

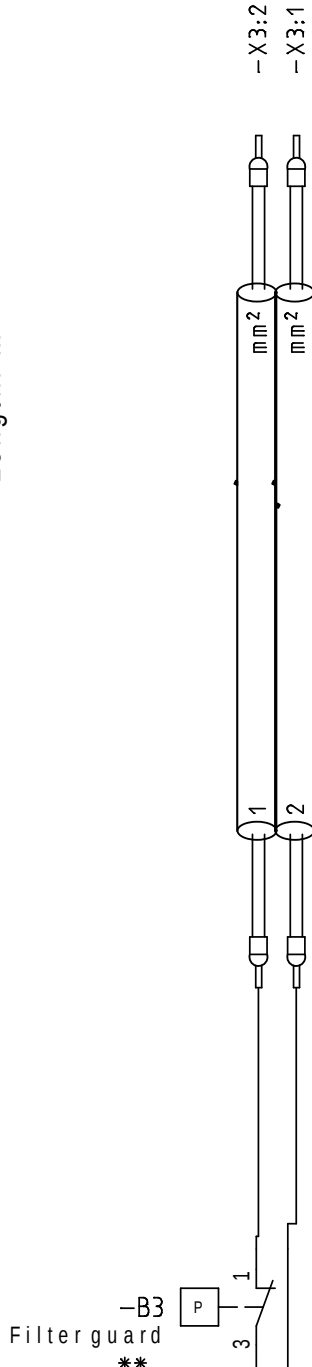
Type:
Dimension:
Length: m



=A1-W302

Description: Filterguard Extract

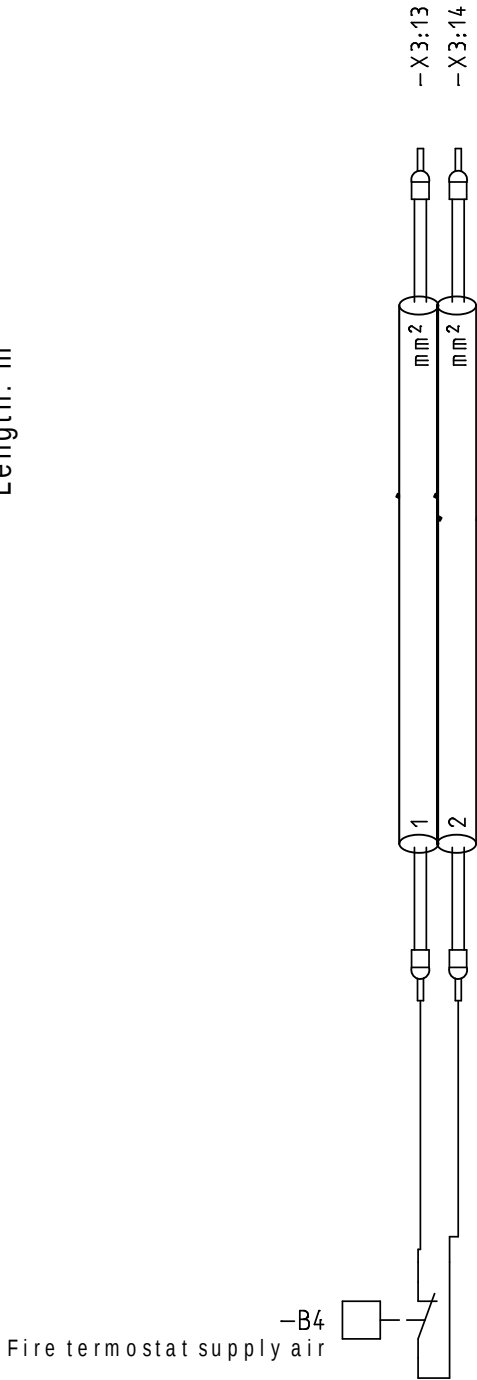
Type: Y-OZ
Dimension:
Length: m



=A1-W304

Description: Fire thermostat supply air

Type:
Dimension:
Length: m



Sheet

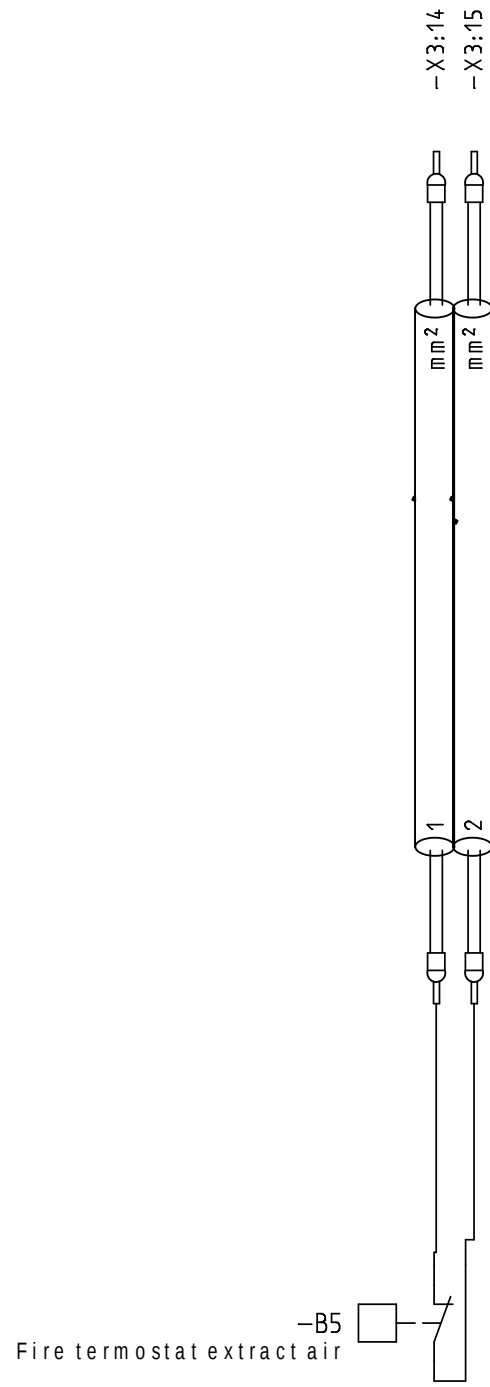
Path

Cabelplan

=A1-W305

Description: Fire thermostat extract air

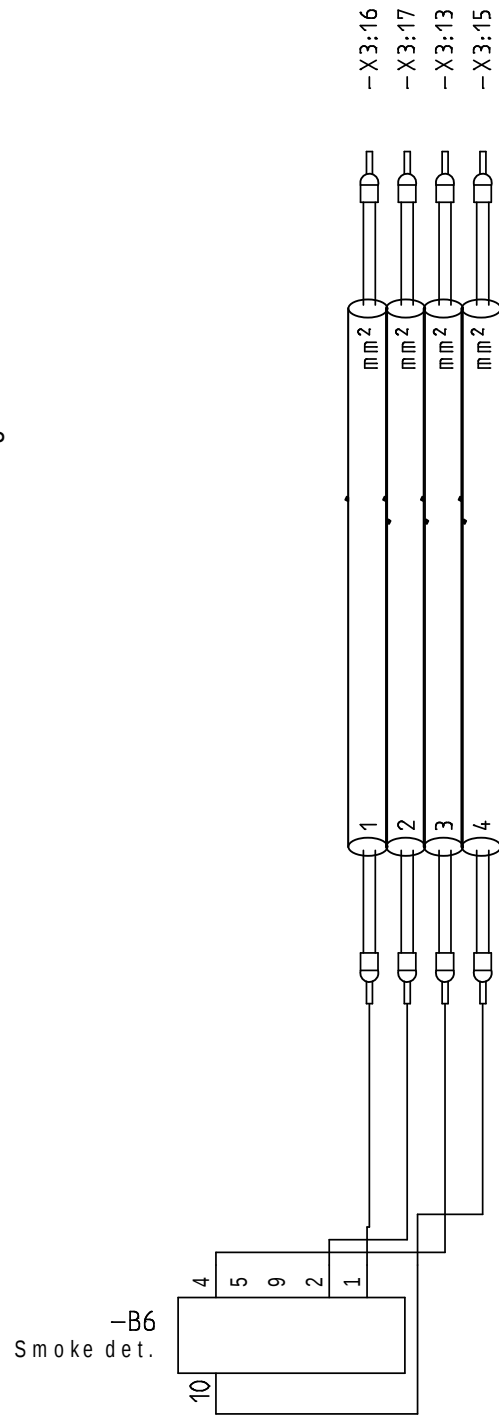
```
Type:
Dimension:
Length: m
```



=A1-W306

Description: Smokedetector

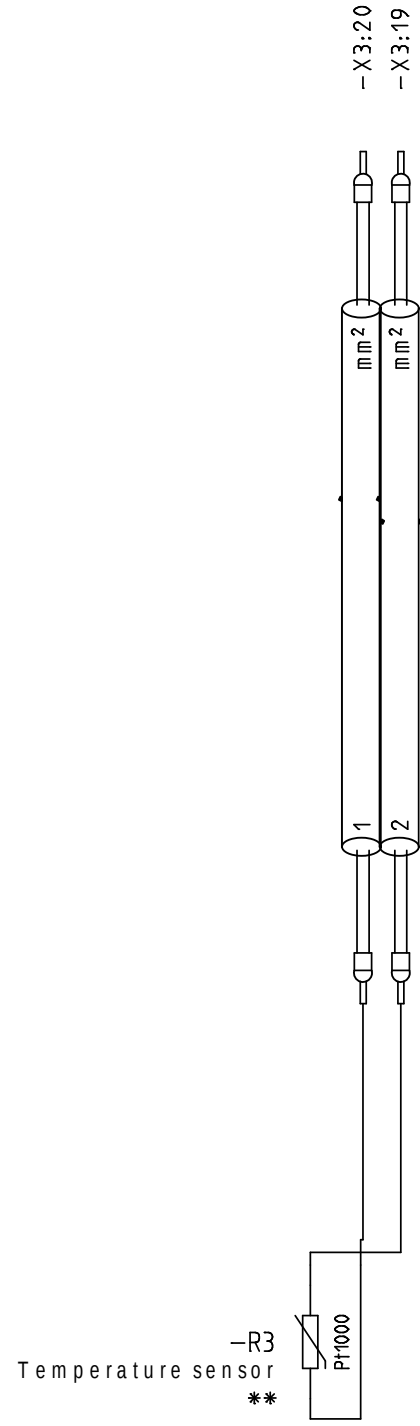
Type:
Dimension:
Length: m



$\equiv A1-W310$

Description: Temperatur sensor extract

Type:
Dimension:
Length: m

[illegible]



Cabelplan

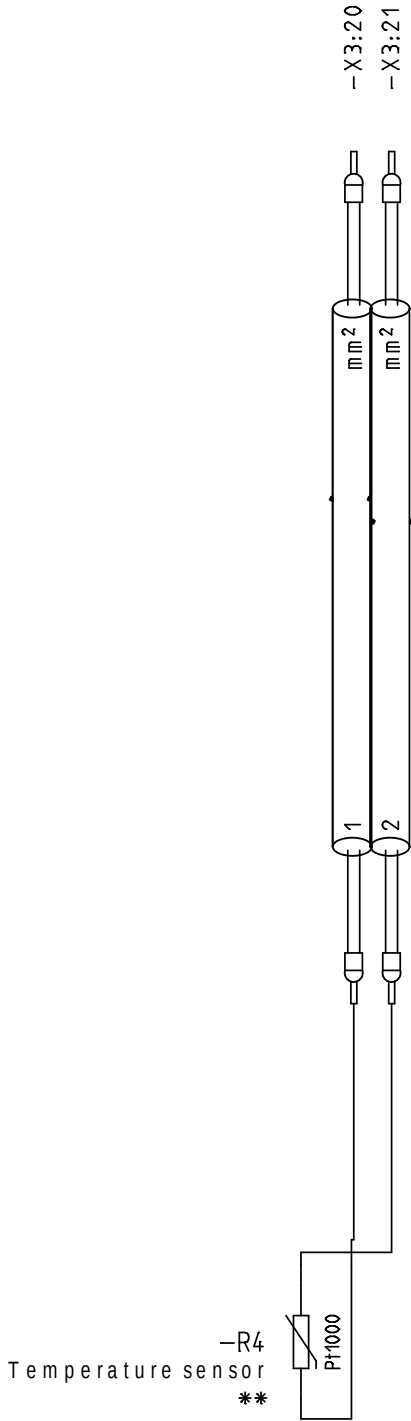
=A1-W311

Description: Temperatur sensor supply air

Type:
Dimension:
Length: m

Sheet

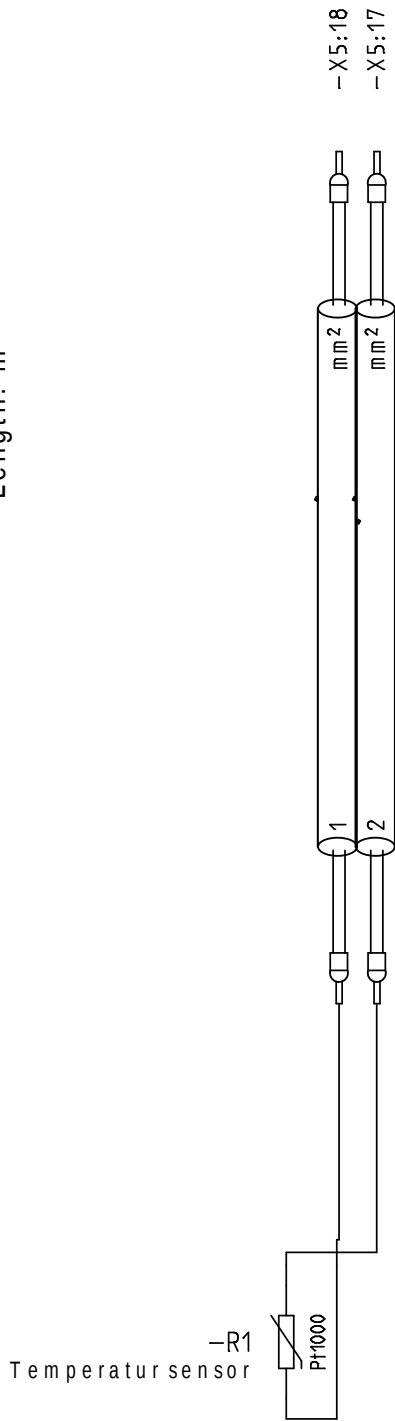
Path



=A1-W312

Description: Temperatur sensor intake

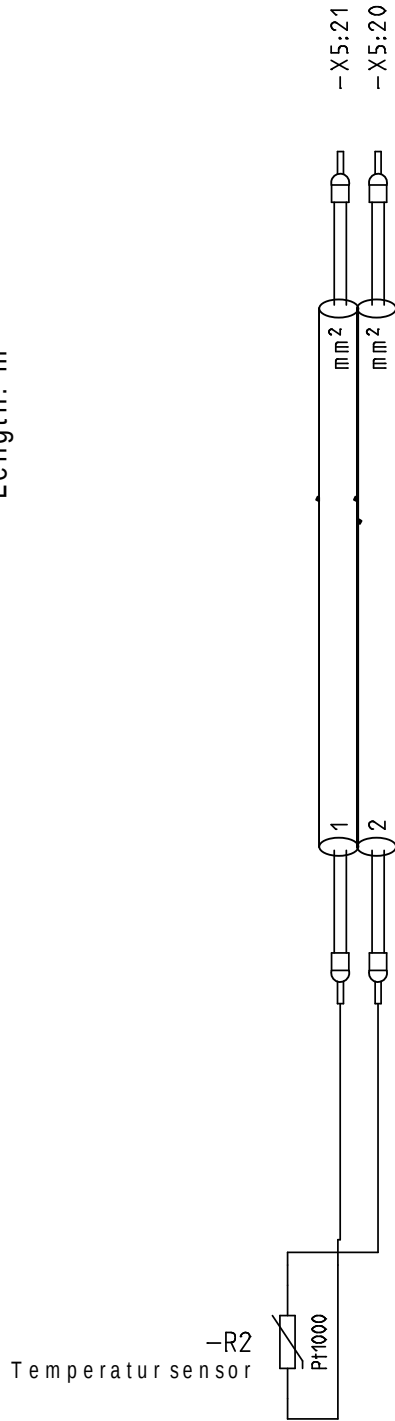
Type:
Dimension:
Length: m



=A1-W313

Description: Temperatur sensor exhaust

Type:
Dimension:
Length: m



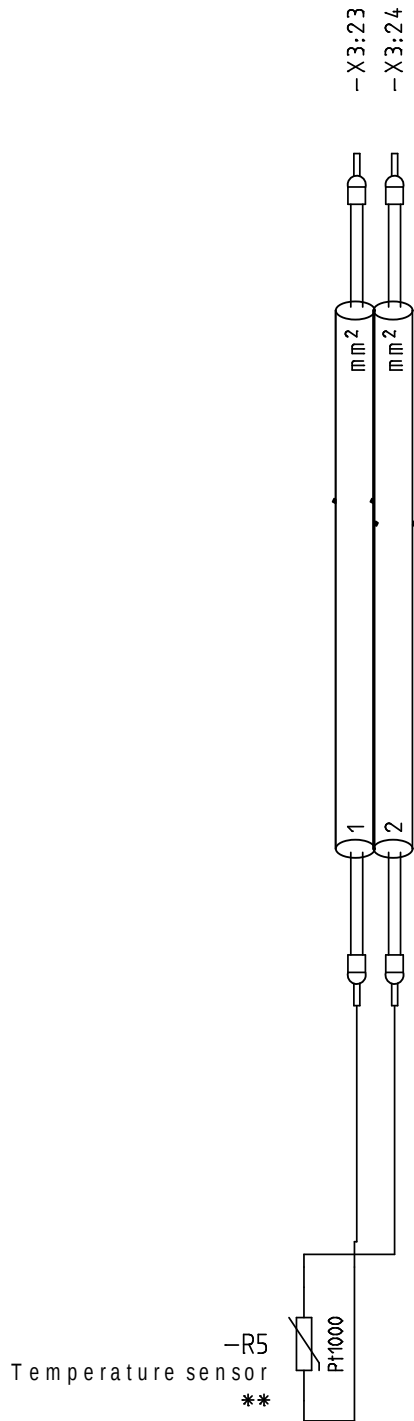
Cabelplan

=A1-W314

Description: Frost protection heating coil

Type:
Dimension:
Length: m

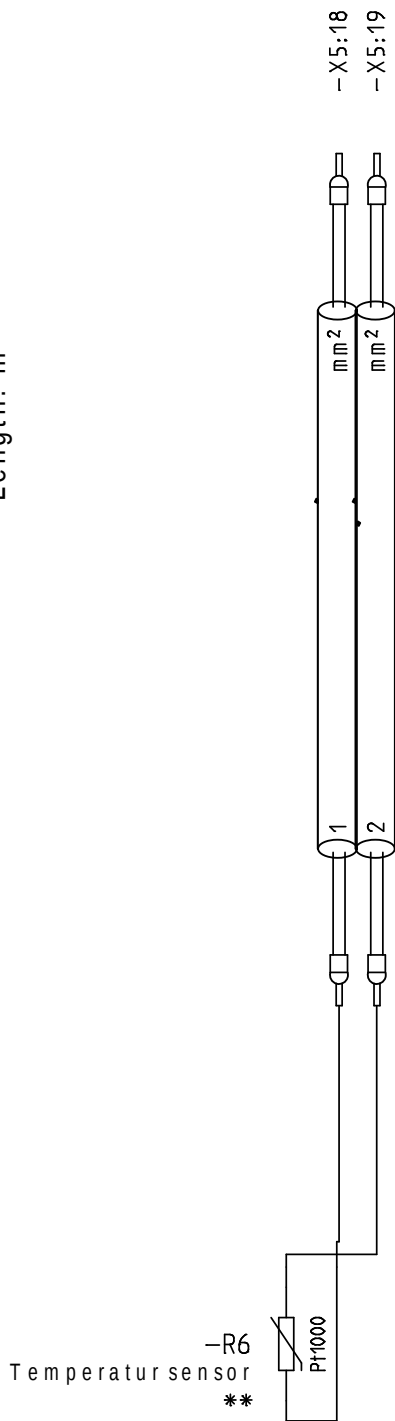
Path
Sheet



=A1-W315

Description: Deicing for plate heat

Type:
Dimension:
Length: m



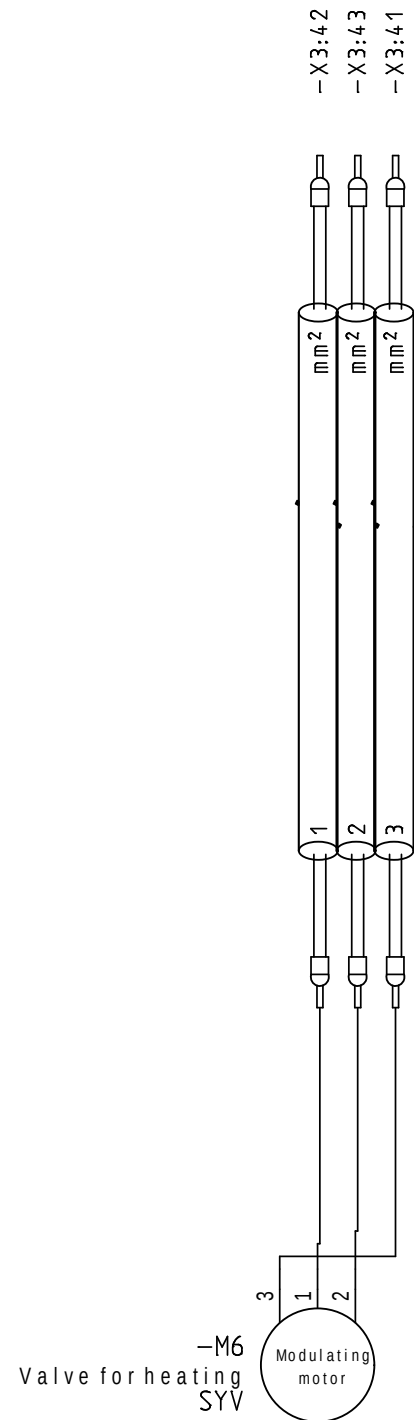
A1-W319

Type:
Dimension:
Length: m



=A1-W320

Type: Y-OZ
Dimension:
Length: m

[illegible]

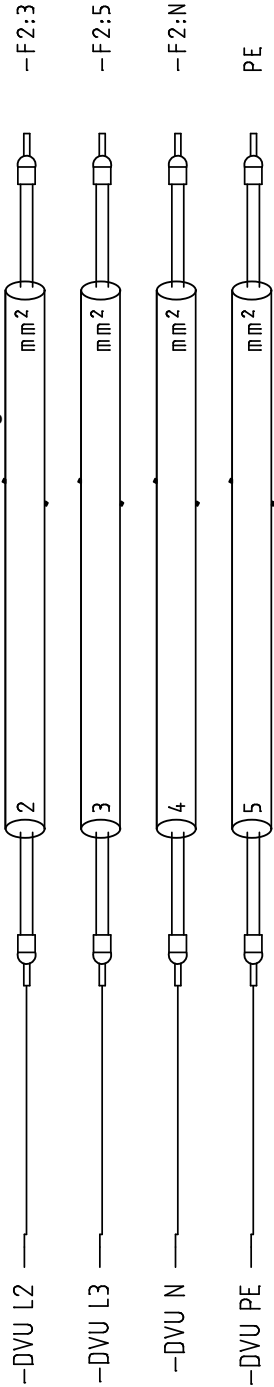


Cabelplan

=A1-W329

Description: DVU supply

Type: Y-OZ
Dimension:
Length: m



Sheet

Path

10

17,J

10

18,J

10

18,J

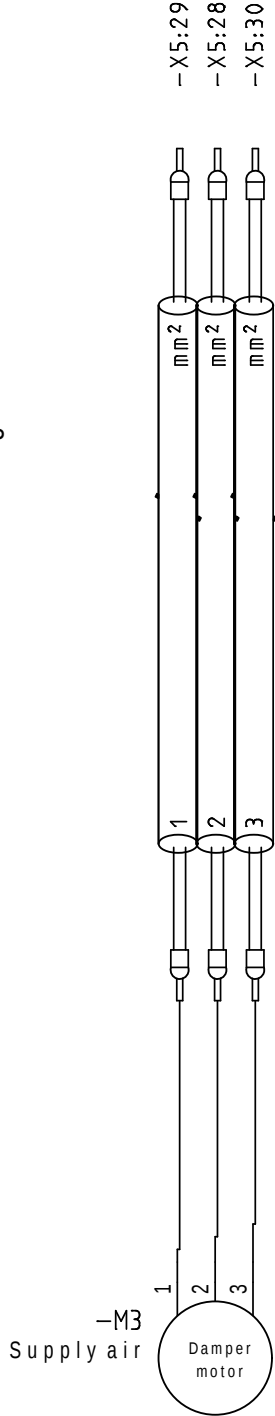
10

18,J

=A1-W330

Description: Supply air damper on/off

Type: Y-OZ
Dimension:
Length: m



26

5K

26

5K

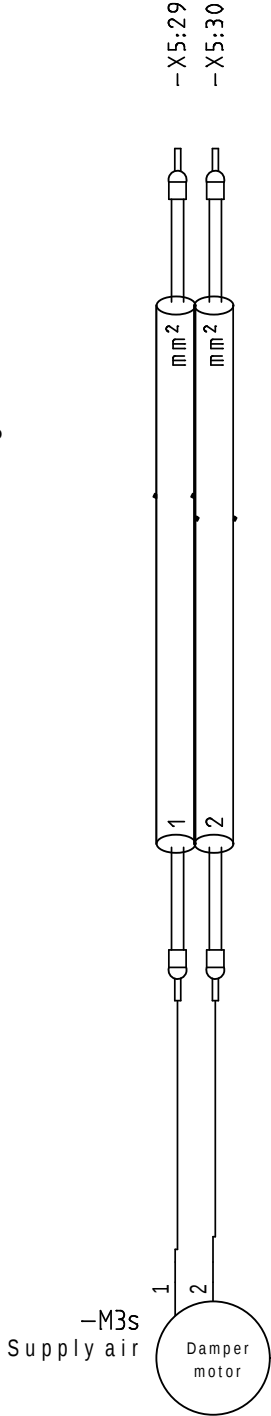
26

5K

=A1-W330S

Description: Supply air damper springreturn

Type: Y-OZ
Dimension:
Length: m



26

8K

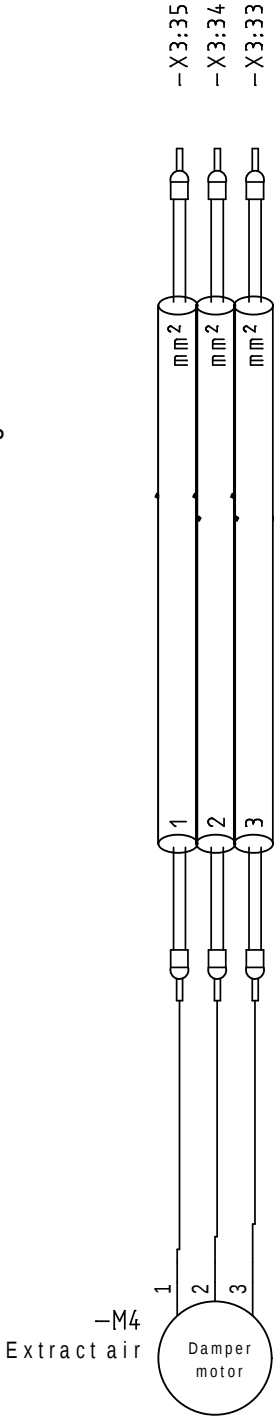
26

8K

=A1-W331

Description: Extract air damper on/off

Type: Y-OZ
Dimension:
Length: m



18

1,J

18

2,J

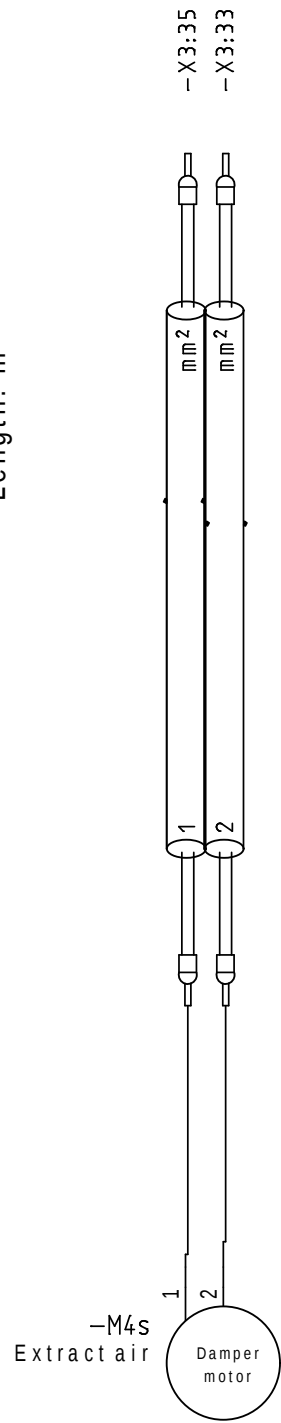
18

2,J



Description: Extract air damper spring

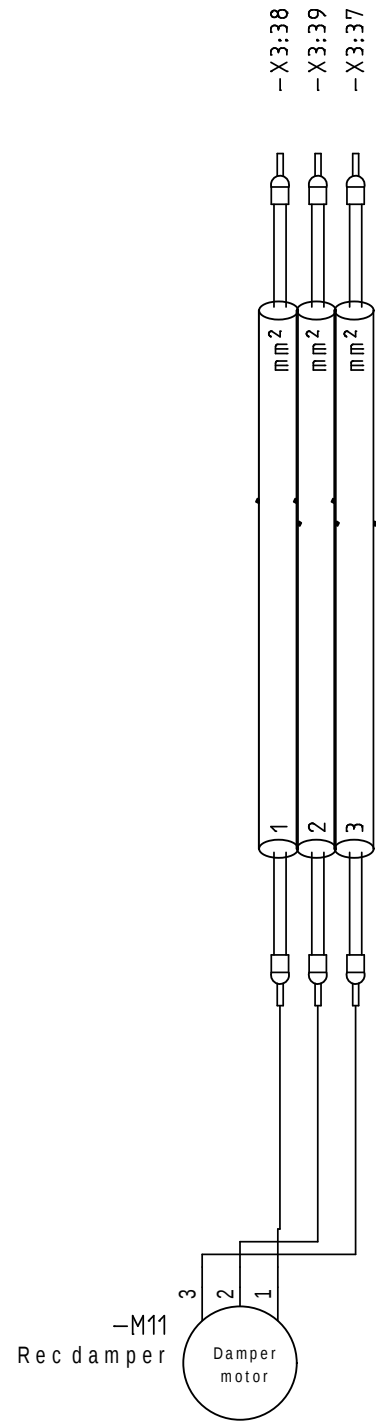
Type: Y-OZ
Dimension:
Length: m



=A1-W332

Description: Rec mix damper

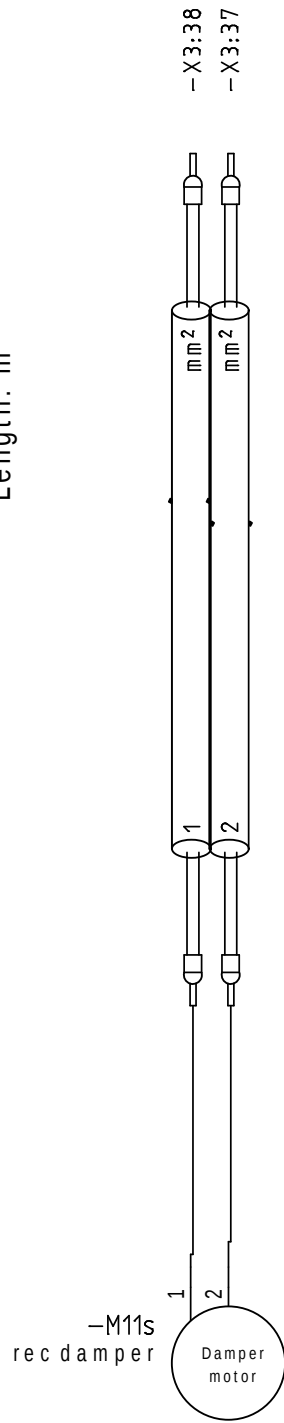
Type: Y-OZ
Dimension:
Length: m



=A1-W332S

Description:

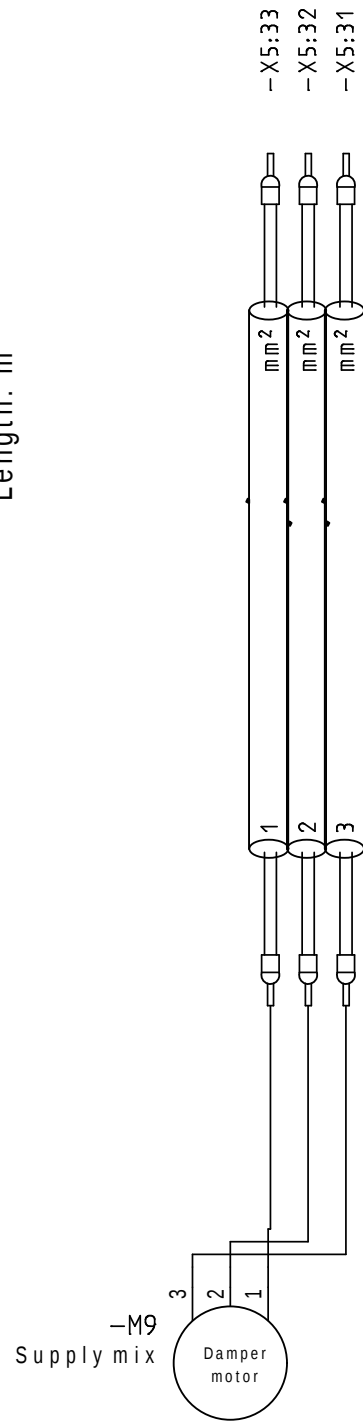
Type:
Dimension:
Length: m



=A1-W333

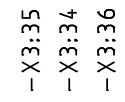
Description: Supply air mix damper

Type: Y-OZ
Dimension:
Length: m



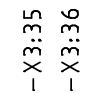
=A1-W334

Type:
Dimension:
Length: m



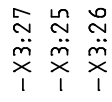
=A1-W33+S

Type:
Dimension:
Length: m



=A1-W340

Type: Y-OZ
Dimension:
Length: m

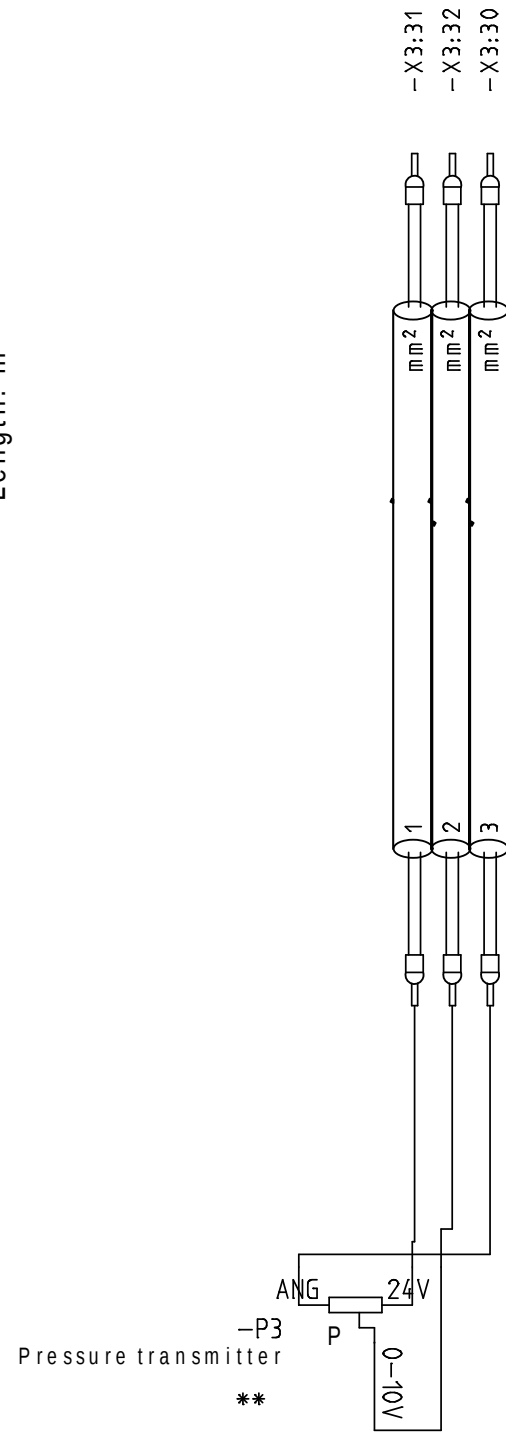
Path
Sheet

Cabelplan

=A1-W341

Description: Pressure supply external

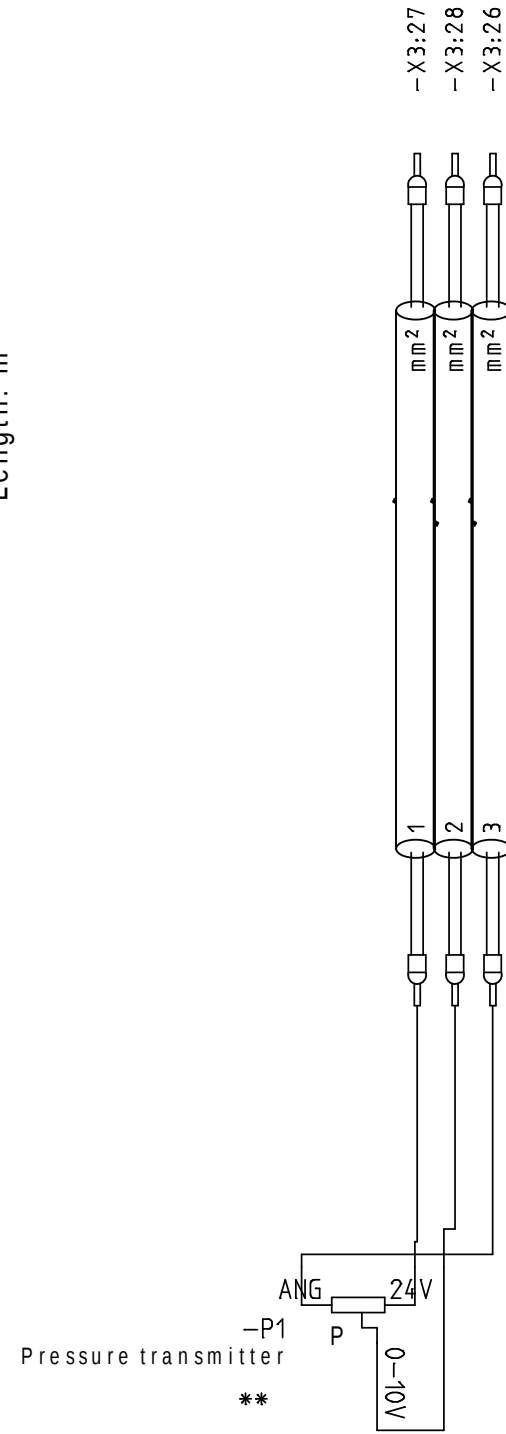
Type: Y-OZ
Dimension:
Length: m



A1-W350

Description: Flow measuring supply

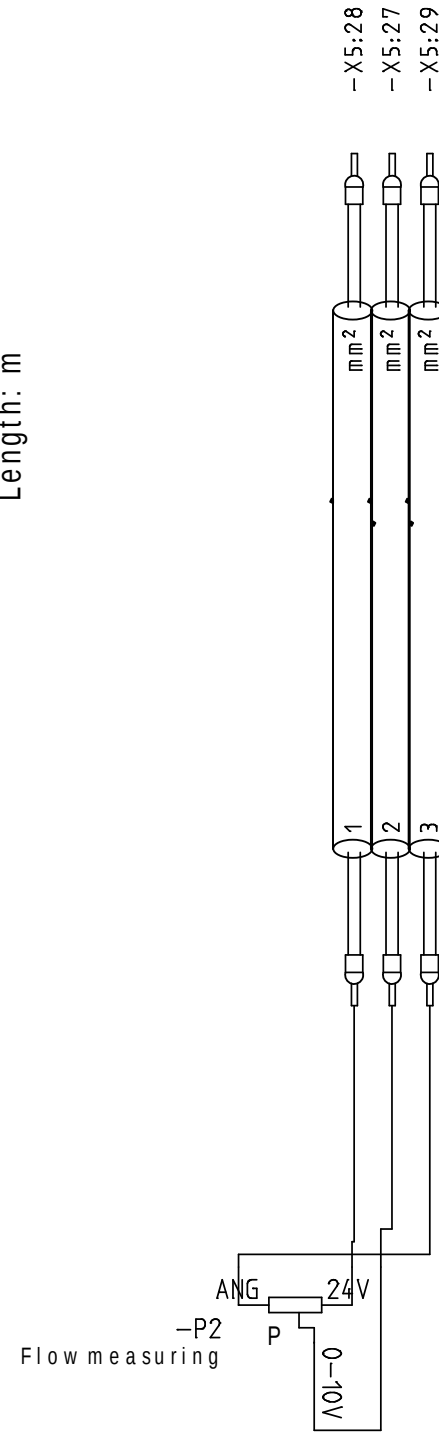
Type: Y-OZ
Dimension:
Length: m



A1-W351

Description: Flow measuring extract

Type: Y-OZ
Dimension:
Length: m

[illegible]

=A1-W352

Type: Y-OZ
Dimension:
Length: m



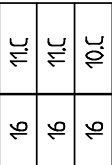
=A1-W353

Type: Y-OZ
Dimension:
Length: m



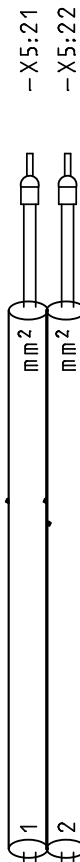
=A1-W354

Type: Y-OZ
Dimension:
Length: m



=A1-W360

Type:
Dimension:
Length: m



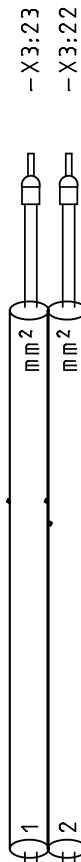
A1-W361

Type:
Dimension:
Length: m



A1-W363

Type:
Dimension:
Length: m



A1-W365

Type:
Dimension:
Length: m

[illegible]

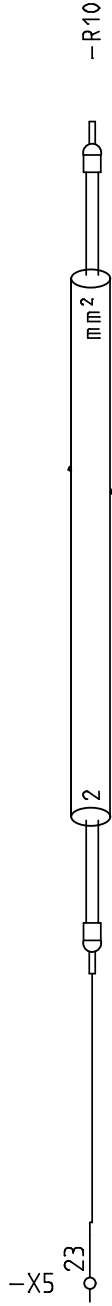


Cabelplan

=A1-W365

Description: Pre-heat temperatur sensor

Type:
Dimension:
Length: m



Sheet

Path

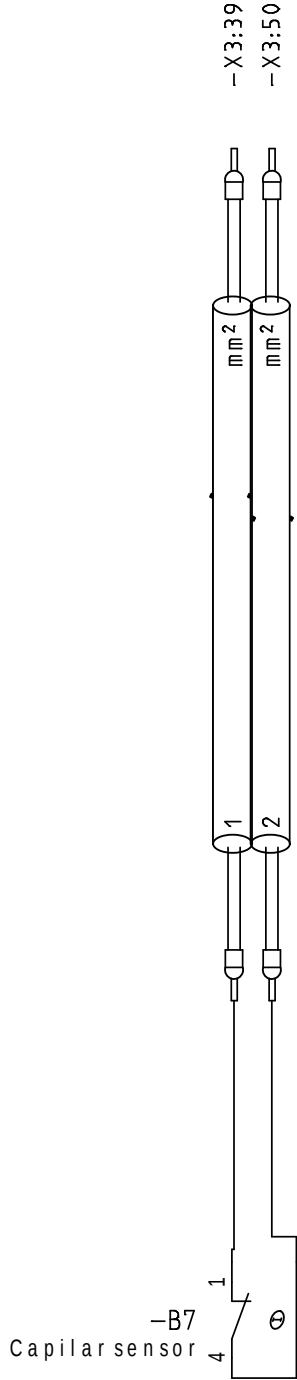
8.C

25

=A1-W371

Description: Capilarsensor

Type:
Dimension:
Length: m



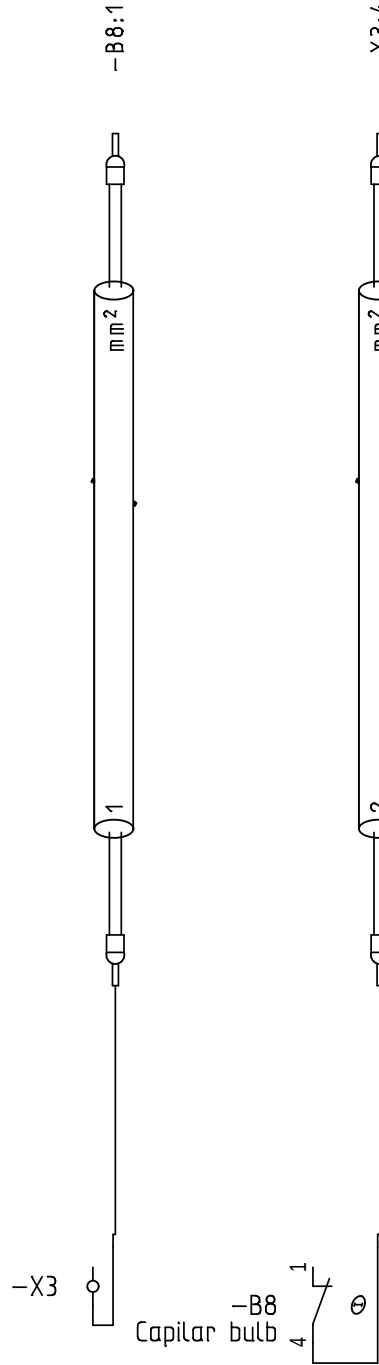
17.B

18

=A1-W371.1

Description: Capilarsensor bulb

Type:
Dimension:
Length: m



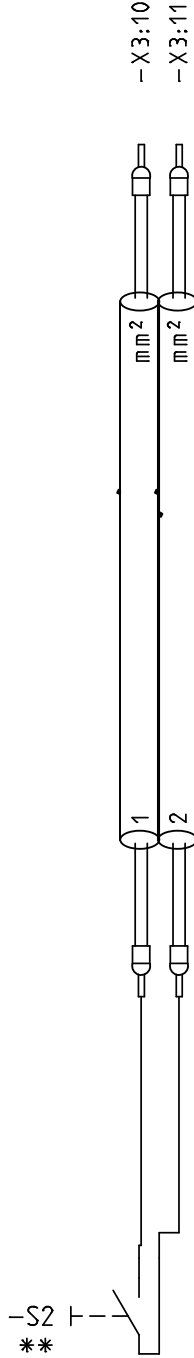
17.E

18

=A1-W380

Description: Reduced speed

Type: Y-OZ
Dimension:
Length: m



15.C

13

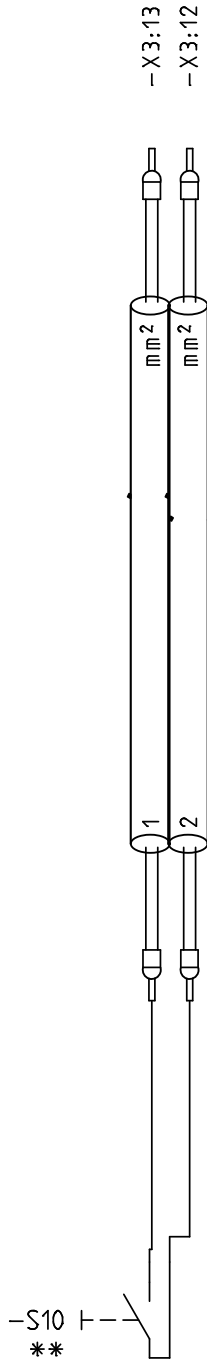
13

15.E

=A1-W381

Description: Normal speed

Type:
Dimension:
Length: m



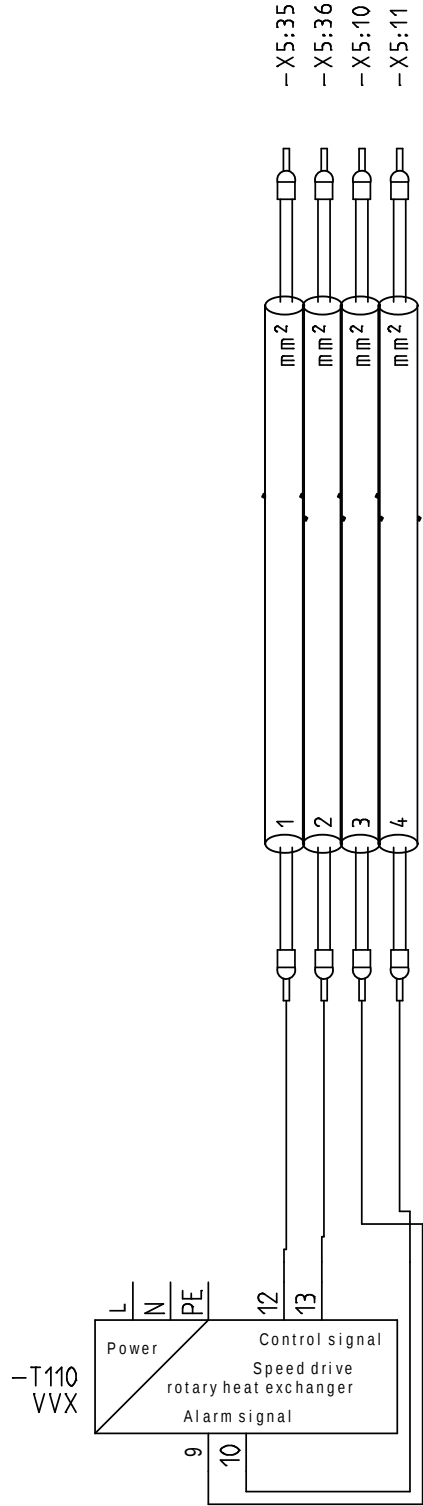
Sheet

Path

=A1-W390

Description: Rot. heat recovery

Type: Y-OZ
Dimension:
Length: m



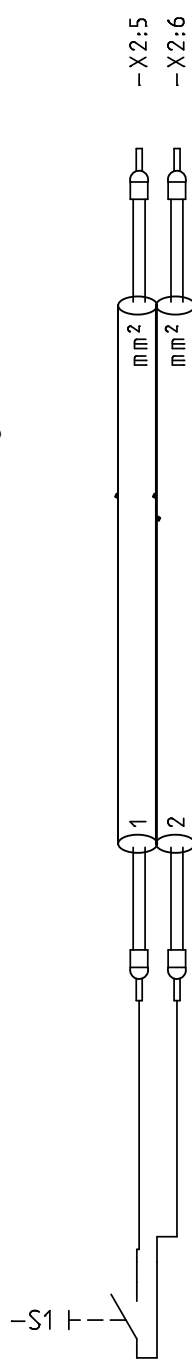
Sheet

Path

=A1-W700

Description: Light switch

Type:
Dimension:
Length: m



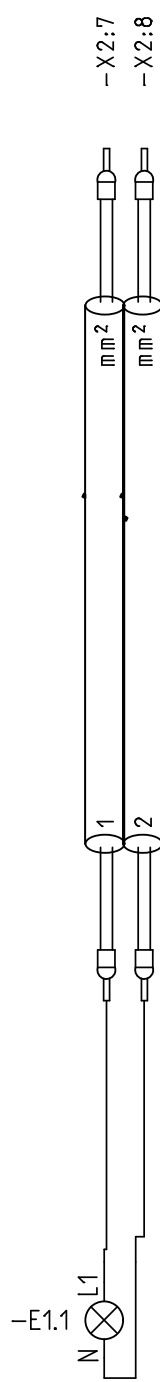
Sheet

Path

=A1-W701.1

Description: Light P20

Type: Y-OZ
Dimension:
Length: m



Sheet

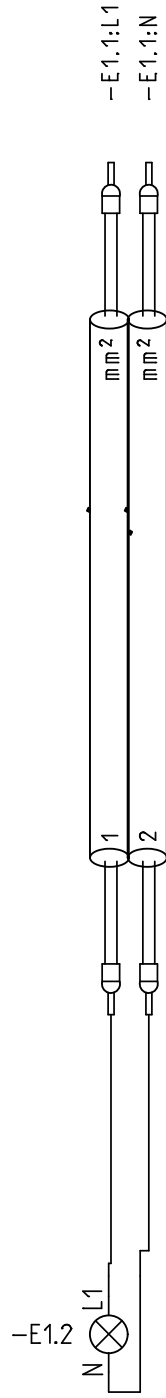
Path

מבטול

A1-W7012

Description: Light P20

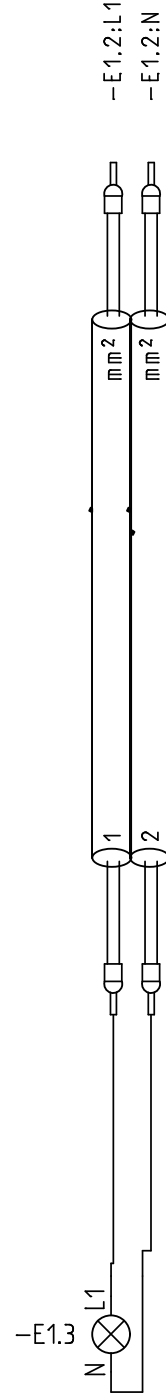
Type: Y-OZ
Dimension:
Length: m



=A1-W7013^a

Description: Light P20

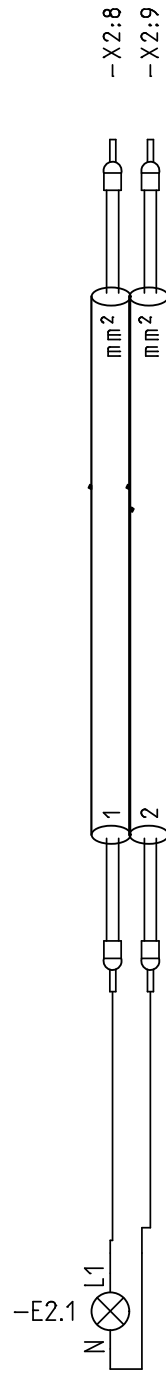
Type: Y-OZ
Dimension:
Length: m



=A1-W702.1

Description: Light P21

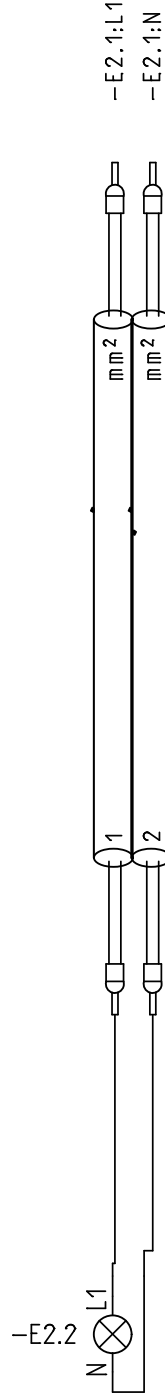
Type: Y-OZ
Dimension:
Length: m



=A1-W702.2

Description:

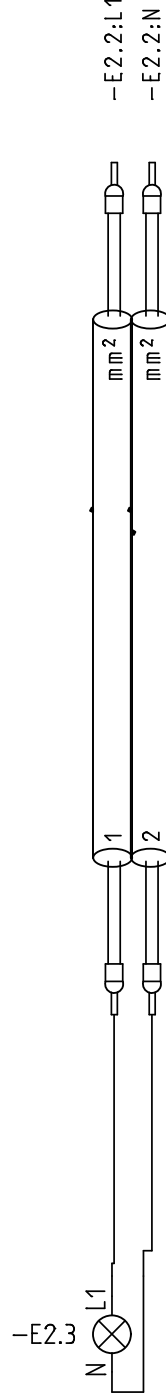
Type:
Dimension:
Length: m



=A1-W7023

Description:

Type:
Dimension:
Length: m



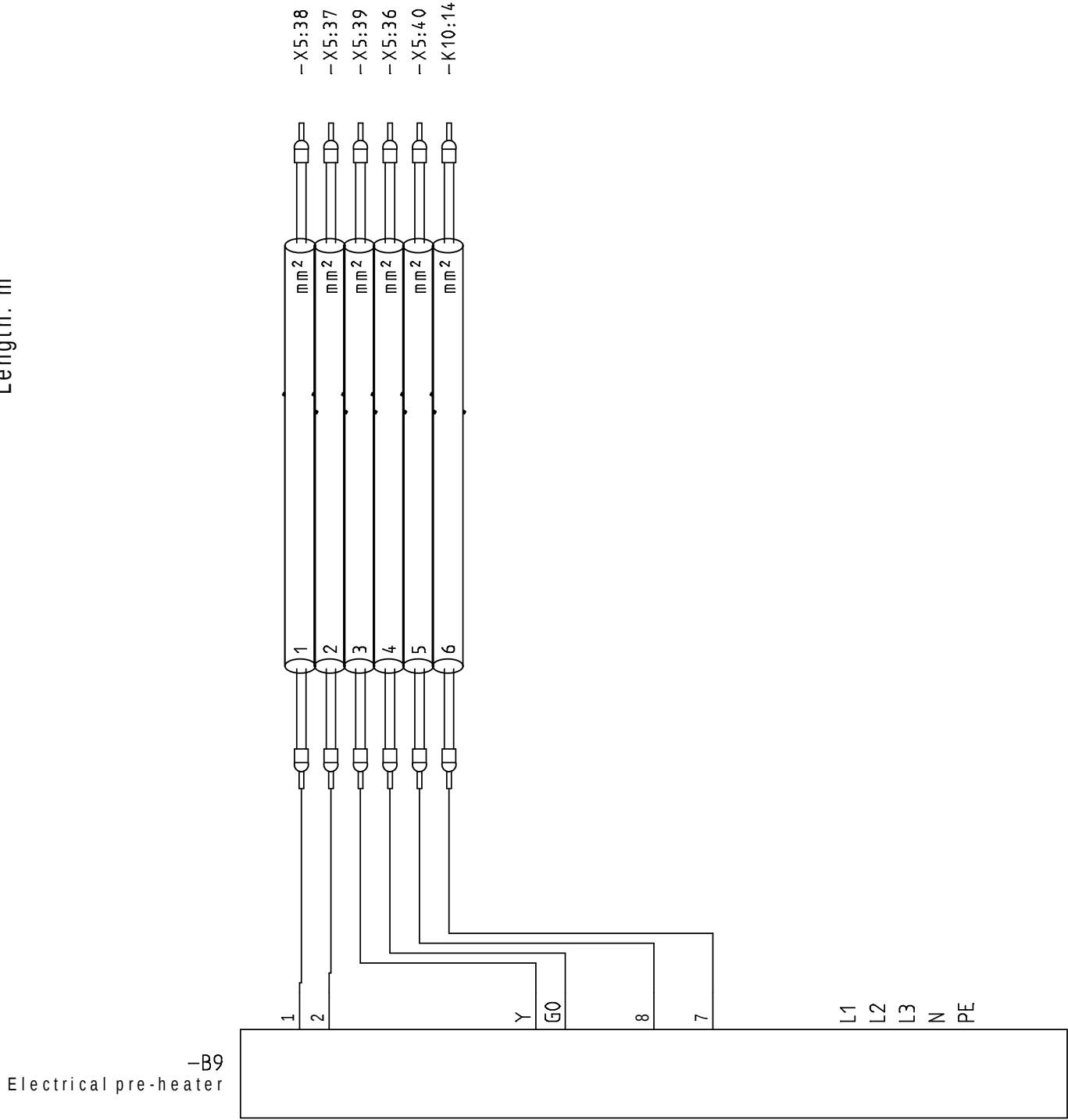
Cabelplan

=A1–W900

Description: Pre-heating

Type:
Dimension:
Length: m

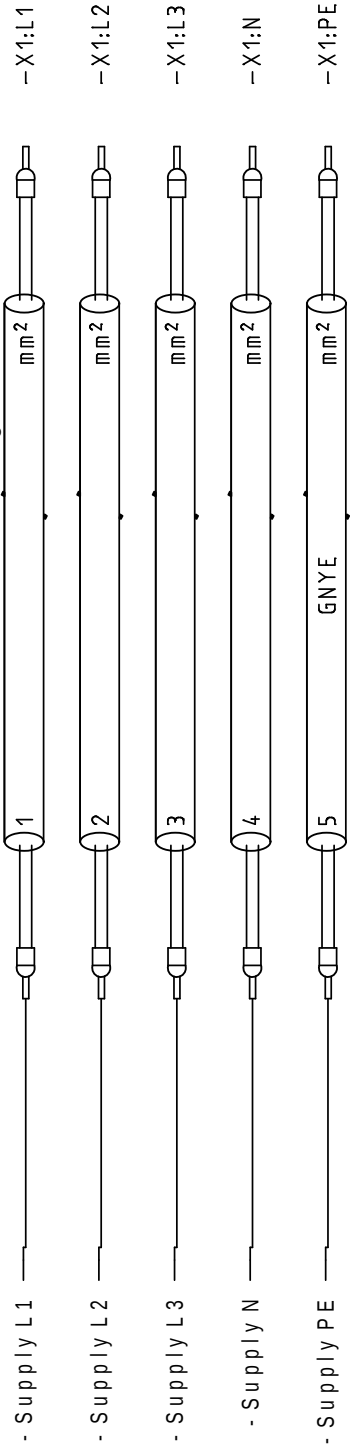
Path
Sheet



=A1–W1000

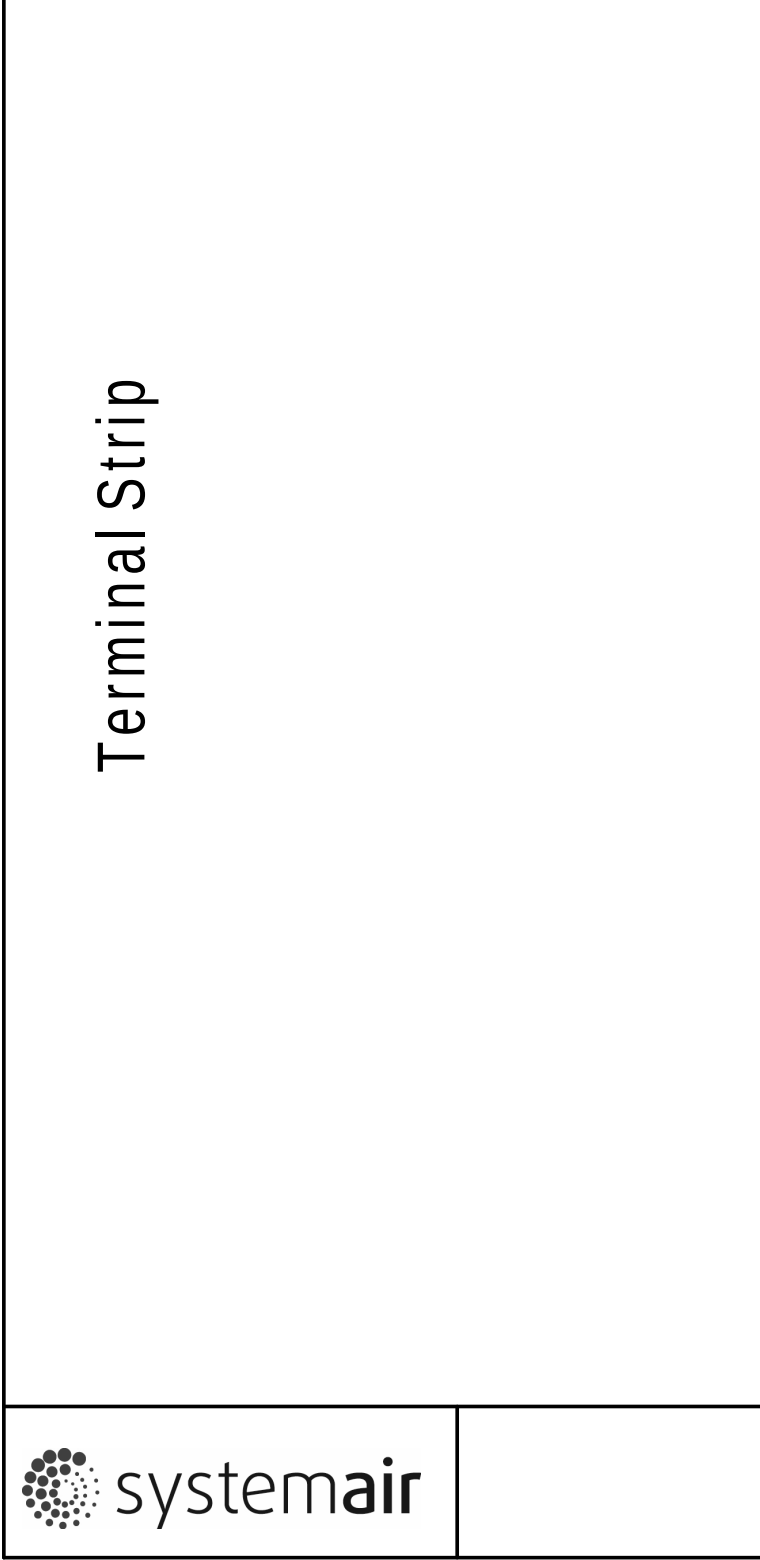
Description: Main supply

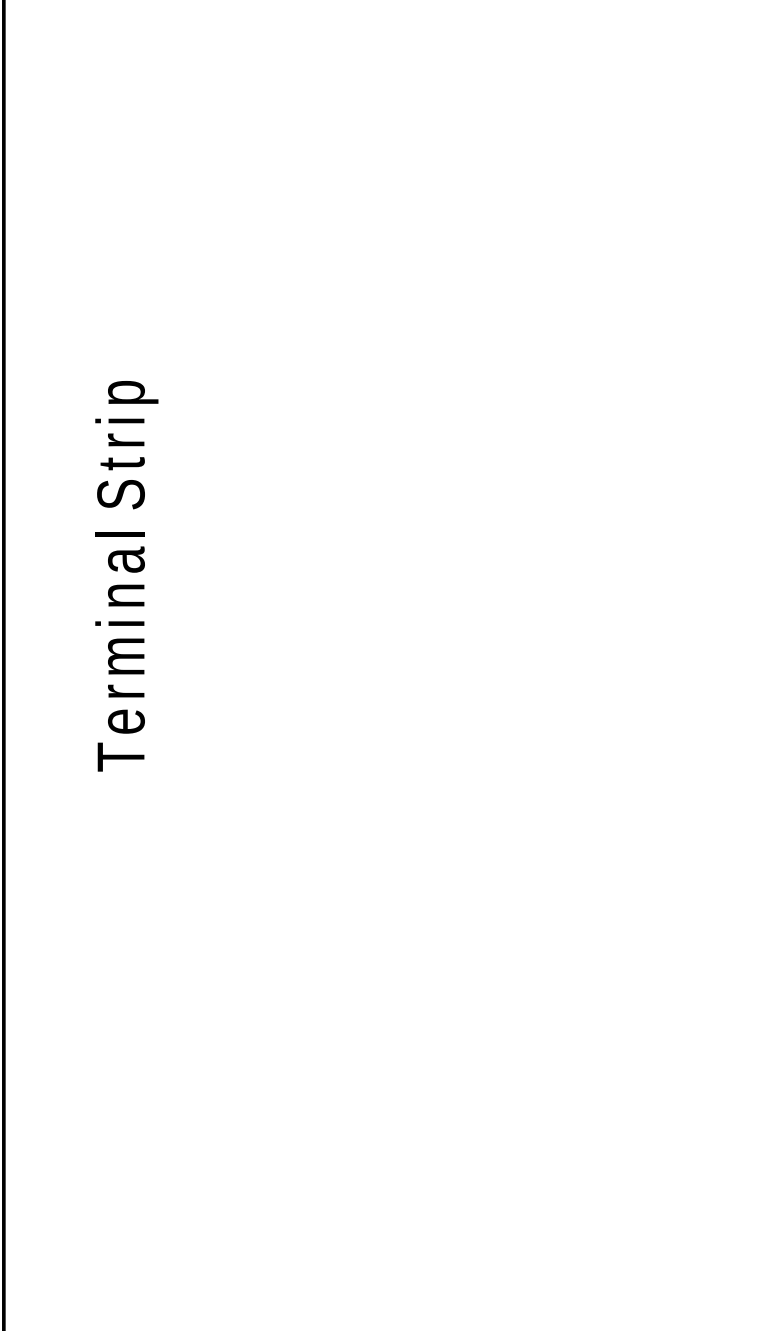
Type: Not delivered
Dimension:
Length: m

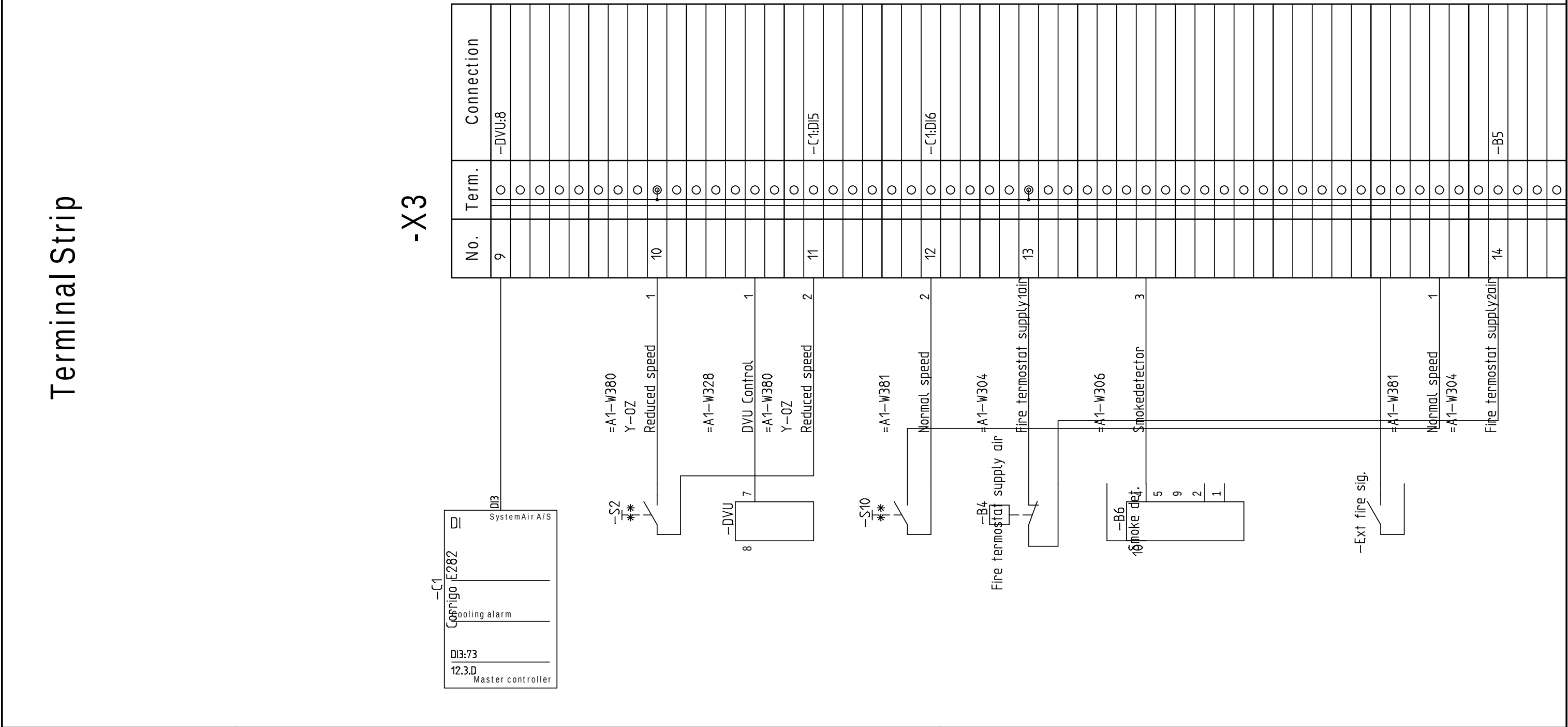


[illegible][illegible]

			Path		11 1.D																11 2.D																11 5.I																11 5.I																11 8.I																11 9.I																11 11.I																11 11.I																11 16.I																																																													
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Light switch		=A1-W700	2																																																																																																																																																																																															



[illegible]

[illegible]

Project:	DV Control system
Date:	08-10-2014

Rev.:

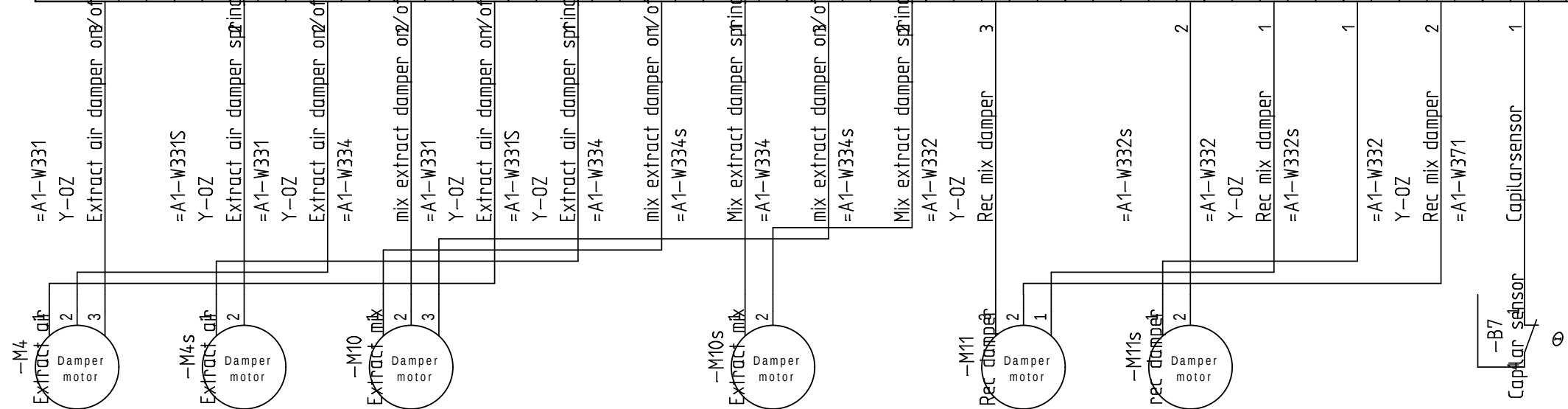
Page:	95
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[illegible]

Terminal Strip

[illegible]

No.	Term.	Connection
33	⊙	
	○	
	○	
	○	
	○	
34	○	-K8:11
	○	
	○	
	⊙	
	○	
35	○	-K8:14
	○	
	○	
	○	
	⊙	
36	○	
	○	
	○	
	○	
	○	
37	○	
	○	
	○	
	○	
	○	
38	○	-K9:11
	○	
	○	
	○	
	⊙	
39	○	-K5:A2
	○	
	○	
	⊙	
	○	
	○	-K9:14
	○	-K9:14
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	○	



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		Sheet																																																
Note	Cable type	Cable name	----- Cable -----																																															

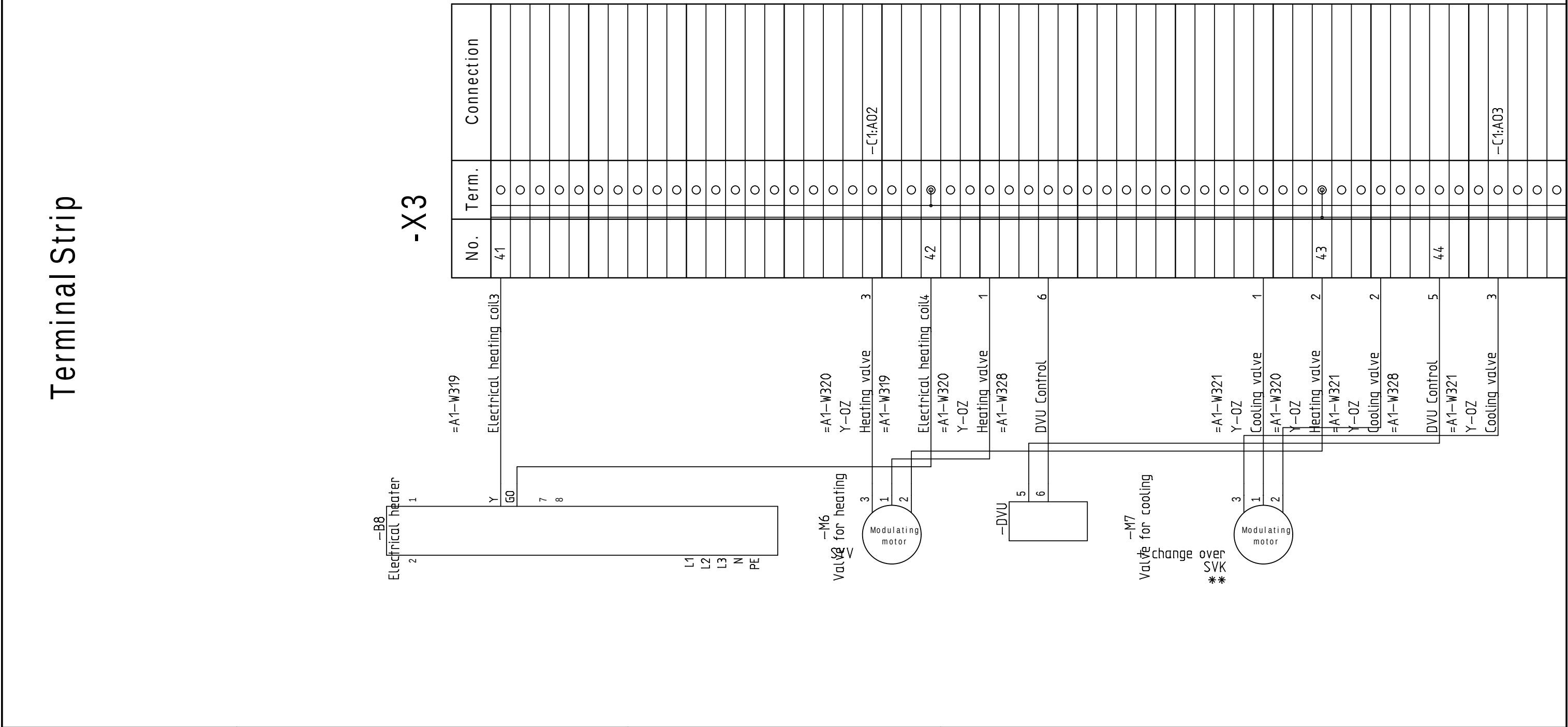
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=A1-W371.1

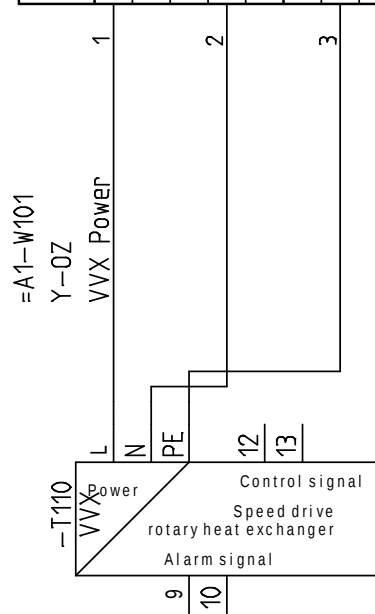
Capilarsensor bulb 2

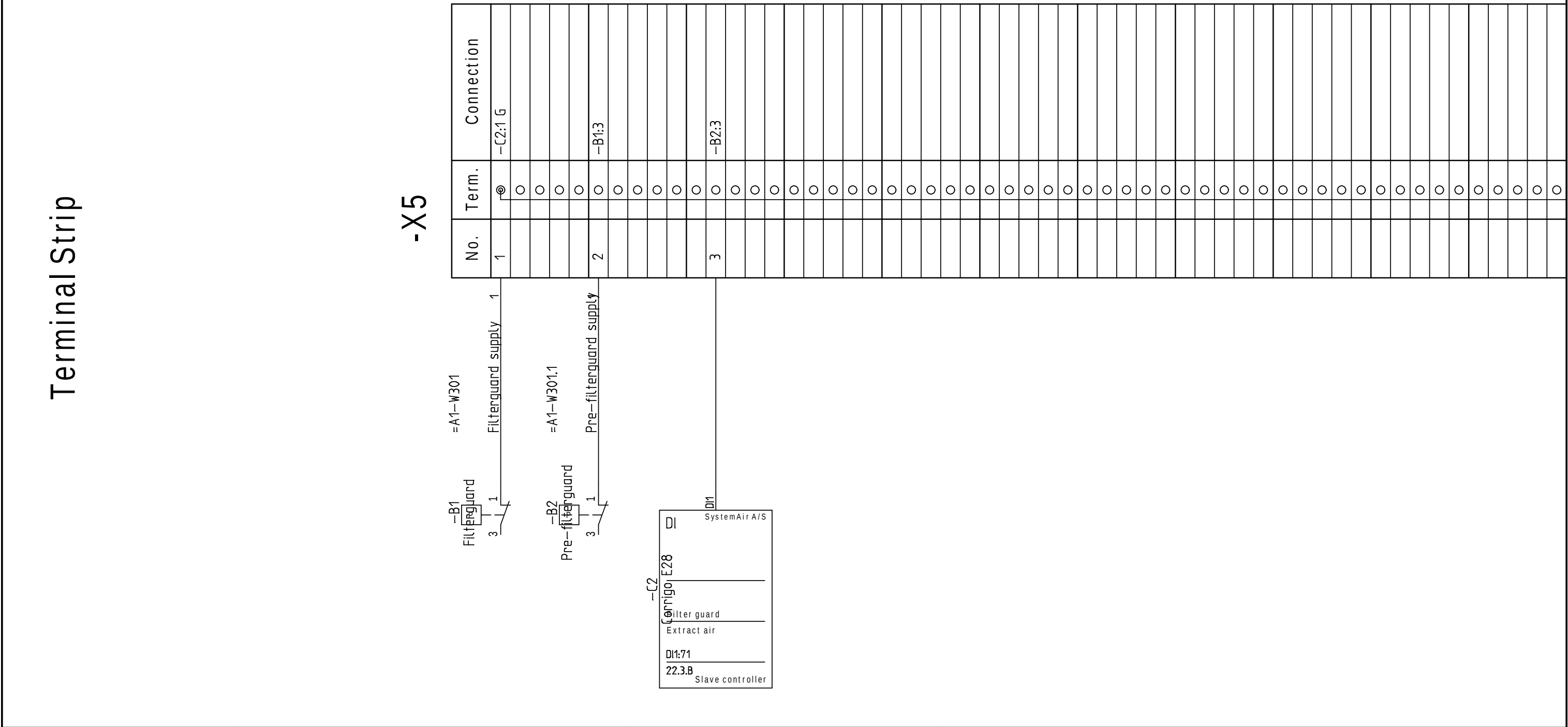
Capilarsensor bulb 2

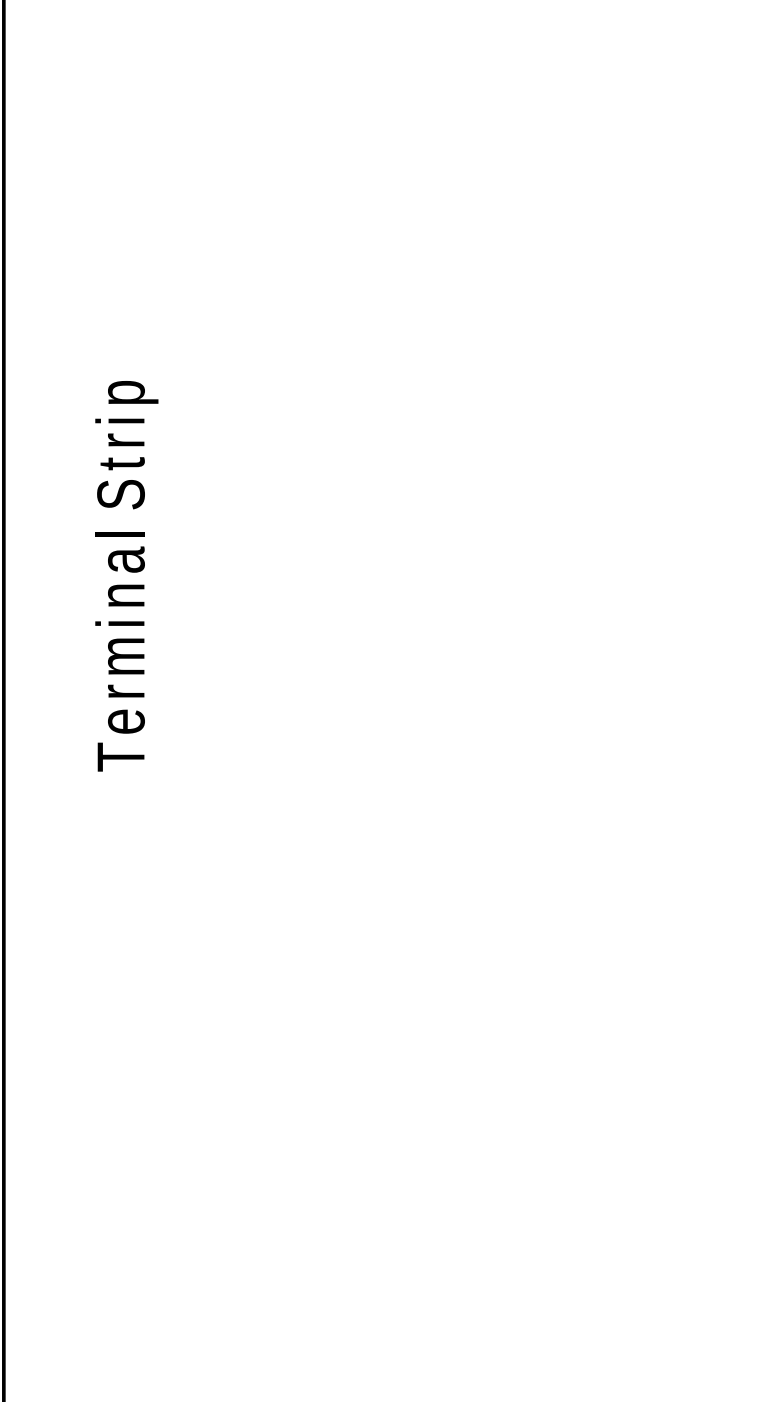
Capilar Bulb
-B8

[illegible]

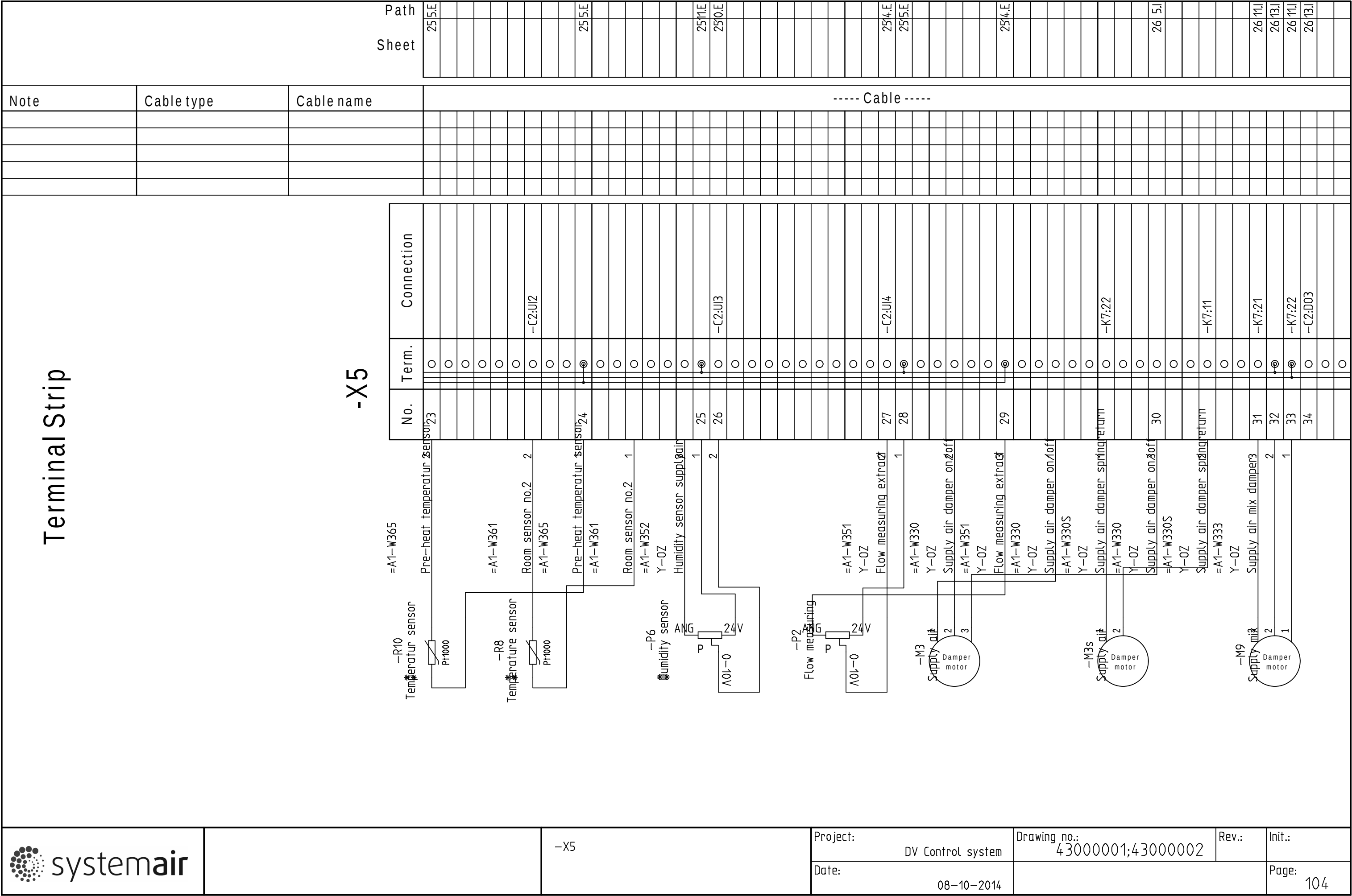
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[illegible]

[illegible]

[illegible]

[illegible]

			Path		4.1												5.1												11.1		13.1		14.1											
			Sheet		27												27												27		27		27											
Note	Cable type	Cable name	----- Cable -----																																									

