



Technical data / Scope of supply

Performance data		Values in brackets: (1 Compressor)		SWVC 62(H)(K)3	SWVC 92(H)(K)3
Heating capacity COP	for B0/W35 acc. to EN14511	Partial load operation	kW COP	3,32 4,86	4,00 4,76
	for B0/W45 acc. to EN14511	Partial load operation	kW COP	3,09 3,76	3,82 3,74
	for B0/W55 acc. to EN14511	Partial load operation	kW COP	2,95 3,13	3,41 2,90
	for B7/W35 flow of B0/W35	Partial load operation	kW COP	4,18 5,94	4,91 5,74
Heating capacity	for B0/W35	min. max.	kW kW	1,25 5,95	1,77 8,65
	for B0/W45	min. max.	kW kW	1,16 5,50	1,79 8,42
	for B0/W55	min. max.	kW kW	1,00 5,17	1,96 8,18
	for B7/W35	min. max.	kW kW	1,55 7,20	2,31 10,60
Cooling capacity at max. flow rate (B15/W25), units with passive cooling: Identifier K			kW	5,8	7,8
Operating limits					
Heating circuit return min. Heating circuit flow max.		Heating within heat source min./max.	°C	20 65	20 65
Heat source, heating		min. max.	°C	-5 30	-5 30
Additional operating points		...		B-9/W60	B-9/W60
Sound					
Sound pressure level at 1 m distance from edge of unit		min. max.	dB(A)	29 36	29 39
Sound power level		min. max.	dB(A)	-	-
Sound power level acc. to EN12102		dB(A)		44 51	44 54
Tonality Low-frequency		dB(A) • yes – no		-	-
Heat source					
Flow rate (pipe dimensioning)		l/h		1450	2000
Max. free heat pump pressure Δp (with cooling Δp_K ***) Flow rate		bar (bar) l/h		0,5 (0,47) 1450	0,56 (0,49) 2000
Approved anti-freeze mixture		Monoethylene glycol Propylene glycol Methanol Ethanol		• • • •	• • • •
Anti-freeze concentration: Minimum frost protection down to		°C		-15	-15
Max. allowable operating pressure		bar		3	3
Circulation pump control range		min. max.	l/h	300 2200	300 4000
Heating circuit					
Flow rate (pipe dimensioning) Min. volume buffer tank in series Min. volume separation buffer tank		l/h		1050 - -	1500 - -
Max. free heat pump pressure Δp (with cooling Δp_K) Volume flow		bar (bar) l/h		0,65 (0,63) 1050	0,46 (0,41) 1500
Max. allowable operating pressure		bar		3	3
General unit data					
Total weight (with cooling)		kg (kg)		145 (153)	149 (157)
Box weight (with cooling) Tower weight (with cooling)		kg (kg) kg (kg)		80 (88) 65 (65)	84 (92) 65 (65)
Refrigerant type Refrigerant capacity		... kg		R407C 1,16	R407C 1,25
Domestic hot water tank					
Net volume		l		-	-
Magnesium sacrificial anode		Impressed current Magnesium	• yes – no	- -	- -
Domestic hot water temperature, heating pump mode Electric heating element		up to °C up to °C		- -	- -
Mixed water quantity according to ErP: 2009/125/EC (at 40 °C, draw-off of 10 l/min)		l		-	-
Standing loss according to ErP: 2009/125/EC (at 65 °C)		W		-	-
Maximum pressure Test pressure		bar bar		- -	- -
Electrics					
Voltage code all-pole fuse protection for heat pump *)**)		... A		-	-
Voltage code all-pole fuse protection for heat pump *) + electric heating element **)		... A		3~N/PE/400V/50Hz C16	3~N/PE/400V/50Hz C16
Voltage code Control voltage fuse protection **)		... A		1~N/PE/230V/50Hz B10	1~N/PE/230V/50Hz B10
Voltage code Electric heating element fuse protection **)		... A		-	- -
WP*): effect. Power consumption B0/W35 (partial load operation) EN14511 Electric consumption I c		kW A ...		0,68 3,0 1,0	0,84 3,6 1,0
WP*): effective power consumption B0/W35 acc. to EN14511: min. max.		kW kW		0,24 1,4	0,3 2,2
WP*): Max. machine current Max. power consumption within the operating limits		A kW		12 2,6	12 2,9
Starting current: direct with soft starter		A A		< 5 -	< 5 -
Degree of protection		IP		20	20
Residual current circuit breaker		if required		B	B
Electric heating element output		3 2 1 phase		kW kW kW	- 6 3
Circulation pump power consumption, heating circuit heat sour min. max.		W W		2 – 60 5 – 87	2 – 60 3 – 140
Other unit information					
Safety valve Heating circuit Response pressure		included in scope of supply: • yes – no bar		• 3	• 3
Safety valve Heat source Response pressure		included in scope of supply: • yes – no bar		- -	- -
Buffer tank Volume		included in scope of supply: • yes – no l		- -	- -
Diaphragm expansion vessel Heating circuit Volume Prepressure		incl. in scope of supply: • yes – no bar		- -	- -
Diaphragm expansion vessel Heat source Volume Prepressure		incl. in scope of supply: • yes – no bar		- -	- -
Overflow valve Changeover valve, heating – Domestic hot water		integrated: • yes – no		• •	• •
Vibration decoupling, Heating circuit Heat source		included in scope of supply or integrated: • yes – no		• •	• •
Controller Heat quantity recording Extension board		included in scope of supply or integrated: • yes – no		• • -	• • -

*) Only compressor, **) Follow local regulations, ***) Figures for 25% mono-ethylene glycol

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Technical data / Scope of supply

Performance data				SWCV 122(H)(K)3	SWCV 162(H)(K)3
Heating capacity COP	for B0/W35 to EN14511	Partial load operation	kW COP	5,06 4,87	9,42 4,92
	for B0/W45 to EN14511	Partial load operation	kW COP	4,78 3,75	9,15 3,85
	for B0/W55 to EN14511	Partial load operation	kW COP	4,58 3,13	9,06 3,22
	for B7/W35 flow of B0/W35	Partial load operation	kW COP	5,92 6,08	11,31 6,05
Heating capacity	for B0/W35 to EN14511	min. max.	kW kW	2,48 13,56	3,2 17,20
	for B0/W45 to EN14511	min. max.	kW kW	2,24 12,88	2,58 17,00
	for B0/W55 to EN14511	min. max.	kW kW	2,54 12,53	2,47 17,00
	for B7/W35 to EN14511	min. max.	kW kW	2,94 15,82	4,00 19,10
Cooling capacity at max. volume flow (B15/W25), units with passive cooling: Identifier K			kW	12,3	14,9
Limits of use					
Heating circuit return min. Heating circuit flow max.			°C	20 65	20 65
Heat source		min. max.	°C	-5 30	-5 30
Additional operating points			...	B-9/W60	B-9/W60
Sound					
Sound pressure level at 1m distance from edge of unit		min. max.	dB(A)	29 38	29 36
Sound power level to EN12102		min. max.	dB(A)	44 53	44 51
Heat source					
Flow rate (pipe dimensioning)			l/h	3200	3900
Max. free heat pump pressure Δp (with cooling Δp_K ***) Volume flow			bar (bar) l/h	1,08 (1,03) 1270	0,88 (0,80) 2350
Approved anti-freeze			Monoethylene glycol Propylene glycol Methanol Ethanol	• • • •	• • • •
Anti-freeze concentration: Minimum frost protection down to			°C	-15	-15
Max. allowable operating pressure			bar	3	3
Heating circuit					
Flow rate (pipe dimensioning) Min. volume buffer tank in series Min. volume separation buffer tank			l/h	2300 - -	2900 - -
Max. free heat pump pressure Δp (with cooling Δp_K) Volume flow			bar (bar) l/h	0,69 (0,65) 870	0,54 (0,50) 1600
Max. allowable operating pressure			bar	3	3
General unit data					
Total weight (with cooling)			kg	168 (176)	180 (188)
Box weight (with cooling) Tower weight (with cooling)			kg (kg) kg (kg)	103 (111) 65 (65)	115 (123) 65 (65)
Refrigerant type Refrigerant capacity			... kg	R407c 2,0	R407c 2,20
Domestic hot water tank					
Net volume			l	—	—
Impressed current anode			integrated: • yes — no	—	—
Domestic hot water temperature, heating pump mode Electric heating element			up to °C up to °C	— —	— —
Mixed water quantity according to ErP: 2009/125/EC (at 40°C, draw-off of 10 l/min)			l	—	—
Standing loss according to ErP: 2009/125/EC (at 65°C)			W	—	—
Maximum pressure			bar	—	—
Electrics					
Voltage code all-pole heat pump fusing *)**)			... A	3~N/PE/400V/50Hz C10	3~N/PE/400V/50Hz C10
Voltage code all-pole heat pump fusing *) + electric heating element **)			... A	—	—
Voltage code Control voltage fusing **)			... A	1~N/PE/230V/50Hz B10	1~N/PE/230V/50Hz B10
Voltage code Electric heating element fusing **)			... A	3~N/PE/400V/50Hz B16	3~N/PE/400V/50Hz B16
WP*): effect. Power input B0/W35 (50Hz) EN14511 Power consumption cos ϕ			kW A ...	1,04 1,7 0,88	1,91 3,1 0,89
WP*): effective power input B0/W35 to EN14511: min. max.			kW kW	0,53 3,29	0,83 4,62
WP*): Max. machine current Max. power input within the limits of use			A kW	9,0 5,5	10 7,3
Starting current: direct with soft starter			A A	< 5 —	< 5 —
Degree of protection			IP	20	20
Electric heating element output			kW	9 6 3	9 6 3
Circulation pump power consumption, heating circuit heat sour			min. — max.	W W	2 – 60 3 – 180
2 – 60 3 – 180			W W	2 – 60 3 – 180	2 – 60 3 – 180
Other unit information					
Safety valve, heating circuit Heat source		included in scope of supply: • yes — no		• —	• —
Expansion valve, heating circuit Heat source		included in scope of supply: • yes — no		— —	— —
Overflow valve Changeover valve		integrated: • yes — no		• •	• •
Vibration isolators, heating circuit Heat source		integrated: • yes — no		• •	• •

*) Only compressor, **) Follow local regulations, ***) Figures for 25% mono-ethylene glycol

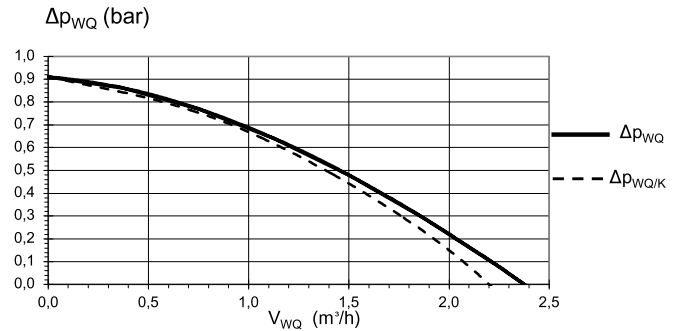
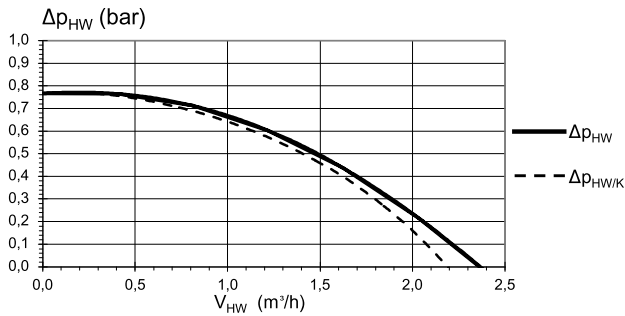
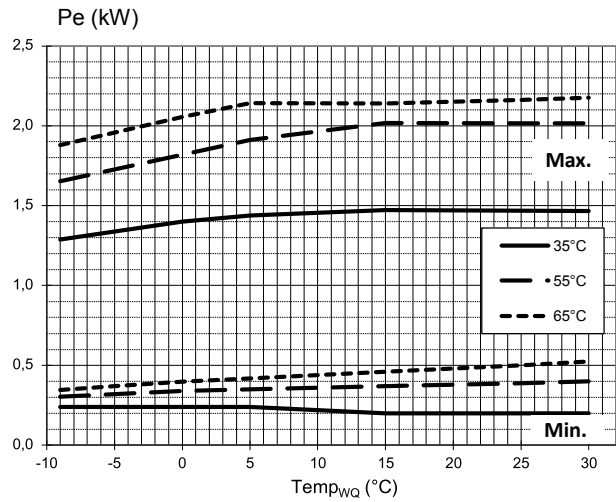
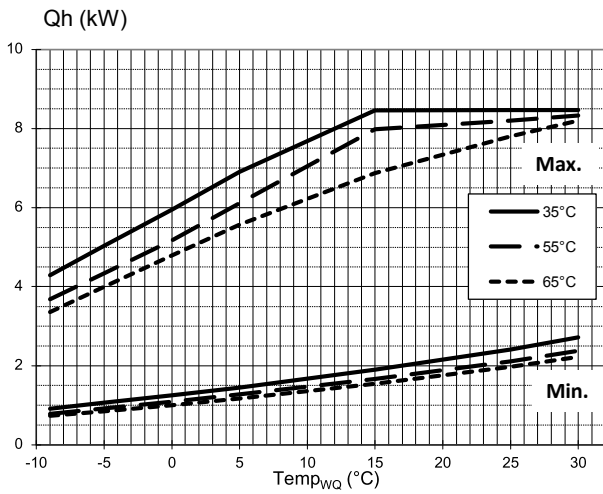
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SWCV 62(H)(K)3

Performance curves



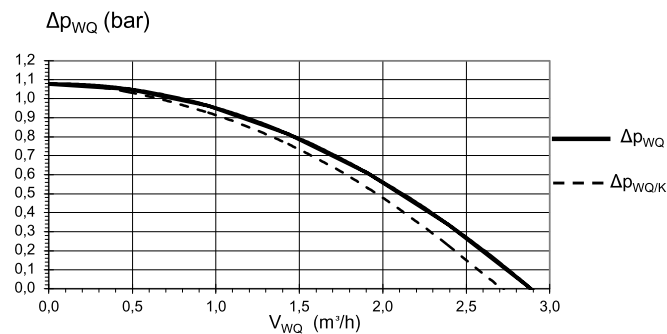
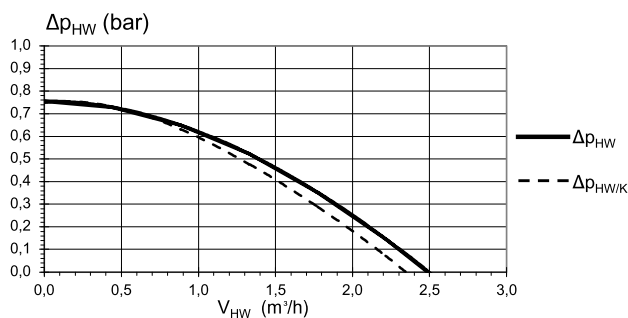
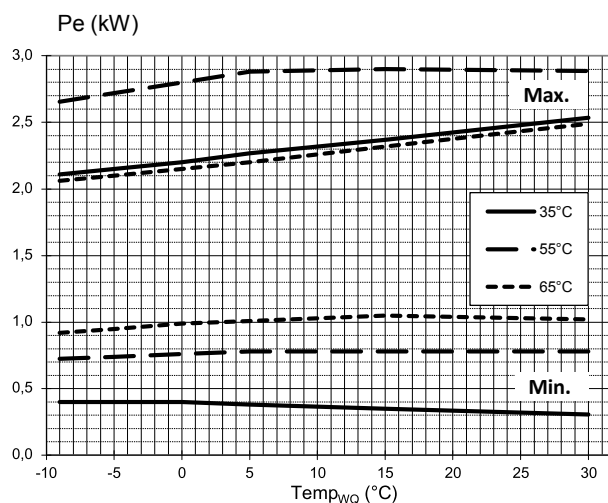
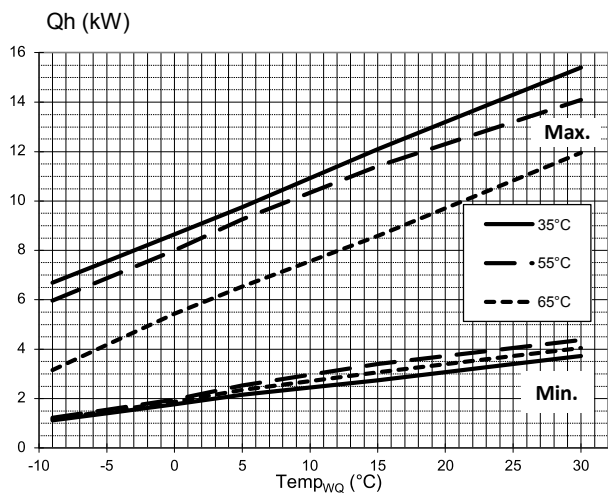
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Keys:	UK823000L/170408
\dot{V}_{HW}	Heating water volume flow rate
\dot{V}_{WQ}	Heat source volume flow rate
$Temp_{WQ}$	Heat source temperature
Qh	Heating capacity
Pe	Power consumption
COP	Coefficient of performance
$\Delta p_{HW} / \Delta p_{HW/K}$	Heating circuit free pressure / Heating circuit with cooling free pressure
$\Delta p_{WQ} / \Delta p_{WQ/K}$	Heat source free pressure / Heat source with cooling free pressure



Performance curves

SWCV 92(H)(K)3



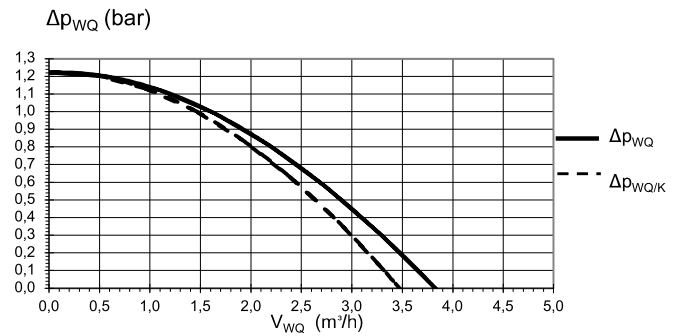
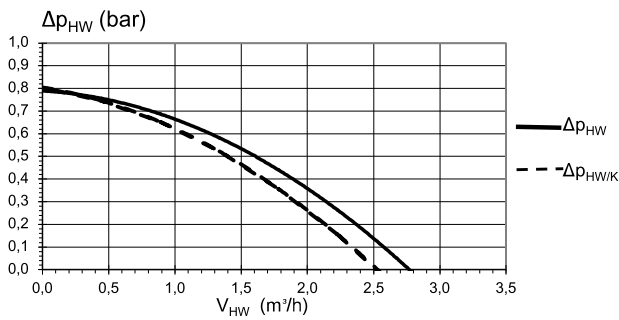
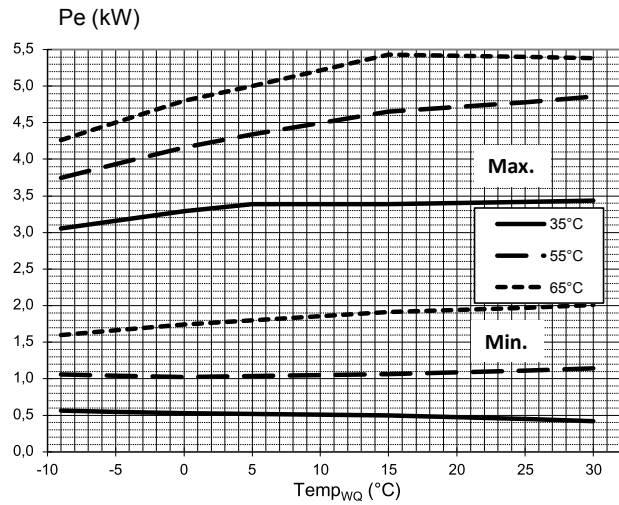
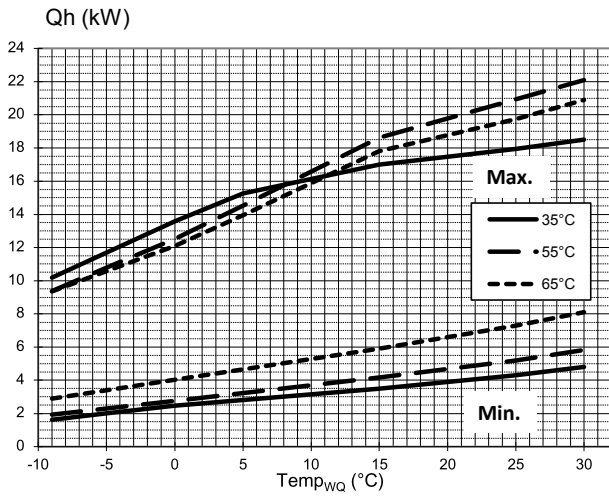
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Keys:	UK823000L/170408
\dot{V}_{HW}	Heating water volume flow rate
\dot{V}_{WQ}	Heat source volume flow rate
$Temp_{WQ}$	Heat source temperature
Q_h	Heating capacity
Pe	Power consumption
COP	Coefficient of performance
$\Delta p_{HW} / \Delta p_{HW/K}$	Heating circuit free pressure / Heating circuit with cooling free pressure
$\Delta p_{WQ} / \Delta p_{WQ/K}$	Heat source free pressure / Heat source with cooling free pressure



SWCV 122(H)(K)3

Performance curves



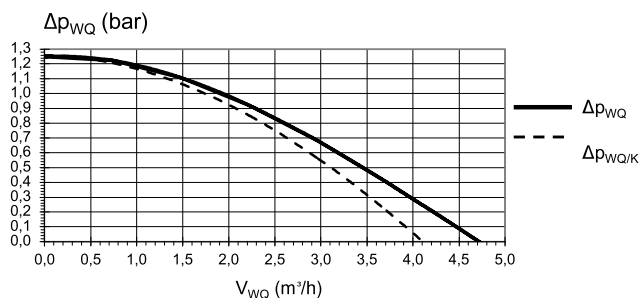
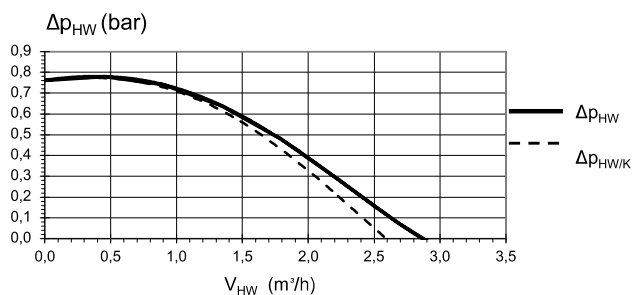
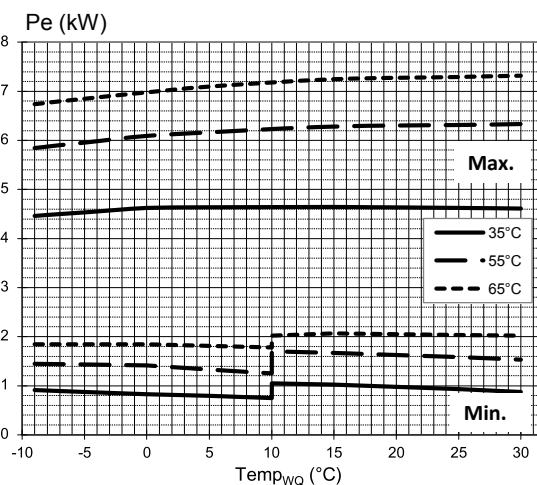
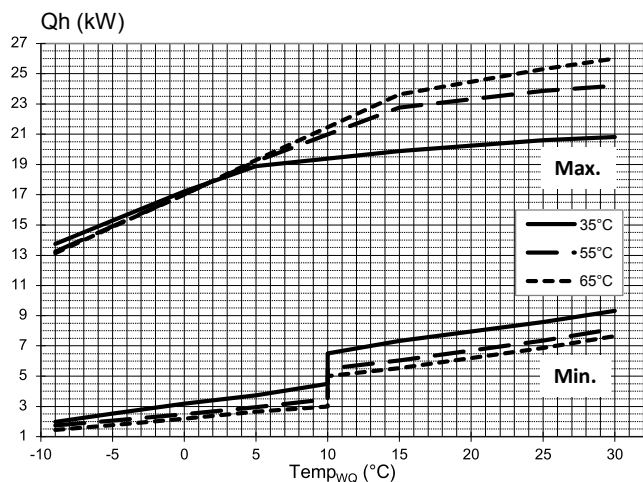
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Keys:	UK823000L/170408
\dot{V}_{HW}	Heating water volume flow rate
\dot{V}_{wQ}	Heat source volume flow rate
$Temp_{wQ}$	Heat source temperature
Q_h	Heating capacity
Pe	Power consumption
COP	Coefficient of performance
$\Delta p_{HW} / \Delta p_{HW/K}$	Heating circuit free pressure / Heating circuit with cooling free pressure
$\Delta p_{wQ} / \Delta p_{wQ/K}$	Heat source free pressure / Heat source with cooling free pressure



Performance curves

SWCV 162(H)(K)3



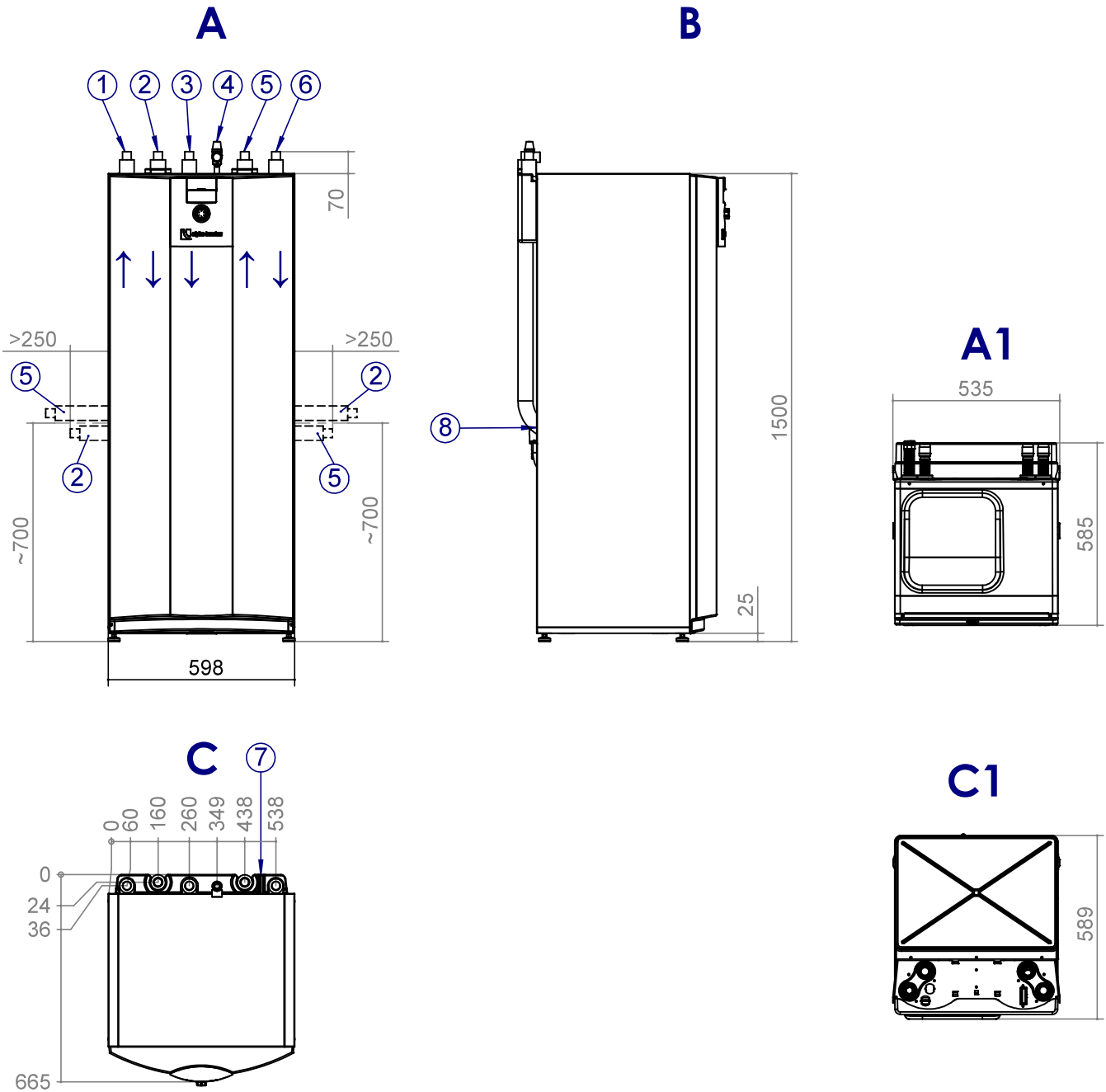
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Keys:	UK823000L/170408
\dot{V}_{HW}	Heating water volume flow rate
\dot{V}_{WQ}	Heat source volume flow rate
$Temp_{WQ}$	Heat source temperature
Qh	Heating capacity
Pe	Power consumption
COP	Coefficient of performance
$\Delta p_{HW} / \Delta p_{HW/K}$	Heating circuit free pressure / Heating circuit with cooling free pressure
$\Delta p_{WQ} / \Delta p_{WQ/K}$	Heat source free pressure / Heat source with cooling free pressure



SWCV 62(H)(K)3 – SWCV 162(H)(K)3

Dimensional drawings



Keys: UK819451a
All dimensions in mm..

A	Front view
B	Side view from left
C	Plan view
A1	Front view of module box
C1	Top view of module box

Pos.	Name	outside diameter
1	Heating water outlet (flow)	Ø28
2	Heat source inlet (in heat pump) optionally at the top, on the right or left	Ø28
3	Heating water inlet (return)	Ø28
4	Heating circuit safety valve (in the separate package)	Rp 3/4" internal thread
5	Heat source outlet (from heat pump) optionally at the top, on the right or left	Ø28
6	Domestic hot water charging circuit inlet (return)	Ø28
7	Cable entry LIN bus cable	-
8	Cable entry connection cable	-

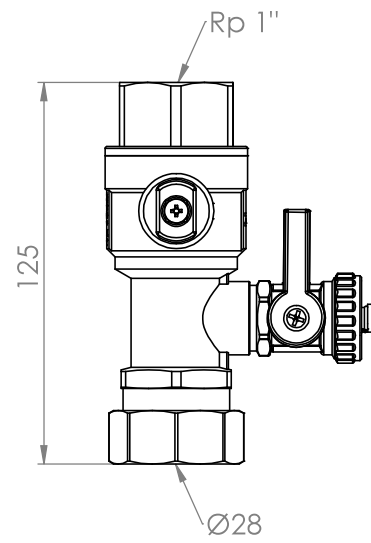


Connections

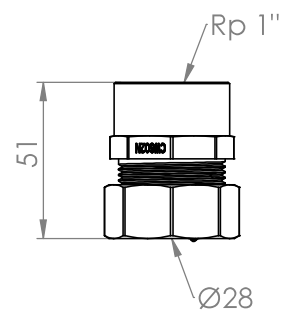
SWCV 62(H)(K)3 – SWCV 162(H)(K)3

Heating circuit

Dimensional drawings



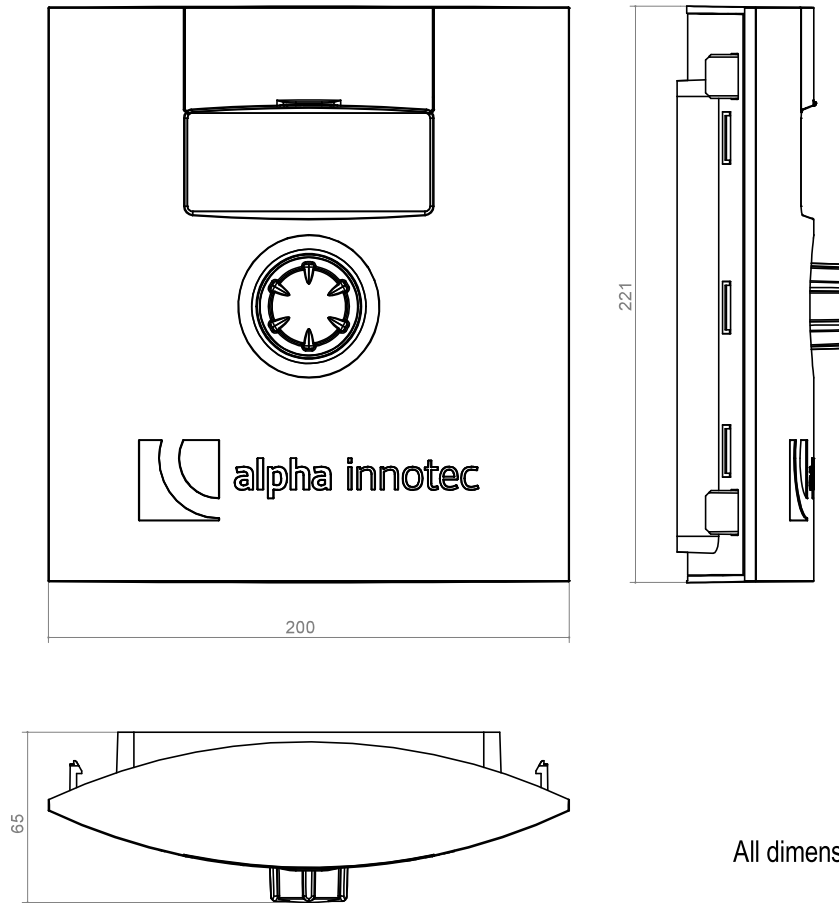
Heating source





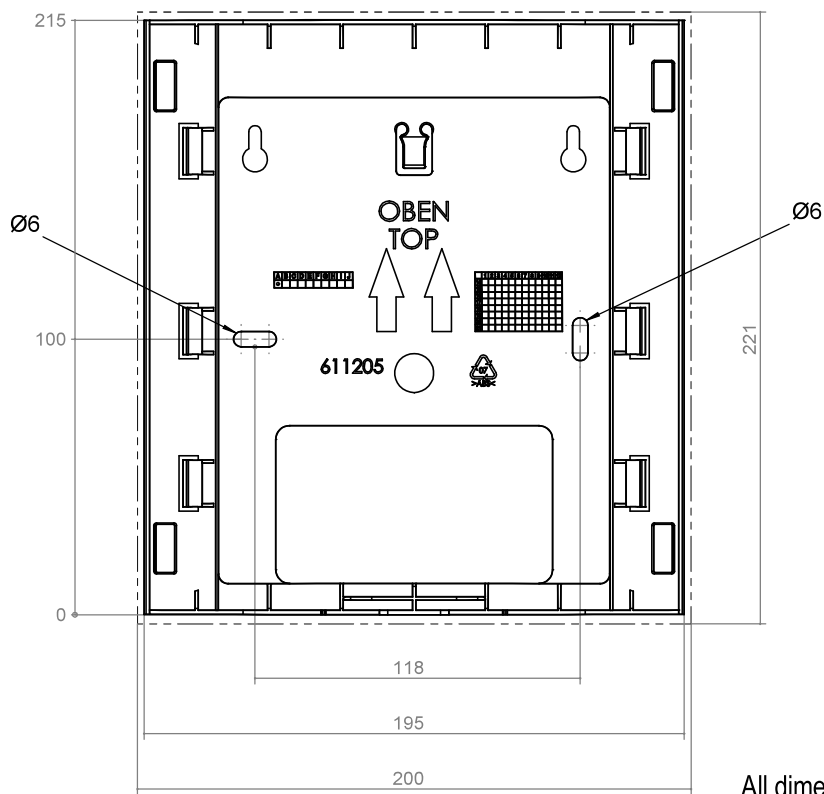
Dimensional drawings

Control unit



All dimensions in mm..

Wall-mounted bracket



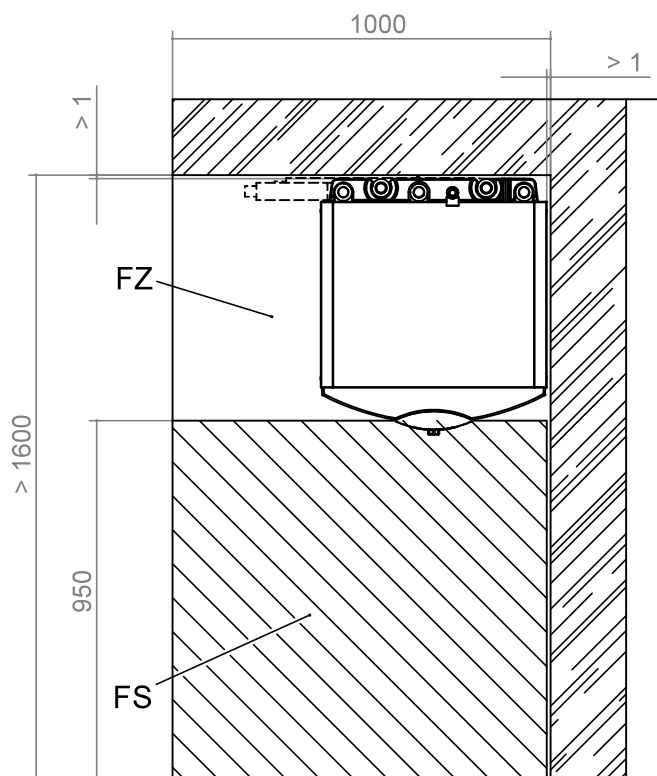
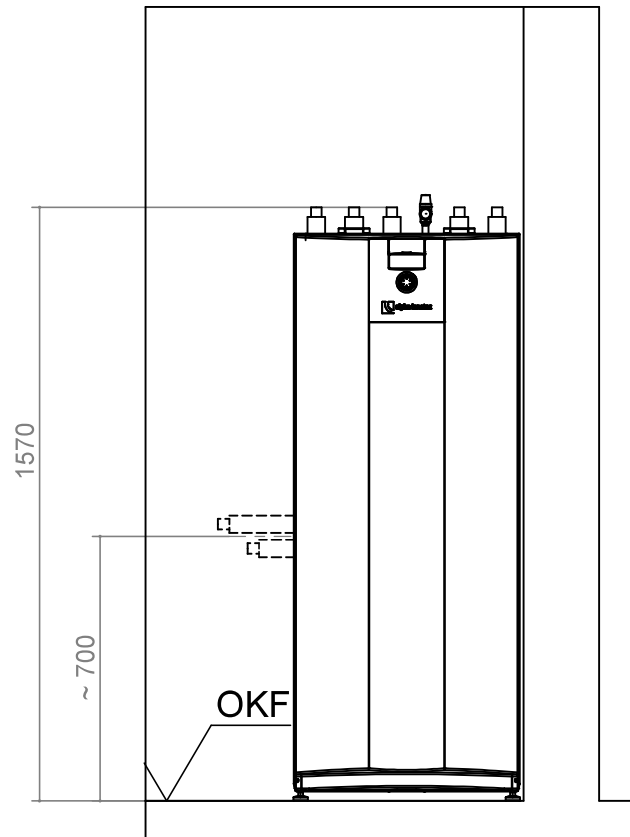
All dimensions in mm..



SWCV 62(H)(K)3 – SWCV 162(H)(K)3

Installation plan 1

V1



Keys: UK819452

All dimensions in mm.

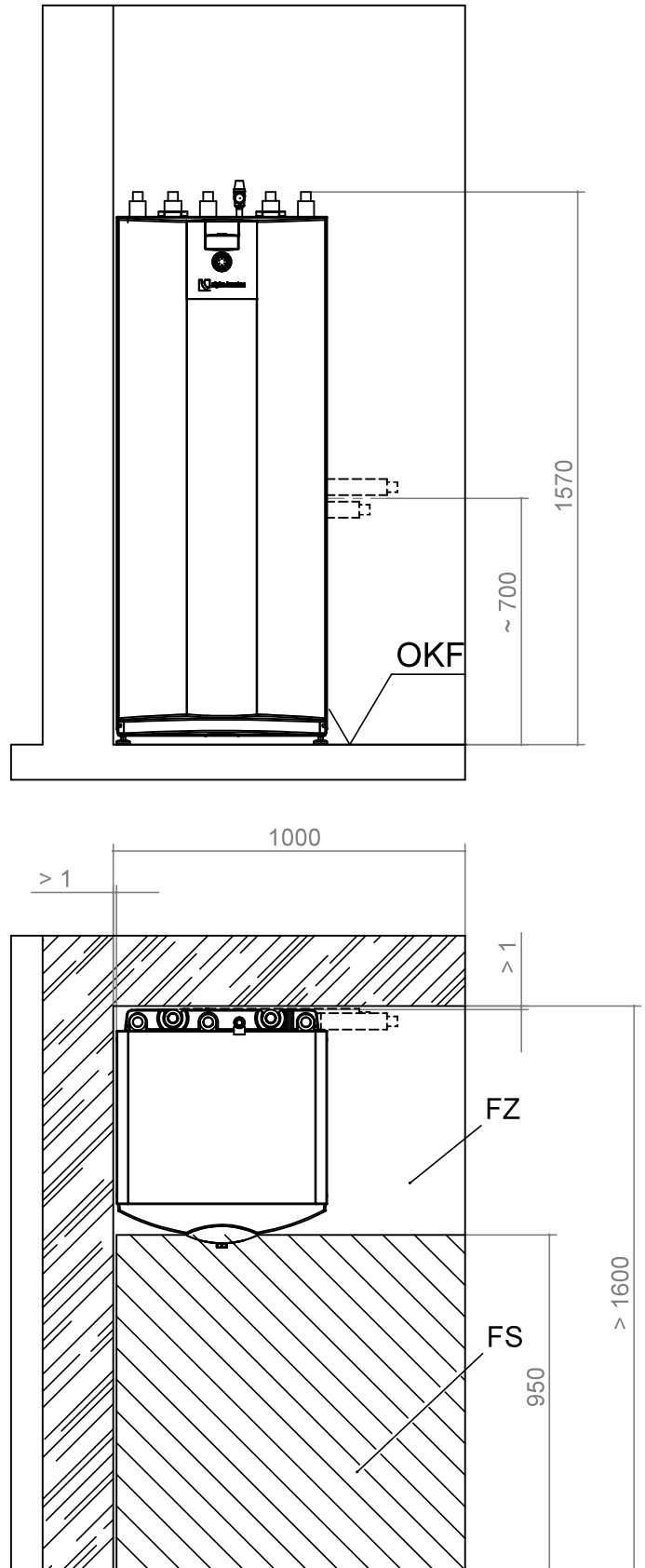
V1	Version 1	FS	Free space for service purposes
OKF	Finished floor level	FZ	Free space for functionally necessary accessories



Installation plan 2

SWCV 62(H)(K)3 – SWCV 162(H)(K)3

V2



Keys: UK819452

All dimensions in mm.

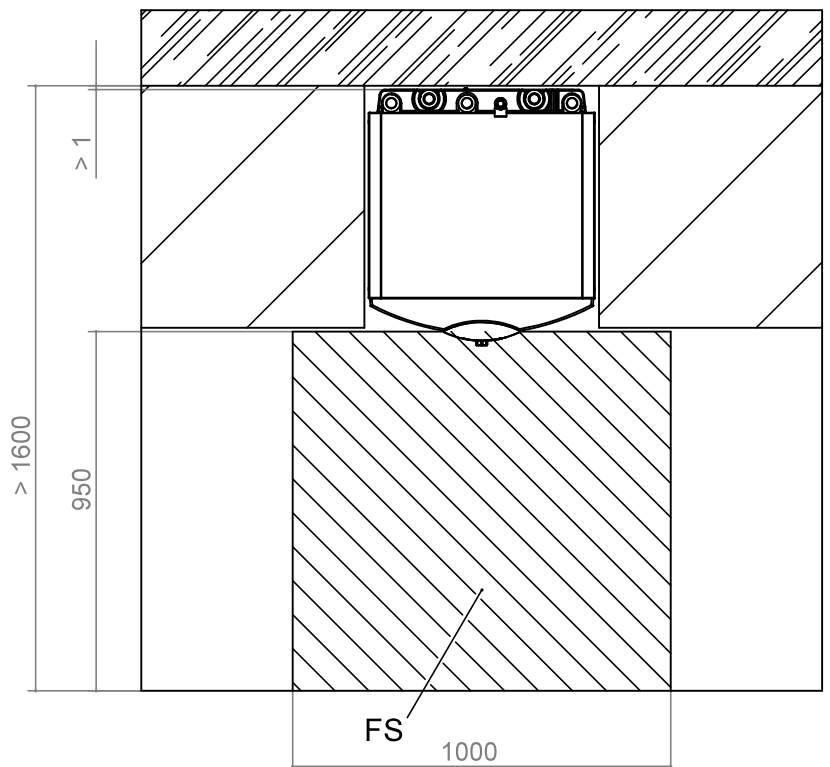
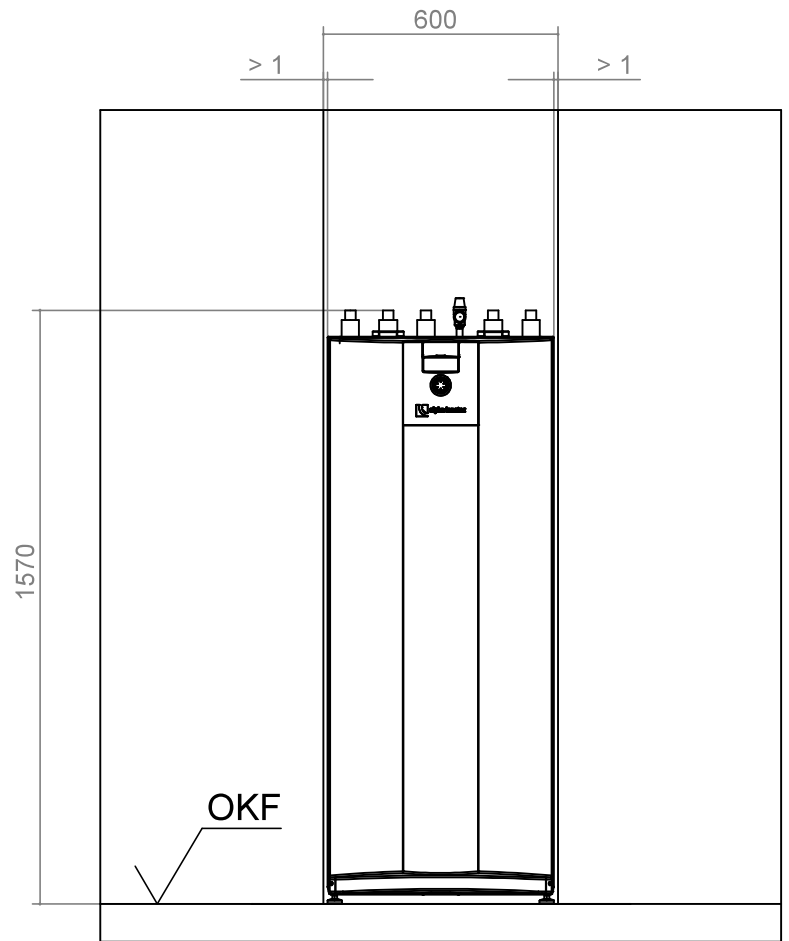
V2	Version 2	FS	Free space for service purposes
OKF	Finished floor level	FZ	Free space for functionally necessary accessories



SWCV 62(H)(K)3 – SWCV 162(H)(K)3

Installation plan 3

V3



Keys: UK819452

All dimensions in mm.

V3 | Version 3

OKF | Finished floor level

FS | Free space for service purposes