Basic performance data - WAMAK AiWa 14 EVI H In

Heating - EN 14511		
Heating capacity [kW]	A7 / W35	15.4
	A2 / W35	13.1
	A-7 / W34	10.9
Electrical power input [kW]	A7 / W35	3.3
	A2 / W35	3.3
	A-7 / W34	3.2
Heating efficiency faktor [COP]	A7 / W35	4.73
	A2 / W35	3.96
	A-7 / W34	3.39
Seasonal space heating energy efficiency - SCOP EN 14825		
Average Climate / Low Temperature [35°C]	SCOP	4.61
	η [%]	184.3
	Label	A+++
	Qhe [kWh]	5445.0
	Pdesignh [kW]	12.4
	Tbivalent [°C]	-7
Cooling		
Cooling capacity - [kW]	A35 / W23-18	14.8
	A25 / W23-18	15.8
	A35 / W12-7	11.0
	A25 / W12-7	11.0
Seasonal space cooling energy efficiency - SEER EN 14825		
[W 23 / 18°C]	SEER	4.75
	Qce [kWh]	6600.0
	ηc [%]	190.0
Sound EN 12102		
Acoustic power - Lw	dB(A)	58.6
Acoustic pressure - Lp	**1 m** dB(A)	50.6
	5 m dB(A)	36.6
	10 m dB(A)	30.6
Mechanical and operational information		
Compressor type (3~ 400/50)	SCROLL / 1 /	On/Off
Refrigerant	R410A (GWP - 2088)	5.4 kg
Operating limit temperatures heating - (min / max) [°C]		25 / **65**
Operating limit temperatures source - (min / max) [°C]		**-22** / 40
Weight		275 kg

Main technical data - WAMAK AiWa 14 EVI H In

Enclosure type		AiWa-I
Basic dimensions	Height [mm]	1760
	Width [mm]	920
	Length [mm]	660
Weight [kg]		275
Colour		Gray
Enclousure IP Class		IP44
Refrigeration cycle		
Compressor	Type	Scroll
	Number of stages	1
	On/Off	
	Power factor Cosϕ	0.77
	Winding resistance	2.33 Ohm
Refrigerant		R410A
	Volme	5.4 kg
	GWP	2088
	Safety class	A1
Refrigeration oil type	POE RL32-3MAF	
	Oil volume	1.24 L
Maximal pressure - refrigerant [bar]		45
	PED class	1
EVI - vapour injection with economizer		
APS System of liquid subcooling		
Reversible operation (cooling)		
Reverse defrosting with hot gas		
Electrical connection data		
Line voltage [#~ V/Hz]		3~ 400/50
Current	nominal [A]	5.58
	maximal [A]	10.90
	starting [A]	15.06
Softstart		MCI 12
Main safety		C25
Control System		

Main controller	SIEMENS	RVS 21 AVS 55.199	
Extension module	AVS75.3xx	AVS75.3xx	AVS75.372
Bus Clip-In		LPB OCI346	Modbus OCI352
Online connection		Web server OZW672	ToSyMo
Superheat controller			1 - EEV H/C

*** with accessory

Heat energy rejection side data		
Operating limit temperatures heating	MAX [°C]	65
	MIN [°C]	25
for more see operating limits diagram		
Condenser	Port size	1.1/4 "
	Type	BPHE
	Count	1
	Material	AISI 316
Maximal operating pressure - refrigerant [bar]		45
Maximal operating pressure - Water [bar]		6
Testing pressure [bar]		70
Heat transfer medium		Water
Volume flow @ dT 5K (nom) - Water [m3/h]		2.67
Internal pressure drop - Water [kPa]		12
ECM speed circulator - condenser		UPM3 25-75
Flow sensor consumer - analogue		0..10V
Temperature difference	@ 35°C (nom)	5 K
	@ 55°C	8 K
	@ 65°C	10 K
Renewable energy extraction side data		
Operating limit temperatures source	MIN [°C]	-22
	MAX [°C]	40
for more see operating limits diagram		
Evaporator	Port size	700mm x 700mm "
	Type	Cu-coil /Al-fin
	Count	1
	Material	Cu/Al
Maximal operating pressure - refrigerant [bar]		28
Heat transfer medium		Air
Volume flow - Air [m3/h]		4860
Internal pressure drop - Air [kPa]		0.027
Temperature difference - Air		7 K
Number of fans		1
Fan diameter [mm]		630

WAMAK AiWa 14 EVI H In

ErP (EU) No 811/2013: Technical parameters for heat pump space heaters

Model	**AiWa 14 EVI H In**
Air-to-water heat pump	yes
Brine-to-water heat pump	no
Water-to-water heat pump	no
Low-temperature heat pump	no
Equipped with a supplementary heater	no
Heat pump combination heater	no
Temperature application	low (35°C - 30°C)
Climate conditions	average

Item	Symbol	Value	Unit
Rated heat output at Tdesignh	Prated	12.4	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	10.9	kW
Tj = +2 °C	Pdh	13.0	kW
Tj = +7 °C	Pdh	15.3	kW
Tj = +12 °C	Pdh	18.2	kW
Tj = bivalent temperature	Pdh	10.7	kW
Tj = operation limit temperature	Pdh	7.8	kW
Bivalent temperature	Tbiv	-7	°C
Power consumption in modes other than active mode			
Off mode	Poff	0.010	kW
Thermostat-off mode	Pto	0.010	kW
Standby mode	Psb	0.010	kW
Crankcase heater mode	Pck	0.020	kW
Other items			
Capacity control		fixed	
Sound power level			
indoors	Lwa	59	dB
outdoors	Lwa	---	dB
Annual energy consumption	Q_{HE}	5445.0	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	184.3	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	3.39	-
Tj = +2 °C	COPd	4.5	-
Tj = +7 °C	COPd	5.8	-
Tj = +12 °C	COPd	7.7	-
Tj = bivalent temperature	COPd	3.3	-
Tj = operation limit temperature	COPd	2.5	-
Tj = operation limit temperature	TOL	-22	°C
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output	Psup	5.5	kW
Type of energy input		electricity	
For air-to-water heat pumps: Rated air flow rate, outdoors	-	4860	m3/h
For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	---	m3/h

Contact details: WAMAK, s.r.o., Orovnica 252, 96652, Orovnica, Slovakia, info@wamak.sk

WAMAK AiWa 14 EVI H In

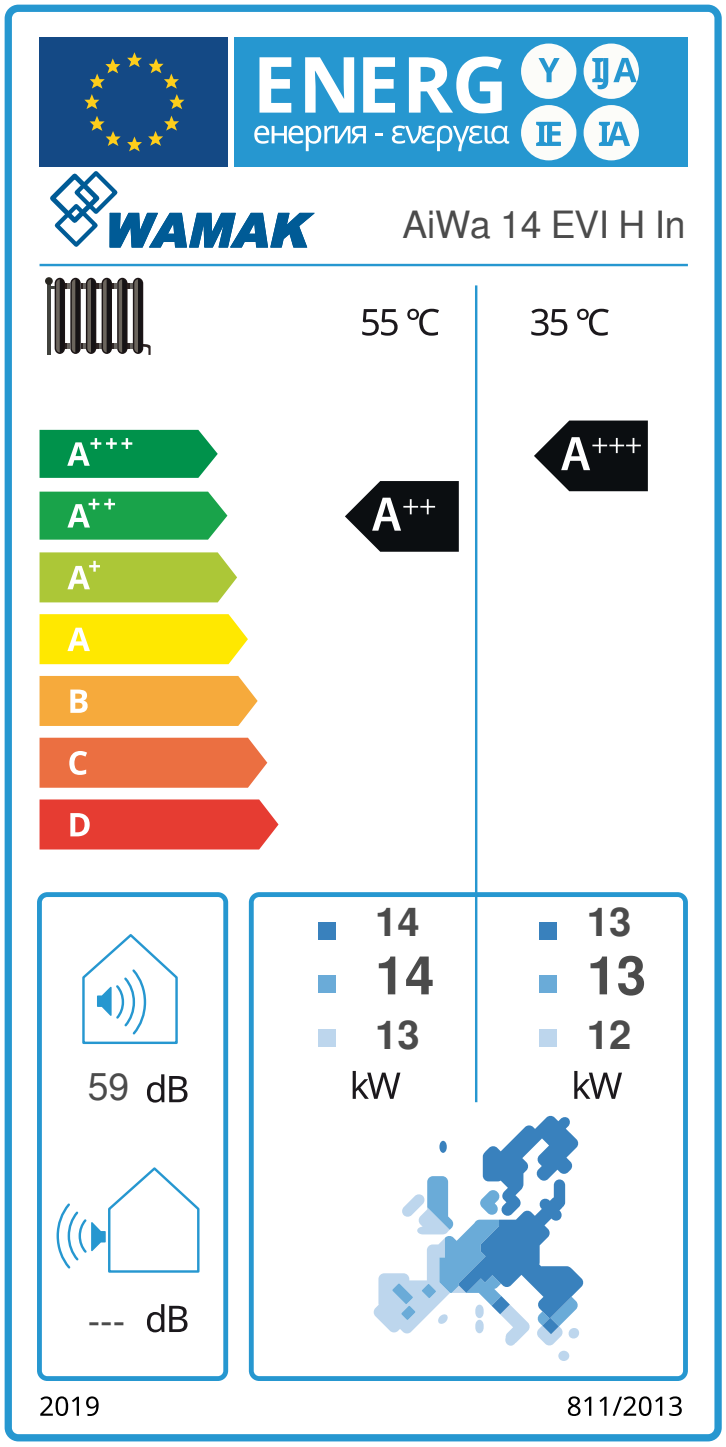
ErP (EU) No 811/2013: Technical parameters for heat pump space heaters

Model	**AiWa 14 EVI H In**
Air-to-water heat pump	yes
Brine-to-water heat pump	no
Water-to-water heat pump	no
Low-temperature heat pump	no
Equipped with a supplementary heater	no
Heat pump combination heater	no
Temperature application	middle (55°C - 47°C)
Climate conditions	average

Item	Symbol	Value	Unit
Rated heat output at Tdesignh	Prated	13.2	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	11.5	kW
Tj = +2 °C	Pdh	13.2	kW
Tj = +7 °C	Pdh	15.4	kW
Tj = +12 °C	Pdh	18.2	kW
Tj = bivalent temperature	Pdh	11.4	kW
Tj = operation limit temperature	Pdh	8.6	kW
Bivalent temperature	Tbiv	-7	°C
Power consumption in modes other than active mode			
Off mode	Poff	0.010	kW
Thermostat-off mode	Pto	0.010	kW
Standby mode	Psb	0.010	kW
Crankcase heater mode	Pck	0.020	kW
Other items			
Capacity control		fixed	
Sound power level			
indoors	Lwa	59	dB
outdoors	Lwa	---	dB
Annual energy consumption	Q_{HE}	7581.3	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	141.7	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.35	-
Tj = +2 °C	COPd	3.4	-
Tj = +7 °C	COPd	4.6	-
Tj = +12 °C	COPd	6.5	-
Tj = bivalent temperature	COPd	2.2	-
Tj = operation limit temperature	COPd	1.8	-
Tj = operation limit temperature	TOL	-22	°C
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			
Rated heat output	Psup	5.5	kW
Type of energy input		electricity	
For air-to-water heat pumps: Rated air flow rate, outdoors	-	4860	m3/h
For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	---	m3/h

Contact details: WAMAK, s.r.o., Orovnica 252, 96652, Orovnica, Slovakia, info@wamak.sk



AiWa 14 EVI H In **ErP Data**

		55 °C	35 °C
Energy class		A++	A+++
η	[%]	141.7	184.3
P_{rated}	[kW]	14	13
Q_{HE}	[kWh/y]	7582	5445
SCOP	[-]	3.54	4.61
$T_{bivalent}$	[°C]	-7	-7

CONTROLER

+ QAA55/75	class **VII**	3.5% ↓
- QAA55/75	class **III**	1.5% ↓

Heating performance data

Version: v2024.010-AW

Average Climate / Low Temperature [35°C]

ZHI14K1P-TFM_R410A_1_AW

	Operating conditions	Qh	P	COP
1	A7 / W30-35	15.4	3.3	4.73
2	A2 / W35	13.1	3.3	3.96
3	A-22 / W35	7.8	3.1	2.50
A	A-7 / W34	10.9	3.2	3.39
B	A2 / W30	13.0	2.9	4.46
C	A7 / W27	15.3	2.6	5.81
D	A12 / W24	18.2	2.4	7.73
E	A-10 / W35	10.7	3.3	3.25
F	A-7 / W34	10.9	3.2	3.39

SCOP DATA EN 14825:2018	
Average Climate / Low Temperature [35°C]	
SCOPon	4.70
SCOPnet	4.75
SCOP	4.61
η [%]	184.25
Label	A+++
Qh [kWh]	5444.98
Pdesignh [kW]	12.4
Tbivalent [°C]	-7.00

Average Climate / Medium Temperature [55°C]

	Operating conditions	Qh	P	COP
1	A7 / W47-55	15.7	5.4	2.90
2	A2 / W55	13.6	5.4	2.53
3	A-22 / W55	8.6	4.5	1.78
A	A-7 / W52	11.5	4.9	2.35
B	A2 / W42	13.2	3.9	3.37
C	A7 / W36	15.4	3.3	4.61
D	A12 / W30	18.2	2.8	6.55
E	A-10 / W55	11.4	5.2	2.18
F	A-7 / W55	11.7	5.3	2.22

SCOP DATA EN 14825:2018	
Average Climate / Medium Temperature [55°C]	
SCOPon	3.60
SCOPnet	3.63
SCOP	3.54
η [%]	141.70
Label	A++
Qh [kWh]	7581.26
Pdesignh [kW]	13.2
Tbivalent [°C]	-7.00

Cooling performance data

Low temperature cooling W 12 / 7°C

	Operating conditions	Qc	P	EER
A	A35 / W12-7	11.0	4.0	2.74
B	A30 / W12-7	11.4	3.5	3.21
C	A25 / W12-7	11.7	3.1	3.74
D	A20 / W12-7	11.9	2.7	4.36

SEER DATA EN 14825:2018 [W 12 / 7°C]	
SEERon	3.64
SEER	3.55
Qc [kWh]	2282.53
η [%]	141.87

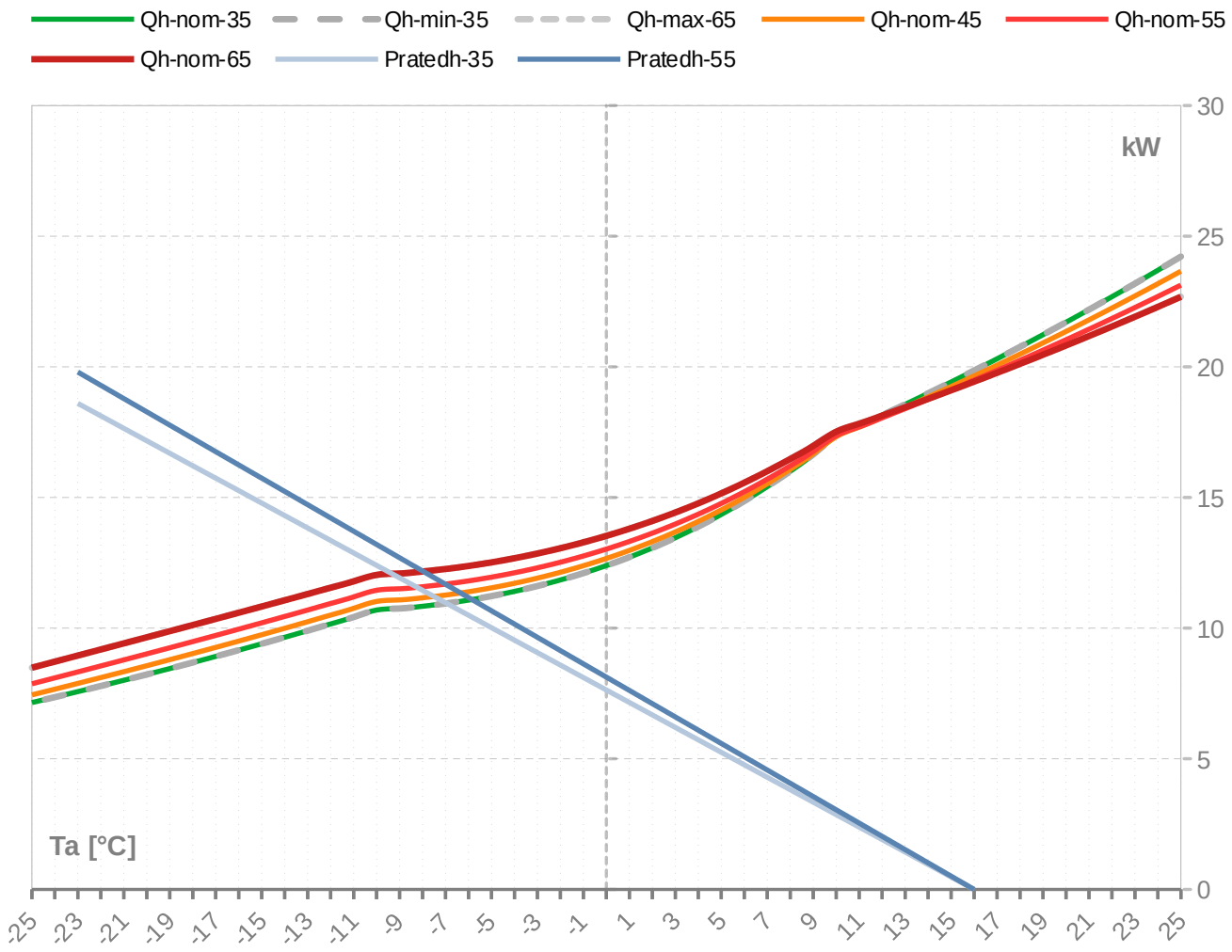
Radiant cooling W 23 / 18°C

	Operating conditions	Qc	P	EER
A	A35 / W23-18	14.8	4.0	3.69
B	A30 / W23-18	15.3	3.2	4.33
C	A25 / W23-18	15.8	2.8	5.06
D	A20 / W23-18	16.1	2.4	5.90

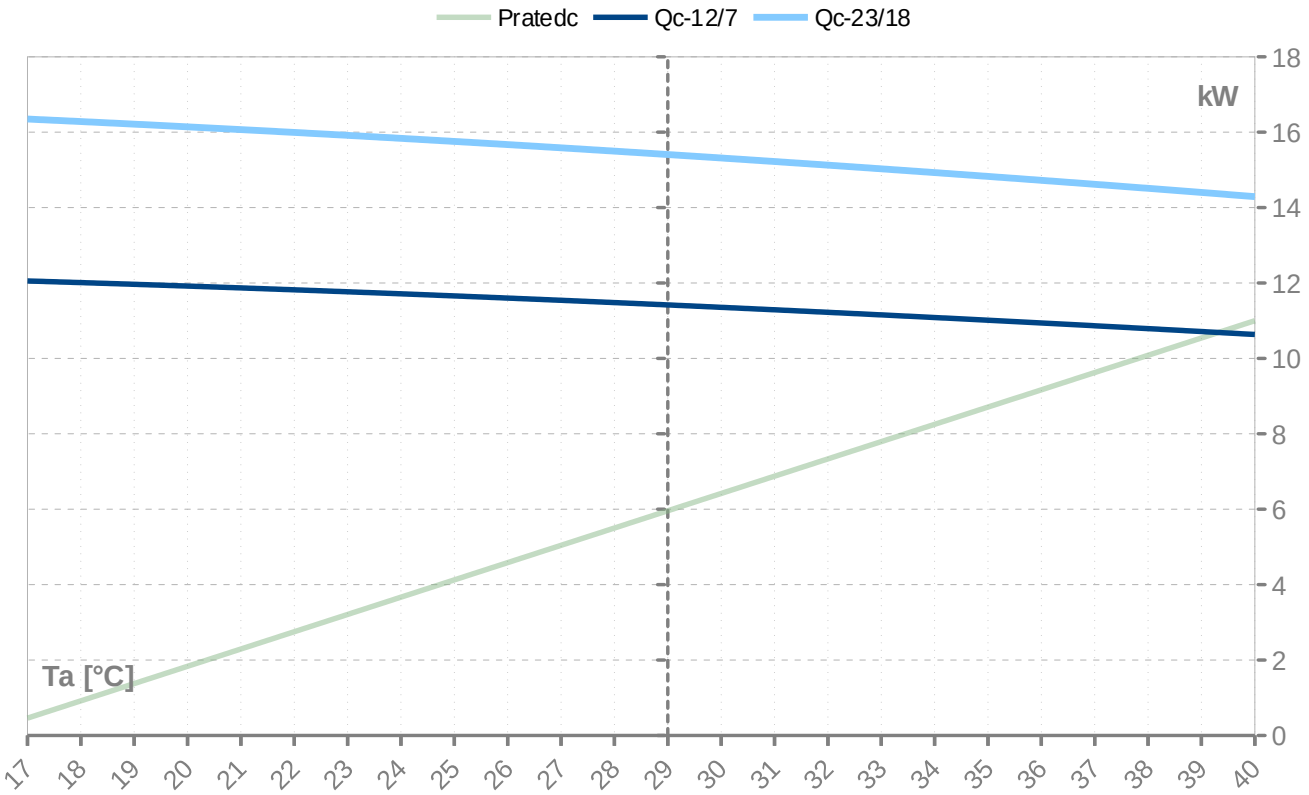
SEER DATA EN 14825:2018 [W 23 / 18°C]	
SEERon	4.92
SEER	4.75
Qc [kWh]	1689.69
η [%]	189.95

Performance lines - heating

ZHI14K1P-TFM_R410A_1_AW



Performance lines - cooling



Th [°C]	**35 °C**									
Ta [°C]	**Qh nom [kW]**	**Qh min** [kW]	**Qh max** [kW]	**Pin nom [kW]**	**Pin-min** [kW]	**Pin-max** [kW]	**COP kW / kW**	**I nom** [A]	**I min** [A]	**I max** [A]
25	**20.3**	20.3		**3.1**	3.1		**6.52**	5.5	5.5	
24	**20.3**	20.3		**3.1**	3.1		**6.52**	5.5	5.5	
23	**20.3**	20.3		**3.1**	3.1		**6.52**	5.5	5.5	
22	**20.3**	20.3		**3.1**	3.1		**6.52**	5.5	5.5	
21	**20.3**	20.3		**3.1**	3.1		**6.52**	5.5	5.5	
20	**20.3**	20.3		**3.1**	3.1		**6.52**	5.5	5.5	
19	**20.3**	20.3		**3.1**	3.1		**6.52**	5.5	5.5	
18	**20.3**	20.3		**3.1**	3.1		**6.52**	5.5	5.5	
17	**20.3**	20.3		**3.1**	3.1		**6.52**	5.5	5.5	
16	**19.9**	19.9	19.9	**3.1**	3.1	3.1	**6.35**	5.5	5.5	5.5
15	**19.4**	19.4	19.4	**3.1**	3.1	3.1	**6.18**	5.5	5.5	5.5
14	**19.0**	19.0	19.0	**3.2**	3.2	3.2	**6.02**	5.5	5.5	5.5
13	**18.6**	18.6	18.6	**3.2**	3.2	3.2	**5.86**	5.5	5.5	5.5
12	**18.2**	18.2	18.2	**3.2**	3.2	3.2	**5.71**	5.5	5.5	5.5
11	**17.7**	17.7	17.7	**3.2**	3.2	3.2	**5.56**	5.6	5.6	5.6
10	**17.3**	17.3	17.3	**3.2**	3.2	3.2	**5.41**	5.6	5.6	5.6
9	**16.6**	16.6	16.6	**3.2**	3.2	3.2	**5.16**	5.6	5.6	5.6
8	**16.0**	16.0	16.0	**3.2**	3.2	3.2	**4.94**	5.6	5.6	5.6
7	**15.4**	15.4	15.4	**3.3**	3.3	3.3	**4.73**	5.6	5.6	5.6
6	**14.9**	14.9	14.9	**3.3**	3.3	3.3	**4.55**	5.6	5.6	5.6
5	**14.4**	14.4	14.4	**3.3**	3.3	3.3	**4.38**	5.7	5.7	5.7
4	**13.9**	13.9	13.9	**3.3**	3.3	3.3	**4.22**	5.7	5.7	5.7
3	**13.5**	13.5	13.5	**3.3**	3.3	3.3	**4.09**	5.7	5.7	5.7
2	**13.1**	13.1	13.1	**3.3**	3.3	3.3	**3.96**	5.7	5.7	5.7
1	**12.7**	12.7	12.7	**3.3**	3.3	3.3	**3.85**	5.7	5.7	5.7
0	**12.4**	12.4	12.4	**3.3**	3.3	3.3	**3.75**	5.7	5.7	5.7
-1	**12.1**	12.1	12.1	**3.3**	3.3	3.3	**3.66**	5.7	5.7	5.7
-2	**11.8**	11.8	11.8	**3.3**	3.3	3.3	**3.59**	5.7	5.7	5.7
-3	**11.6**	11.6	11.6	**3.3**	3.3	3.3	**3.52**	5.7	5.7	5.7
-4	**11.4**	11.4	11.4	**3.3**	3.3	3.3	**3.46**	5.7	5.7	5.7
-5	**11.2**	11.2	11.2	**3.3**	3.3	3.3	**3.40**	5.7	5.7	5.7
-6	**11.1**	11.1	11.1	**3.3**	3.3	3.3	**3.36**	5.7	5.7	5.7
-7	**10.9**	10.9	10.9	**3.3**	3.3	3.3	**3.32**	5.7	5.7	5.7
-8	**10.8**	10.8	10.8	**3.3**	3.3	3.3	**3.29**	5.7	5.7	5.7
-9	**10.8**	10.8	10.8	**3.3**	3.3	3.3	**3.27**	5.7	5.7	5.7
-10	**10.7**	10.7	10.7	**3.3**	3.3	3.3	**3.25**	5.7	5.7	5.7
-11	**10.4**	10.4	10.4	**3.3**	3.3	3.3	**3.18**	5.7	5.7	5.7
-12	**10.2**	10.2	10.2	**3.3**	3.3	3.3	**3.10**	5.7	5.7	5.7
-13	**9.9**	9.9	9.9	**3.3**	3.3	3.3	**3.03**	5.7	5.7	5.7
-14	**9.6**	9.6	9.6	**3.3**	3.3	3.3	**2.96**	5.6	5.6	5.6
-15	**9.4**	9.4	9.4	**3.2**	3.2	3.2	**2.90**	5.6	5.6	5.6
-16	**9.2**	9.2	9.2	**3.2**	3.2	3.2	**2.83**	5.6	5.6	5.6
-17	**8.9**	8.9	8.9	**3.2**	3.2	3.2	**2.77**	5.6	5.6	5.6
-18	**8.7**	8.7	8.7	**3.2**	3.2	3.2	**2.71**	5.6	5.6	5.6
-19	**8.5**	8.5	8.5	**3.2**	3.2	3.2	**2.66**	5.6	5.6	5.6
-20	**8.2**	8.2	8.2	**3.2**	3.2	3.2	**2.60**	5.5	5.5	5.5
-21	**8.0**	8.0	8.0	**3.1**	3.1	3.1	**2.55**	5.5	5.5	5.5
-22	**7.8**	7.8	7.8	**3.1**	3.1	3.1	**2.50**	5.5	5.5	5.5
-23	**7.6**	7.6	7.6	**3.1**	3.1	3.1	**2.45**	5.5	5.5	5.5
-24	**7.4**	7.4	7.4	**3.1**	3.1	3.1	**2.40**	5.4	5.4	5.4
-25	**7.1**	7.1	7.1	**3.0**	3.0	3.0	**2.35**	5.4	5.4	5.4

* attention: operating limits not reflected in performance table

ZHI14K1P-TFM_R410A_1_AW

Th [°C]	**45 °C**									
Ta [°C]	**Qh nom [kW]**	**Qh min** [kW]	**Qh max** [kW]	**Pin nom [kW]**	**Pin-min** [kW]	**Pin-max** [kW]	**COP kW / kW**	**I nom** [A]	**I min** [A]	**I max** [A]
25	**23.7**	23.7	23.7	**4.0**	4.0	4.0	**5.96**	6.4	6.4	6.4
24	**23.2**	23.2	23.2	**4.0**	4.0	4.0	**5.81**	6.5	6.5	6.5
23	**22.7**	22.7	22.7	**4.0**	4.0	4.0	**5.67**	6.5	6.5	6.5
22	**22.3**	22.3	22.3	**4.0**	4.0	4.0	**5.53**	6.5	6.5	6.5
21	**21.8**	21.8	21.8	**4.0**	4.0	4.0	**5.40**	6.5	6.5	6.5
20	**21.4**	21.4	21.4	**4.1**	4.1	4.1	**5.27**	6.5	6.5	6.5
19	**20.9**	20.9	20.9	**4.1**	4.1	4.1	**5.14**	6.6	6.6	6.6
18	**20.5**	20.5	20.5	**4.1**	4.1	4.1	**5.02**	6.6	6.6	6.6
17	**20.1**	20.1	20.1	**4.1**	4.1	4.1	**4.90**	6.6	6.6	6.6
16	**19.7**	19.7	19.7	**4.1**	4.1	4.1	**4.78**	6.6	6.6	6.6
15	**19.2**	19.2	19.2	**4.1**	4.1	4.1	**4.67**	6.6	6.6	6.6
14	**18.8**	18.8	18.8	**4.1**	4.1	4.1	**4.56**	6.7	6.7	6.7
13	**18.5**	18.5	18.5	**4.1**	4.1	4.1	**4.45**	6.7	6.7	6.7
12	**18.1**	18.1	18.1	**4.2**	4.2	4.2	**4.35**	6.7	6.7	6.7
11	**17.7**	17.7	17.7	**4.2**	4.2	4.2	**4.25**	6.7	6.7	6.7
10	**17.3**	17.3	17.3	**4.2**	4.2	4.2	**4.15**	6.7	6.7	6.7
9	**16.7**	16.7	16.7	**4.2**	4.2	4.2	**3.98**	6.7	6.7	6.7
8	**16.1**	16.1	16.1	**4.2**	4.2	4.2	**3.82**	6.7	6.7	6.7
7	**15.5**	15.5	15.5	**4.2**	4.2	4.2	**3.68**	6.8	6.8	6.8
6	**15.0**	15.0	15.0	**4.2**	4.2	4.2	**3.55**	6.8	6.8	6.8
5	**14.5**	14.5	14.5	**4.2**	4.2	4.2	**3.44**	6.8	6.8	6.8
4	**14.1**	14.1	14.1	**4.2**	4.2	4.2	**3.33**	6.8	6.8	6.8
3	**13.7**	13.7	13.7	**4.2**	4.2	4.2	**3.24**	6.8	6.8	6.8
2	**13.3**	13.3	13.3	**4.2**	4.2	4.2	**3.15**	6.8	6.8	6.8
1	**13.0**	13.0	13.0	**4.2**	4.2	4.2	**3.07**	6.8	6.8	6.8
0	**12.7**	12.7	12.7	**4.2**	4.2	4.2	**3.01**	6.8	6.8	6.8
-1	**12.4**	12.4	12.4	**4.2**	4.2	4.2	**2.94**	6.8	6.8	6.8
-2	**12.1**	12.1	12.1	**4.2**	4.2	4.2	**2.89**	6.7	6.7	6.7
-3	**11.9**	11.9	11.9	**4.2**	4.2	4.2	**2.84**	6.7	6.7	6.7
-4	**11.7**	11.7	11.7	**4.2**	4.2	4.2	**2.80**	6.7	6.7	6.7
-5	**11.5**	11.5	11.5	**4.2**	4.2	4.2	**2.76**	6.7	6.7	6.7
-6	**11.4**	11.4	11.4	**4.2**	4.2	4.2	**2.73**	6.7	6.7	6.7
-7	**11.3**	11.3	11.3	**4.2**	4.2	4.2	**2.70**	6.7	6.7	6.7
-8	**11.2**	11.2	11.2	**4.2**	4.2	4.2	**2.68**	6.7	6.7	6.7
-9	**11.1**	11.1	11.1	**4.2**	4.2	4.2	**2.66**	6.7	6.7	6.7
-10	**11.0**	11.0	11.0	**4.2**	4.2	4.2	**2.65**	6.7	6.7	6.7
-11	**10.8**	10.8	10.8	**4.1**	4.1	4.1	**2.60**	6.7	6.7	6.7
-12	**10.5**	10.5	10.5	**4.1**	4.1	4.1	**2.54**	6.7	6.7	6.7
-13	**10.2**	10.2	10.2	**4.1**	4.1	4.1	**2.49**	6.6	6.6	6.6
-14	**10.0**	10.0	10.0	**4.1**	4.1	4.1	**2.44**	6.6	6.6	6.6
-15	**9.7**	9.7	9.7	**4.1**	4.1	4.1	**2.40**	6.6	6.6	6.6
-16	**9.5**	9.5	9.5	**4.0**	4.0	4.0	**2.35**	6.6	6.6	6.6
-17	**9.3**	9.3	9.3	**4.0**	4.0	4.0	**2.30**	6.5	6.5	6.5
-18	**9.0**	9.0	9.0	**4.0**	4.0	4.0	**2.26**	6.5	6.5	6.5
-19	**8.8**	8.8	8.8	**4.0**	4.0	4.0	**2.22**	6.5	6.5	6.5
-20	**8.6**	8.6	8.6	**3.9**	3.9	3.9	**2.18**	6.4	6.4	6.4
-21	**8.3**	8.3	8.3	**3.9**	3.9	3.9	**2.14**	6.4	6.4	6.4
-22	**8.1**	8.1	8.1	**3.9**	3.9	3.9	**2.10**	6.3	6.3	6.3
-23	**7.9**	7.9	7.9	**3.8**	3.8	3.8	**2.06**	6.3	6.3	6.3
-24	**7.7**	7.7	7.7	**3.8**	3.8	3.8	**2.02**	6.2	6.2	6.2
-25	**7.4**	7.4	7.4	**3.8**	3.8	3.8	**1.98**	6.2	6.2	6.2

* attention: operating limits not reflected in performance table

Th [°C]	**55 °C**									
Ta [°C]	**Qh nom** **[kW]**	**Qh min** [kW]	**Qh max** [kW]	**Pin nom** **[kW]**	**Pin-min** [kW]	**Pin-max** [kW]	**COP** **kW / kW**	**I nom** [A]	**I min** [A]	**I max** [A]
25	**23.1**	23.1	23.1	**5.2**	5.2	5.2	**4.42**	8.0	8.0	8.0
24	**22.7**	22.7	22.7	**5.3**	5.3	5.3	**4.32**	8.0	8.0	8.0
23	**22.3**	22.3	22.3	**5.3**	5.3	5.3	**4.23**	8.1	8.1	8.1
22	**21.9**	21.9	21.9	**5.3**	5.3	5.3	**4.14**	8.1	8.1	8.1
21	**21.4**	21.4	21.4	**5.3**	5.3	5.3	**4.05**	8.1	8.1	8.1
20	**21.0**	21.0	21.0	**5.3**	5.3	5.3	**3.96**	8.1	8.1	8.1
19	**20.6**	20.6	20.6	**5.3**	5.3	5.3	**3.87**	8.1	8.1	8.1
18	**20.2**	20.2	20.2	**5.3**	5.3	5.3	**3.79**	8.2	8.2	8.2
17	**19.9**	19.9	19.9	**5.4**	5.4	5.4	**3.71**	8.2	8.2	8.2
16	**19.5**	19.5	19.5	**5.4**	5.4	5.4	**3.63**	8.2	8.2	8.2
15	**19.1**	19.1	19.1	**5.4**	5.4	5.4	**3.56**	8.2	8.2	8.2
14	**18.8**	18.8	18.8	**5.4**	5.4	5.4	**3.49**	8.2	8.2	8.2
13	**18.4**	18.4	18.4	**5.4**	5.4	5.4	**3.41**	8.2	8.2	8.2
12	**18.0**	18.0	18.0	**5.4**	5.4	5.4	**3.34**	8.2	8.2	8.2
11	**17.7**	17.7	17.7	**5.4**	5.4	5.4	**3.28**	8.2	8.2	8.2
10	**17.4**	17.4	17.4	**5.4**	5.4	5.4	**3.21**	8.3	8.3	8.3
9	**16.8**	16.8	16.8	**5.4**	5.4	5.4	**3.09**	8.3	8.3	8.3
8	**16.2**	16.2	16.2	**5.4**	5.4	5.4	**2.99**	8.3	8.3	8.3
7	**15.7**	15.7	15.7	**5.4**	5.4	5.4	**2.90**	8.3	8.3	8.3
6	**15.2**	15.2	15.2	**5.4**	5.4	5.4	**2.81**	8.3	8.3	8.3
5	**14.8**	14.8	14.8	**5.4**	5.4	5.4	**2.73**	8.3	8.3	8.3
4	**14.4**	14.4	14.4	**5.4**	5.4	5.4	**2.66**	8.2	8.2	8.2
3	**14.0**	14.0	14.0	**5.4**	5.4	5.4	**2.59**	8.2	8.2	8.2
2	**13.6**	13.6	13.6	**5.4**	5.4	5.4	**2.53**	8.2	8.2	8.2
1	**13.3**	13.3	13.3	**5.4**	5.4	5.4	**2.48**	8.2	8.2	8.2
0	**13.0**	13.0	13.0	**5.4**	5.4	5.4	**2.43**	8.2	8.2	8.2
-1	**12.8**	12.8	12.8	**5.3**	5.3	5.3	**2.39**	8.2	8.2	8.2
-2	**12.5**	12.5	12.5	**5.3**	5.3	5.3	**2.35**	8.2	8.2	8.2
-3	**12.3**	12.3	12.3	**5.3**	5.3	5.3	**2.32**	8.1	8.1	8.1
-4	**12.1**	12.1	12.1	**5.3**	5.3	5.3	**2.29**	8.1	8.1	8.1
-5	**11.9**	11.9	11.9	**5.3**	5.3	5.3	**2.26**	8.1	8.1	8.1
-6	**11.8**	11.8	11.8	**5.3**	5.3	5.3	**2.24**	8.1	8.1	8.1
-7	**11.7**	11.7	11.7	**5.3**	5.3	5.3	**2.22**	8.1	8.1	8.1
-8	**11.6**	11.6	11.6	**5.3**	5.3	5.3	**2.20**	8.1	8.1	8.1
-9	**11.5**	11.5	11.5	**5.2**	5.2	5.2	**2.19**	8.1	8.1	8.1
-10	**11.4**	11.4	11.4	**5.2**	5.2	5.2	**2.18**	8.0	8.0	8.0
-11	**11.2**	11.2	11.2	**5.2**	5.2	5.2	**2.14**	8.0	8.0	8.0
-12	**10.9**	10.9	10.9	**5.2**	5.2	5.2	**2.11**	8.0	8.0	8.0
-13	**10.7**	10.7	10.7	**5.2**	5.2	5.2	**2.07**	7.9	7.9	7.9
-14	**10.4**	10.4	10.4	**5.1**	5.1	5.1	**2.04**	7.9	7.9	7.9
-15	**10.2**	10.2	10.2	**5.1**	5.1	5.1	**2.00**	7.9	7.9	7.9
-16	**10.0**	10.0	10.0	**5.1**	5.1	5.1	**1.97**	7.8	7.8	7.8
-17	**9.7**	9.7	9.7	**5.0**	5.0	5.0	**1.93**	7.8	7.8	7.8
-18	**9.5**	9.5	9.5	**5.0**	5.0	5.0	**1.90**	7.7	7.7	7.7
-19	**9.2**	9.2	9.2	**4.9**	4.9	4.9	**1.87**	7.7	7.7	7.7
-20	**9.0**	9.0	9.0	**4.9**	4.9	4.9	**1.84**	7.6	7.6	7.6
-21	**8.8**	8.8	8.8	**4.9**	4.9	4.9	**1.81**	7.5	7.5	7.5
-22	**8.6**	8.6	8.6	**4.8**	4.8	4.8	**1.78**	7.5	7.5	7.5
-23	**8.3**	8.3	8.3	**4.8**	4.8	4.8	**1.75**	7.4	7.4	7.4
-24	**8.1**	8.1	8.1	**4.7**	4.7	4.7	**1.72**	7.3	7.3	7.3
-25	**7.9**	7.9	7.9	**4.6**	4.6	4.6	**1.69**	7.3	7.3	7.3

* attention: operating limits not reflected in performance table

Th [°C]	T-Max @ 65 °C									
	Qh nom	**Qh min**	**Qh max**	**Pin nom**	**Pin-min**	**Pin-max**	**COP**	**I nom**	**I min**	**I max**
Ta [°C]	**[kW]**	[kW]	[kW]	**[kW]**	[kW]	[kW]	**kW / kW**	[A]	[A]	[A]
25	**22.7**	22.7	22.7	**6.8**	6.8	6.8	**3.32**	10.1	10.1	10.1
24	**22.3**	22.3	22.3	**6.9**	6.9	6.9	**3.25**	10.2	10.2	10.2
23	**21.9**	21.9	21.9	**6.9**	6.9	6.9	**3.19**	10.2	10.2	10.2
22	**21.5**	21.5	21.5	**6.9**	6.9	6.9	**3.13**	10.2	10.2	10.2
21	**21.2**	21.2	21.2	**6.9**	6.9	6.9	**3.07**	10.2	10.2	10.2
20	**20.8**	20.8	20.8	**6.9**	6.9	6.9	**3.02**	10.2	10.2	10.2
19	**20.5**	20.5	20.5	**6.9**	6.9	6.9	**2.96**	10.2	10.2	10.2
18	**20.1**	20.1	20.1	**6.9**	6.9	6.9	**2.91**	10.3	10.3	10.3
17	**19.8**	19.8	19.8	**6.9**	6.9	6.9	**2.85**	10.3	10.3	10.3
16	**19.4**	19.4	19.4	**6.9**	6.9	6.9	**2.80**	10.3	10.3	10.3
15	**19.1**	19.1	19.1	**6.9**	6.9	6.9	**2.75**	10.3	10.3	10.3
14	**18.8**	18.8	18.8	**6.9**	6.9	6.9	**2.70**	10.3	10.3	10.3
13	**18.5**	18.5	18.5	**6.9**	6.9	6.9	**2.66**	10.3	10.3	10.3
12	**18.1**	18.1	18.1	**7.0**	7.0	7.0	**2.61**	10.3	10.3	10.3
11	**17.8**	17.8	17.8	**7.0**	7.0	7.0	**2.56**	10.3	10.3	10.3
10	**17.5**	17.5	17.5	**7.0**	7.0	7.0	**2.52**	10.3	10.3	10.3
9	**17.0**	17.0	17.0	**6.9**	6.9	6.9	**2.44**	10.3	10.3	10.3
8	**16.5**	16.5	16.5	**6.9**	6.9	6.9	**2.37**	10.3	10.3	10.3
7	**16.0**	16.0	16.0	**6.9**	6.9	6.9	**2.31**	10.3	10.3	10.3
6	**15.6**	15.6	15.6	**6.9**	6.9	6.9	**2.25**	10.2	10.2	10.2
5	**15.2**	15.2	15.2	**6.9**	6.9	6.9	**2.20**	10.2	10.2	10.2
4	**14.8**	14.8	14.8	**6.9**	6.9	6.9	**2.15**	10.2	10.2	10.2
3	**14.4**	14.4	14.4	**6.8**	6.8	6.8	**2.11**	10.2	10.2	10.2
2	**14.1**	14.1	14.1	**6.8**	6.8	6.8	**2.07**	10.1	10.1	10.1
1	**13.8**	13.8	13.8	**6.8**	6.8	6.8	**2.03**	10.1	10.1	10.1
0	**13.5**	13.5	13.5	**6.8**	6.8	6.8	**2.00**	10.1	10.1	10.1
-1	**13.3**	13.3	13.3	**6.8**	6.8	6.8	**1.97**	10.0	10.0	10.0
-2	**13.1**	13.1	13.1	**6.7**	6.7	6.7	**1.94**	10.0	10.0	10.0
-3	**12.9**	12.9	12.9	**6.7**	6.7	6.7	**1.92**	10.0	10.0	10.0
-4	**12.7**	12.7	12.7	**6.7**	6.7	6.7	**1.90**	9.9	9.9	9.9
-5	**12.5**	12.5	12.5	**6.7**	6.7	6.7	**1.88**	9.9	9.9	9.9
-6	**12.4**	12.4	12.4	**6.6**	6.6	6.6	**1.86**	9.9	9.9	9.9
-7	**12.3**	12.3	12.3	**6.6**	6.6	6.6	**1.85**	9.9	9.9	9.9
-8	**12.2**	12.2	12.2	**6.6**	6.6	6.6	**1.84**	9.9	9.9	9.9
-9	**12.1**	12.1	12.1	**6.6**	6.6	6.6	**1.83**	9.8	9.8	9.8
-10	**12.0**	12.0	12.0	**6.6**	6.6	6.6	**1.82**	9.8	9.8	9.8
-11	**11.8**	11.8	11.8	**6.6**	6.6	6.6	**1.80**	9.8	9.8	9.8
-12	**11.5**	11.5	11.5	**6.5**	6.5	6.5	**1.77**	9.7	9.7	9.7
-13	**11.3**	11.3	11.3	**6.5**	6.5	6.5	**1.75**	9.7	9.7	9.7
-14	**11.1**	11.1	11.1	**6.4**	6.4	6.4	**1.72**	9.6	9.6	9.6
-15	**10.8**	10.8	10.8	**6.4**	6.4	6.4	**1.70**	9.5	9.5	9.5
-16										
-17										
-18										
-19										
-20										
-21										
-22										
-23										
-24										
-25										

* attention: operating limits not reflected in performance table

Tc [°C]	W 12 / 7 °C									
	Qc nom	**Qc min**	**Qc max**	**Pin**	**Pin min**	**Pin max**	**EER**	**I nom**	**I min**	**I max**
Ta [°C]	**[kW]**	[kW]	[kW]	**[kW]**	[kW]	[kW]	**kW / kW**	[A]	[A]	[A]
40	**10.6**	10.6	10.6	**4.6**	4.6	4.6	**2.34**	7.2	7.2	7.2
39	**10.7**	10.7	10.7	**4.4**	4.4	4.4	**2.41**	7.0	7.0	7.0
38	**10.8**	10.8	10.8	**4.3**	4.3	4.3	**2.49**	6.9	6.9	6.9
37	**10.9**	10.9	10.9	**4.2**	4.2	4.2	**2.57**	6.8	6.8	6.8
36	**10.9**	10.9	10.9	**4.1**	4.1	4.1	**2.66**	6.6	6.6	6.6
35	**11.0**	11.0	11.0	**4.0**	4.0	4.0	**2.74**	6.5	6.5	6.5
34	**11.1**	11.1	11.1	**3.9**	3.9	3.9	**2.83**	6.4	6.4	6.4
33	**11.2**	11.2	11.2	**3.8**	3.8	3.8	**2.92**	6.3	6.3	6.3
32	**11.2**	11.2	11.2	**3.7**	3.7	3.7	**3.01**	6.2	6.2	6.2
31	**11.3**	11.3	11.3	**3.6**	3.6	3.6	**3.11**	6.1	6.1	6.1
30	**11.4**	11.4	11.4	**3.5**	3.5	3.5	**3.21**	6.0	6.0	6.0
29	**11.4**	11.4	11.4	**3.4**	3.4	3.4	**3.31**	5.9	5.9	5.9
28	**11.5**	11.5	11.5	**3.4**	3.4	3.4	**3.41**	5.8	5.8	5.8
27	**11.5**	11.5	11.5	**3.3**	3.3	3.3	**3.52**	5.7	5.7	5.7
26	**11.6**	11.6	11.6	**3.2**	3.2	3.2	**3.63**	5.6	5.6	5.6
25	**11.7**	11.7	11.7	**3.1**	3.1	3.1	**3.74**	5.5	5.5	5.5
24	**11.7**	11.7	11.7	**3.0**	3.0	3.0	**3.86**	5.4	5.4	5.4
23	**11.8**	11.8	11.8	**3.0**	3.0	3.0	**3.98**	5.3	5.3	5.3
22	**11.8**	11.8	11.8	**2.9**	2.9	2.9	**4.10**	5.2	5.2	5.2
21	**11.9**	11.9	11.9	**2.8**	2.8	2.8	**4.23**	5.1	5.1	5.1
20	**11.9**	11.9	11.9	**2.7**	2.7	2.7	**4.36**	5.1	5.1	5.1
19	**12.0**	12.0	12.0	**2.7**	2.7	2.7	**4.49**	5.0	5.0	5.0
18	**12.0**	12.0	12.0	**2.6**	2.6	2.6	**4.63**	4.9	4.9	4.9
17	**12.1**	12.1	12.1	**2.5**	2.5	2.5	**4.77**	4.9	4.9	4.9

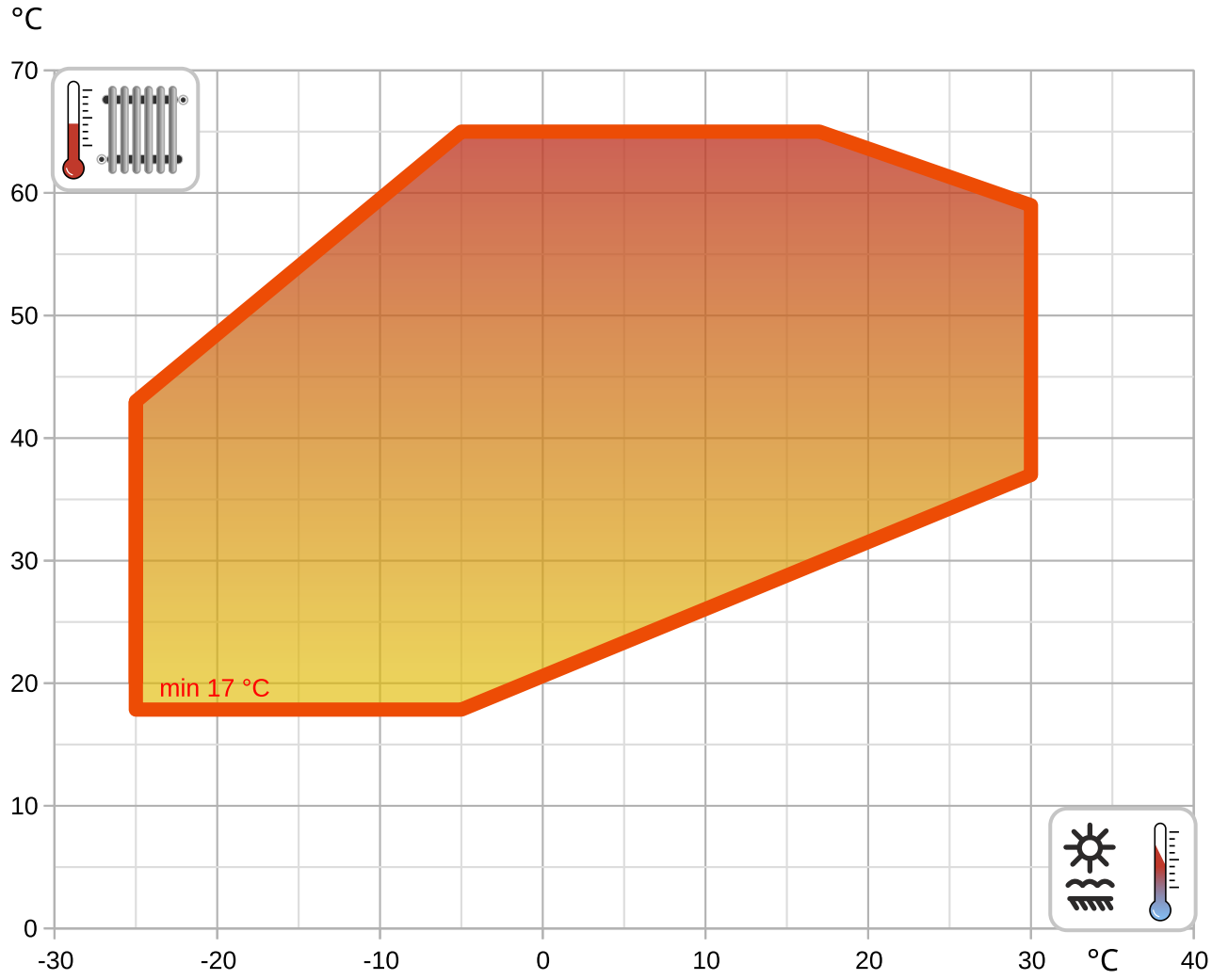
Tc [°C]	W 23 / 18 °C									
	Qc	**Qh-min**	**Qh-max**	**Pin**	**Pin-min**	**Pin-max**	**EER**	**I**	**I-min**	**I-max**
Ta [°C]	**[kW]**	[kW]	[kW]	**[kW]**	[kW]	[kW]	**kW / kW**	[A]	[A]	[A]
40	**14.3**	14.3	14.3	**4.6**	4.6	4.6	**3.14**	7.1	7.1	7.1
39	**14.4**	14.4	14.4	**4.4**	4.4	4.4	**3.24**	6.9	6.9	6.9
38	**14.5**	14.5	14.5	**4.3**	4.3	4.3	**3.35**	6.8	6.8	6.8
37	**14.6**	14.6	14.6	**4.2**	4.2	4.2	**3.46**	6.7	6.7	6.7
36	**14.7**	14.7	14.7	**4.1**	4.1	4.1	**3.57**	6.5	6.5	6.5
35	**14.8**	14.8	14.8	**4.0**	4.0	4.0	**3.69**	6.4	6.4	6.4
34	**14.9**	14.9	14.9	**3.9**	3.9	3.9	**3.81**	6.3	6.3	6.3
33	**15.0**	15.0	15.0	**3.8**	3.8	3.8	**3.94**	6.2	6.2	6.2
32	**15.1**	15.1	15.1	**3.7**	3.7	3.7	**4.06**	6.1	6.1	6.1
31	**15.2**	15.2	15.2	**3.6**	3.6	3.6	**4.19**	5.9	5.9	5.9
30	**15.3**	15.3	15.3	**3.5**	3.5	3.5	**4.33**	5.8	5.8	5.8
29	**15.4**	15.4	15.4	**3.4**	3.4	3.4	**4.47**	5.7	5.7	5.7
28	**15.5**	15.5	15.5	**3.4**	3.4	3.4	**4.61**	5.6	5.6	5.6
27	**15.6**	15.6	15.6	**3.3**	3.3	3.3	**4.76**	5.5	5.5	5.5
26	**15.7**	15.7	15.7	**3.2**	3.2	3.2	**4.91**	5.4	5.4	5.4
25	**15.8**	15.8	15.8	**3.1**	3.1	3.1	**5.06**	5.4	5.4	5.4
24	**15.8**	15.8	15.8	**3.0**	3.0	3.0	**5.22**	5.3	5.3	5.3
23	**15.9**	15.9	15.9	**3.0**	3.0	3.0	**5.38**	5.2	5.2	5.2
22	**16.0**	16.0	16.0	**2.9**	2.9	2.9	**5.55**	5.1	5.1	5.1
21	**16.1**	16.1	16.1	**2.8**	2.8	2.8	**5.73**	5.0	5.0	5.0
20	**16.1**	16.1	16.1	**2.7**	2.7	2.7	**5.90**	5.0	5.0	5.0
19	**16.2**	16.2	16.2	**2.7**	2.7	2.7	**6.09**	4.9	4.9	4.9
18	**16.3**	16.3	16.3	**2.6**	2.6	2.6	**6.28**	4.8	4.8	4.8
17	**16.3**	16.3	16.3	**2.5**	2.5	2.5	**6.47**	4.7	4.7	4.7

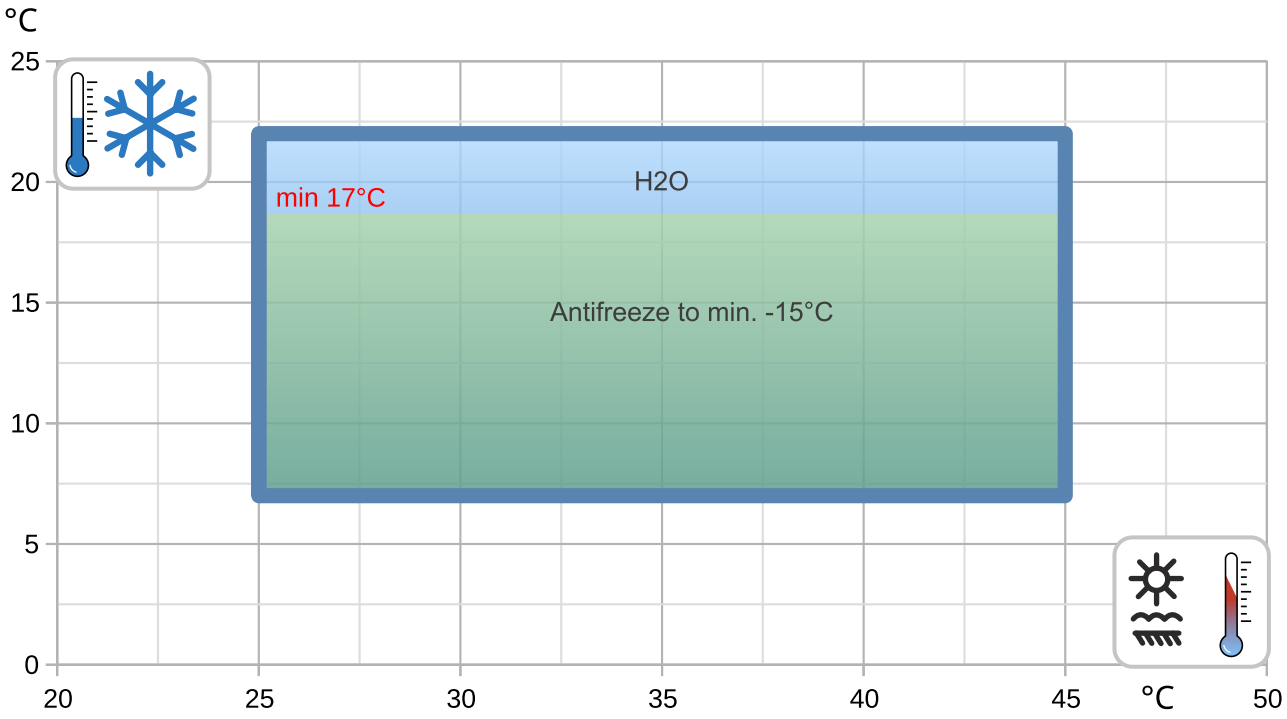
* attention: operating limits not reflected in performance table

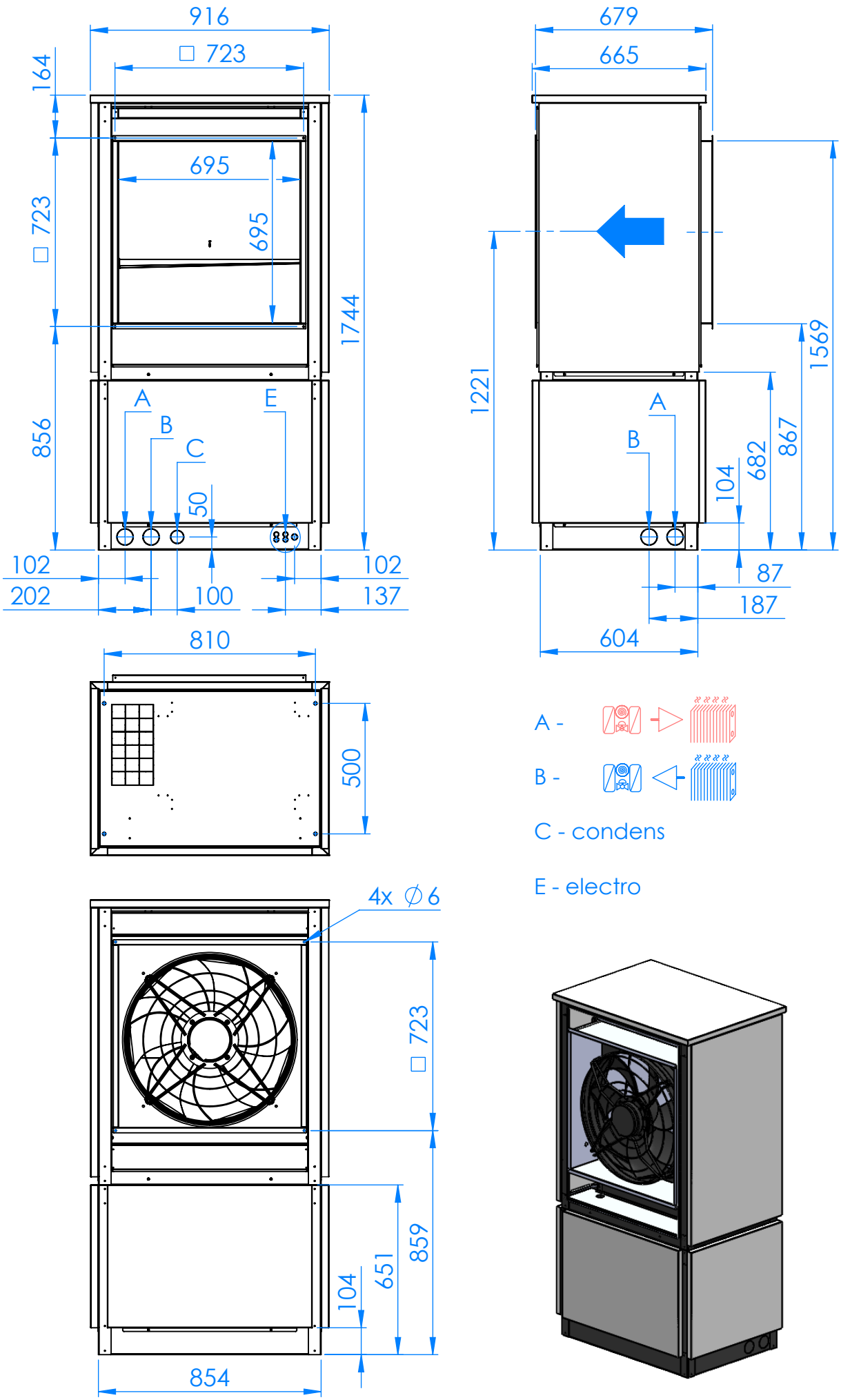
LEGENDE:

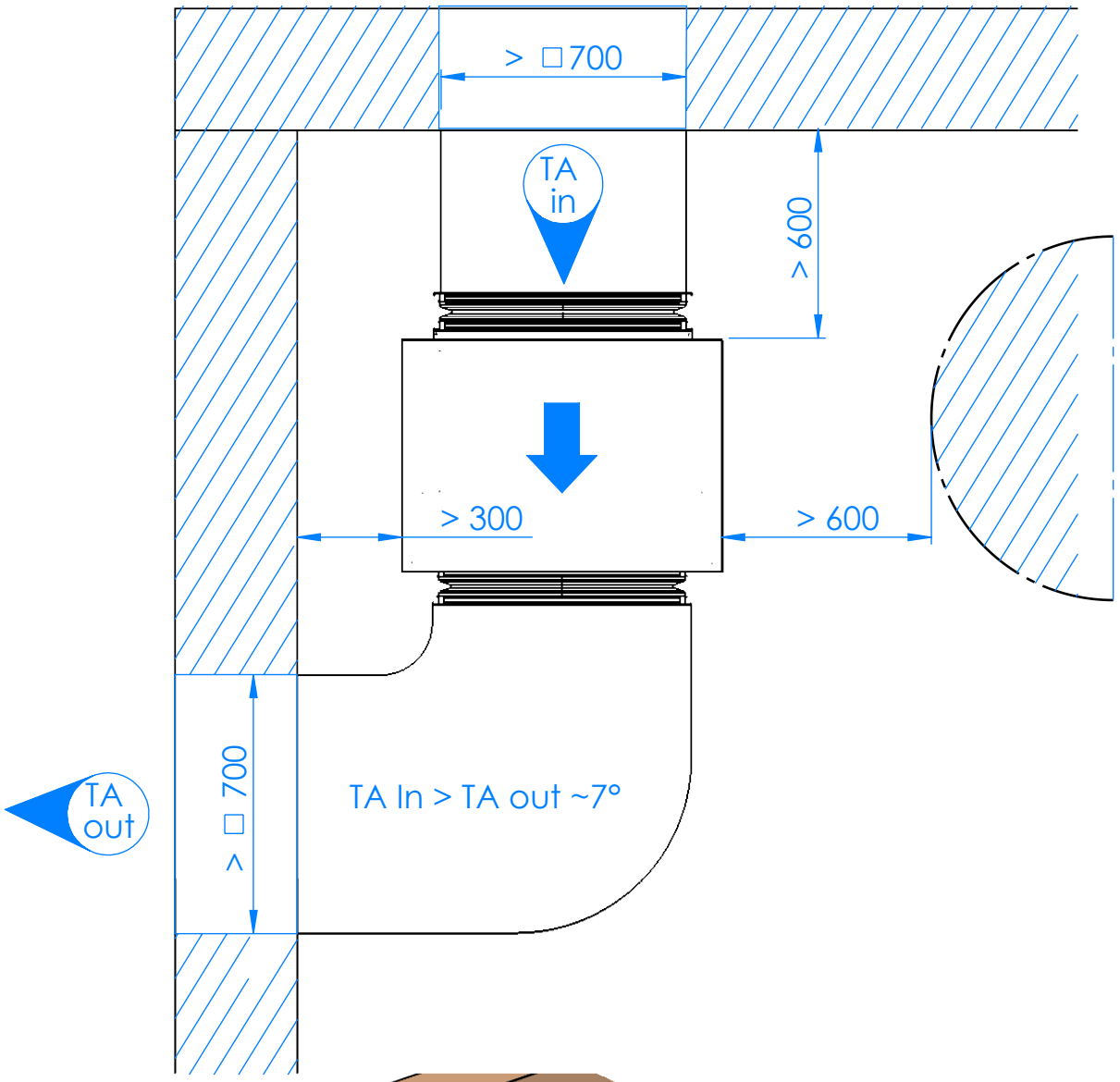
Ts-IN: Temperature renewable source - inlet [°C]
Th-OU: Temperature heating - outlet (flow) [°C]
Tc-OU: Temperature cooling - outlet (flow) [°C]
Qh nom: Heating capacity nominal
Qh min: Heating capacity minimal
Qh max: Heating capacity maximal
Pin nom: Power input at nominal heating capacity
Pin min: Power input at minimal heating capacity
Pin max: Power input at maximal heating capacity
COP nom: coefficient of performance at nominal heating capacity
Qc nom: cooling / heat extraction capacity at nominal heating capacity
Qc min: cooling / heat extraction at minimal heating capacity
Qc max: cooling / heat extraction at maximal heating capacity
I nom: Current at nominal heating capacity
EER: energy efficiency ratio at nominal cooling capacity

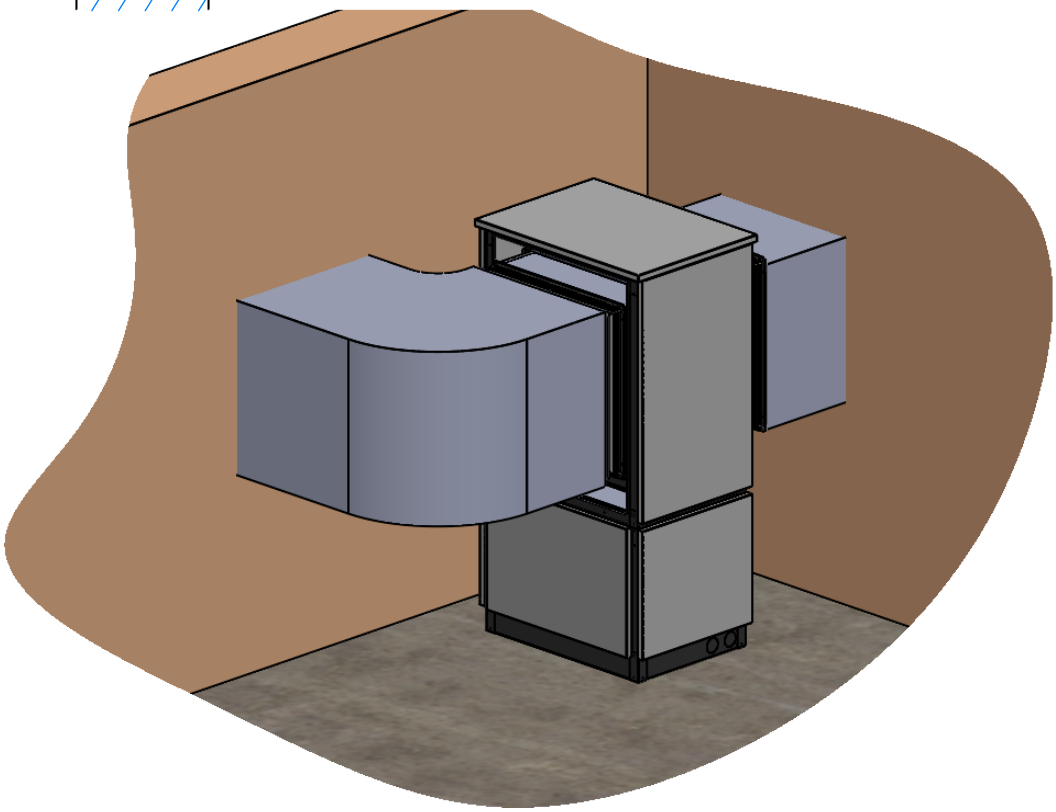
Operating limits

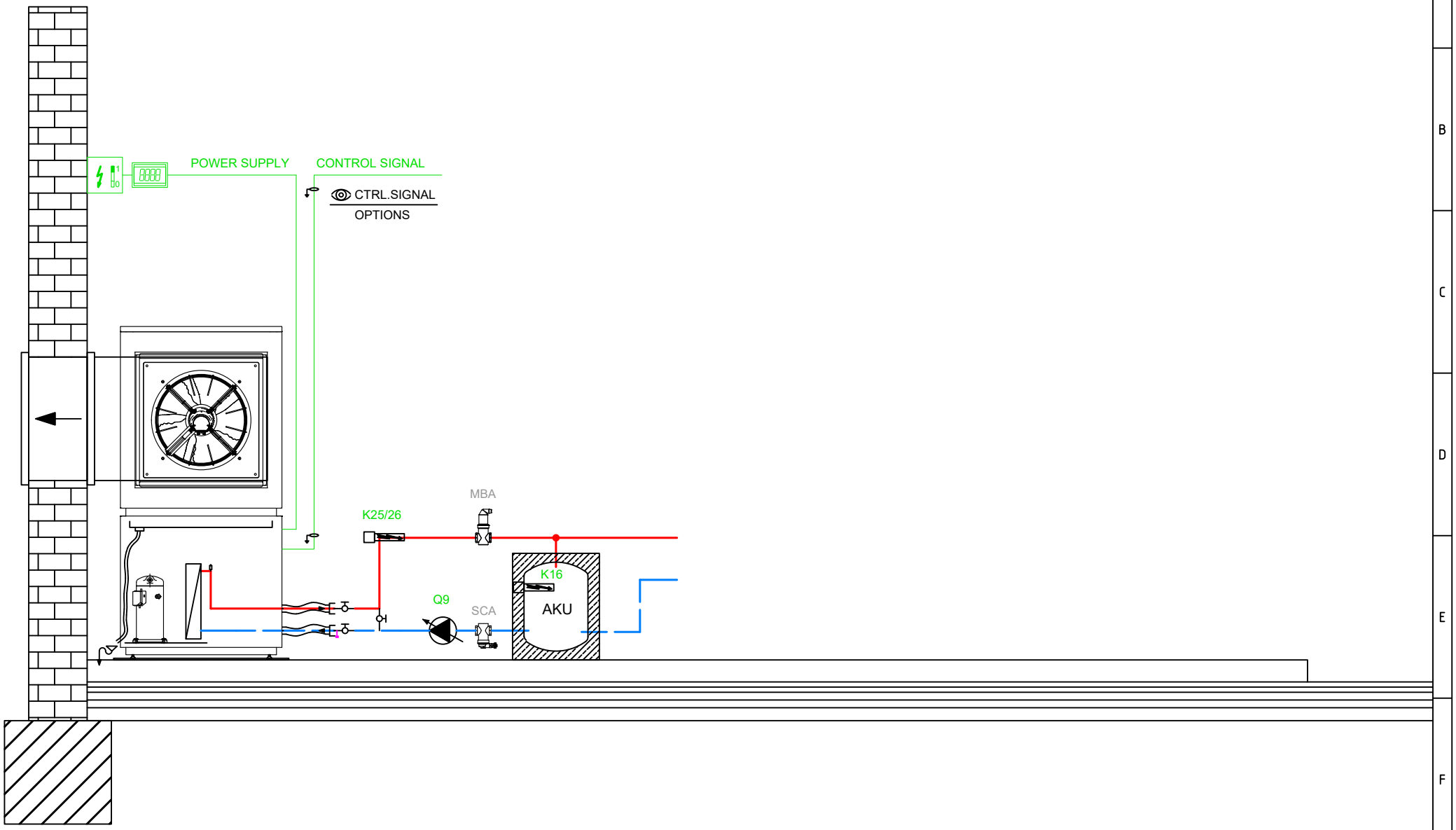




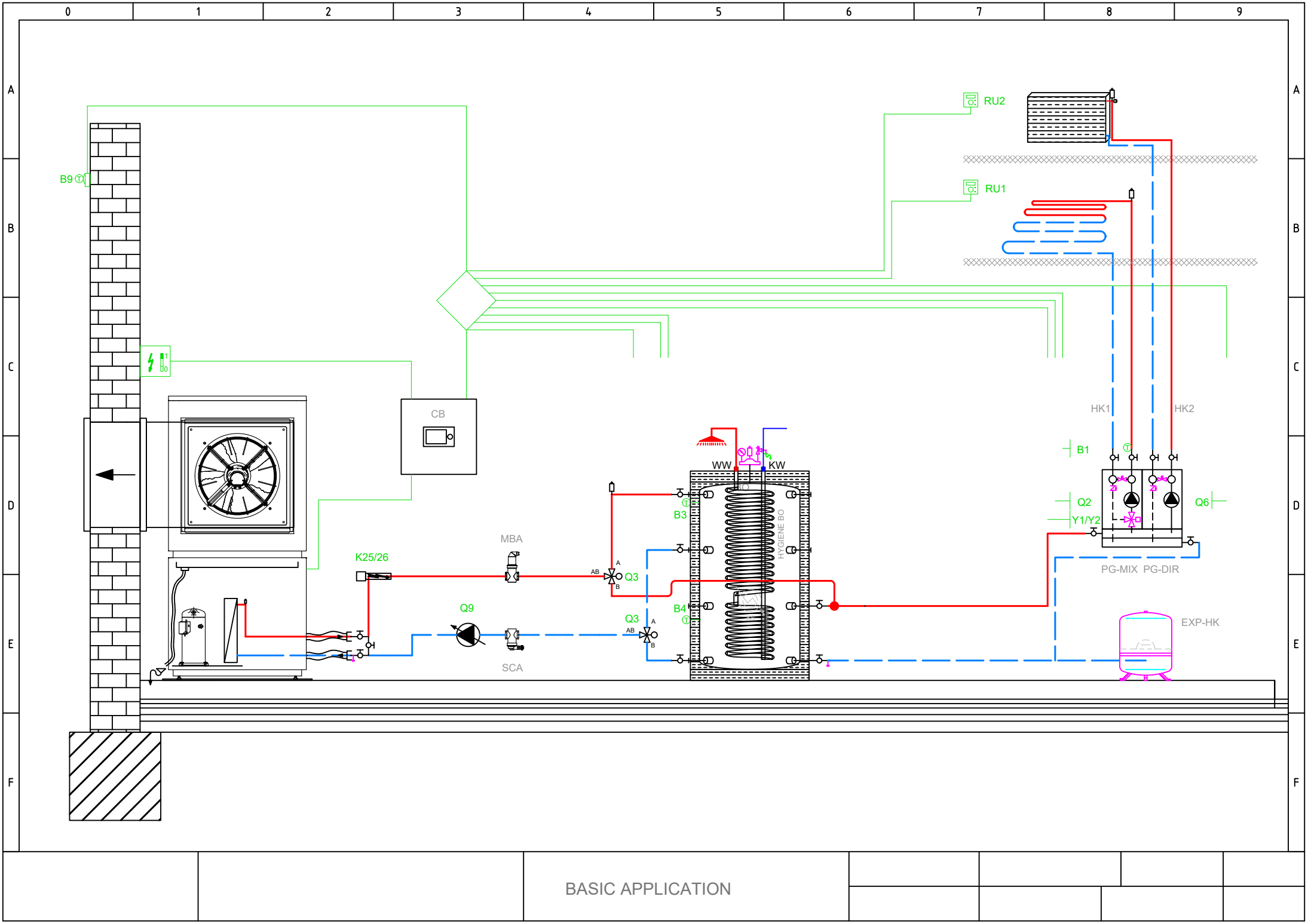

916
□ 723
164
695
695
□ 723
1744
856
A
B
C
E
50
102
202
100
102
137
679
665
1221
1569
867
682
104
A
B
87
187
604
810
500
A -
B -
C - condens
E - electro
4x ∅6
□ 723
859
651
104
854


> □700
TA in
> 600
> 300
> 600
TA out
> □ 700
TA In > TA out ~7°

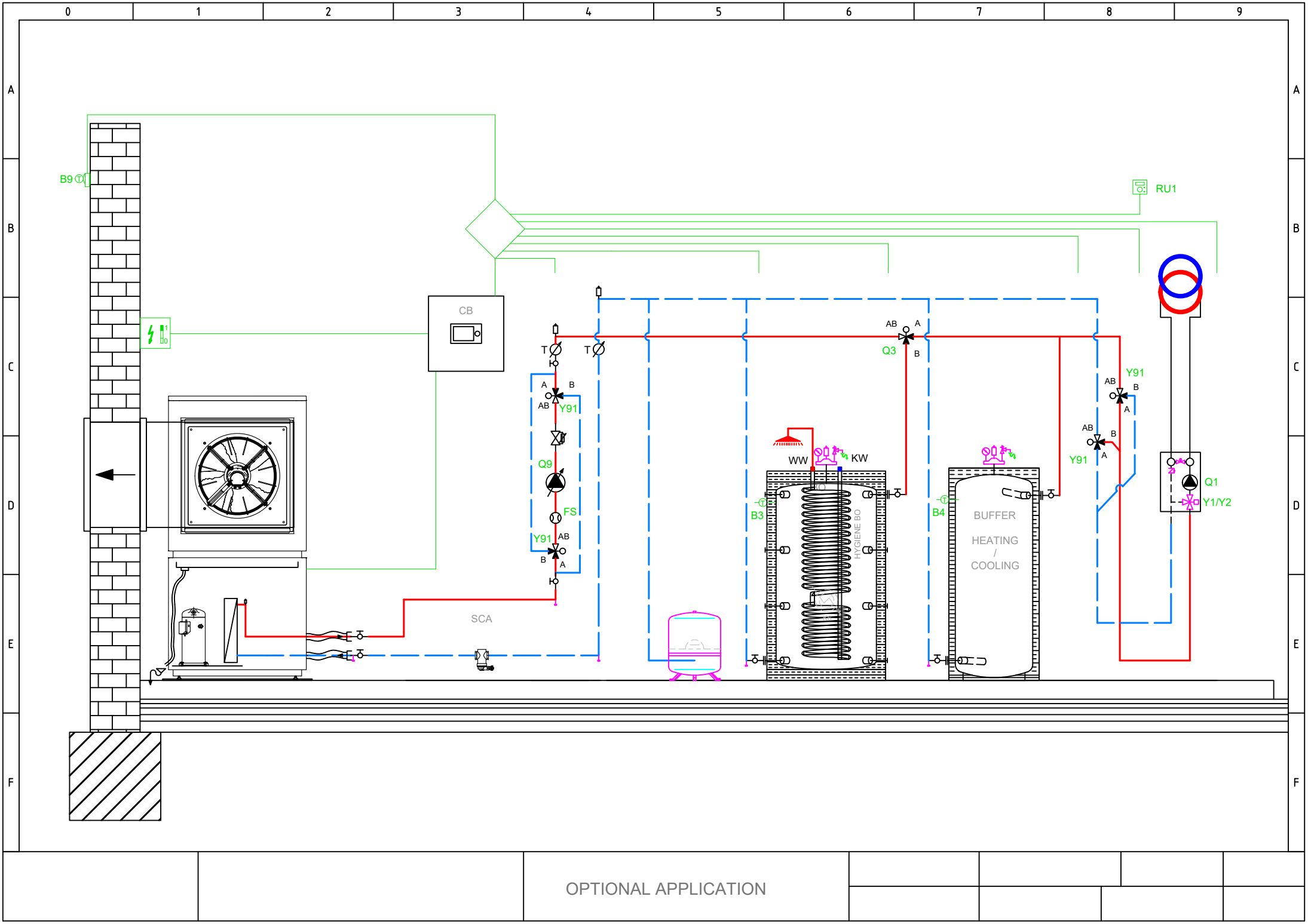




FACTORY SETTINGS



BASIC APPLICATION



OPTIONAL APPLICATION

AiWa - AWK v052024 Config FactorySet v24.9.1

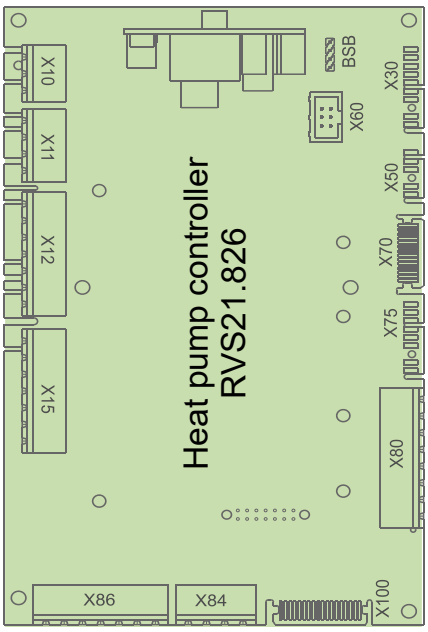
Heat pump controller preconfiguration and standard wiring of inputs and outputs

EN

Main power supply 230V / 50 Hz
Ground
Neutral conductor

	X10	1	L
			PE
			N
E10	X11	1	EX1
E11			EX2
E14			EX3
E24			EX4
K82	X12	1	QX1
			N
K40			QX2
			QX2i
			N
L			FX3
K1			QX3
Y22	X15	1	QX4
			QX4i
			N
Q9			QX5
			N
			ZX6
			N
	X86	1	GX1
			H3
			M
			H1
			G+
			M
			BSB

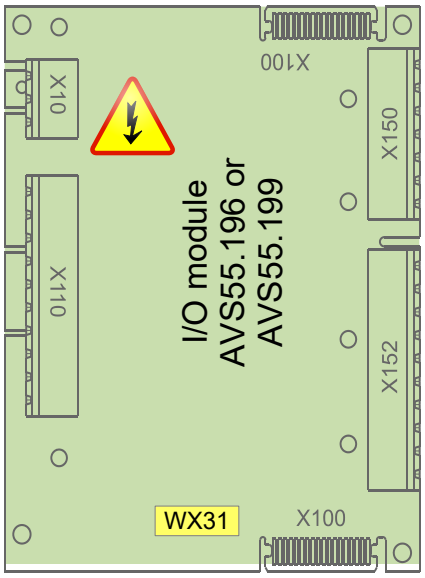
Total: max 6A
1 x QX..: max 2A



	BSB		Connection service tool (OCI700)
	X30		Operating unit (HMI) AVS37.xxx
	X60		Modbus clip-in OCI351.01
	X50		Extension module AVS75.xxx
	X70		LPB clip-in
	D1		D1 Digital output 1 Heating
	D2		D2 Digital output 2 Cooling
	D3		D3 Digital output 3 HP On/Off
	UX3		
	M	X75	
	DI6		DI6 Digital input 6 Defrosting
	DI7		DI7 Digital input 7 Alarm
	M	1	
	BX1		B91 Source inlet sensor B91
	M		
	BX2		B84 Source outl sens B92/B84
	M		
	UX1	X80	K19 Fan K19
	M		0..10 V Signal
	UX2		Q9 Condenser pump Q9
	M	1	PWM Signal
	BX3		B71 HP return sensor B71
	M		
	BX4	X84	B9 Outside sensor B9
	M	1	

Main power supply 230V / 50 Hz
Ground
Neutral conductor

	X10	1	L
			PE
			N
	X110	1	QX31
			QX32
			N
			QX33
			N
			ZX34
			N
K10	X115	1	QX35
			QX35i
			N
V81	WX31		



	BSB		
	M		
	G+	X150	5 V/12 V for active sensors
	H31		Flow measurement 10V
	M		
	H32		Low pressure 0..10V
	GX1	1	5 V/12 V for active sensors
	H33		High pressure 0..10V
	M		
	BX31		B21 HP flow sensor B21
	M		
	BX32	X152	B81 Hot-gas sensor B81
	M		
	BX33		B85 Suction gas sensor B85
	M		
	BX34		B83 Refrig sensor liquid B83
	M	1	

AiWa - AWK v052024 Config FactorySet v24.9.1

Heat pump controller preconfiguration and standard wiring of inputs and outputs

EN

AVS75.390
AVS75.391
AVS75.370

Main power supply 230V / 50 Hz
Ground
Neutral conductor

L
PE
N
T QX21
N
PE
QX22
S N
PE
QX23
C L
FX23
EX21

X50
X50
CL+ b
CL-
G+
UX21 e
M
UX22
BX21 e
M
BX22
GX21 g
H21
H22
M

Operating unit (HMI) AVS37.xxx
Extension module AVS75.xxx
Room unit QAA...
Room unit QAA...

Main power supply 230V / 50 Hz
Ground
Neutral conductor

L
PE
N
T QX21
N
PE
QX22
S N
PE
QX23
C L
FX23
EX21

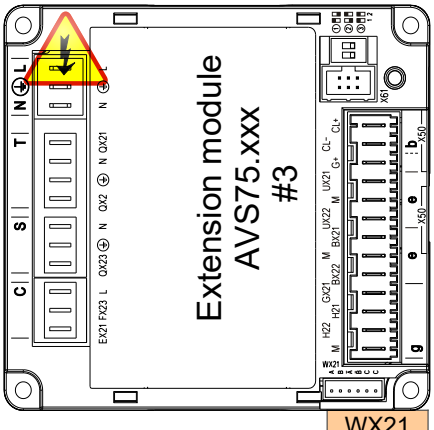
X50
X50
CL+ b
CL-
G+
UX21 e
M
UX22
BX21 e
M
BX22
GX21 g
H21
WX21
H22
M

Operating unit (HMI) AVS37.xxx
Extension module AVS75.xxx
Room unit QAA...
Room unit QAA...

Multifunktional

Main power supply 230V / 50 Hz
Ground
Neutral conductor

L
PE
N
T QX21
N
PE
QX22
S N
PE
QX23
C L
FX23
EX21



X50
X50
CL+ b
CL-
G+
UX21 e
M
UX22
BX21 e
M
BX22
GX21 g
H21
H22
M

Operating unit (HMI) AVS37.xxx
Extension module AVS75.xxx
Room unit QAA...
Room unit QAA...

B86 Suction gas sensor EVI B86

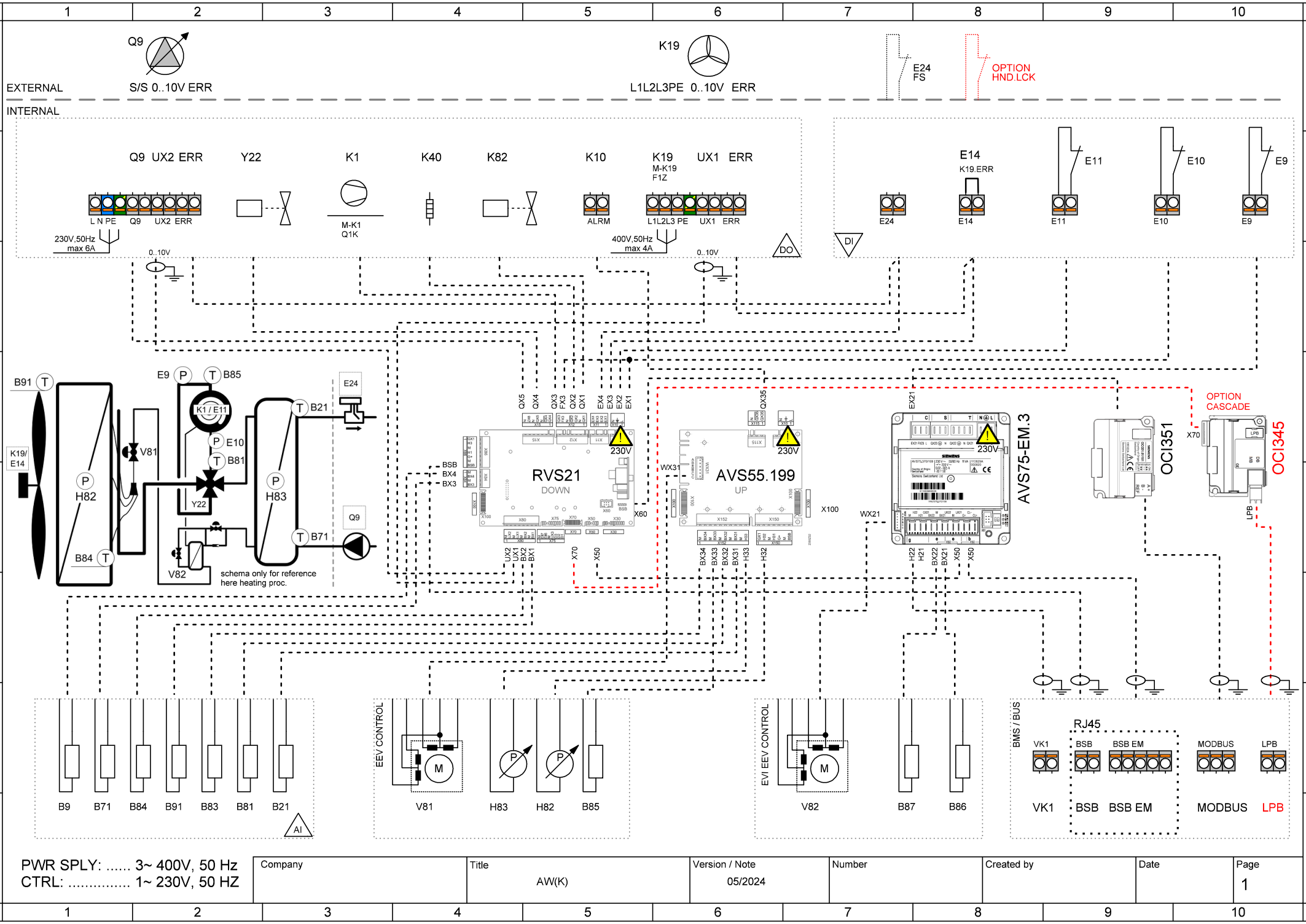
B87 Evaporation sensor EVI B87

E9 Low-pressure switch E9

V82 EEV EVI V82

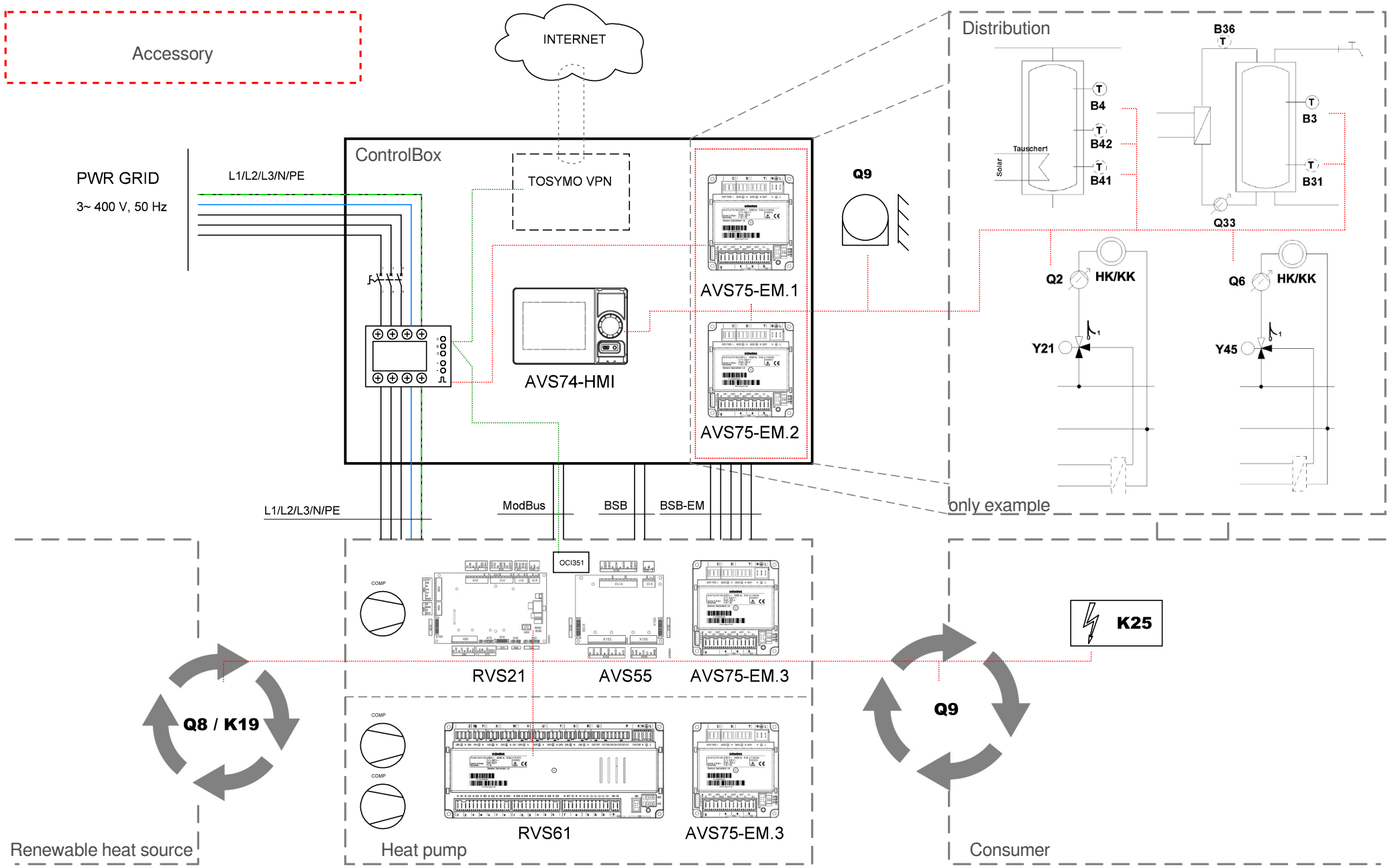
WX21

WX21

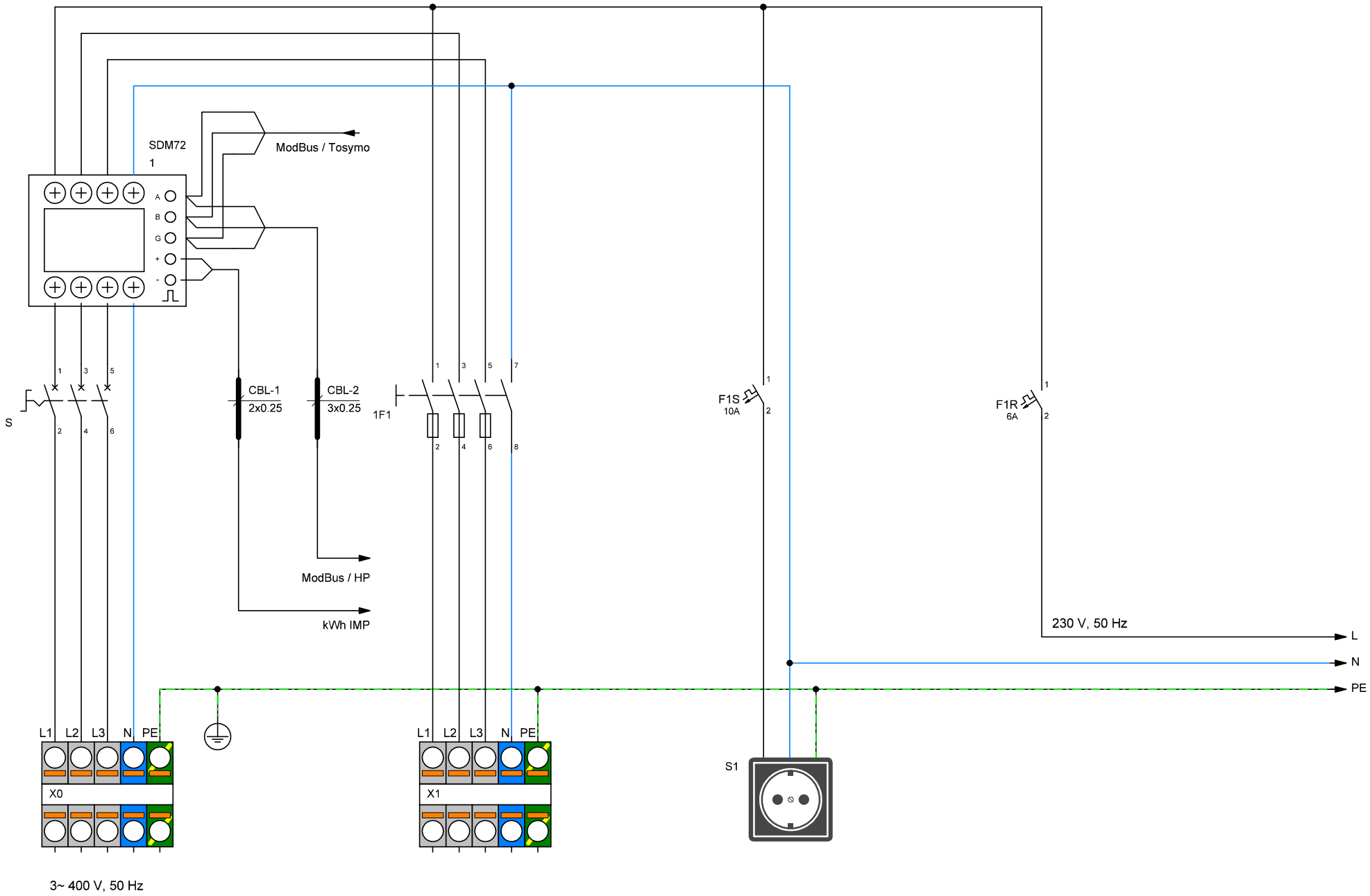


PWR SPLY: ..... 3~ 400V, 50 Hz
CTRL: ..... 1~ 230V, 50 HZ

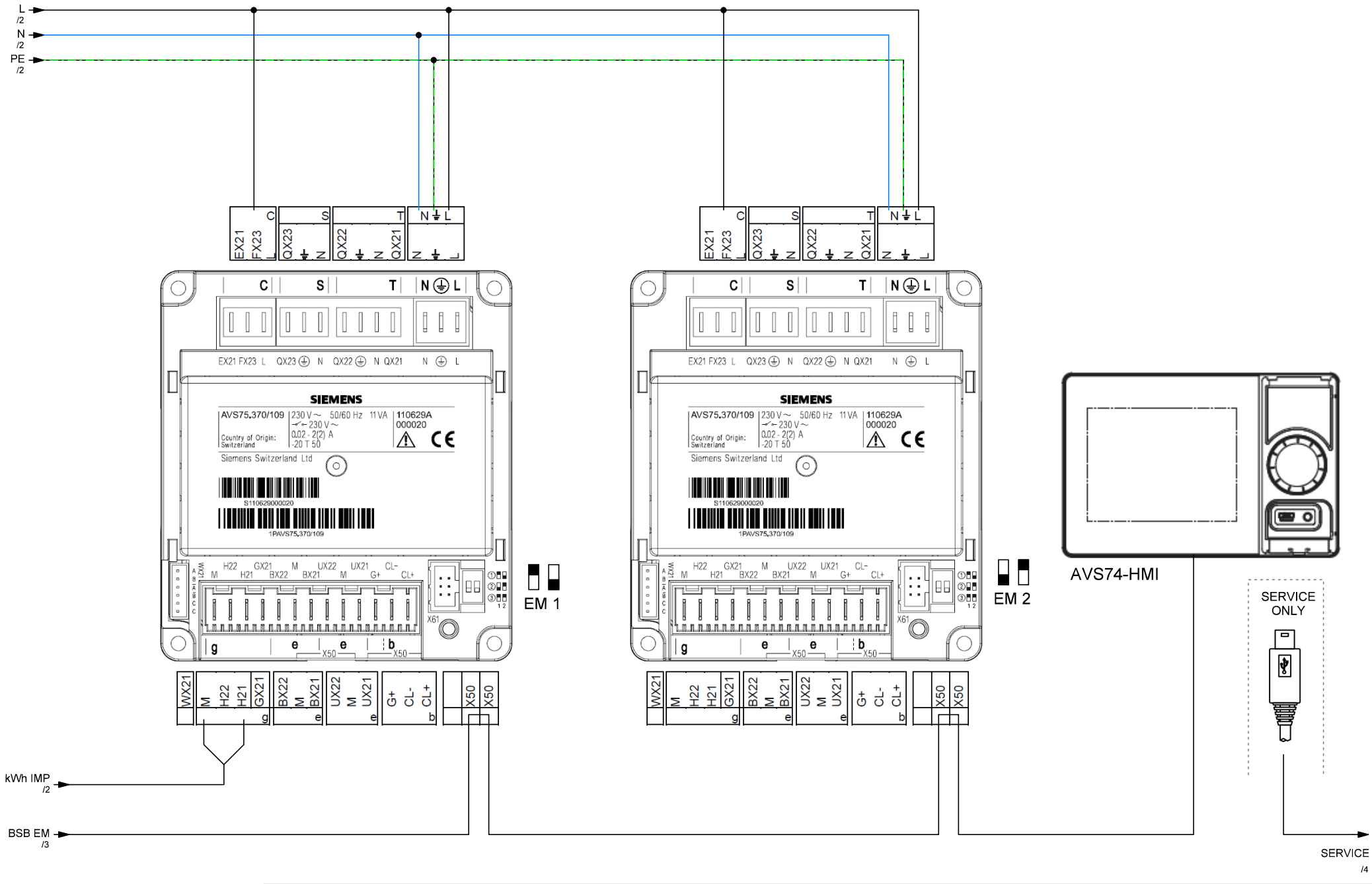
Company	Title	Version / Note	Number	Created by	Date	Page
	AW(K)	05/2024				1



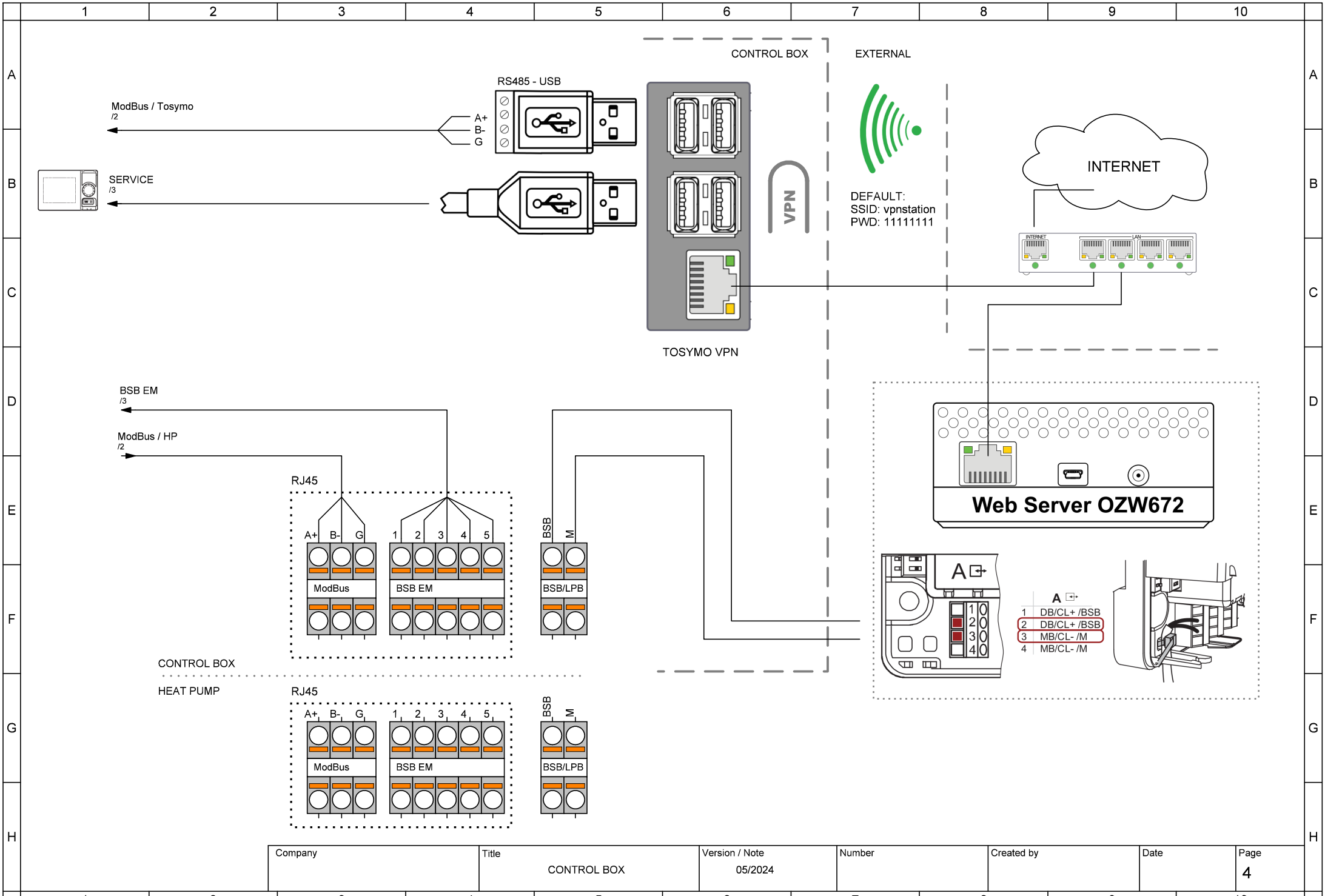
Company	Title	Version / Note	Number	Created by	Date	Page
	CONTROL BOX	05/2024				1



Company	Title	Version / Note	Number	Created by	Date	Page
	CONTROL BOX	05/2024				2



Company	Title	Version / Note	Number	Created by	Date	Page
	CONTROL BOX	05/2024				3



Company	Title	Version / Note	Number	Created by	Date	Page
	CONTROL BOX	05/2024				4

ControlBox v052024

Extension modules preconfiguration and standard wiring of inputs and outputs

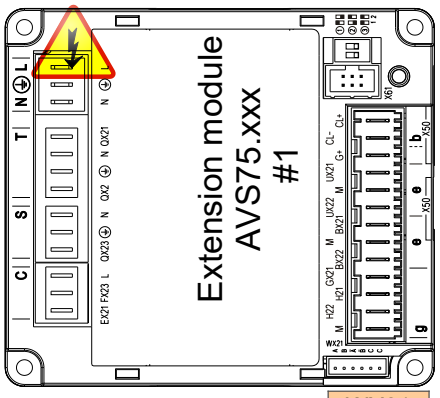
EN

AVS75.390
AVS75.391
AVS75.370

AVS75.370

Main power supply 230V / 50 Hz
Ground
Neutral conductor
Y1 Mixing valve Open
Y2 Mixing valve Close
Q2 Heat circuit pump HC1 Q2
L Phase 230V
E61 Smart grid E61

Heizkreis 1 par. 7300

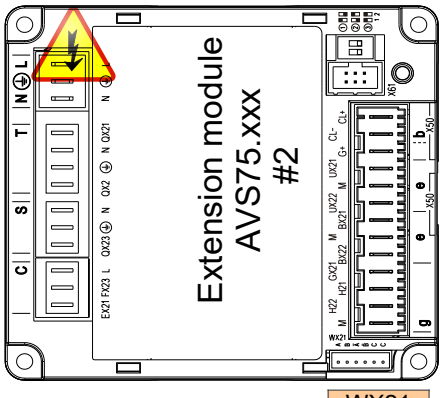


Extension module AVS75.xxx
Room unit QAA...
Room unit QAA...
B1 Flow sensor 1
Pulse count

AVS75.370

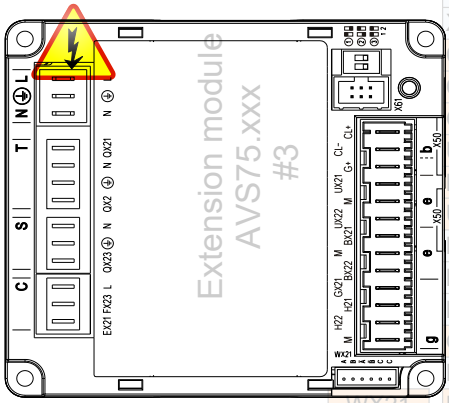
Main power supply 230V / 50 Hz
Ground
Neutral conductor
Q3 DHW ctrl elem Q3
K6 El imm heater DHW K6
Q6 Heat circuit pump HC2 Q6
L Phase 230V
E62 Smart grid E62

Multifunktional par. 7375



Operating unit (HMI) AVS37.xxx
Extension module AVS75.xxx
Room unit QAA...
Room unit QAA...
B3 DHW sensor B3
B4 Buffer sensor B4

Main power supply 230V / 50 Hz
Ground
Neutral conductor



Operating unit (HMI) AVS37.xxx
Extension module AVS75.xxx
Room unit QAA...
Room unit QAA...

Attention: Extension module 3 is inside the heat pump

Control connection options

1 ControlBox

ControlBox, with two built-in extension modules, enables numerous options for application control on the consumer side behind the heat pump. For more, see the ControlBox schematic and the application diagrams sheet.

2 Fix flow temperature setpoint - On / Off dry (potential free) contact

2 wire shielded cable 2 x 0.5 mm2 - Setpoint = 45°C (editable by param. 1859)

Connection terminal - see wiring diagram

3 Analog 0..10V flow temperature setpoint control

2 wire shielded cable 2 x 0.5 mm2 - Setpoint: 0V = 16°C ~ 10V = 60°C (editable in parameter set)

Connection terminal - see wiring diagram

4 ModBus RTU communication command

3 wire shielded cable min. 3 x 0.25mm2

For ModBus mapping table conntact technical support

5 MQTT IoT communication protocol

For more information contact technical support