Wiring diagram

Page	Chapter title
2	System layout
5	Technical data table
10-11	Power
30-33	Communication internal components
40	Digital inputs
50	Digital outputs
60	Analog inputs
70	Analog outputs
80	Universal inputs
90-94	External connections
100-101	Component table

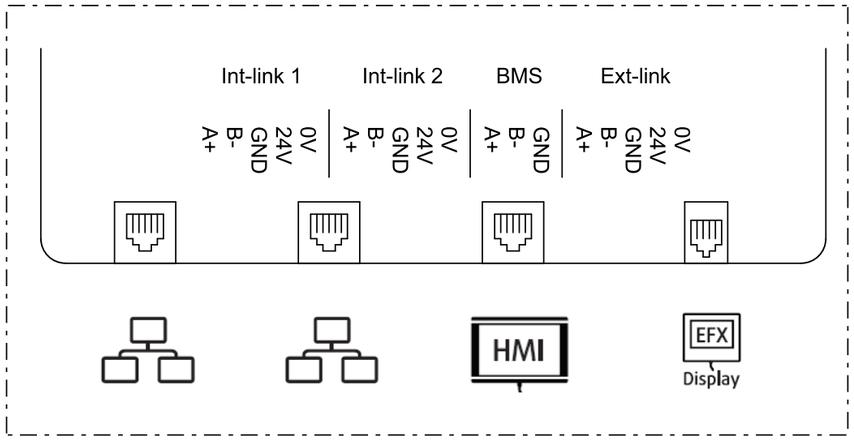
Project:
Client:
Adress:
Date:

AHU Type: Topvex
Model:SC/TC 20-50

systemair

Project: WD000201			Rev: A002	Sheets: 1
Date: 2024-02-08	Revision date: 2024-05-10	Initials: HaJa	Total sheets: 23	Next sheet: 2

Modbus RTU RS485
Baud rate: 9600
Data bits: 8
Parity: None
Stop bits: 1



NaviPad

Access control cabinet

CU27-C2 WIFI

X2

Modbus Int-link 1

Modbus Int-link 2

PDT3
Modbus Address:8

PDT1
Modbus Address:5

Models with section defrosting

DM50-C
Modbus Address: 53

PDT2
Modbus Address: 6

Models with electrical heater

PDT4
Modbus Address: 9

F3

Power supply

Power

Electrical connection box

F1 F2 T24

X1

Power supply

Power

Power

SF
Modbus Address: 1

EF
Modbus Address: 2

systemair		System layout	Project: WD000201		Rev: A002	Sheet: 2
			Date: 2024-02-08	Revision date: 2024-05-10 Initials: HaJa	Total sheets: 23	Next sheet: 5

0	1	2	3	4	5	6	7	8	9
Air Handling Unit									
Model*	Power supply	Prefuse AHU(A)	Fan fuse (A)	Heater fuse(A)	Total power heater (kW)	Current consumtion fans (A/Unit)	Current consumtion heater (A)	Rated power fans (kW/Unit)	Supply air fan K-factor (m^3/h)	Extract air fan K-factor (m^3/h)
SC20 HWL, HWH, N	1~230 V +PE, 50Hz	1x16	1xC10			4		1~/0,78	67	67
SC20 EL4,2	3~400 V+N +PE, 50Hz	3x16	1xC10	B32	4,2	4	6,1	1~/0,78	67	67
SC20 EL6,5	3~400 V+N +PE, 50Hz	3x20	1xC10	B32	6,5	4	9,4	1~/0,78	67	67
SC20 EL9,6	3~400 V+N +PE, 50Hz	3x25	1xC10	B32	9,6	4	13,9	1~/0,78	67	67
SC25 HWL, HWH, N	1~230 V+PE, 50Hz	1x16	1xC10			4		1~/0,78	65	66
SC25 EL6,5	3~400 V+N +PE, 50Hz	3x20	1xC10	B32	6,5	4	9,4	1~/0,78	65	66
SC25 EL9,6	3~400 V+N +PE, 50Hz	3x25	1xC10	B32	9,6	4	13,9	1~/0,78	65	66
SC25 EL12	3~400 V+N +PE, 50Hz	3x32	1xC10	B32	12	4	17,0	1~/0,78	65	66
SC30 HWL, HWH, N	1~230 V+PE, 50Hz	1x16	1xC10			4		1~/0,78	65	66
SC30 EL7,2	3~400 V+N +PE, 50Hz	3x25	1xC10	B32	7,2	4	10,4	1~/0,78	65	66
SC30 EL12	3~400 V+N +PE, 50Hz	3x32	1xC10	B32	12	4	18,2	1~/0,78	65	66
SC30 EL18	3~400 V+N +PE, 50Hz	3x40	1xC10	B32	18	4	26,0	1~/0,78	65	66
SC35 HWL, HWH, N	1~230 V+PE, 50Hz	1x20	1xC16			6,6		1~/0,78	111	117
SC35 EL7,2	3~400 V+N +PE, 50Hz	3x32	1xC16	B32	7,2	6,6	10,4	1~/0,78	111	117
SC35 EL12	3~400 V+N +PE, 50Hz	3x40	1xC16	B32	12	6,6	18,2	1~/0,78	111	117
SC35 EL18	3~400 V+N +PE, 50Hz	3x50	1xC16	B32	18	6,6	26,0	1~/0,78	111	117
SC50 HWL, HWH, N	1~230 V+PE, 50Hz	*1x20*	1xC16			5,9		1~/1,35	*142*	*139*
SC50 EL9,6	3~400 V+N +PE, 50Hz	*3x32*	1xC16	B32	9,6	5,9	13,9	1~/1,35	*142*	*139*
SC50 EL17	3~400 V+N +PE, 50Hz	*3x50*	1xC16	B32	17	5,9	24,5	1~/1,35	*142*	*139*
SC50 EL25,5	3~400 V+N +PE, 50Hz	*3x63*	1xC16	B32	25,5	5,9	36,8	1~/1,35	*142*	*139*
TC20 HWL, HWH, N	1~230 V +PE, 50Hz	1x16	1xC10			4		1~/0,78	67	67
TC20 EL4,2	3~400 V+N +PE, 50Hz	3x16	1xC10	B32	4,2	4	6,1	1~/0,78	67	67
TC20 EL6,5	3~400 V+N +PE, 50Hz	3x20	1xC10	B32	6,5	4	9,4	1~/0,78	67	67
TC20 EL9,6	3~400 V+N +PE, 50Hz	3x25	1xC10	B32	9,6	4	13,9	1~/0,78	67	67
TC25 HWL, HWH, N	1~230 V+PE, 50Hz	1x16	1xC10			4		1~/0,78	67	67
TC25 EL6,5	3~400 V+N +PE, 50Hz	3x20	1xC10	B32	6,5	4	9,4	1~/0,78	67	67
TC25 EL9,6	3~400 V+N +PE, 50Hz	3x25	1xC10	B32	9,6	4	13,9	1~/0,78	67	67
TC25 EL12	3~400 V+N +PE, 50Hz	3x32	1xC10	B32	12	4	17,0	1~/0,78	67	67
TC30 HWL, HWH, N	1~230 V+PE, 50Hz	1x16	1xC10			6,6		1~/0,78	67	67
TC30 EL7,2	3~400 V+N +PE, 50Hz	3x25	1xC10	B32	7,2	6,6	10,4	1~/0,78	67	67
TC30 EL12	3~400 V+N +PE, 50Hz	3x32	1xC10	B32	12	6,6	18,2	1~/0,78	67	67
TC30 EL18	3~400 V+N +PE, 50Hz	3x40	1xC10	B32	18	6,6	26,0	1~/0,78	67	67
TC35 HWL, HWH, N	1~230 V+PE, 50Hz	1x20	1xC16			6,6		1~/0,78	113	105
TC35 EL7,2	3~400 V+N +PE, 50Hz	3x32	1xC16	B32	7,2	6,6	10,4	1~/0,78	113	105
TC35 EL12	3~400 V+N +PE, 50Hz	3x40	1xC16	B32	12	6,6	18,2	1~/0,78	113	105
TC35 EL18	3~400 V+N +PE, 50Hz	3x50	1xC16	B32	18	6,6	26,0	1~/0,78	113	105

Model type: S-SC20-L-N-ePM1/60-CE-"X"-"Y"-"Z"-ePM10/60-AC
X = Exhanger damper type; B = Bypass, S = Section defrosting, S=Supply unit, R = Rotary exchanger
Y = Fan wheel type; C1 = Compsite, M0 = Metal wheel
Z = Heater type; HWL = Water coil low power, HWH = Water coil high power

Description
AHU Total consumption = without circulation pump consumption
AHU code description
Q=K factor x √Pressure

Air Handling Unit										
Model*	Power supply	Prefuse AHU(A)	Fan fuse (A)	Heater fuse(A)	Total power heater (kW)	Current consumtion fans (A/Unit)	Current consumtion heater (A)	Rated power fans (kW/Unit)	Supply air fan K-factor (m^3/h)	Extract air fan K-factor (m^3/h)
TC50 HWL, HWH, N	1~230 V+PE, 50Hz	1x20	1xC16			5,9		1~/1,35	141	144
TC50 EL9,6	3~400 V+N +PE, 50Hz	3x32	1xC16	B32	9,6	5,9	13,9	1~/1,35	141	144
TC50 EL17	3~400 V+N +PE, 50Hz	3x50	1xC16	B32	17	5,9	24,5	1~/1,35	141	144
TC50 EL25,5	3~400 V+N +PE, 50Hz	3x63	1xC16	B32	25,5	5,9	36,8	1~/1,35	141	144
SC20 HWL, HWH, N M0	1~230 V +PE, 50Hz	1x16	3xC16			3,6		1~/0,8	60	60
SC20 EL4,2 M0	3~400 V+N +PE, 50Hz	3x16	3xC16	B32	4,2	3,6	6,1	1~/0,8	60	60
SC20 EL6,5 M0	3~400 V+N +PE, 50Hz	3x20	3xC16	B32	6,5	3,6	9,4	1~/0,8	60	60
SC20 EL9,6 M0	3~400 V+N +PE, 50Hz	3x25	3xC16	B32	9,6	3,6	13,9	1~/0,8	60	60
SC25 HWL, HWH, N M0	1~230 V+PE, 50Hz	1x16	3xC16			3,6		1~/0,8	60	60
SC25 EL6,5 M0	3~400 V+N +PE, 50Hz	3x20	3xC16	B32	6,5	3,6	9,4	1~/0,8	60	60
SC25 EL9,6 M0	3~400 V+N +PE, 50Hz	3x25	3xC16	B32	9,6	3,6	13,9	1~/0,8	60	60
SC25 EL12 M0	3~400 V+N +PE, 50Hz	3x32	3xC16	B32	12	3,6	17,0	1~/0,8	60	60
TC20 HWL, HWH, N M0	1~230 V +PE, 50Hz	1x16	3xC16			3,6		1~/0,8	60	60
TC20 EL4,2 M0	3~400 V+N +PE, 50Hz	3x16	3xC16	B32	4,2	3,6	6,1	1~/0,8	60	60
TC20 EL6,5 M0	3~400 V+N +PE, 50Hz	3x20	3xC16	B32	6,5	3,6	9,4	1~/0,8	60	60
TC20 EL9,6 M0	3~400 V+N +PE, 50Hz	3x25	3xC16	B32	9,6	3,6	13,9	1~/0,8	60	60
TC25 HWL, HWH, N M0	1~230 V+PE, 50Hz	1x16	3xC16			3,6		1~/0,8	60	60
TC25 EL6,5 M0	3~400 V+N +PE, 50Hz	3x20	3xC16	B32	6,5	3,6	9,4	1~/0,8	60	60
TC25 EL9,6 M0	3~400 V+N +PE, 50Hz	3x25	3xC16	B32	9,6	3,6	13,9	1~/0,8	60	60
TC25 EL12 M0	3~400 V+N +PE, 50Hz	3x32	3xC16	B32	12	3,6	17,0	1~/0,8	60	60

Model type: S-SC20-L-N-ePM1/60-CE-"X"-"Y"-"Z"-ePM10/60-AC
X = Exhanger damper type; B = Bypass, S = Section defrosting, S=Supply unit, R = Rotary exchanger
Y = Fan wheel type; C1 = Compsite, M0 = Metal wheel
Z = Heater type; HWL = Water coil low power, HWH = Water coil high power

Description
AHU Total consumption = without circulation pump consumption
AHU code description
Q=K factor x √Pressure

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Technical data table M0

Project:		Rev:	Sheet:
WD000201		A002	6
Date: 2024-02-08	Revision date: 2024-05-10	Initials: HaJa	Total sheets: 23	Next sheet: 7

Air Handling Unit

Common data	
Name	Data
AC/DC converter T24 (W)	75
Max cable area connector 51-66	0,25-2,5
Control fuse (A)	C10
Max cable area connector 1-43, 071-84	0,2-1,5
BMS intlink	0,2-1,5
Cable area terminal X1 (mm²)	0,5-16
Cable area terminal X2 (mm²)	0,25...4
Cable area connection F3 (mm²)	1,5...25

Color code	
Black	BK
Brown	BN
Red	RD
Orange	OG
Yellow	YE
Green	GN
Blue	BU
Violet	VT
Grey	GY
White	WH
Pink	PK
Green/Yellow	GnYe

Model type: S-SC20-L-N-ePM1/60-CE-"X"-"Y"-"Z"-ePM10/60-AC
X = Exhanger damper type; B = Bypass, S = Section defrosting, S=Supply unit, R = Rotary exchanger
Y = Fan wheel type; C1 = Compsite, M0 = Metal wheel
Z = Heater type; HWL = Water coil low power, HWH = Water coil high power

Description
AHU Total consumption = without circulation pump consumption
AHU code description
Q=K factor x √Pressure

*Prefuse calculated with circulation pump of max 4A on HW units

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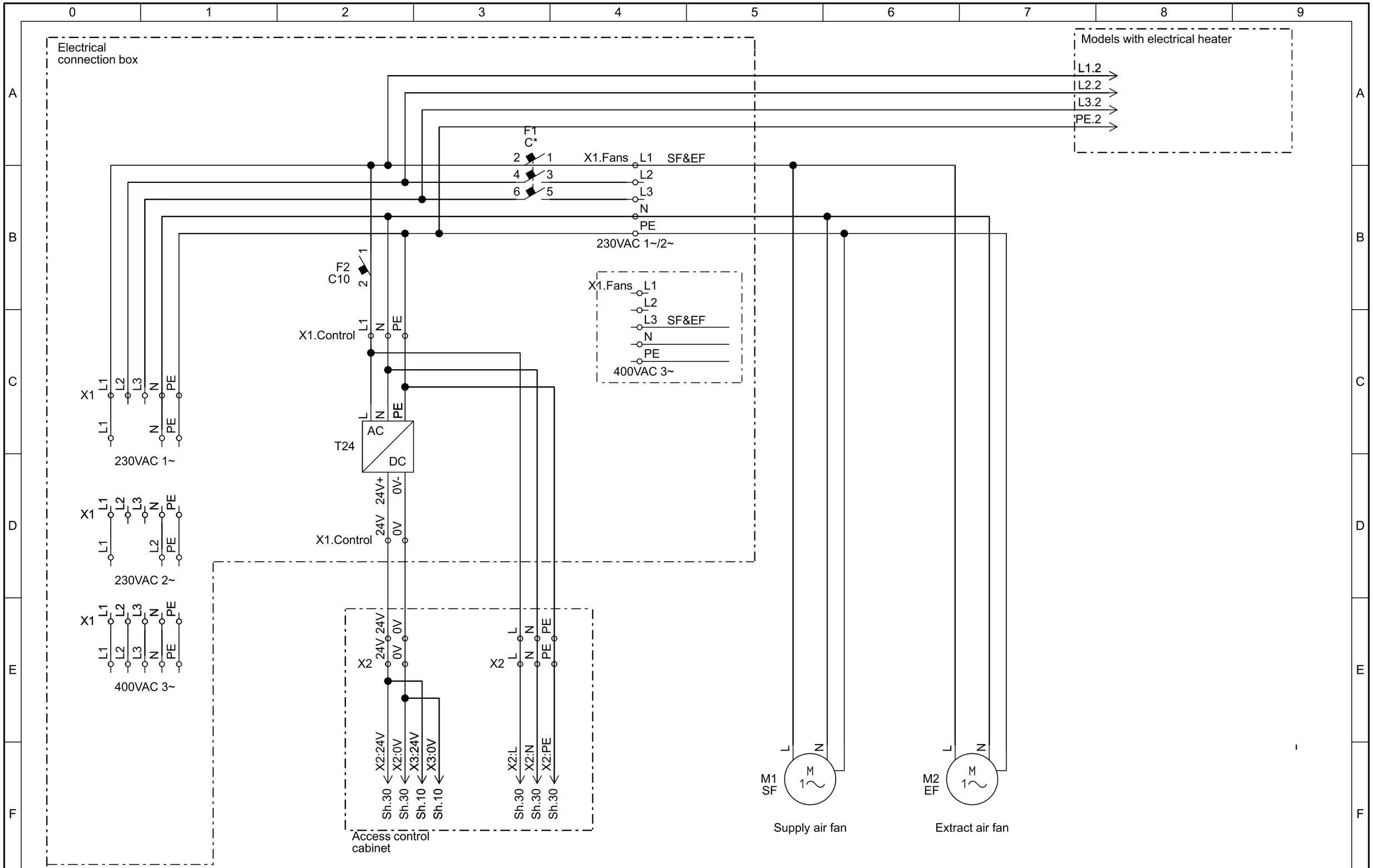
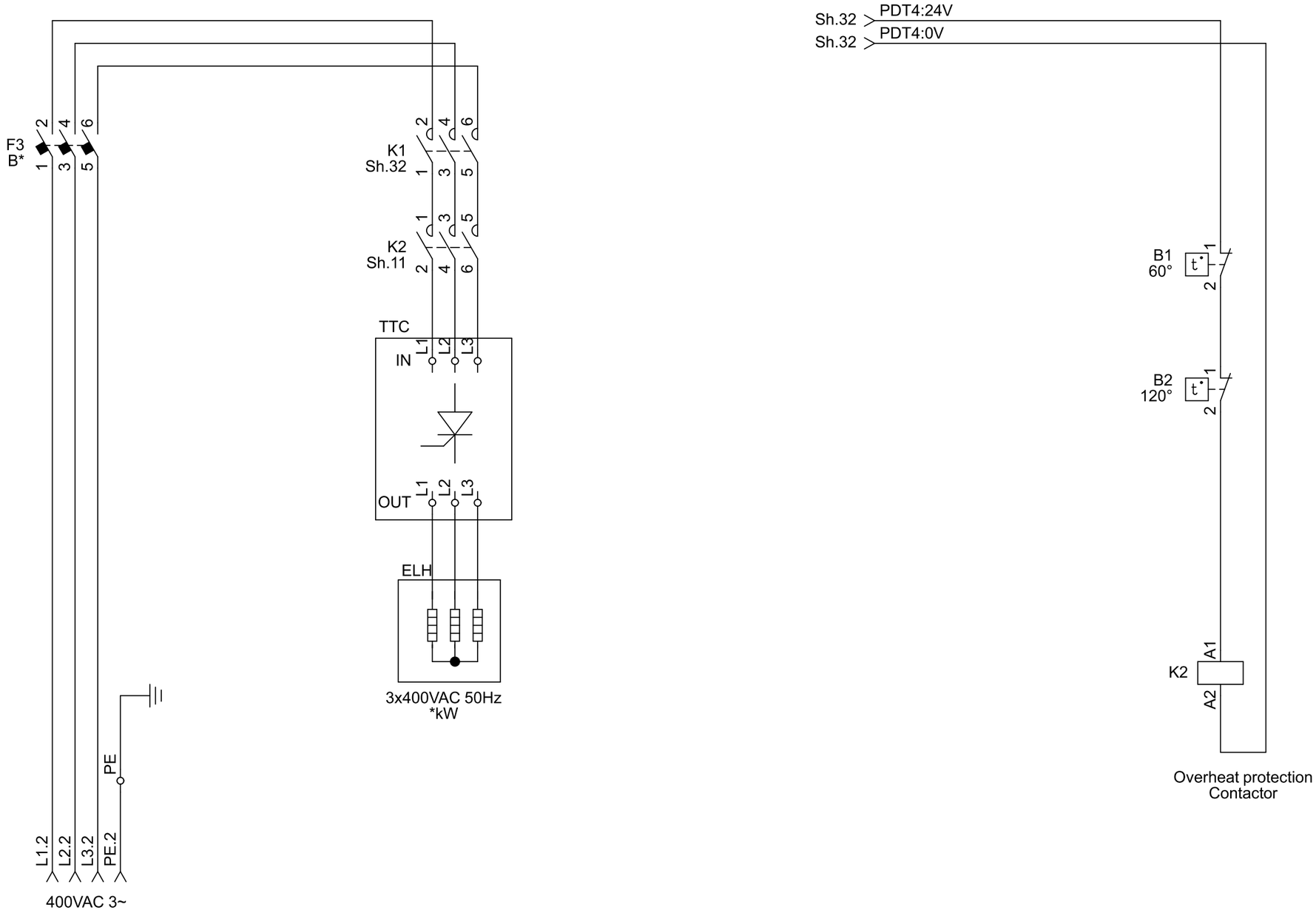
Common data

Project:			Rev:	Sheet:
WD000201			A002	7
Date: 2024-02-08	Revision date: 2024-05-10	Initials: HaJa	Total sheets: 23	Next sheet: 10

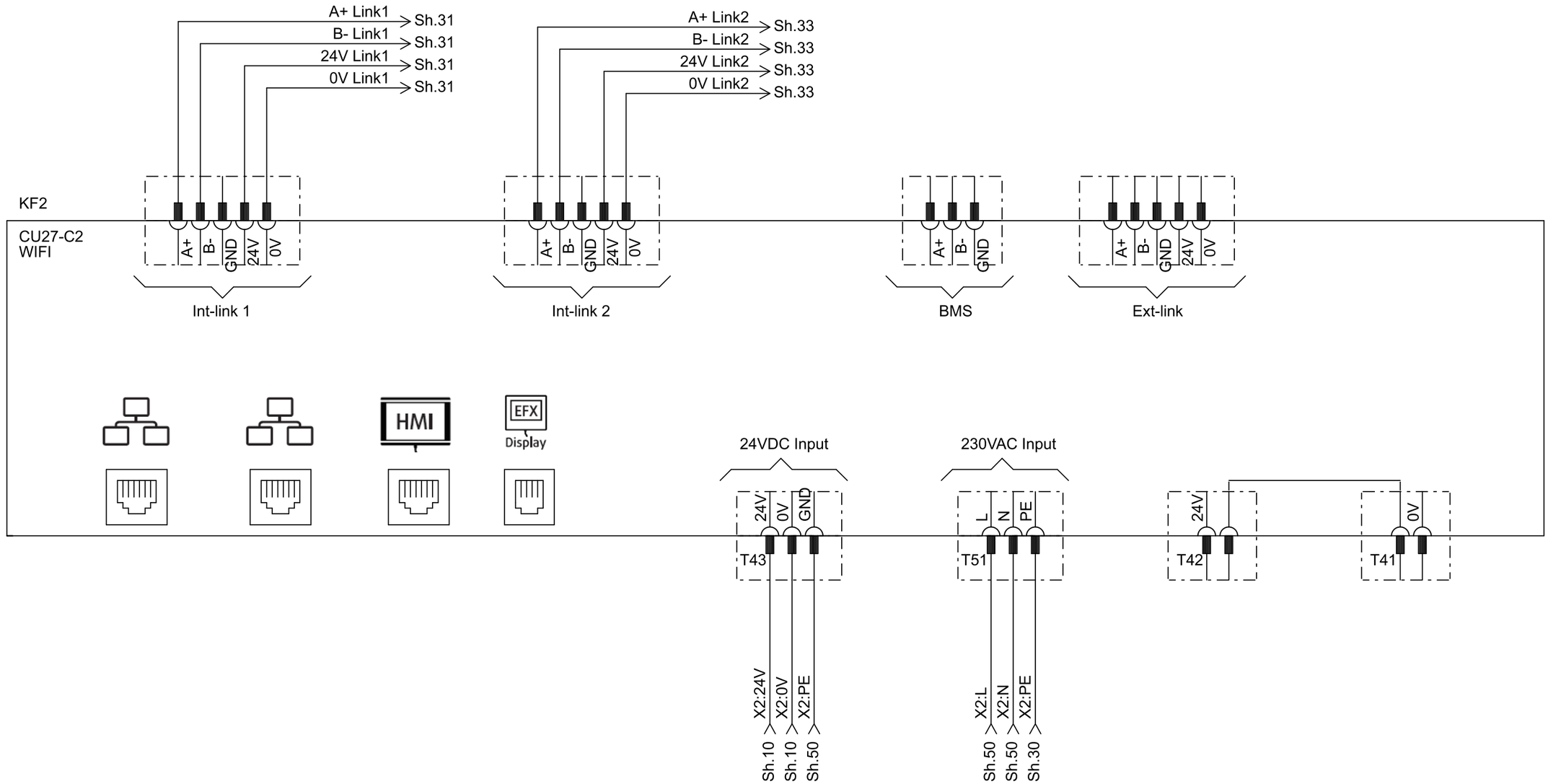


systemair		Power	Project: WD000201		Rev: A002	Sheet: 10
			Date: 2024-02-08	Revision date: 2024-05-10 / Initials: HaJa	Total sheets: 23	Next sheet: 11

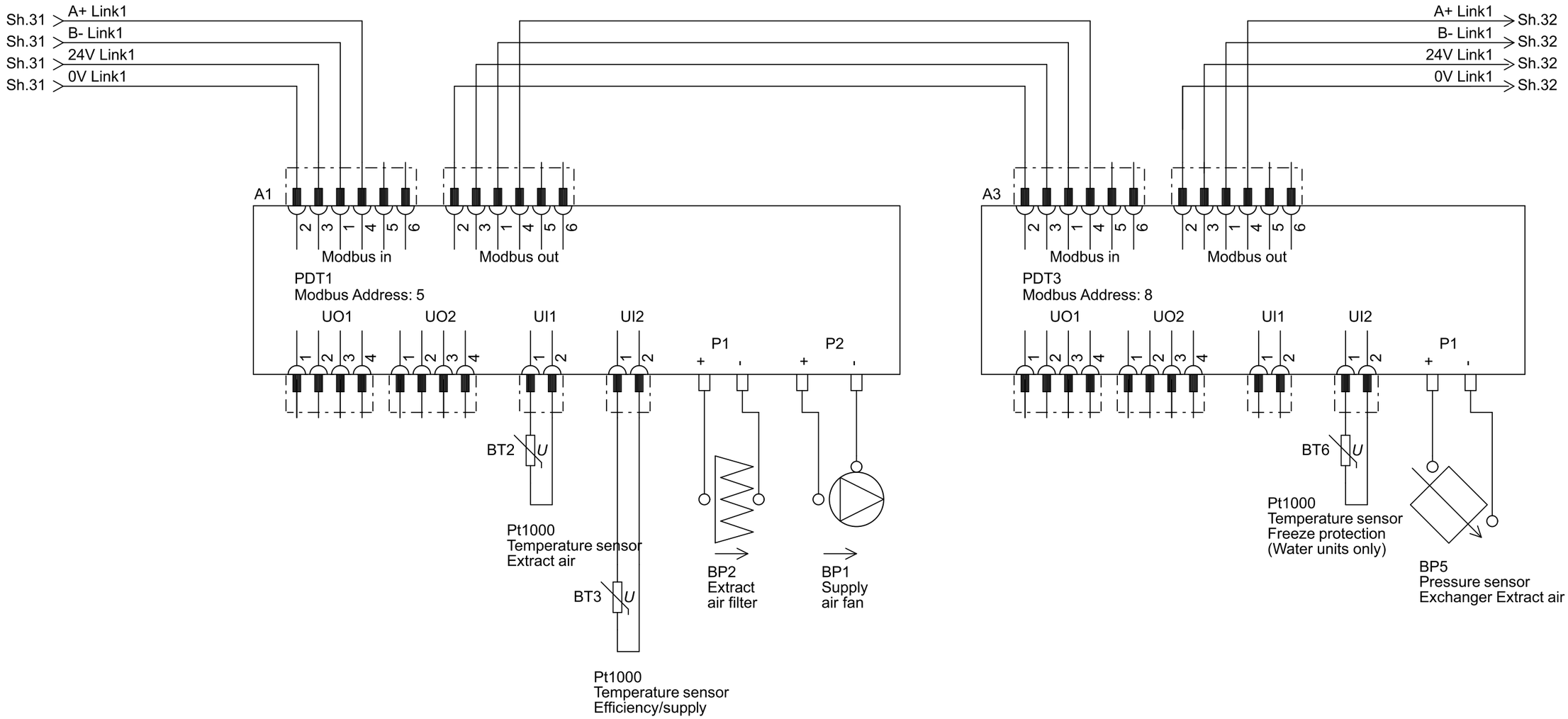
Models with electrical heater



systemair		Power	Project: WD000201			Rev: A002	Sheet: 11
			Date: 2024-02-08	Revision date: 2024-05-10	Initials: HaJa	Total sheets: 23	Next sheet: 30



systemair		Communication	Project: WD000201			Rev: A002	Sheet: 30
			Date: 2024-02-08	Revision date: 2024-05-10	Initials: HaJa	Total sheets: 23	Next sheet: 31



systemair		Communication	Project: WD000201		Rev: A002	Sheet: 31
			Date: 2024-02-08	Revision date: 2024-05-10 Initials: HaJa	Total sheets: 23	Next sheet: 32

Models with electrical heater

Sh.31 A+ Link1
Sh.31 B- Link1
Sh.31 24V Link1
Sh.31 0V Link1

PDT4:24V > Sh.11
PDT4:0V > Sh.11

A4
Modbus in
Modbus out
PDT4
Modbus address: 9

UO1
UO2
UI1
UI2

M1
SF
69
68
Modbus Address:1
Supply air fan

BF1
AFS

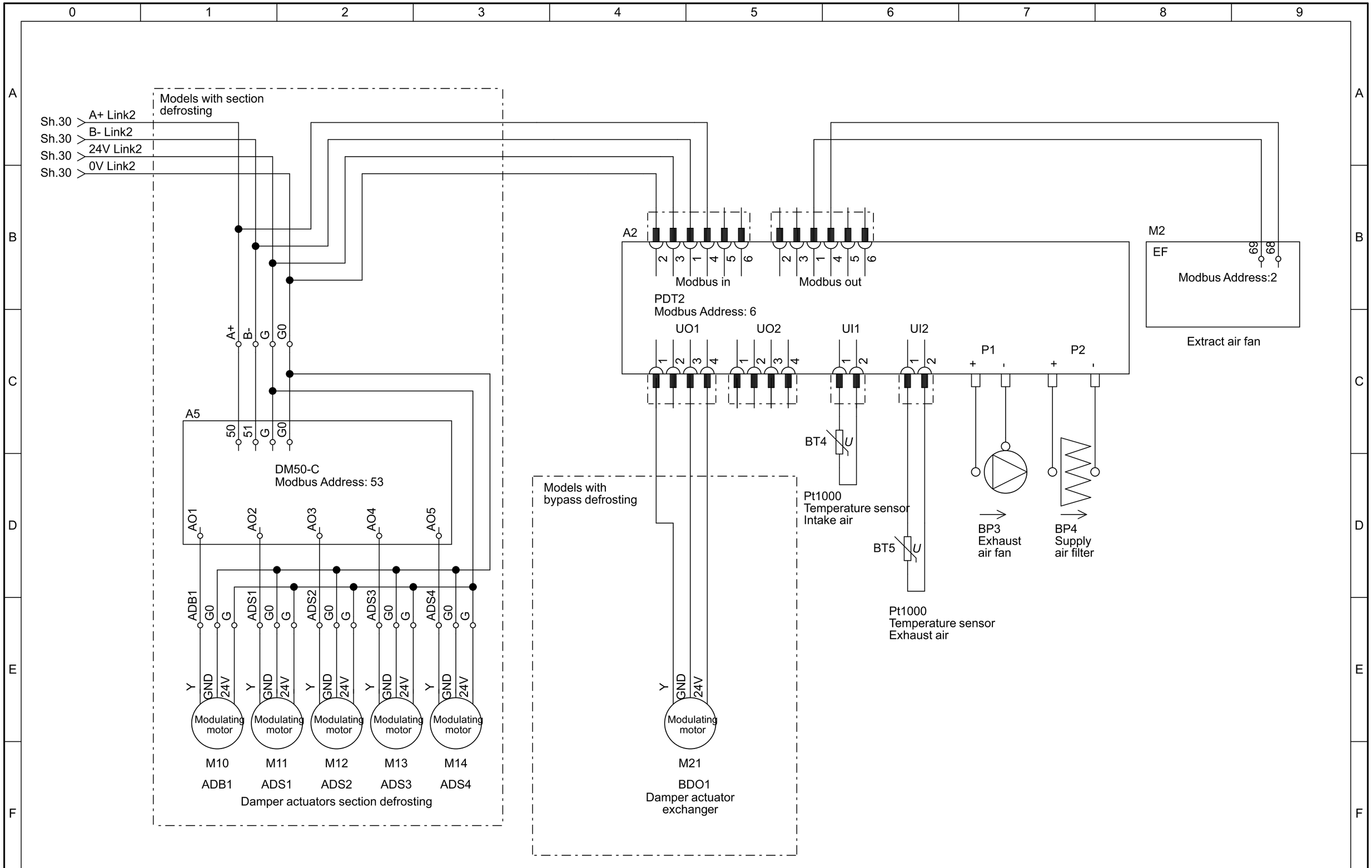
K1
A1
A2
Start heater
Contactor

TTC
2
1
TTC 0-10V
Heater control
signal

K1
Sh.32
21
22
Run indication
Heater

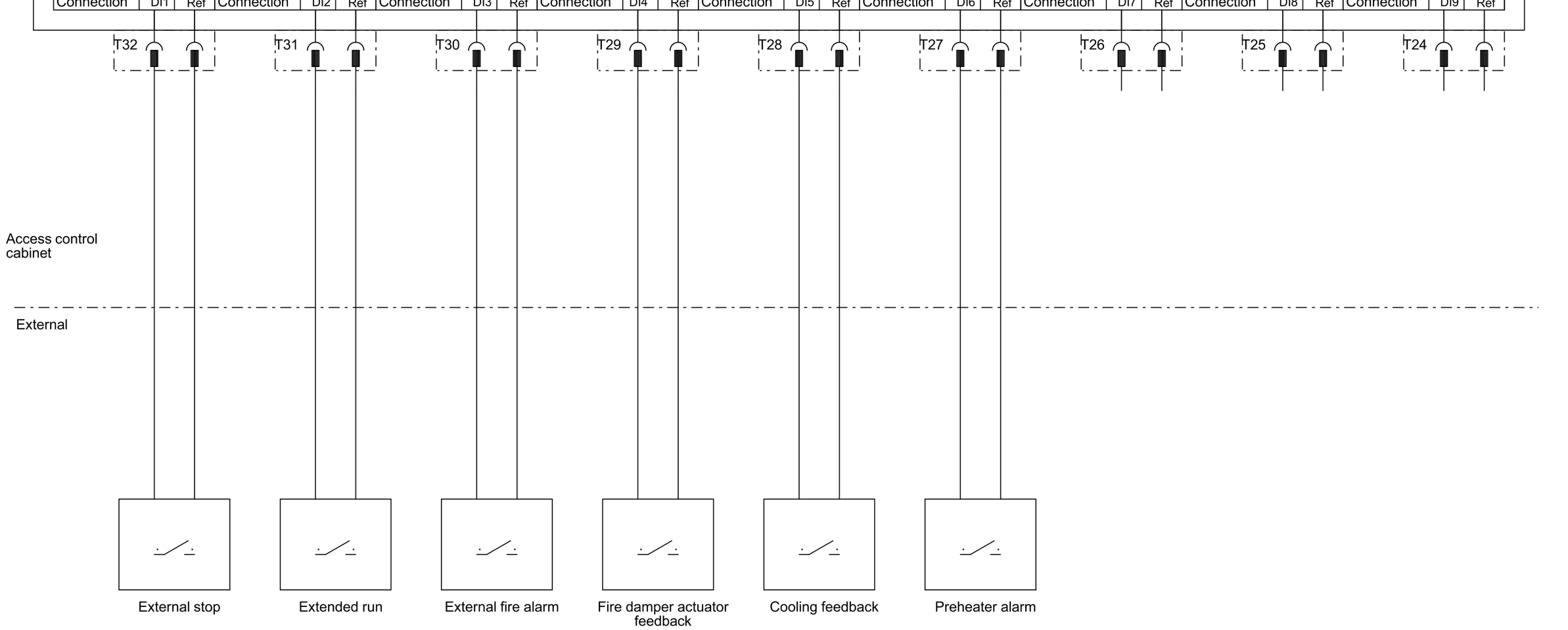
K2
Sh.11
21
22
Overheat protection
Contactor

systemair		Communication	Project: WD000201		Rev: A002	Sheet: 32
			Date: 2024-02-08	Revision date: 2024-05-10 Initials: HaJa	Total sheets: 23	Next sheet: 33



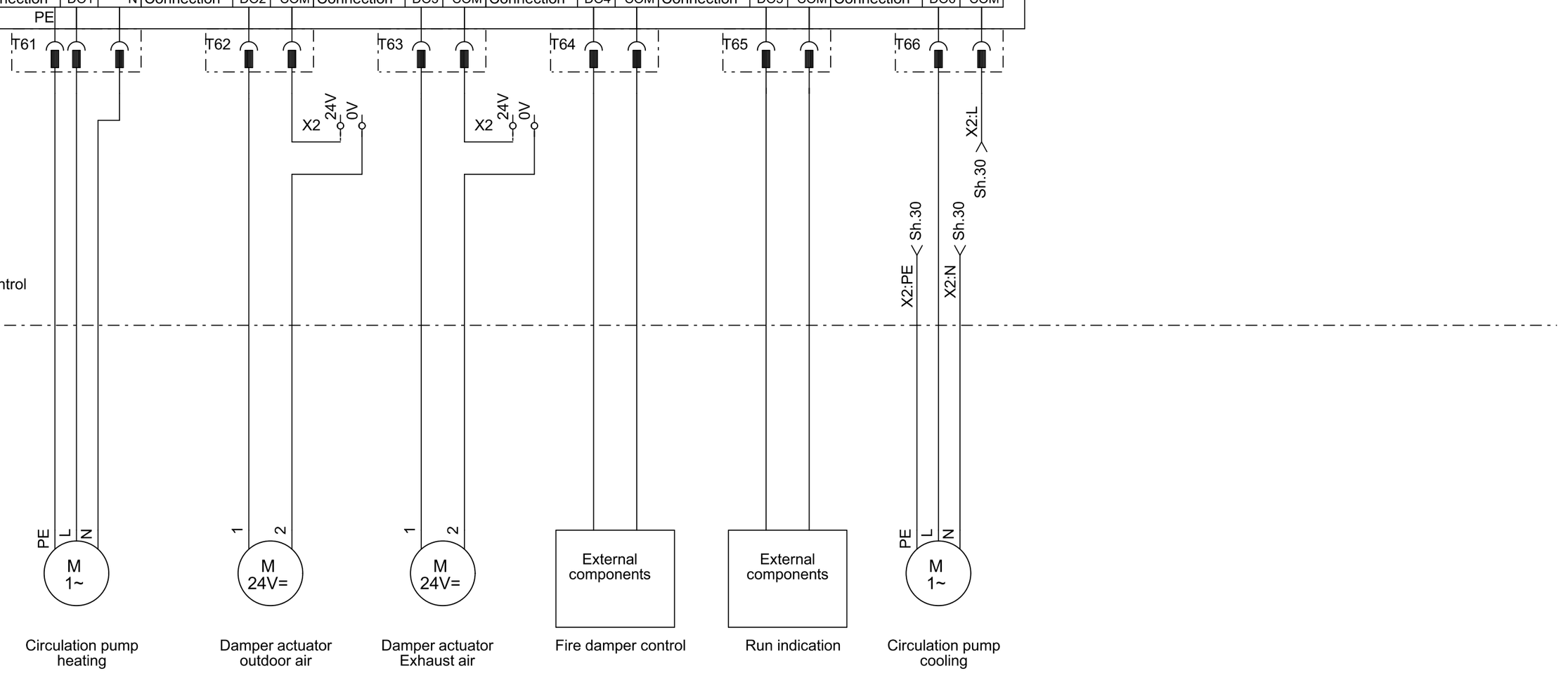
systemair		Communication	Project: WD000201			Rev: A002	Sheet: 33
			Date: 2024-02-08	Revision date: 2024-05-10	Initials: HaJa	Total sheets: 23	Next sheet: 40

DI1		DI2		DI3		DI4		DI5		DI6		DI7		DI8		DI9	
Unit	CU27-C	Module	CU27-C	Module	CU27-C	Module	CU27-C	Module	CU27-C	Module	CU27-C	Module	CU27-C	Module	CU27-C	Module	CU27-C
Ref.		Ref.		Ref.		Ref.		Ref.		Ref.		Ref.		Ref.		Ref.	
Address		Address		Address		Address		Address		Address		Address		Address		Address	
ConnText		ConnText		ConnText		ConnText		ConnText		ConnText		ConnText		ConnText		ConnText	
Connection	DI1 Ref	Connection	DI2 Ref	Connection	DI3 Ref	Connection	DI4 Ref	Connection	DI5 Ref	Connection	DI6 Ref	Connection	DI7 Ref	Connection	DI8 Ref	Connection	DI9 Ref



systemair		Digital inputs	Project: WD000201		Rev: A002	Sheet: 40
			Date: 2024-02-08	Revision date: 2024-05-10 Initials: HaJa	Total sheets: 23	Next sheet: 50

DO1		DO2		DO3		DO4		DO5		DO6	
Module		Module		Module		Module		Module		Module	
Ref.		Ref.		Ref.		Ref.		Ref.		Ref.	
Address		Address		Address		Address		Address		Address	
ConnText		ConnText		ConnText		ConnText		ConnText		ConnText	
Connection	DO1 N	Connection	DO2 COM	Connection	DO3 COM	Connection	DO4 COM	Connection	DO5 COM	Connection	DO6 COM



Circulation pump heating

Damper actuator outdoor air

Damper actuator Exhaust air

Fire damper control

Run indication

Circulation pump cooling

systemair		Digital outputs	Project: WD000201	Rev: A002	Sheet: 50
			Date: 2024-02-08 / Revision date: 2024-05-10 / Initials: HaJa	Total sheets: 23	Next sheet: 60

SMOKE		AI4		AI5		AI6	
Module	CU27-C	Module	CU27-C	Module	CU27-C	Module	CU27-C
Ref.		Ref.		Ref.		Ref.	
Address		Address		Address		Address	
ConnText		ConnText		ConnText		ConnText	
Connection	0 +	Connection	24V AI4 0V	Connection	24V AI5 0V	Connection	24V AI6 0V

T1 T16 T15 T14

Access control cabinet

External

2k2 Ohm

1 2 5

Smoke detector
Calectro UG-3-0

+24V 0..10V -0V

Duct pressure sensor
Supply air

+24V 0..10V -0V

Duct pressure sensor
Extract air

+24V 0..10V -0V

CO2/Humidity sensor

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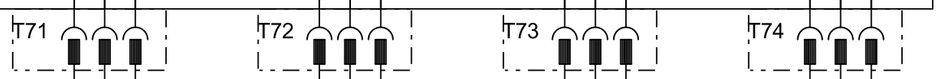
Analog inputs

Project:			Rev:	Sheet:
WD000201			A002	60
Date: 2024-02-08	Revision date: 2024-05-10	Initials: HaJa	Total sheets: 23	Next sheet: 70

AO1		AO2		AO3		AO4	
Module		Module		Module		Module	
Ref.		Ref.		Ref.		Ref.	
Address		Address		Address		Address	
ConnText		ConnText		ConnText		ConnText	
Connection	24V AO1 0V	Connection	24V AO2 0V	Connection	24V AO3 0V	Connection	24V AO4 0V

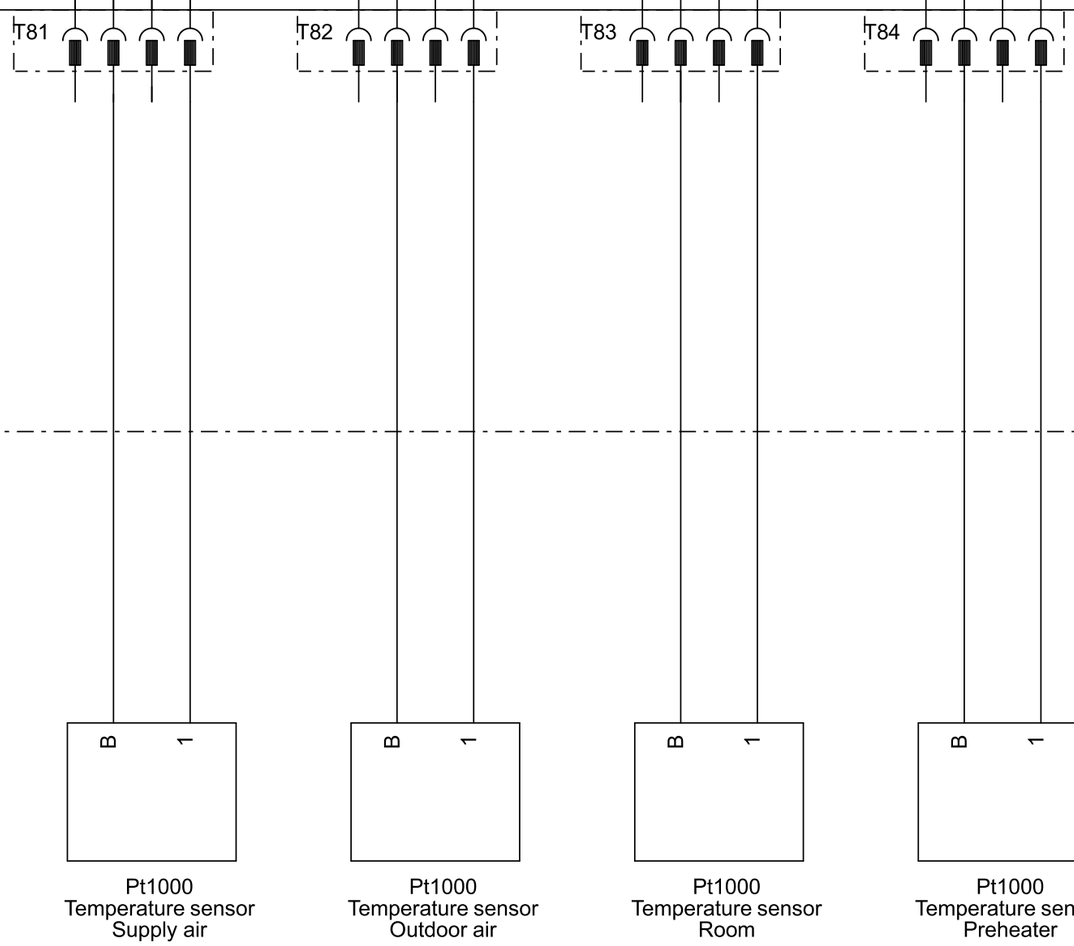


Access control cabinet

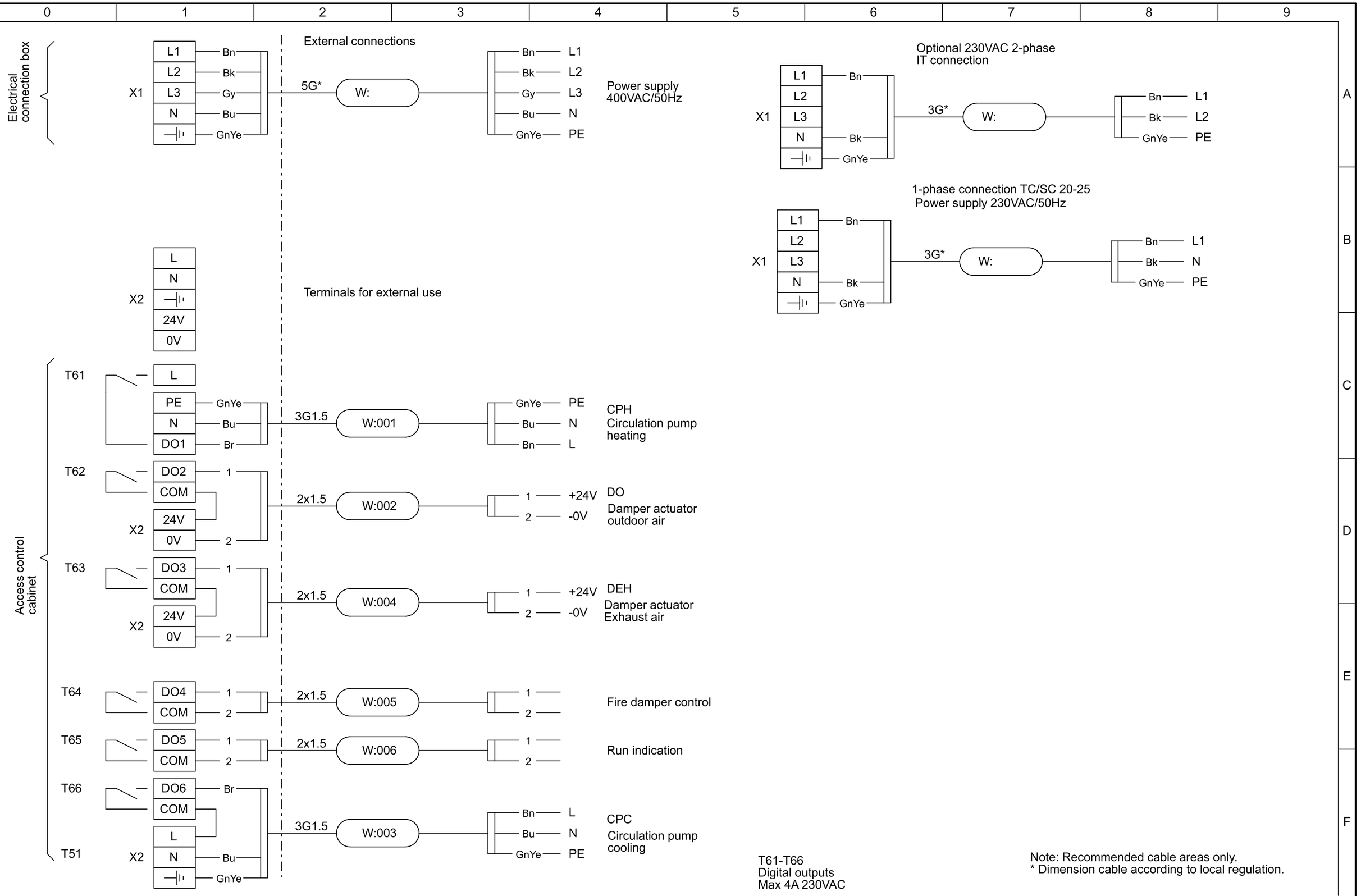
External

systemair		Analog outputs	Project: WD000201	Rev: A002	Sheet: 70
			Date: 2024-02-08	Revision date: 2024-05-10 / Initials: HaJa	Total sheets: 23 / Next sheet: 80

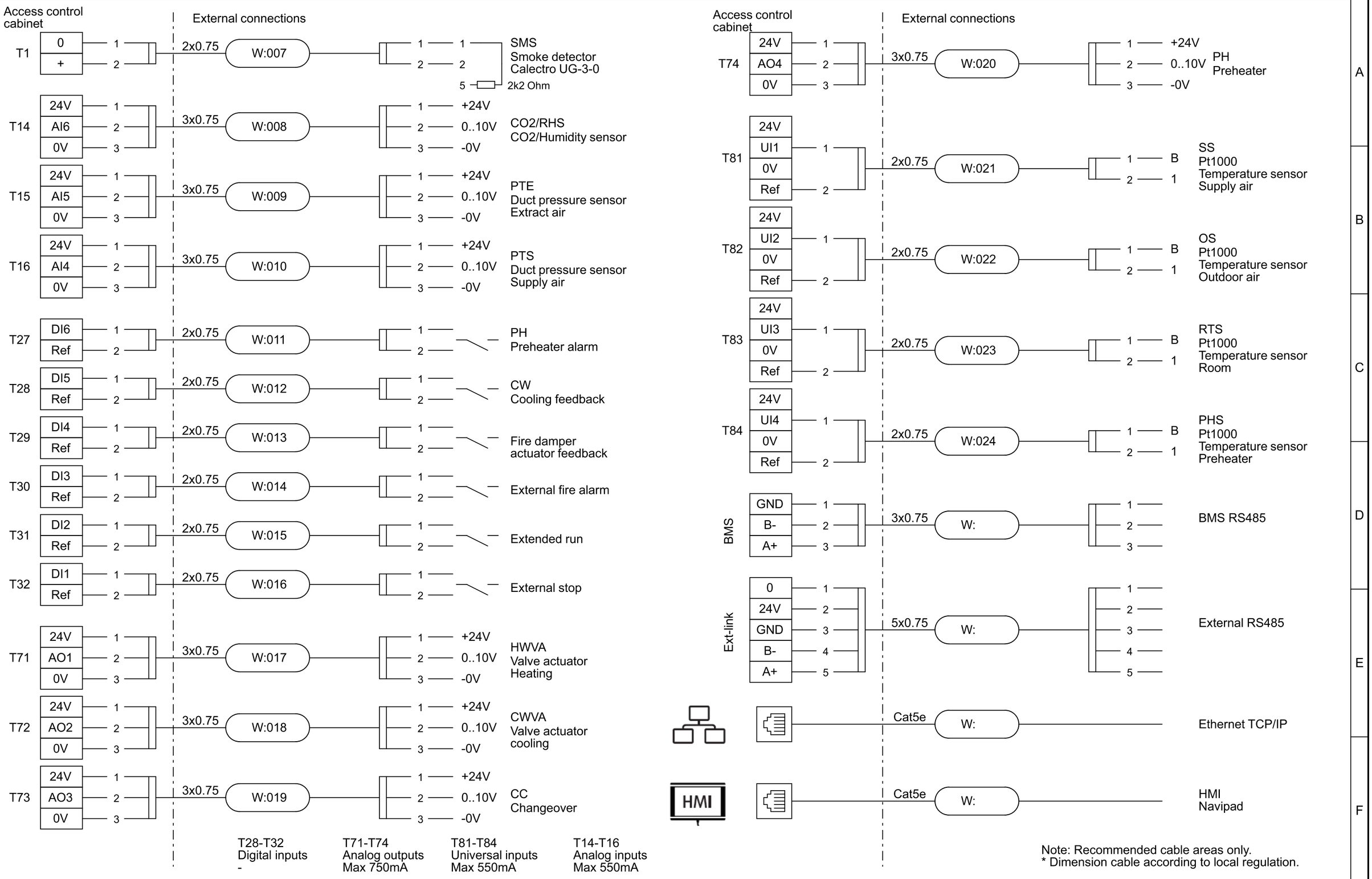
UI1		UI2		UI3		UI4	
Module	CU27-C	Module	CU27-C	Module	CU27-C	Module	CU27-C
Ref.		Ref.		Ref.		Ref.	
Address		Address		Address		Address	
ConnText	0.0	ConnText	0.0	ConnText	0.0	ConnText	0.0
Connection	24V UI1 0V Ref	Connection	24V UI2 0V Ref	Connection	24V UI3 0V Ref	Connection	24V UI4 0V Ref



systemair		Universal inputs	Project: WD000201	Rev: A002	Sheet: 80
			Date: 2024-02-08 / Revision date: 2024-05-10 / Initials: HaJa	Total sheets: 23	Next sheet: 90



systemair		External connections	Project: WD000201		Rev: A002	Sheet: 90
			Date: 2024-02-08	Revision date: 2024-05-10	Initials: HaJa	Total sheets: 23	Next sheet: 91



systemair		External connections	Project: WD000201	Rev: A002	Sheet: 91
			Date: 2024-02-08	Revision date: 2024-05-10	Initials: HaJa
			Total sheets: 23	Next sheet: 92	

Connection Topvex		External connections		Description	Wire		
Contact	Terminal	Object	Terminal		Part#	Type	ID
Power supply							
Electrical connection box	X1:L1	1-phase connection TC/SC 20-25 Power supply 230VAC/50Hz	L1	*Dimension cable according to local regulation	Bn	3G*	W:
	X1:L2						
	X1:L3						
	X1:N		N		Bu		
	X1:PE		PE		GnYe		
Electrical connection box	X1:L1	Power supply 230/400VAC 3~/50Hz	L1	*Dimension cable according to local regulation	Bn	4G*	W:
	X1:L2		L2				
	X1:L3		L3				
	X1:N		N		Bk		
	X1:PE		PE		GnYe		
Electrical connection box	X1:L1	Optional 230VAC 2-phase IT connection	L1	*Dimension cable according to local regulation	Bn	3G*	W:
					Bk		
	X1:N		L2		Gy		
	PE		PE		GnYe		
Analog inputs 0-10V max: 550mA							
CU27-C T1	+	SMS Smoke detector	1	Calectro UG-3-0	1	2x0.75	W:007
	0		2		2		
CU27-C T14	24V	CO2/RHS CO2/Humidity sensor	+24V		1	3x0.75	W:008
	AI6		0..10V		2		
	0V		-0V		3		
CU27-C T15	24V	PTE Duct pressure sensor Extract air	+24V		1	3x0.75	W:009
	AI5		0..10V		2		
	0V		-0V		3		
CU27-C T16	24V	PTS Duct pressure sensor Supply air	+24V		1	3x0.75	W:010
	AI4		0..10V		2		
	0V		-0V		3		
Digital inputs							
CU27-C T27	DI6	PH Preheater alarm	NO	External contact	1	2x0.75	W:011
	Ref		COM		2		
CU27-C T28	DI5	CW Cooling feedback	NO	External contact	1	2x0.75	W:012
	Ref		COM		2		
CU27-C T29	DI4	Fire damper actuator feedback	NO	External contact	1	2x0.75	W:013
	Ref		COM		2		
CU27-C T30	DI3	External fire alarm	NO	External contact	1	2x0.75	W:014
	Ref		COM		2		
CU27-C T31	DI2	Extended run	NO	External contact	1	2x0.75	W:015
	Ref		COM		2		
CU27-C T32	DI1	External stop	NO	External contact	1	2x0.75	W:016
	Ref		COM		2		

systemair

External connections

Project:		Rev:	Sheet:
WD000201		A002	92
Date: 2024-02-08	Revision date: 2024-05-10	Initials: HaJa	Total sheets: 23	Next sheet: 93

Connection Topvex		External connections		Description	Wire		
Contact	Terminal	Object	Terminal		Part#	Type	ID
Relay outputs max: 230V/4A							
CU27-C T61	DO1	CPH Circulation pump heating	L		Bn	3G1.5	W:001
	N		N		Bu		
	PE		PE		GnYe		
CU27-C T62	DO2	DO Damper actuator outdoor air	+24V		1	2x1.5	W:002
	X2:0V		-0V		2		
CU27-C T63	DO3	DEH Damper actuator exhaust air	+24V	X2:L - T63:COM Bridged	Bn	2x1.5	W:003
	X2:0V		-0V		Bu		
CU27-C T64	DO4	DF Fire damper control	-	Fire damper signal circuit	1	2x1.5	W:004
	COM		-		2		
CU27-C T65	DO5	Run indication	-	Run indication signal circuit	1	2x1.5	W:005
	COM		-		2		
CU27-C T66	DO6	CPC Circulation pump cooling	L	Sum alarm signal circuit	DO6	3G1.5	W:006
	X2:N		N		N		
	X2:PE		PE		PE		
Analog outputs 0-10V max:750mA							
CU27-C T71	24V	HWVA Valve actuator Heating	+24V		1	3x0.75	W:017
	AO1		0..10V		2		
	0V		-0V		3		
CU27-C T72	24V	CWVA Valve actuator Cooling	+24V		1	3x0.75	W:018
	AO2		0..10V		2		
	0V		-0V		3		
CU27-C T73	24V	CC Changeover	+24V		1	3x0.75	W:019
	AO3		0..10V		2		
	0V		-0V		3		
CU27-C T74	24V	PH Preheater	+24V		1	3x0.75	W:020
	AO4		0..10V		2		
	0V		-0V		3		

systemair

External connections

Project:			Rev:	Sheet:
WD000201			A002	93
Date: 2024-02-08	Revision date: 2024-05-10	Initials: HaJa	Total sheets: 23	Next sheet: 94

Connection Topvex		External connections		Description	Wire		
Contact	Terminal	Object	Terminal		Part#	Type	ID
Universal inputs max: 550mA							
CU27-C T81	24V	SS Pt1000 Temperature sensor Supply air				2x0.75	W:021
	0V						
	UI1		B		1		
	Ref		1		2		
CU27-C T82	24V	OS Pt1000 Temperature sensor Outdoor air				2x0.75	W:022
	0V						
	UI2		B		1		
	Ref		1		2		
CU27-C T83	24V	RTS Pt1000 Temperature sensor Room				2x0.75	W:023
	0V						
	UI3		B		1		
	Ref		1		2		
CU27-C T84	24V	PHS Pt1000 Temperature sensor Preheater				2x0.75	W:024
	0V						
	UI4		B		1		
	Ref		1		2		
Communication ports CU27-C							
BMS	GND	BMS RS485	-		1	3x0.75	W:
	B-		-		2		
	A+		-		3		
Ext-link	0V	External RS485	-		1	5x0.75	W:
	24V		-		2		
	GND		-		3		
	B-		-		4		
	A+		-		5		
TCP/IP		Ethernet TCP/IP	-		-	Cat5e	W:
			-		-		
NaviPad		HMI Navipad	-		-	Cat5e	W:
			-		-		

systemair		External connections	Project: WD000201	Rev: A002	Sheet: 94
			Date: 2024-02-08 / Revision date: 2024-05-10 / Initials: HaJa	Total sheets: 23	Next sheet: 100

Designation	Label	Description	Misc.
A1	PDT1	PDT Supply PDT24-C	PDT222-2525-C-Q
A2	PDT2	PDT Extract PDT24-C	PDT222-2525-C-Q
A3	PDT3	PDT Exchanger PDT14-C	PDT122-25-C-Q
A4	PDT4	Heater control	XDT22-C-Q
A5	DM50-C	Section defrosting module	
BF1	AFS	Airflow guard	Differential pressure guard 20..300Pa
BP1	PDT1:P1	Supply air fan pressure for flow calculation	
BP2	PDT1:P2	Filter extract air pressure	
BP3	PDT2:P1	Exhaust air fan pressure for flow calculation	
BP4	PDT2:P2	Filter supply air pressure	
BP5	PDT3:P1	Exchanger extract air cpressure	
BT1	SS	Supply air temperature	
BT2	ETS	Extract air temperature	
BT3	EFS	Efficiency temperature	
BT4	OS	Intake air temperature	
BT5	EHS	Exhaust air temperature	
BT6	FPS	Frost protection sensor 1 (Only HW units, immersion sensor pre-mounted on HW-coil from supplier)	
BT10	OT	Overheat thermostat 60°	Automatic reset
BT11	ET	Emergency thermostat 120°	Manual reset
M1	SF	Supply air fan	
M2	EF	Extract air fan	
M10	ADB1	Bypass motor with section defrost	Damper actuator 24VDC/0...10V, 2Nm
M11	ADS1	Damper motor 1	Damper actuator 24VDC/0...10V, 2Nm
M12	ADS2	Damper motor 2	Damper actuator 24VDC/0...10V, 2Nm
M13	ADS3	Damper motor 3	Damper actuator 24VDC/0...10V, 2Nm
M14	ADS4	Damper motor 4	Damper actuator 24VDC/0...10V, 2Nm
M21	BDO1	Bypass damper (bypass models only)	Damper actuator 24VDC/0...10V, 5Nm
			Damper actuator 24VDC/0...10V, 5Nm
CU27-C2 WIFI	KF2	Control Unit CU27-C2 WIFI	
T24	T24	Power supply 230VAC/24VDC	
TTC	TTC	Thyristor card	
TT-S1	TT-S1	Thyristor card addon contact	
K1	K1	Contactor 1:st step control	
K2	K2	Contactor 1:st step safety	
K3	K3	Contactor 2:nd step control	
K4	K4	Contactor 2:nd step safety	
CAL4-11		Auxiliary contact block	
CAL4-11		Auxiliary contact block	
F1	F1	MCB Motors	ABB S203
F2	F2	MCB 24VDC Power supply	ABB S201
F3	F3	MCB Heater	ABB S203
X1	X1	Terminals Electrical connection box WAGO topjob	Terminal WAGO Topjob 2002
X2	X2	Terminals Access control cabinet WAGO topjob	Terminal WAGO Topjob 2002

systemair

Component table

Project:			Rev:	Sheet:
WD000201			A002	100
Date:	Revision date:	Initials:	Total sheets:	Next sheet:
2024-02-08	2024-05-10	HaJa	23	101

Designation	Label	Description	Misc.
SMS		Smoke detector	Calectro UG-3-0
PTS		Duct pressure sensor supply air	
PTE		Duct pressure sensor extract air	
OS		Temperature sensor Outdoor air	Pt1000
PHS		Temperature sensor Preheater	Pt1000
RTS		Temperature sensor Room	Pt1000
CO2		CO2 sensor	
RHS		Humidity sensor	
DEH		Damper actuator outdoor	
DO		Damper actuator exhaust air	
DF		Damper actuator Fire	
HWVA		Valve actuator Heating	
CWVA		Valve actuator Cooling	
CC		Changeover Coil	
CPH		Circulation pump heating	
CPC		Circulation pump cooling	
PH		Preheater	
HMI		NaviPad	PD70-C

systemair

Component table

Project:		Rev:	Sheet:
WD000201		A002	101
Date: 2024-02-08	Revision date: 2024-05-10	Initials: HaJa	Total sheets: 23	Next sheet: