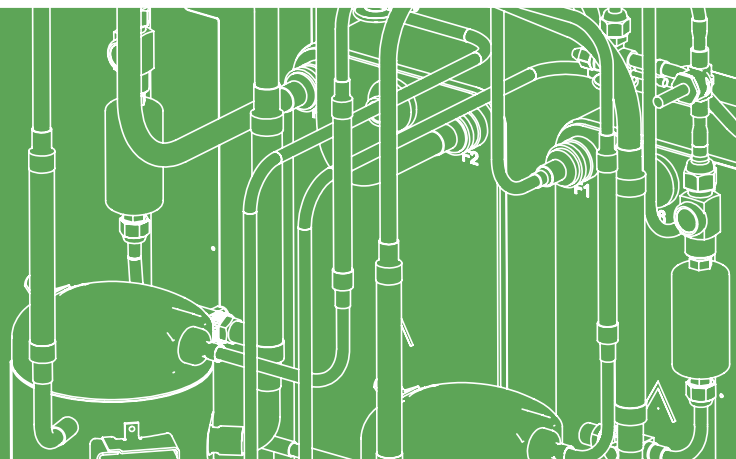


WAMAK



AiWa 16i EVI
H Out

VarioSONIC



Compact air-water heat pump with or without capacity regulation for indoor or outdoor installation

Compact air-water heat pump with or without capacity regulation for indoor or outdoor installation

Compact outside or inside installed air-water heat pump. Versions designated "i" are equipped with an integrated capacity control. Depending on the type of maximum flow temperature of up to 65 ° C. Compact design, integrated control cabinet with control.

Closed cooling circuit with Copeland Scroll compressor and heat exchangers. When capacity control variants with built in frequency inverters. Wide application possibilities of heating and cooling of houses and water heaters. Active cooling is reversible standard possible. Easy installation without complicated wiring and installation of refrigeration. Optimized for low temperature heating systems not only in new construction but also for heating systems with mid temperature flow after renovations.

Frame construction with solid base plate on adjustable feet. Epoxy-coated panel of the base unit. With weather-compensated, digital heat pump control. To control a heating circuit with mixer and one heating circuit without mixer.

Plain text user guidance with function-dependent menu levels, information texts and states in plain text. Diagnostic system with history storage and output state indication. Outdoor temperature sensor, hot gas sensor, liquid refrigerant sensor, heat pump flow temperature sensor and return temperature sensor, as well as source-flow sensor, source return sensor and DHW sensor included.

Build-in condenser pump, backup heating element of 6 kW as well as 3 way switching valve for DHW preparation in packaging.

Optionally available with ModBus module as well WebControl control and monitoring via the Internet.

Technical information - heat pump

Type :	AiWa 16i EVI H Out VarioSONIC	latest data update :	2018-01-04 00:01:43
Article code :	WAie1262	Language :	English

Nominal performance data according to EN 14511

Heating capacity :	5.03 ~ 20.21 kW	Input :	1.34 ~ 5.20 kW
Refrigerating capacity :	3.69 ~ 15.01 kW	COP :	4.2 [50 Hz]

* Data at conditions A2°C/W35°C

Nominal performance data for cooling in reverse mode

Cooling capacity - reverse operation :	5.57 ~ 18.75 kW	ERR :	4.4 [50 Hz]
Input - reverse operation :	1.50 ~ 4.28 kW	* Data at conditions A35°C/W18°C	

Operating temperature limitations

Source temperature minimal :	-25°C	Flow temperature minimal :	+12°C
Source temperature maximal :	+40°C	Flow temperature maximal :	+65°C

Mechanical data

Width :	900 mm	Weight inside :	0 kg
Depth :	6500 mm	Weight outside :	295 kg
Height :	1890 mm	Outdoor unit type :	AiWa-O

Noise emissions

Noise emissions inside Lp (1m) :	0 dB(A)	Noise emissions outside Lp (10m / max. RPM) :	39 dB(A)
------------------------------------	---------	--	----------

Refrigerant circle parameters

Refrigerant :	R410a	Orifice inside :	EEV
Refrigerant volume :	5.9 kg	Orifice economizer :	EEV
Surcharge of refrigerant over 8 meter distance IU/OU :	--- kg/m	Orifice outside :	EEV

* air - water SPLIT heat pumps are delivered without refrigerant charge and only pressured with nitrogen

Pipe dimensions, flow rates , pressure drops

Connecting dimensions - primary side :	---	Pressure drop - primary side :	0.025 ~ 0.031 kPa
Connecting dimensions - secondary side :	1.1/4 "	Pressure drop - secondary side :	max 12 kPa
Flow - primary side :	1480 ~ 6010 m ³ /hour	Recommended ΔT source :	7 K
Flow - secondary side :	0.88 ~ 3.50 m ³ /hour	Recommended ΔT consumer :	5 K

Electrical parameters

Main connection cable - dimension :	5x4 mm ²	Current - nominal :	8.61 / 3.0 A
-------------------------------------	---------------------	---------------------	-----------------

Primary side cable - dimension :	5x4+LAN mm ²	Current - maximal :	24.32 / 8.50 A
Voltage :	3 x 400 V	Softstart :	Inverter
Fuze :	20 A	Starting current :	RAMP A

Features

Condenser circulator installed :	Yes	Installed HP controller :	SIEMENS RVS 21
Fan :	EC 630 mm ErP	Control of mixed heating circuit :	Yes
Bivalent heater installed :	6 kW	Control of direct pump heating circuit :	Yes
Three way switching valve in delivery :	Yes	Active cooling :	Yes
ModBus :	with extension module	Solar system control :	Yes
WebControl :	with WebServer-Module		

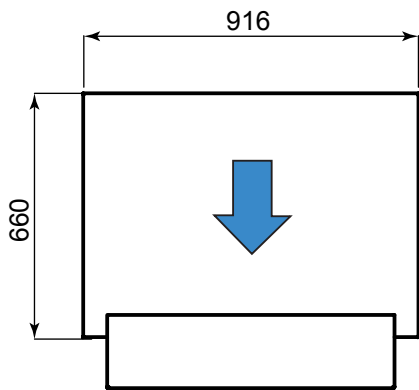
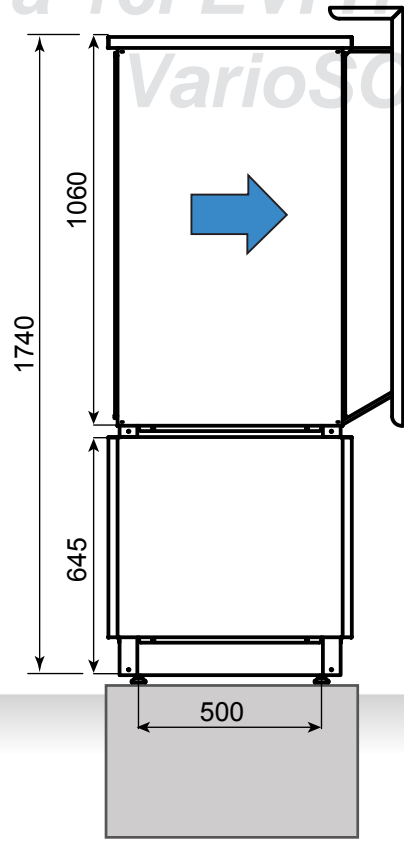
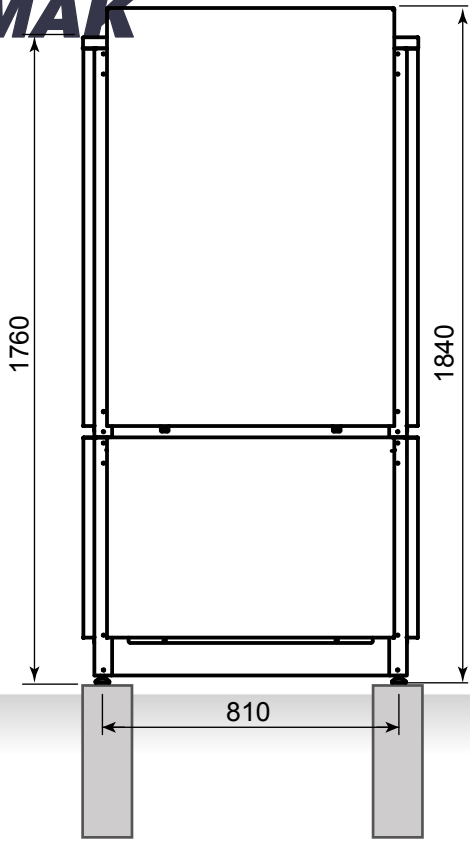
!!! Technical data subject to change without notice !!!




Frequency Hz	Source	flow temperature 35°C			flow temperature 55°C		
		Heating capacity kW	Input kW	COP	Heating capacity kW	Input kW	COP
117	-22	10.91	4.83	2.26	-0	-0	-0
117	-15	13.81	4.98	2.78	15.07	7.23	2.09
117	-7	16.72	5.10	3.29	17.81	7.55	2.36
117	2	20.22	5.20	3.90	-0	-0	-0
117	7	-0	-0	-0	-0	-0	-0
117	10	-0	-0	-0	-0	-0	-0
117	15	-0	-0	-0	-0	-0	-0
100	-22	9.65	4.17	2.32	-0	-0	-0
100	-15	12.37	4.27	2.91	13.44	6.24	2.16
100	-7	14.84	4.33	3.44	15.79	6.48	2.44
100	2	17.93	4.39	4.09	18.66	6.58	2.84
100	7	-0	-0	-0	20.41	6.64	3.08
100	10	-0	-0	-0	21.58	6.66	3.25
100	15	-0	-0	-0	21.58	6.66	3.25
90	-22	8.65	3.76	2.31	-0	-0	-0
90	-15	11.20	3.82	2.94	12.27	5.75	2.14
90	-7	13.46	3.86	3.49	14.39	5.83	2.47
90	2	16.25	3.90	4.18	16.99	5.93	2.87
90	7	18.2	3.90	4.67	18.49	5.95	3.11
90	10	19.44	3.90	4.99	19.64	5.97	3.30
90	15	19.44	3.90	4.99	19.64	5.97	3.30
75	-22	6.96	3.15	2.22	-0	-0	-0
75	-15	9.26	3.15	2.95	10.19	4.79	2.13
75	-7	11.18	3.17	3.54	12.00	4.86	2.48
75	2	13.51	3.19	4.24	14.02	4.92	2.86
75	7	15.07	3.17	4.76	15.36	4.94	3.12
75	10	16.12	3.17	5.09	16.31	4.94	3.31
75	15	16.12	3.17	5.09	16.31	4.94	3.31
50	-22	5.10	2.12	2.42	-0	-0	-0
50	-15	5.93	2.10	2.84	6.50	3.05	2.14
50	-7	7.16	2.10	3.43	7.84	3.31	2.37
50	2	8.63	2.07	4.17	9.22	3.33	2.77
50	7	9.61	2.05	4.69	10.09	3.33	3.04
50	10	10.29	2.03	5.07	10.68	3.17	3.37
50	15	-0	-0	-0	-0	-0	-0
30	-22	-0	-0	-0	-0	-0	-0
30	-15	-0	-0	-0	-0	-0	-0
30	-3.5	4.51	1.34	3.37	4.79	1.77	2.71
30	2	5.00	1.34	3.73	5.29	1.83	2.90
30	7	5.49	1.30	4.23	5.76	1.87	3.09
30	10	5.80	1.28	4.54	6.07	1.89	3.22
30	15	5.80	1.28	4.54	6.07	1.89	3.22







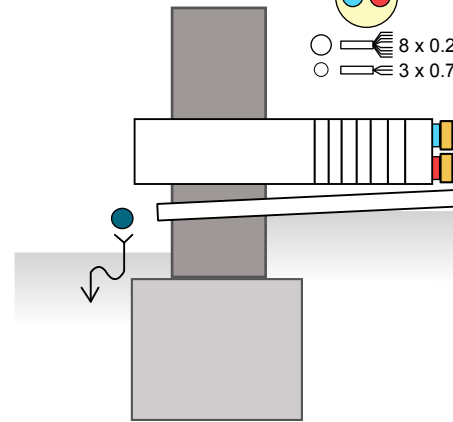
AiWa 16i EVI H Out VarioSONIC

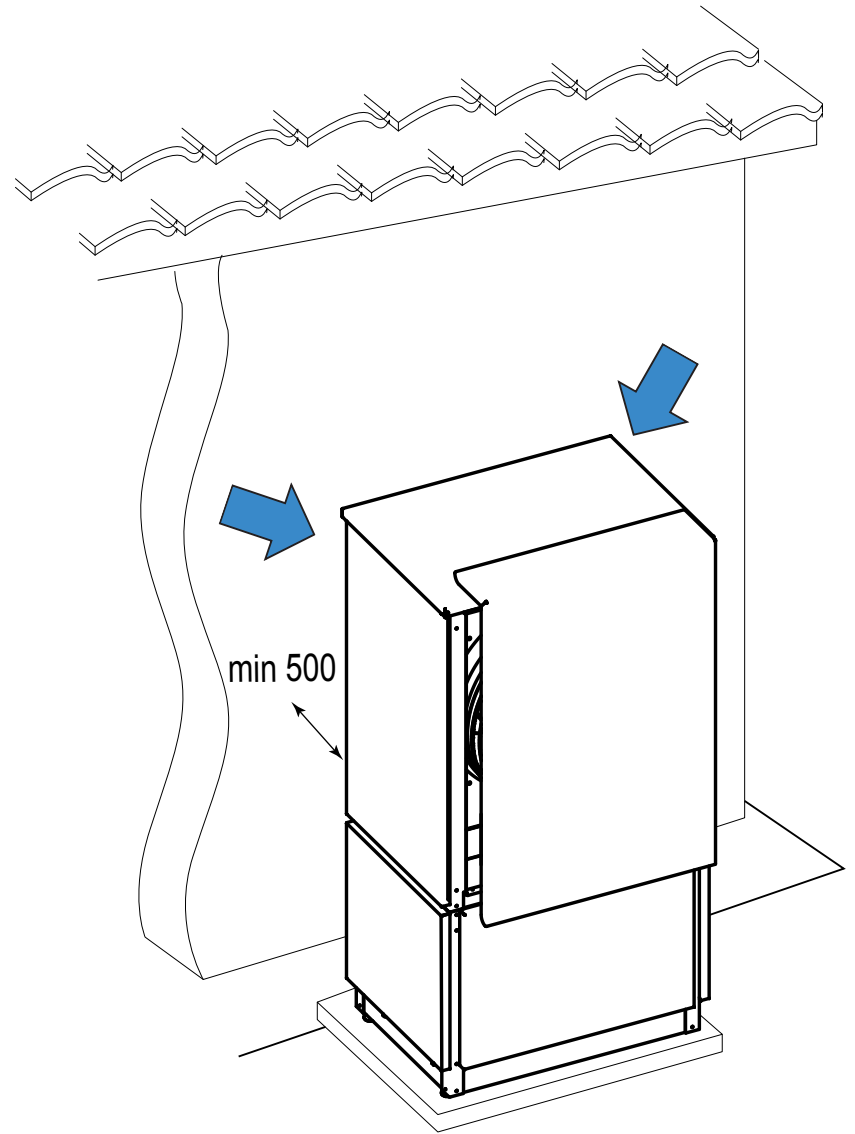
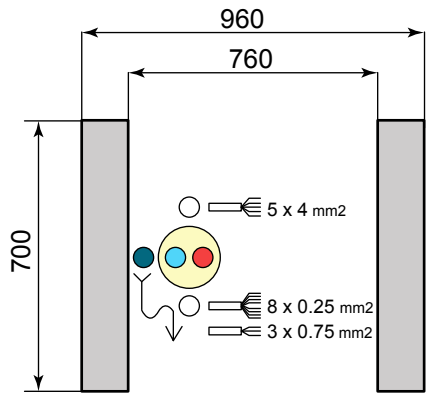
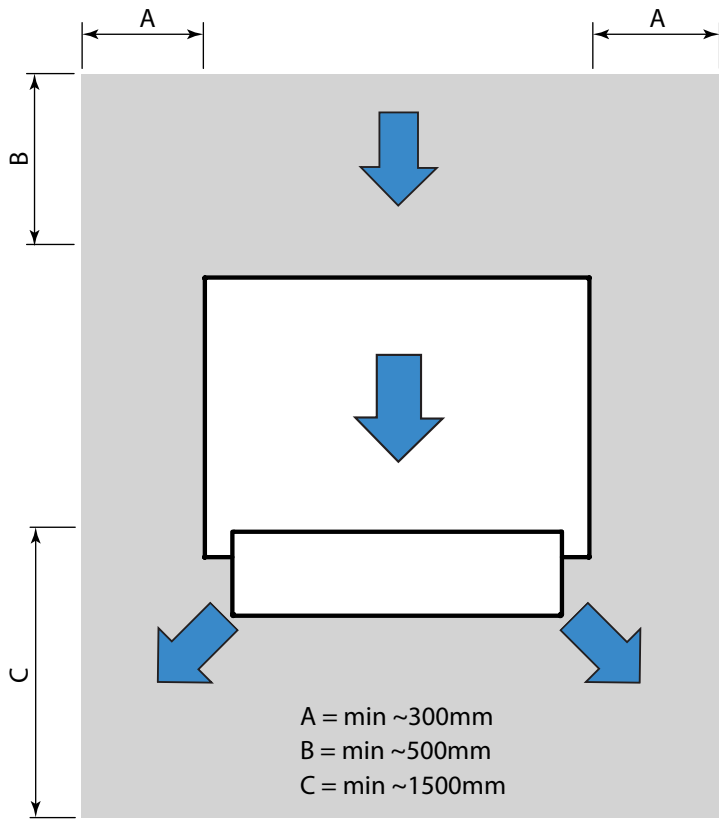


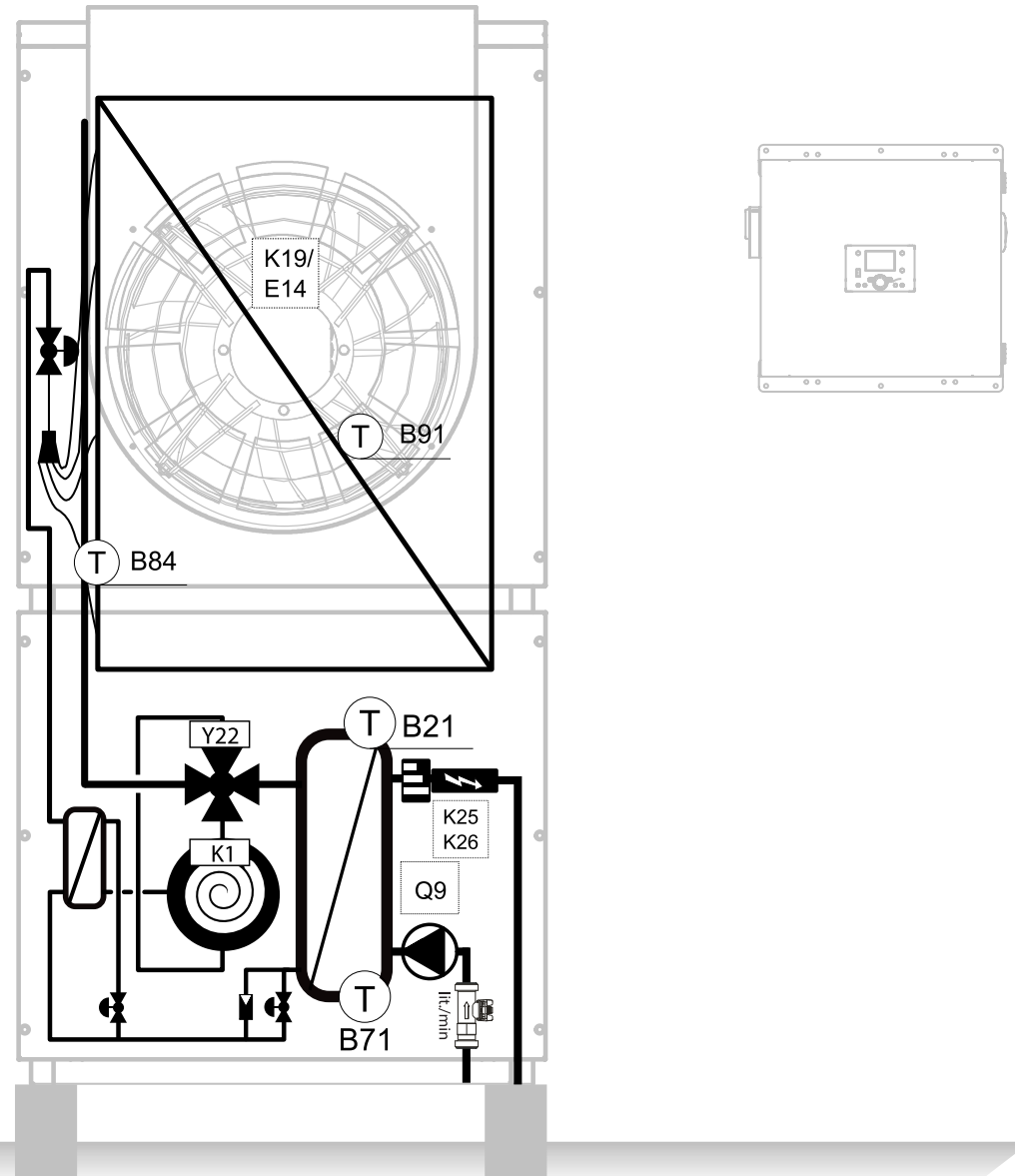

380V / 50 Hz
(230V / 50 Hz)

CONTROL

-  5 x 4 m
- 
-  8 x 0.2
-  3 x 0.7

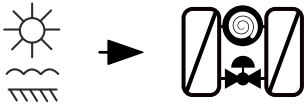




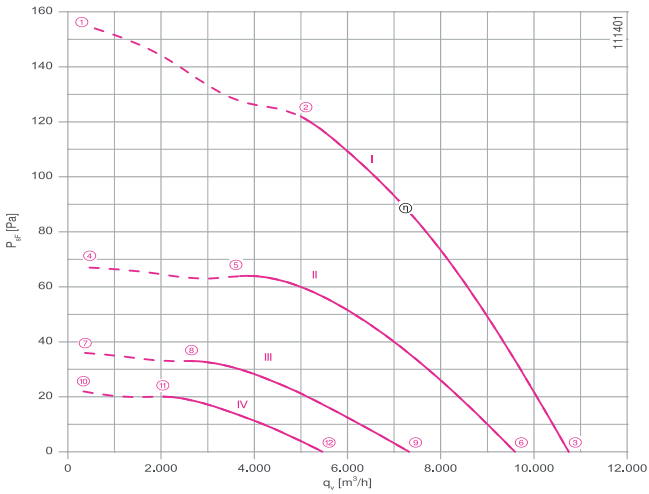




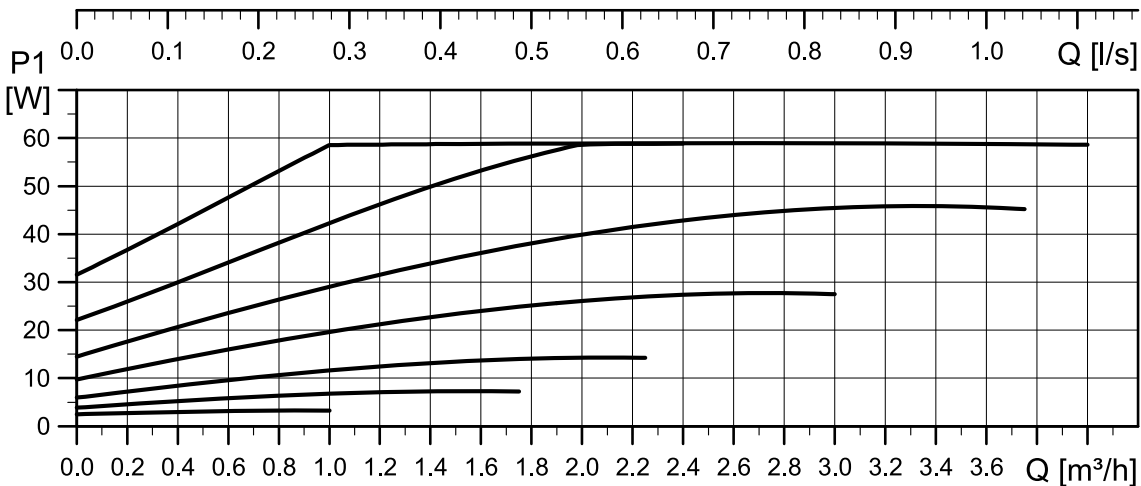
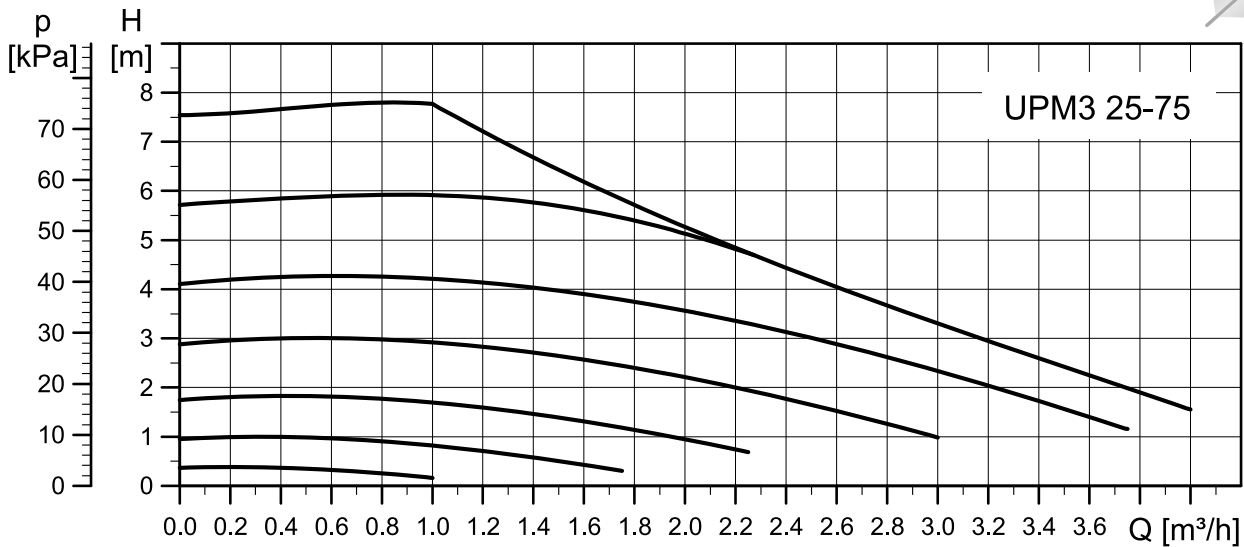
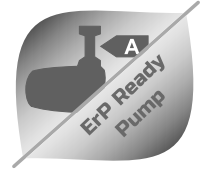
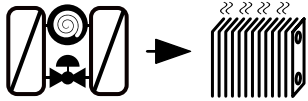
AiWa 16i EVI H Out VarioS

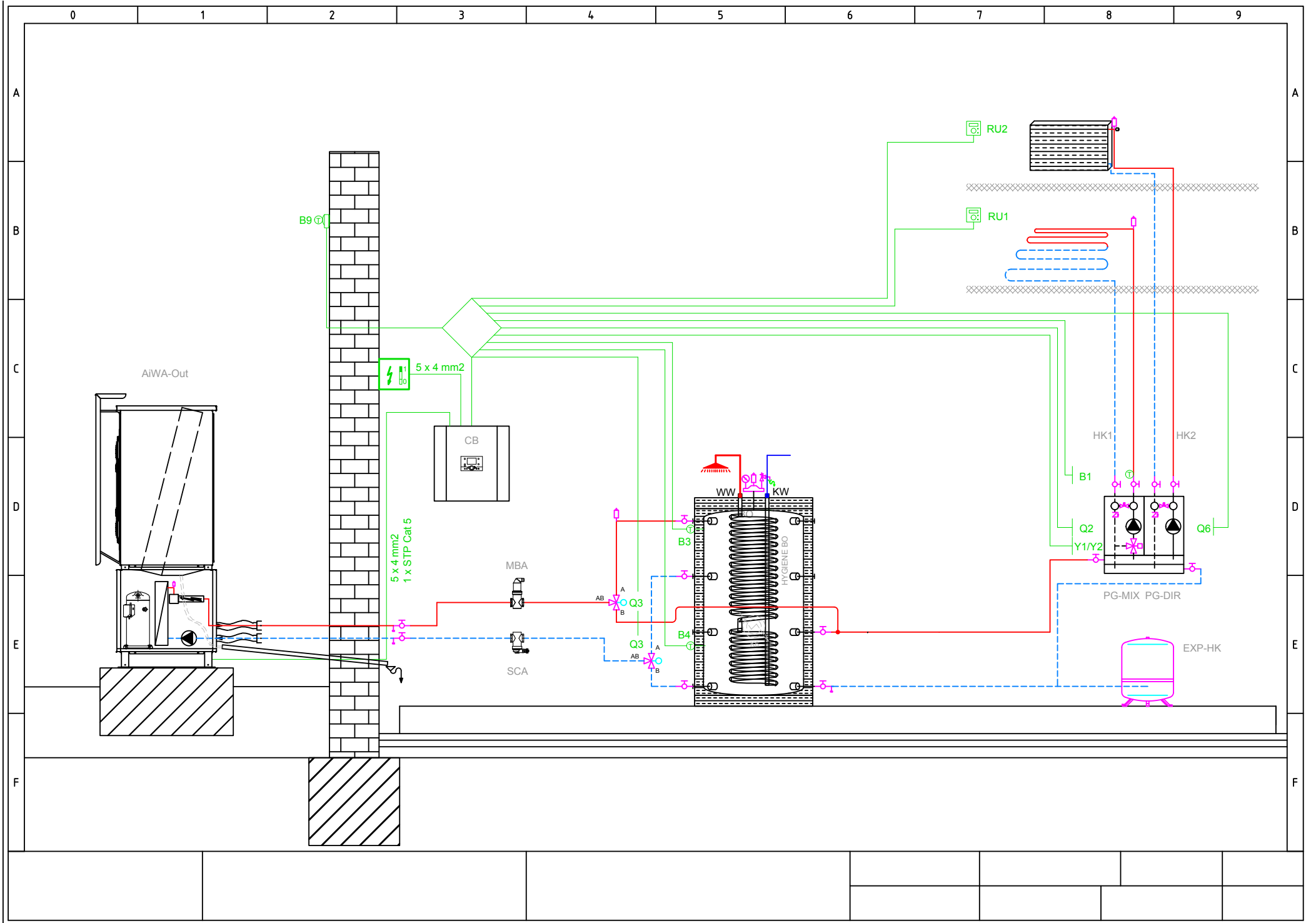


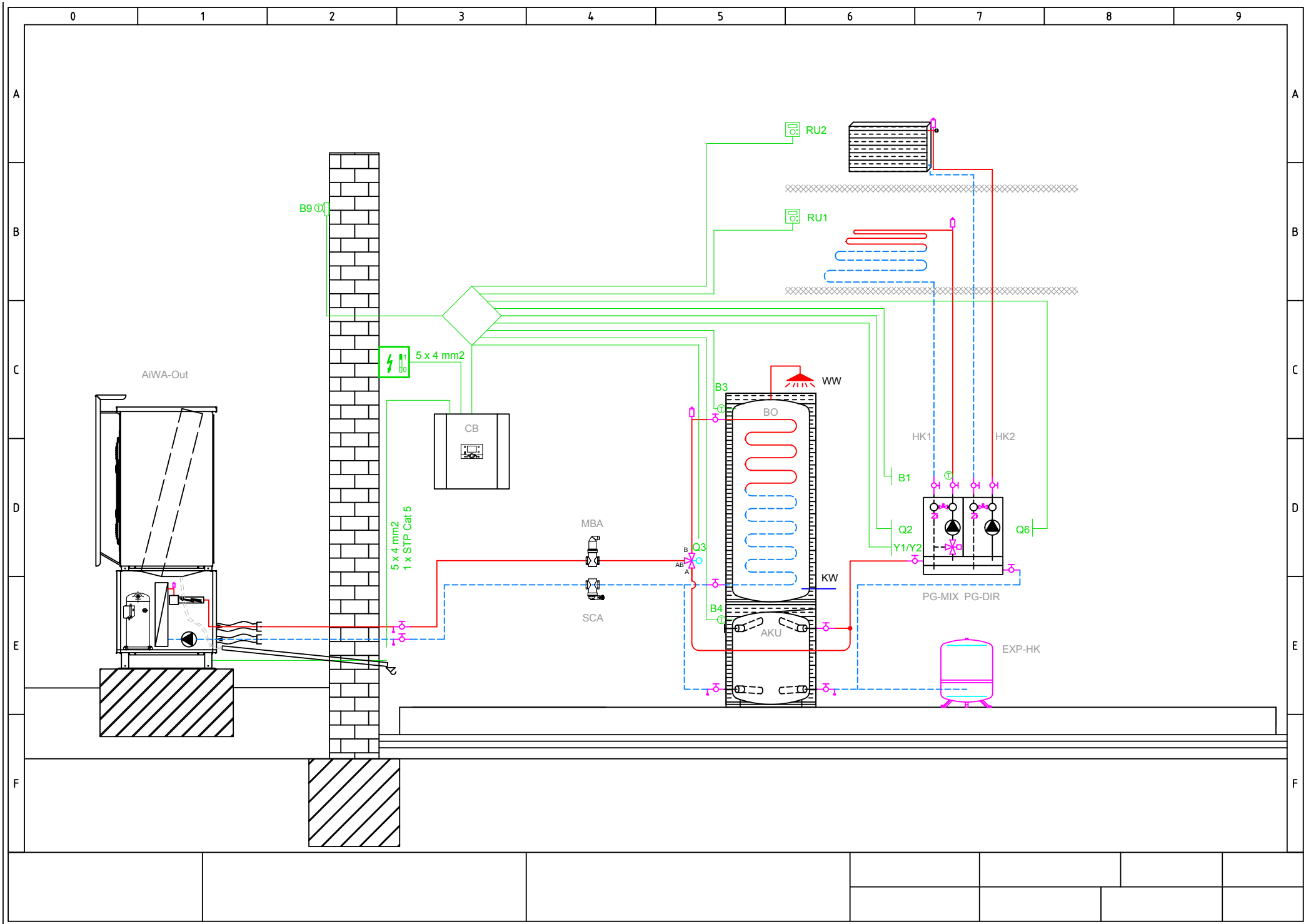
EC Fan 630mm

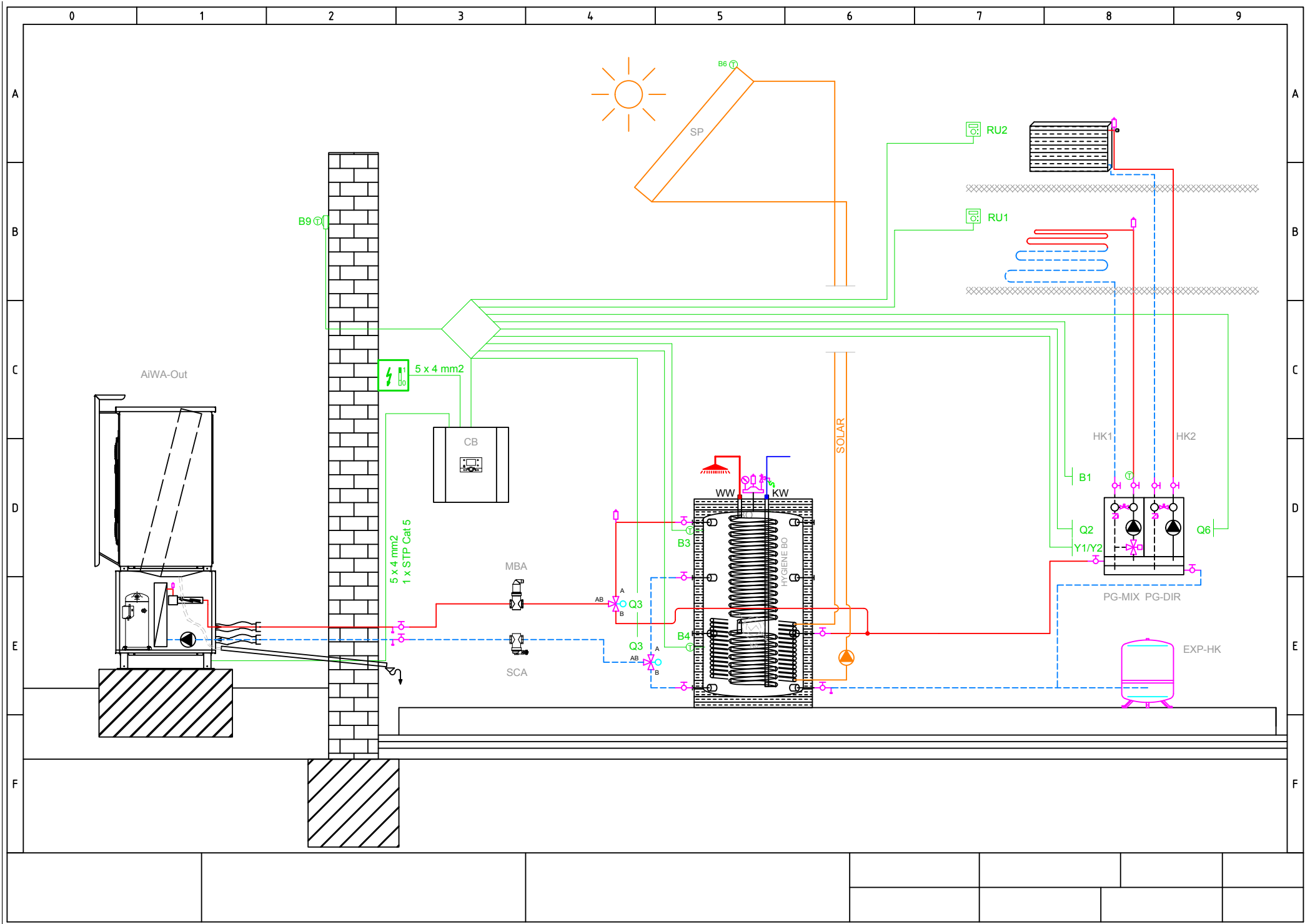


	U V		I A	P ₁ W	n min ⁻¹	L _{WA5} dB(A)
I	230	①	3,70	780	770	
	230*	②	2,90*	640*	870*	73
	230	③	2,20	480	930	71
II	170	④	3,20	480	510	
	170	⑤	3,00	460	630	66
	170	⑥	2,30	370	840	69
III	135	⑦	2,60	300	370	
	135	⑧	2,50	300	460	59
	135	⑨	2,30	280	640	63
IV	110	⑩	2,10	200	290	
	110	⑪	2,10	200	350	52
	110	⑫	2,00	190	480	56







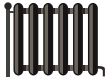




ENERG Y IJA
енергия - ενεργεια IE IA

WAMAK

AiWa 16i EVI H Out
VarioSONIC



55 °C

35 °C



A++

A++



- dB



53 dB

■ 14
■ **11**
■ 6
kW

■ 14
■ **10**
■ 6
kW



2015

811/2013

**AiWa 16i EVI H Out
VarioSONIC**

ErP Data

	55 °C	35 °C
Energy class	A++	A++
η [%]	132	163
P_{rated} [kW]	11	10
Q_{HE} [kWh/y]	10273	8331
SCOP [-]	3.31	4.07
$T_{bivalent}$ [°C]	-	-9

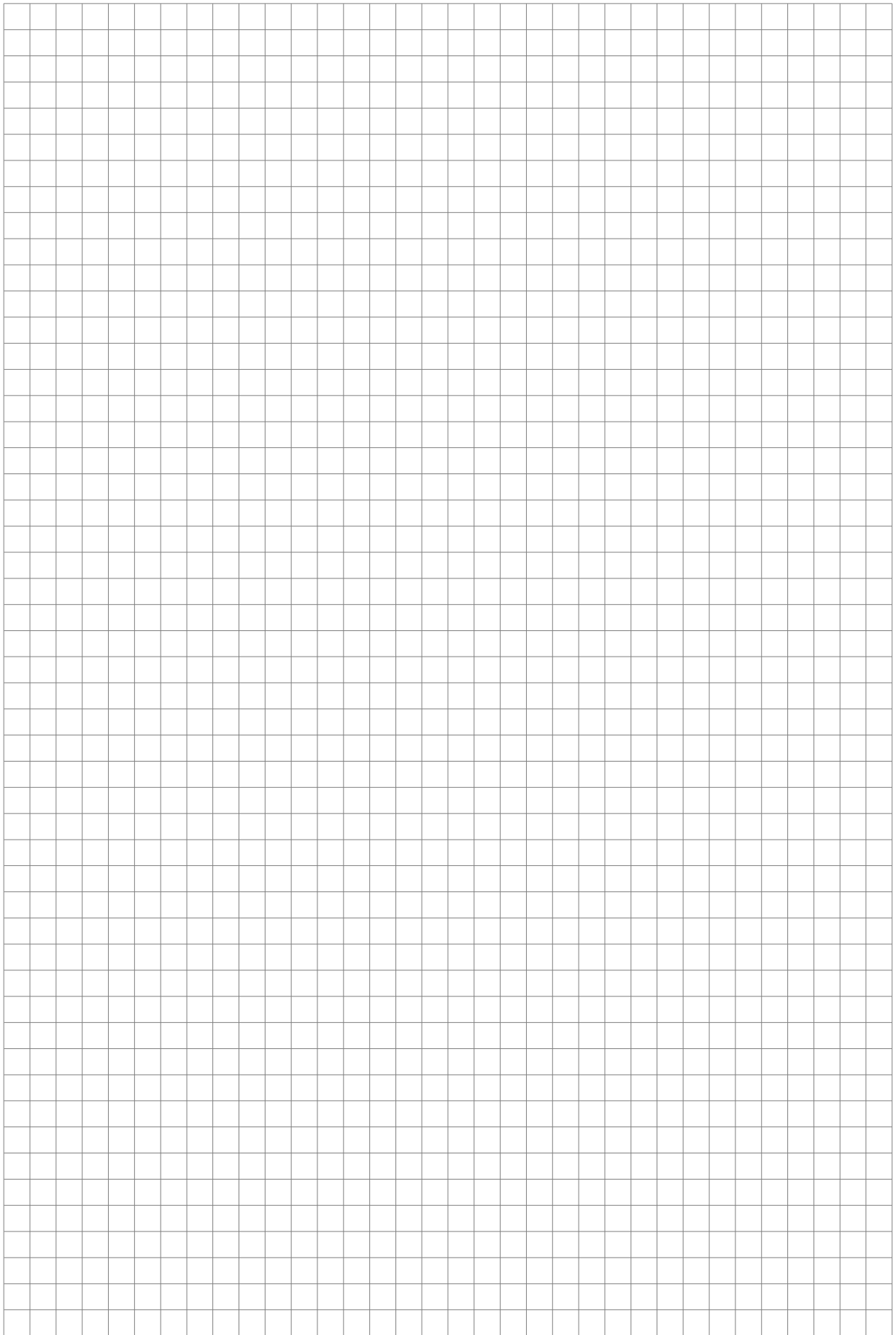
	A+	A++
Energy class	A+	A++
η [%]	105	145
P_{rated} [kW]	14	14
Q_{HE} [kWh/y]	15706	11329
SCOP [-]	2.62	3.62
$T_{bivalent}$ [°C]	-	-9

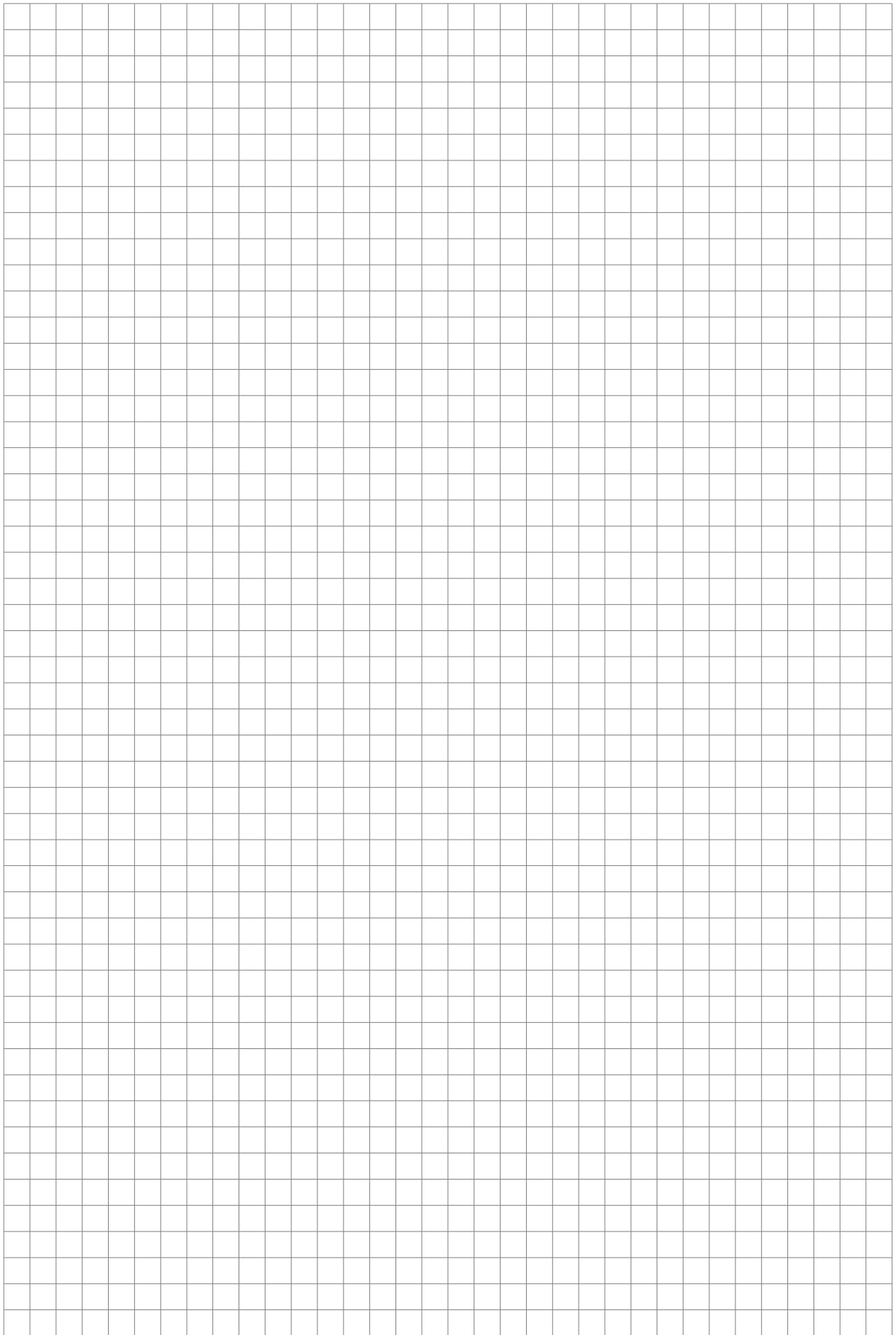
	A++	A++
Energy class	A++	A++
η [%]	150	150
P_{rated} [kW]	6	6
Q_{HE} [kWh/y]	5774	5770
SCOP [-]	3.76	3.76
$T_{bivalent}$ [°C]	-	-

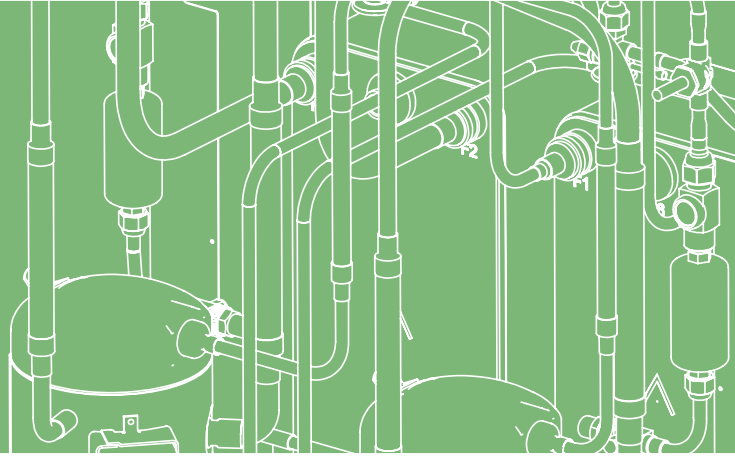
CONTROLLER



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







SERVICE