



Technical data / Scope of supply

SWC 42(H)(K)3

Performance data: Heating output / COP			SWC 42(H)(K)3
Heating capacity COP	at B0/W35 operating point to EN14511	kW COP	4,70 4,70
	at B0/W45 operating point to EN14511	kW COP	4,42 3,42
	at B0/W55 operating point to EN14511	kW COP	4,16 2,58
	at B7/W35 flows analogous to B0/W35	kW COP	5,83 5,70
Cooling capacity at max. flow rate (B15/W25), units with passive cooling: Identifier K		kW	4,3
Limits of use			
Heating circuit return min. Heating circuit flow max.		°C	20 60
Heat source return		min. max. °C	-5 – 25
additional operating points		...	B0W65
Sound			
Sound pressure level at 1m distance from edge of unit		dB(A)	31
Sound power level to EN12102		dB(A)	43
Heat source			
Flow rate: minimum nominal analogous to B0/W35 maximum		l/h	700 1050 1575
Max. free heat pump pressure Δp (with cooling Δp_K ***) Flow rate		bar (bar) l/h	0,75 (—) 1050
Approved anti-freeze		Monoethylene glycol Propylene glycol Methanol Ethanol	• • • •
Anti-freeze concentration: Minimum frost protection down to		°C	-13
max. allowable operating pressure		bar	3
Heating circuit			
Flow rate: minimum nominal analogous to B0/W35 maximum		l/h	450 850 1300
Max. free heat pump pressure Δp (with cooling Δp_K) Volume flow		bar (bar) l/h	0,71 (0,69) 850
Pressure losses, heat pump Δp Volume flow		bar l/h	— (—) —
max. allowable operating pressure		bar	3
General unit data			
Total weight (with cooling)		kg (kg)	155 (163)
Box weight (with cooling) Tower weight (with cooling)		kg (kg) kg (kg)	90 (98) 65 (65)
Refrigerant type Refrigerant capacity		... kg	R410A 1,05
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~PE/400V/50Hz C10
Voltage code Control voltage fusing **)		... A	1~N/PE/230V/50Hz B10
Voltage code Electric heating element fusing **)		... A	3~N/PE/400V/50Hz B16
Voltage code all-pole fusing for connection via a joint supply cable*)**)		... A	— —
WP*): effect. Power input at B0/W35 to EN14511 Current input cos ϕ		kW A ...	1,00 2,44 0,59
WP*): Max. machine current Max. power input within the limits of use		A kW	4,8 2,3
Starting current: direct with soft starter		A A	22,0 —
Degree of protection		IP	20
Electric heating element output		kW	9 6 3
Circulation pump power consumption, heating circuit heat source		min. — max. W W	2 – 60 5 – 87
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, heating -Domestic hot water		integrated: • yes — no	• •
Vibration isolators, heating circuit Heat source		integrated: • yes — no	• •
*) Only compressor, **) Follow local regulations, ***) Figures for 25% mono-ethylene glycol			813465a



Technical data / Scope of supply

SWC 82(H)(K)3 – SWC 102(H)(K)3

Performance data: Heating output / COP			SWC 82(H)(K)3	SWC 102(H)(K)3
Heating capacity COP	at B0/W35 operating point to EN14511	kW COP	7,70 4,90	9,34 5,05
	at B0/W45 operating point to EN14511	kW COP	6,84 3,61	8,84 3,80
	at B0/W55 operating point to EN14511	kW COP	6,49 2,91	8,30 2,82
	at B7/W35 flows analogous to B0/W35	kW COP	9,20 5,96	11,19 6,30
Cooling capacity at max. flow rate (B15/W25), units with passive cooling: Identifier K		kW	7	8,6
Limits of use				
Heating circuit return min. Heating circuit flow max.		°C	20 60	20 60
Heat source return		min. max. °C	-5 – 25	-5 – 25
additional operating points		...	B0W65	B0W65
Sound				
Sound pressure level at 1m distance from edge of unit		dB(A)	31	32
Sound power level to EN12102		dB(A)	43	44
Heat source				
Flow rate: minimum nominal analogous to B0/W35 maximum		l/h	1200 1750 2600	1500 2200 3300
Max. free heat pump pressure Δp (with cooling Δp_K ***) Flow rate		bar (bar) l/h	0,76 (0,70) 1750	0,93 (0,86) 2200
Approved anti-freeze		Monoethylene glycol Propylene glycol Methanol Ethanol	• • • •	• • • •
Anti-freeze concentration: Minimum frost protection down to		°C	-13	-13
max. allowable operating pressure		bar	3	3
Heating circuit				
Flow rate: minimum nominal analogous to B0/W35 maximum		l/h	650 1300 1600	800 1600 2000
Max. free heat pump pressure Δp (with cooling Δp_K) Volume flow		bar (bar) l/h	0,57 (0,54) 1300	0,52 (0,48) 1600
Pressure losses, heat pump Δp Volume flow		bar l/h	— (—) —	— (—) —
max. allowable operating pressure		bar	3	3
General unit data				
Total weight (with cooling)		kg (kg)	175 (183)	180 (188)
Box weight (with cooling) Tower weight (with cooling)		kg (kg) kg (kg)	110 (118) 65 (65)	115 (123) 65 (65)
Refrigerant type Refrigerant capacity		... kg	R410A 1,72	R410A 1,98
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~PE/400V/50Hz C10	3~PE/400V/50Hz C10
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
Voltage code all-pole fusing for connection via a joint supply cable*)**)		... A	— —	— —
WP*): effect. Power input at B0/W35 to EN14511 Current input $\cos\phi$		kW A ...	1,57 3,02 0,75	1,87 3,73 0,72
WP*): Max. machine current Max. power input within the limits of use		A kW	6,01 3,10	7,63 4,00
Starting current: direct with soft starter		A A	30,0 —	— 22,0
Degree of protection		IP	20	20
Electric heating element output		kW	9 6 3	9 6 3
Circulation pump power consumption, heating circuit heat source		min. — max. W W	2 – 60 3 – 140	2 – 60 2 – 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, heating -Domestic hot water		integrated: • yes — no	• •	• •
Vibration isolators, heating circuit Heat source		integrated: • yes — no	• •	• •
*) Only compressor, **) Follow local regulations, ***) Figures for 25% mono-ethylene glycol			813467a	813468a



Technical data / Scope of supply

SWC 122(H)(K)3 – SWC 142(H)(K)3

Performance data: Heating output / COP			SWC 122(H)(K)3	SWC 142(H)(K)3
Heating capacity COP	at B0/W35 operating point to EN14511	kW COP	12,18 5,00	13,50 5,08
	at B0/W45 operating point to EN14511	kW COP	11,24 3,76	12,29 3,76
	at B0/W55 operating point to EN14511	kW COP	10,63 2,97	11,76 2,94
	at B7/W35 flows analogous to B0/W35	kW COP	14,55 6,06	16,07 6,31
Cooling capacity at max. flow rate (B15/W25), units with passive cooling: Identifier K		kW	10,8	12,5
Limits of use				
Heating circuit return min. Heating circuit flow max.		°C	20 60	20 60
Heat source return		min. max. °C	-5 – 25	-5 – 25
additional operating points		...	B0W65	B0W65
Sound				
Sound pressure level at 1m distance from edge of unit		dB(A)	31	35
Sound power level to EN12102		dB(A)	43	48
Heat source				
Flow rate: minimum nominal analogous to B0/W35 maximum		l/h	1900 2800 4200	2100 3150 4750
Max. free heat pump pressure Δp (with cooling Δp_K ***) Flow rate		bar (bar) l/h	0,7 (0,6) 2800	0,76 (0,7) 3150
Approved anti-freeze		Monoethylene glycol Propylene glycol Methanol Ethanol	• • • •	• • • •
Anti-freeze concentration: Minimum frost protection down to		°C	-13	-13
max. allowable operating pressure		bar	3	3
Heating circuit				
Flow rate: minimum nominal analogous to B0/W35 maximum		l/h	1050 2050 2600	1150 2300 2900
Max. free heat pump pressure Δp (with cooling Δp_K) Volume flow		bar (bar) l/h	0,38 (0,31) 2050	0,50 (0,41) 2300
Pressure losses, heat pump Δp Volume flow		bar l/h	— (—) —	— (—) —
max. allowable operating pressure		bar	3	3
General unit data				
Total weight (with cooling)		kg (kg)	185 (193)	200 (212)
Box weight (with cooling) Tower weight (with cooling)		kg (kg) kg (kg)	120 (128) 65 (65)	130 (130) 70 (82)
Refrigerant type Refrigerant capacity		... kg	R410A 2,25	R410A 2,38
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~PE/400V/50Hz C10	3~PE/400V/50Hz C10
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
Voltage code all-pole fusing for connection via a joint supply cable*)**)		... A	— —	— —
WP*): effect. Power input at B0/W35 to EN14511 Current input cos ϕ		kW A ...	2,44 4,70 0,75	2,66 4,84 0,79
WP*): Max. machine current Max. power input within the limits of use		A kW	9,44 4,80	10,62 5,60
Starting current: direct with soft starter		A A	— 26,0	— 27,0
Degree of protection		IP	20	20
Electric heating element output		kW	9 6 3	9 6 3
Circulation pump power consumption, heating circuit heat source		min. — max. W W	2 – 60 2 – 180	5 – 87 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, heating -Domestic hot water		integrated: • yes — no	• •	• •
Vibration isolators, heating circuit Heat source		integrated: • yes — no	• •	• •
*) Only compressor, **) Follow local regulations, ***) Figures for 25% mono-ethylene glycol			813469a	813470a



Technical data / Scope of supply

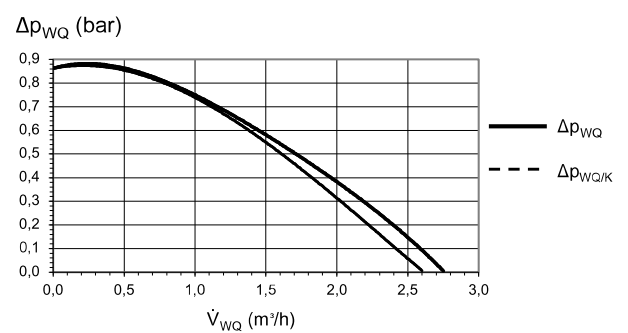
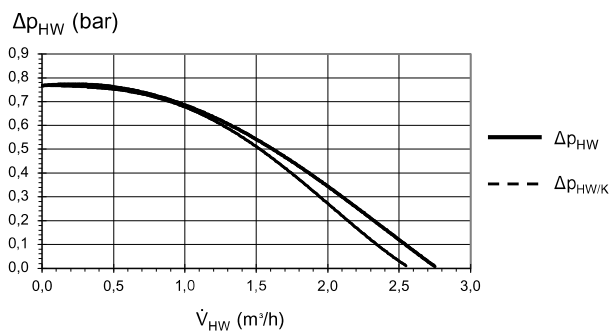
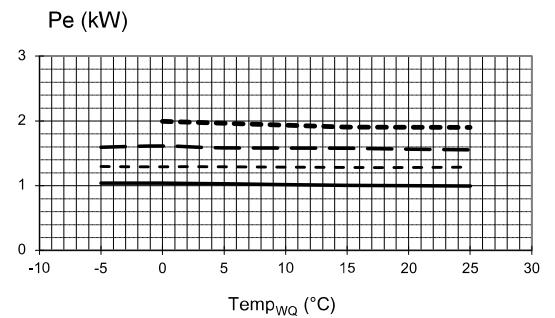
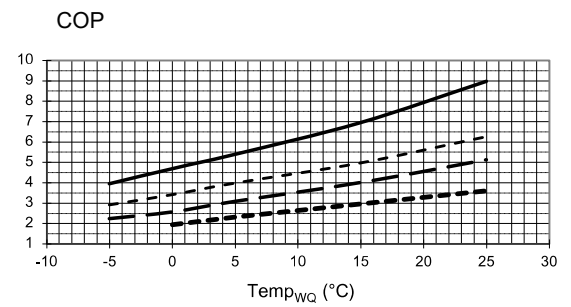
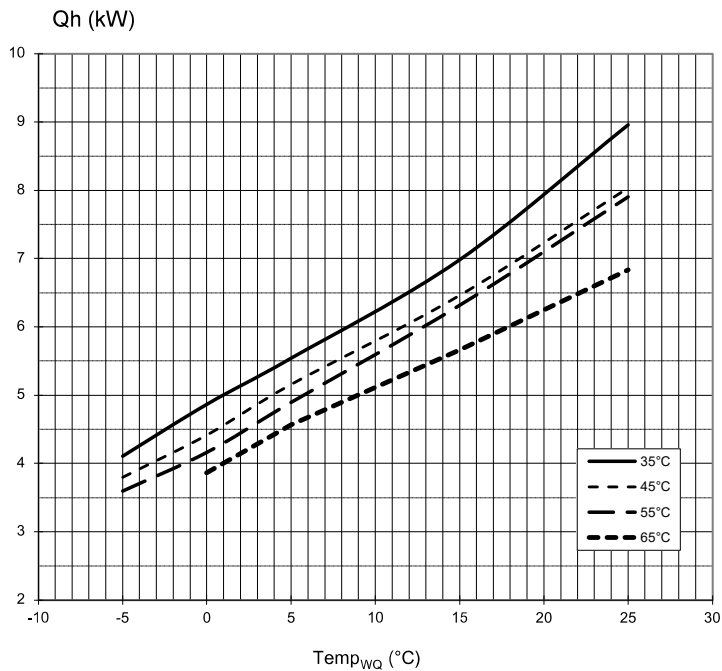
SWC 172(H)(K)3 – SWC 192(H)(K)3

Performance data: Heating output / COP			SWC 172(H)(K)3		SWC 192(H)(K)3	
Heating capacity COP	at B0/W35 operating point to EN14511	kW COP	16,86 4,93		18,60 4,87	
	at B0/W45 operating point to EN14511	kW COP	16,15 3,82		17,08 3,73	
	at B0/W55 operating point to EN14511	kW COP	15,59 3,07		16,36 2,88	
	at B7/W35 flows analogous to B0/W35	kW COP	19,80 5,88		21,80 5,84	
Cooling capacity at max. flow rate (B15/W25), units with passive cooling: Identifier K		kW	14,9		16,6	
Limits of use						
Heating circuit return min. Heating circuit flow max.		°C	20 60		20 60	
Heat source return		min. max.	°C -5 – 25		-5 – 25	
additional operating points		...	B0W65		B0W65	
Sound						
Sound pressure level at 1m distance from edge of unit		dB(A)	34		37	
Sound power level to EN12102		dB(A)	47		50	
Heat source						
Flow rate: minimum nominal analogous to B0/W35 maximum		l/h	2700 4000 6000		3000 4400 6600	
Max. free heat pump pressure Δp (with cooling ΔpK) ***) Flow rate		bar (bar) l/h	0,50 (0,46) 4000		0,40 (0,34) 4400	
Approved anti-freeze		Monoethylene glycol Propylene glycol Methanol Ethanol	• • • •		• • • •	
Anti-freeze concentration: Minimum frost protection down to		°C	-13		-13	
max. allowable operating pressure		bar	3		3	
Heating circuit						
Flow rate: minimum nominal analogous to B0/W35 maximum		l/h	1450 2850 3600		1600 3200 4000	
Max. free heat pump pressure Δp (with cooling ΔpK) Volume flow		bar (bar) l/h	0,39 (0,25) 2850		0,62 (0,47) 3200	
Pressure losses, heat pump Δp Volume flow		bar l/h	— (—) —		— (—) —	
max. allowable operating pressure		bar	3		3	
General unit data						
Total weight (with cooling)		kg (kg)	205 (217)		210 (222)	
Box weight (with cooling) Tower weight (with cooling)		kg (kg) kg (kg)	135 (135) 70 (82)		140 (140) 70 (82)	
Refrigerant type Refrigerant capacity		... kg	R410A 2,65		R410A 2,80	
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~PE/400V/50Hz C16		3~PE/400V/50Hz C16	
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	
Voltage code all-pole fusing for connection via a joint supply cable*)**)		... A	— —		— —	
WP*): effect. Power input at B0/W35 to EN14511 Current input cosφ		kW A ...	3,35 7,90 0,61		3,82 8,71 0,63	
WP*): Max. machine current Max. power input within the limits of use		A kW	19,0 6,90		18,0 7,50	
Starting current: direct with soft starter		A A	— 30,0		— 33,0	
Degree of protection		IP	20		20	
Electric heating element output		kW	9 6 3		9 6 3	
Circulation pump power consumption, heating circuit heat source		min. — max. W W	5 – 87 3 – 180		3 – 140 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, heating -Domestic hot water		integrated: • yes — no	• •		• •	
Vibration isolators, heating circuit Heat source		integrated: • yes — no	• •		• •	
*) Only compressor, **) Follow local regulations, ***) Figures for 25% mono-ethylene glycol			813471b		813472c	



Performance curves

SWC 42(H)(K)3



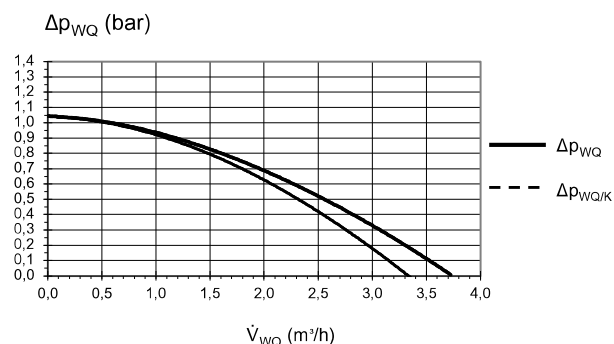
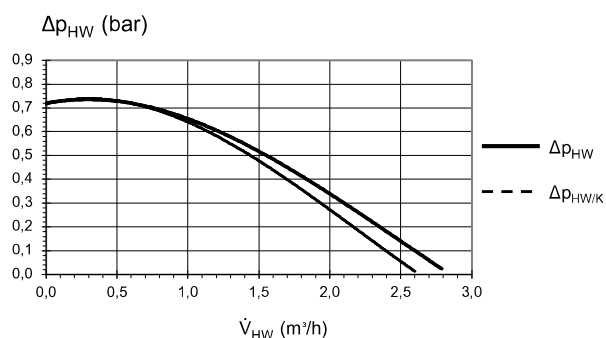
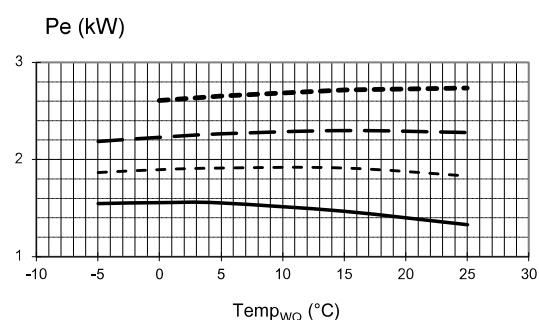
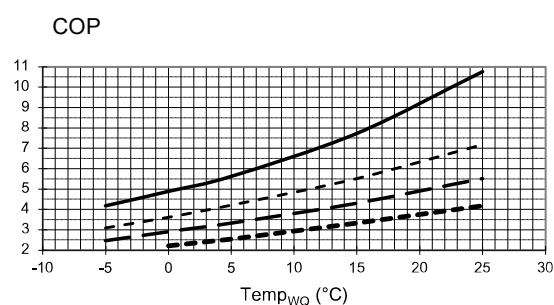
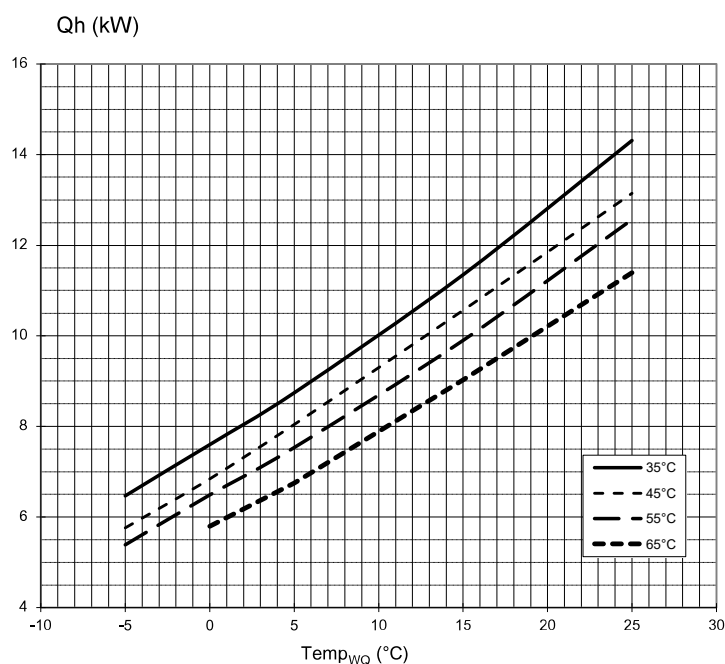
823239

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



SWC 82(H)(K)3

Performance curves



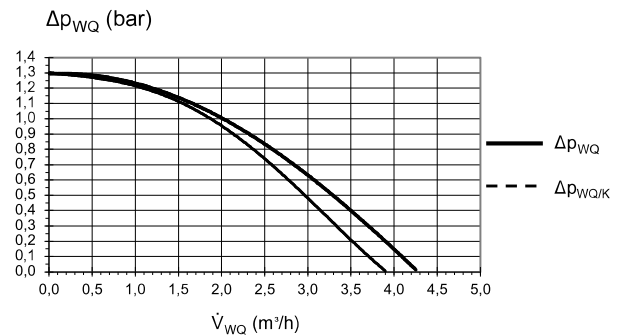
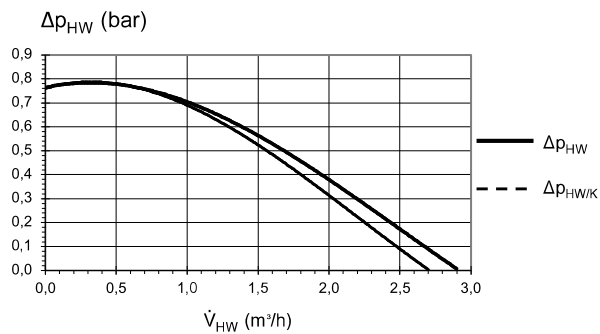
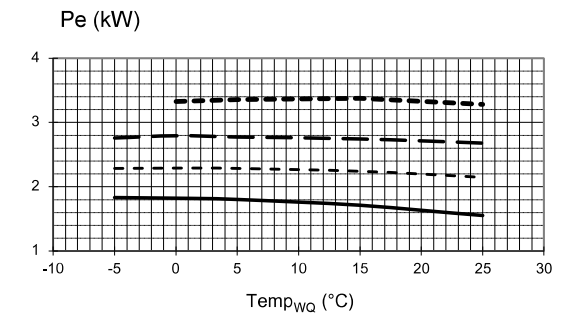
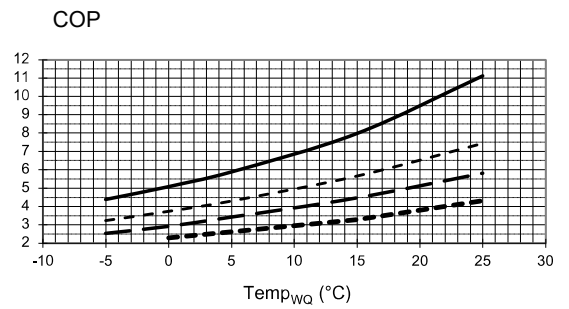
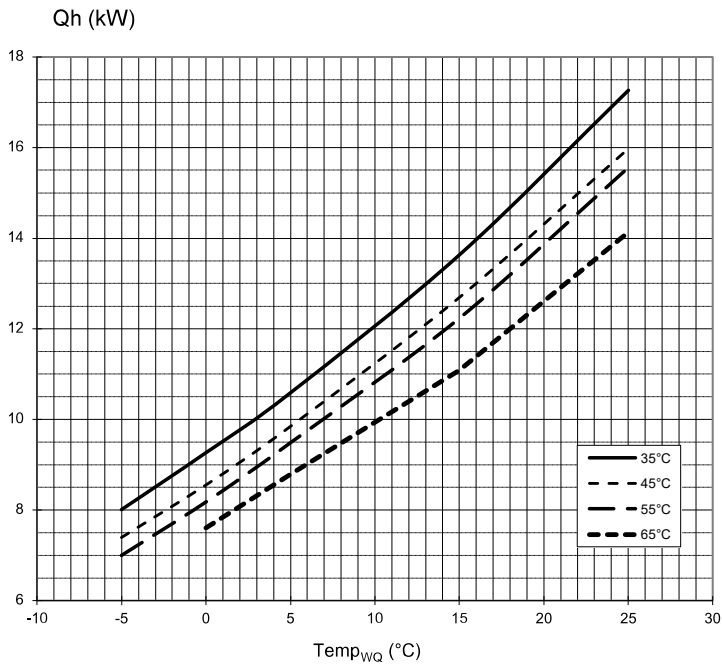
823241

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
Δp _{HW} / Δp _{HW/K}	Heating circuit free pressure / Heating circuit with cooling free pressure
Δp _{WQ} / Δp _{WQ/K}	Heat source free pressure / Heat source with cooling free pressure



Performance curves

SWC 102(H)(K)3



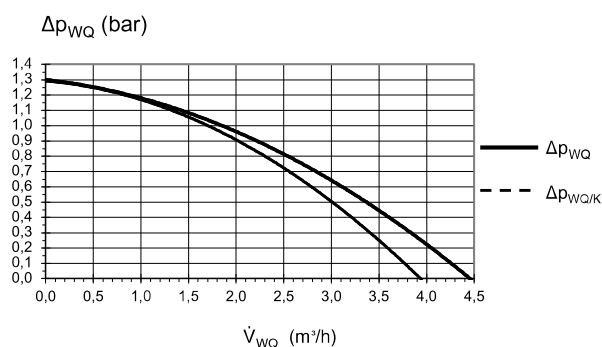
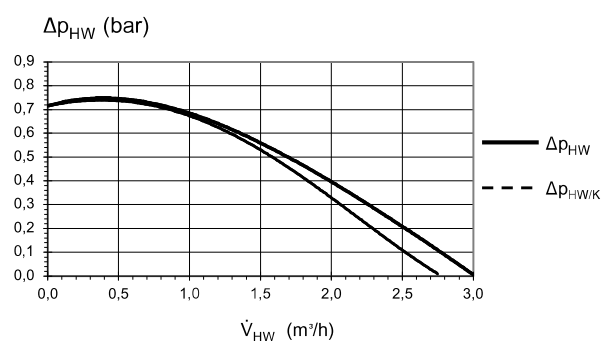
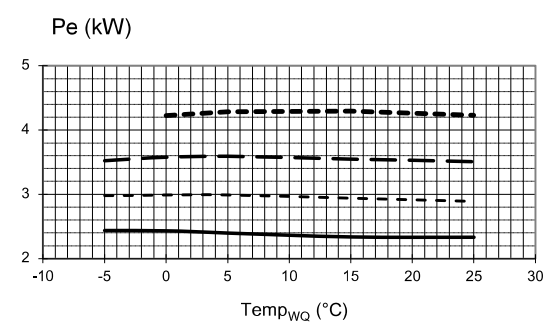
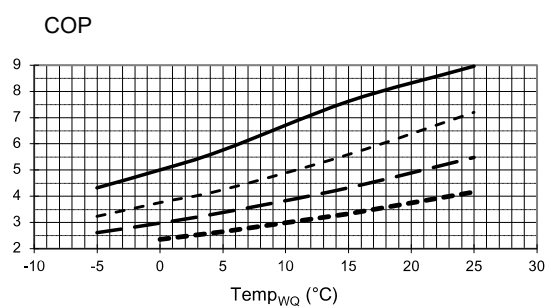
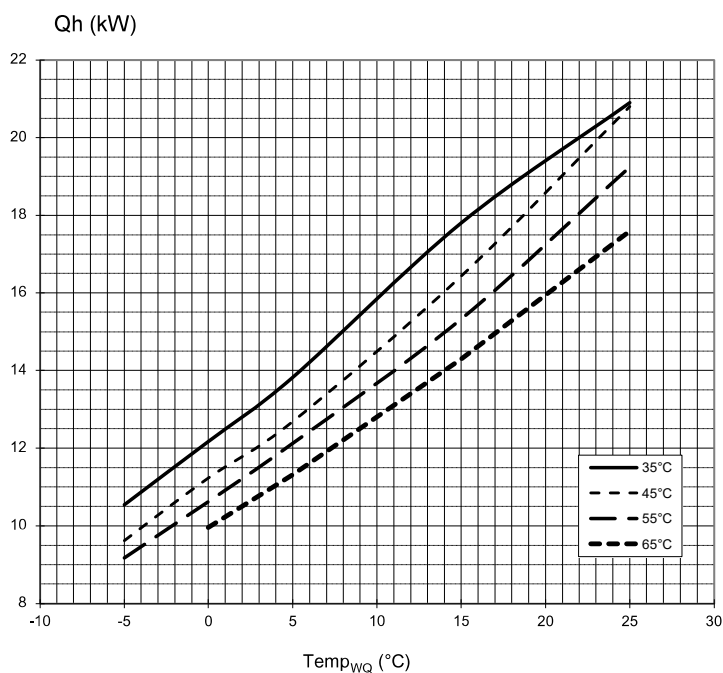
823242

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
Δp _{HW} / Δp _{HW/K}	Heating circuit free pressure / Heating circuit with cooling free pressure
Δp _{wQ} / Δp _{wQ/K}	Heat source free pressure / Heat source with cooling free pressure



SWC 122(H)(K)3

Performance curves



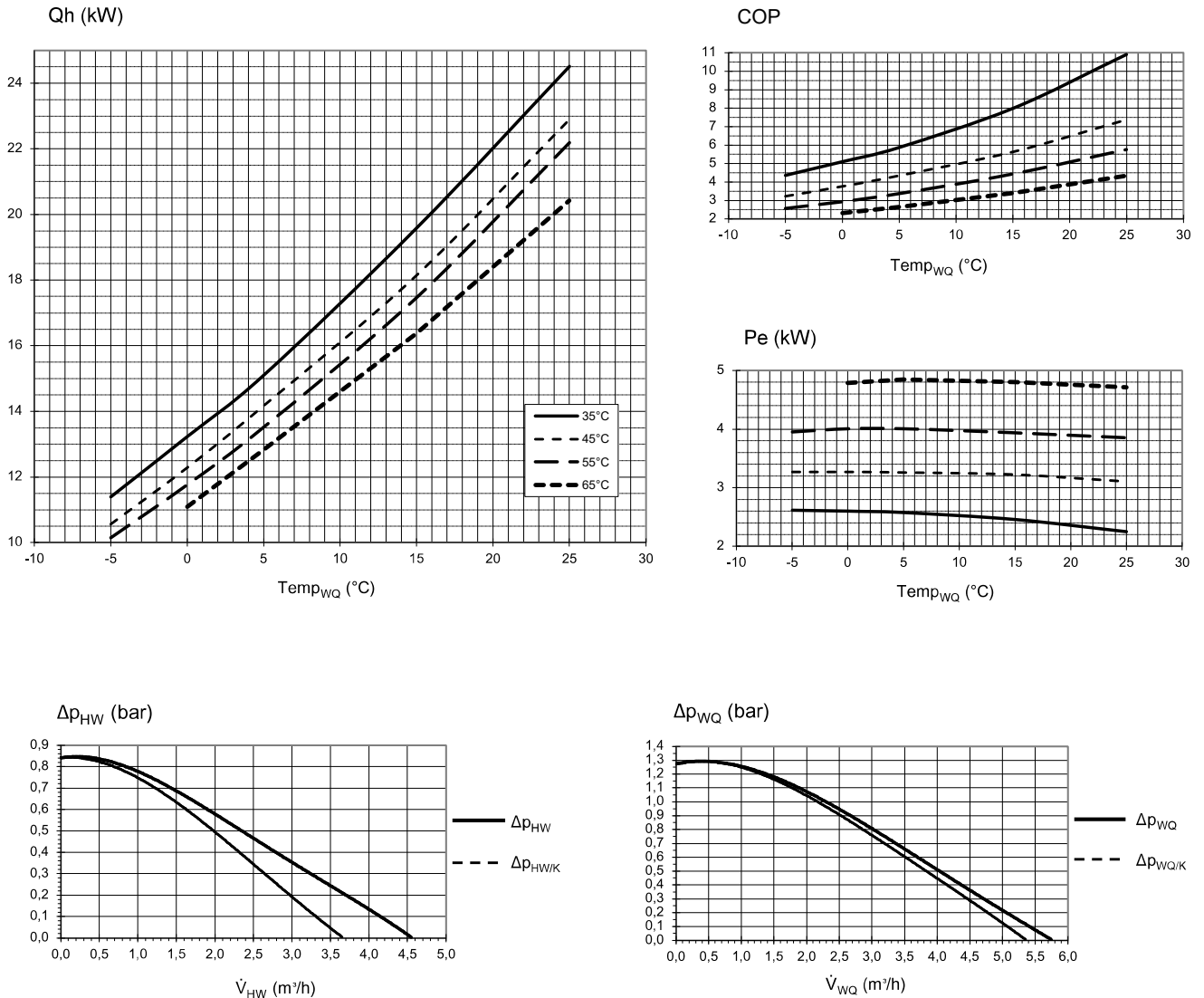
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Keys:	UK823000L/170408
$\dot{V}_{HW}$	Heating water volume flow rate
$\dot{V}_{WQ}$	Heat source volume flow rate
Temp _{WQ}	Heat source temperature
Qh	Heating capacity
Pe	Power consumption
COP	Coefficient of performance
$\Delta p_{HW} / \Delta p_{HW/K}$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

SWC 142(H)(K)3



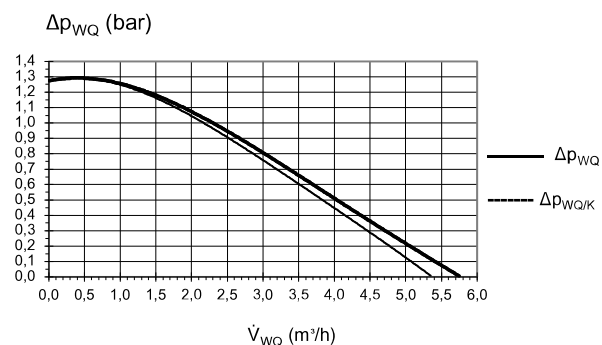
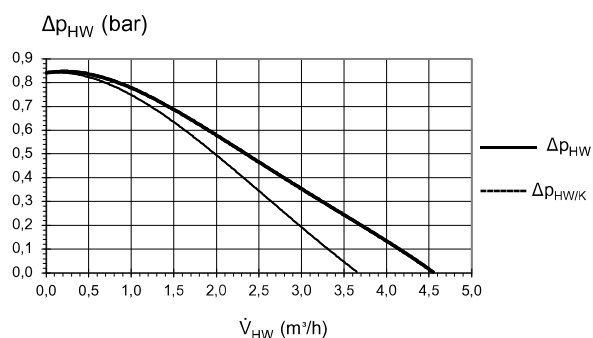
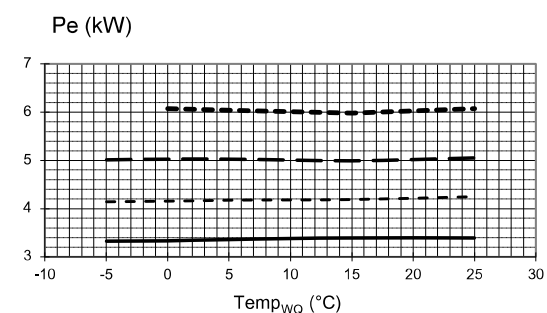
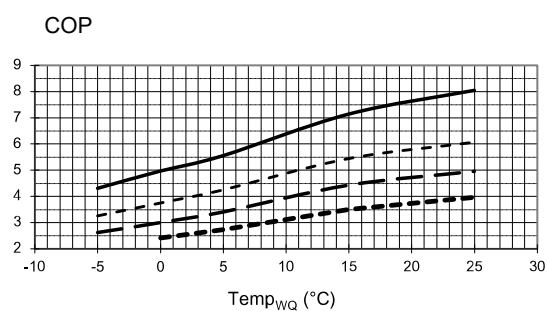
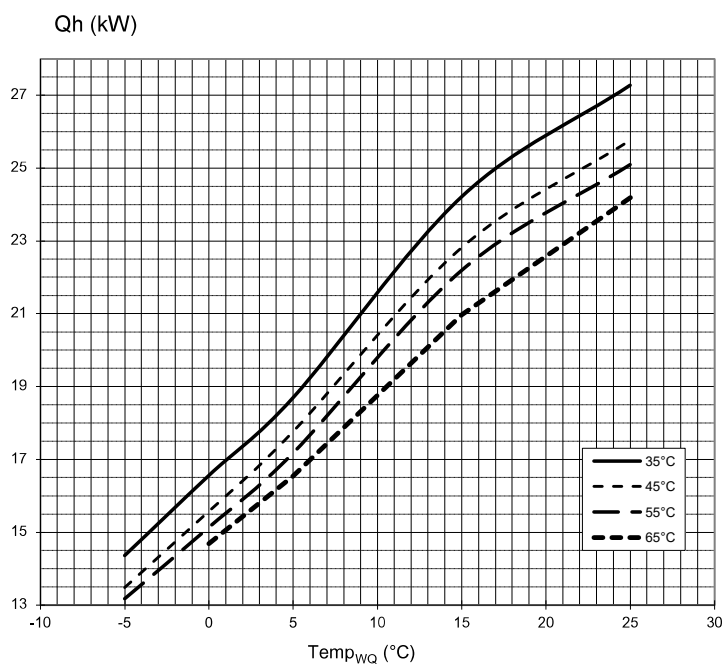
823244

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



SWC 172(H)(K)3

Performance curves



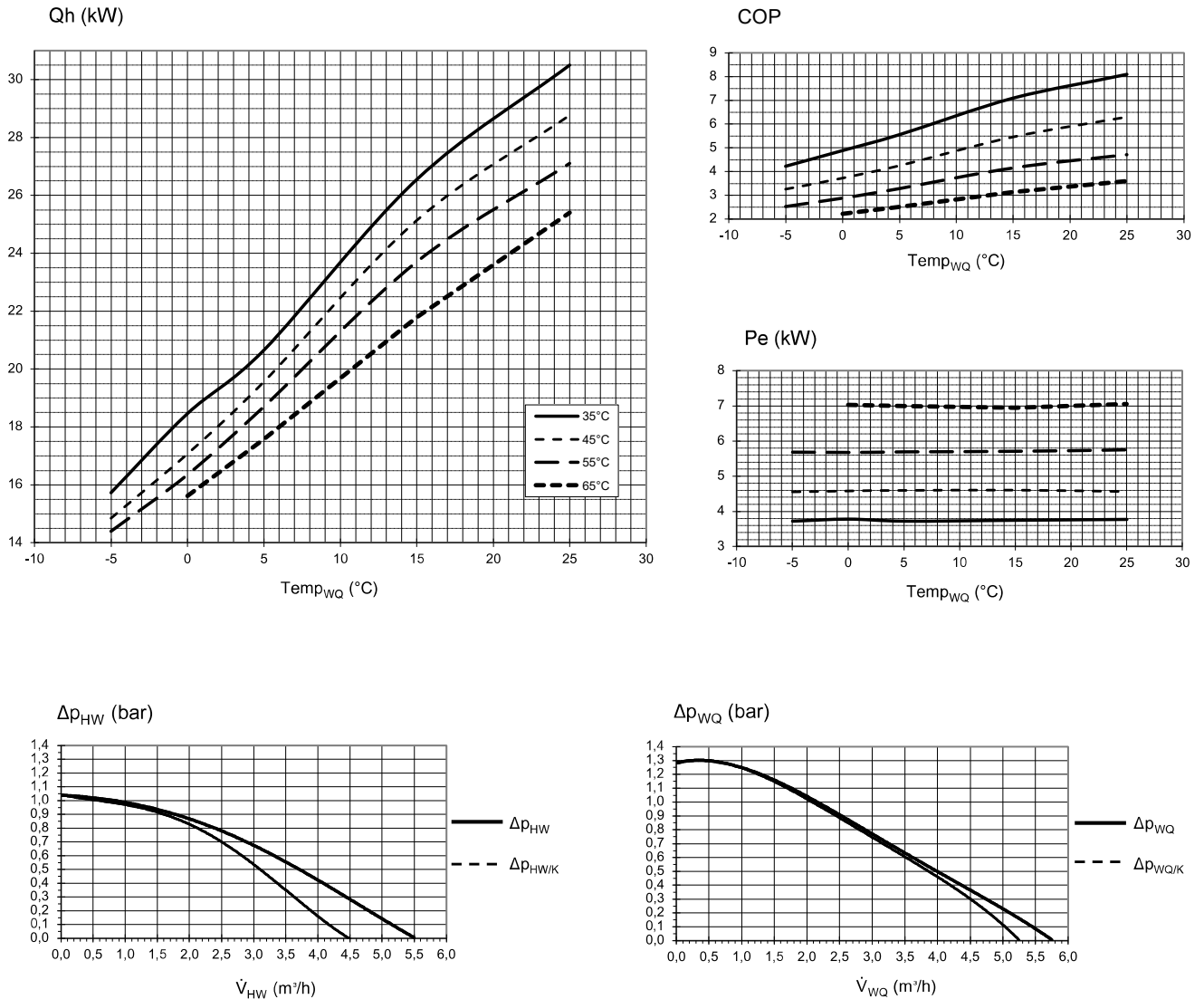
823245

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

SWC 192(H)(K)3



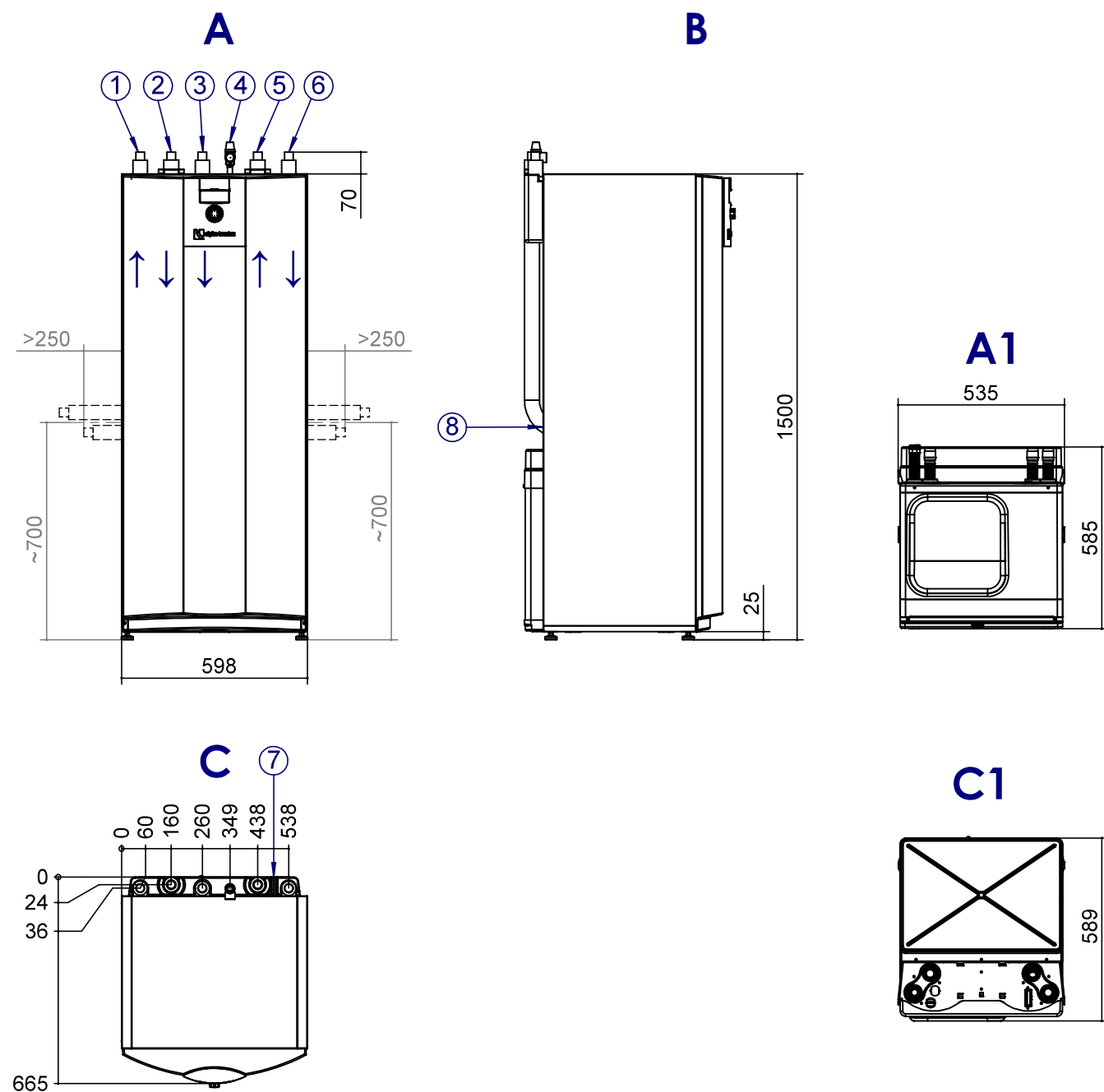
823246

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



SWC 42(H)(K)3 – SWC 122(H)(K)3

Dimensional drawings



Keys: UK819451

All dimensions in mm..

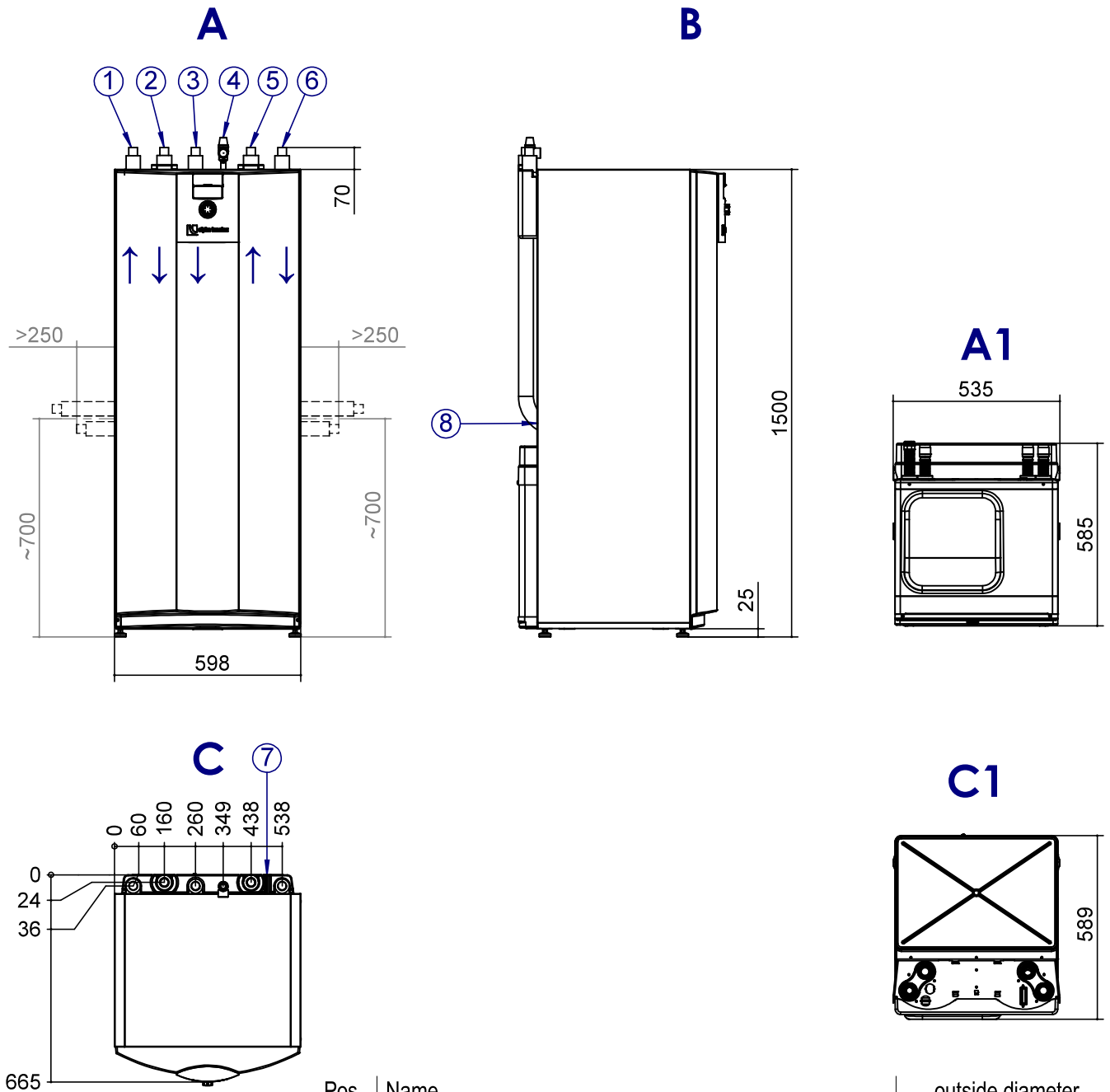
A	Front view
B	Side view from left
C	Plan view
A1	Front view of module box
C1	Top view of module box

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)	Rp ¾ internal thread
4	Heating circuit safety valve (in the separate package)	Ø28
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)	–
7	Cable entry LIN bus cable	–
8	Cable entry connection cable	–



Dimensional drawings

SWC 142(H)(K)3 – SWC 192(H)(K)3



Keys: UK819451

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

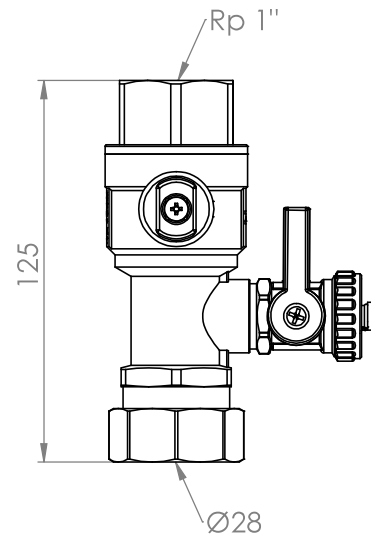


Connections

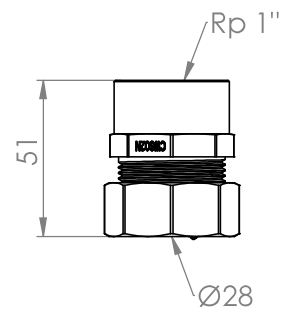
SWC 42(H)(K)3 – SWC 122 (H)(K)3

Heating circuit

Dimensional drawings

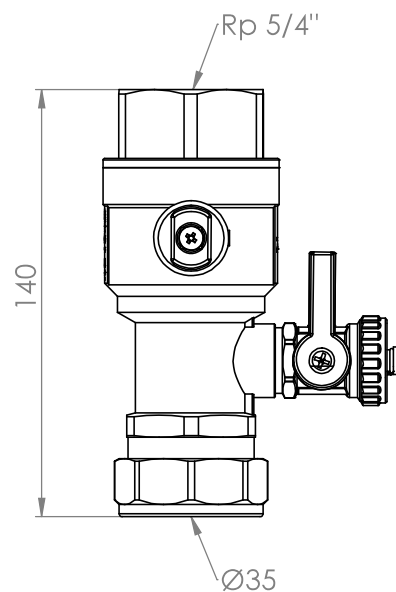


Heating source



SWC 142(H)(K)3 – SWC 192 (H)(K)3

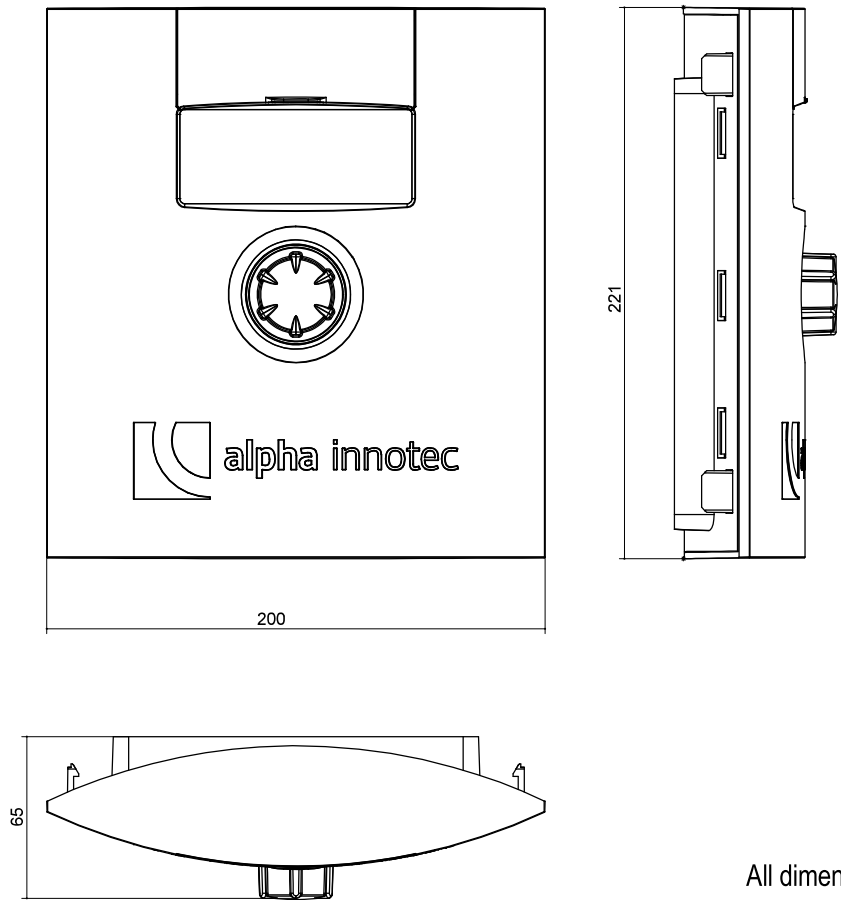
Heating circuit and heating source





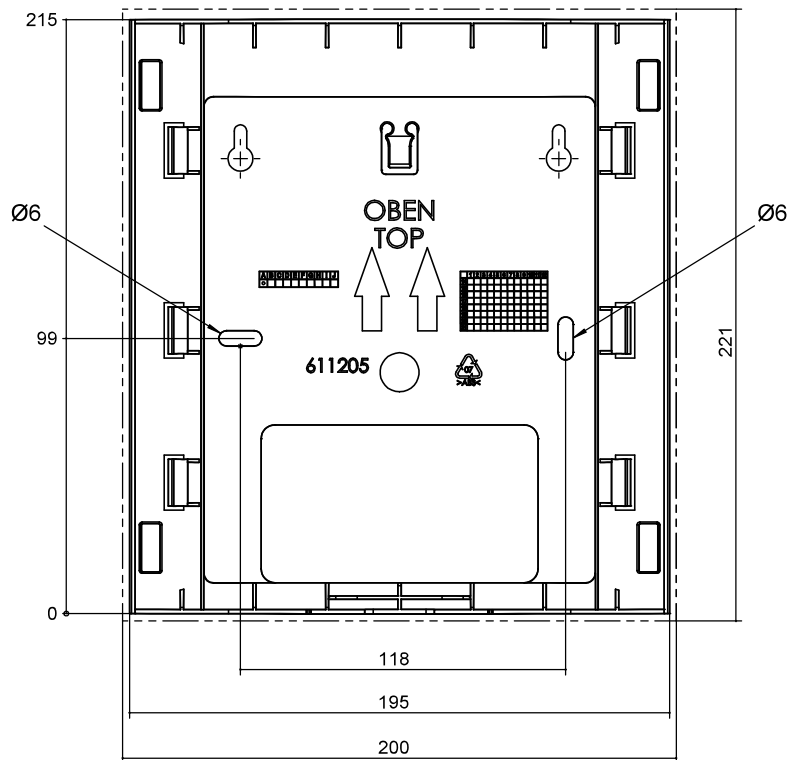
Dimensional drawings

Control unit



All dimensions in mm..

Wall-mounted bracket



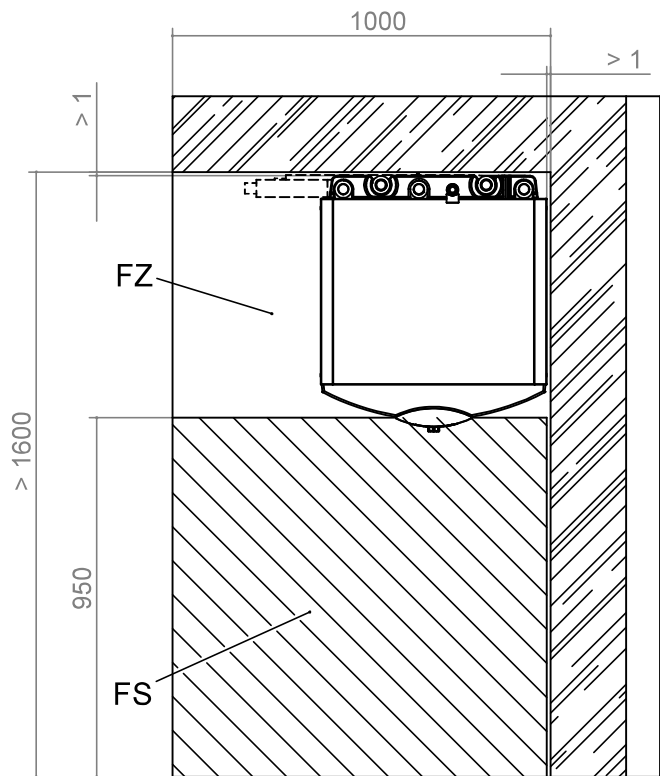
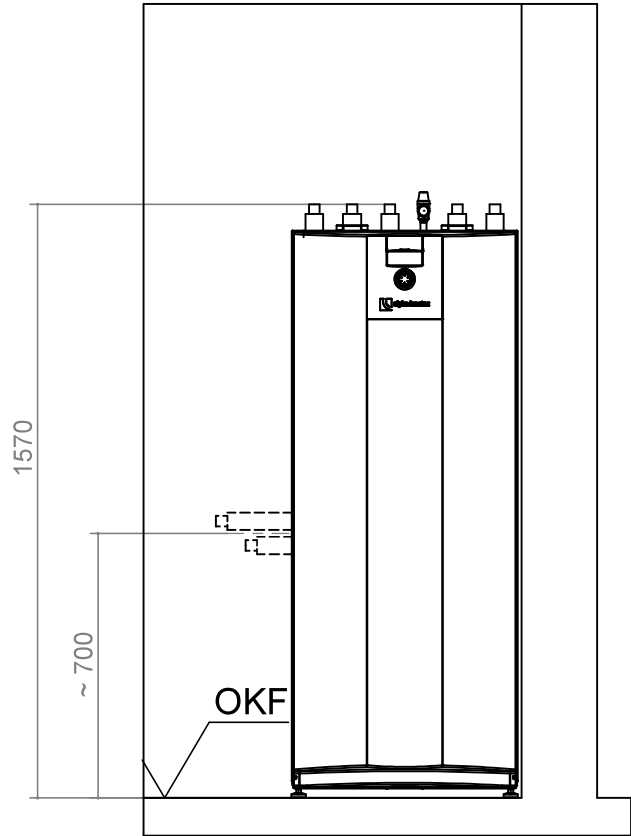
All dimensions in mm..



SWC 42(H)(K)3 – SWC 192(H)(K)3

Installation plan 1

V1



Keys: UK819452
All dimensions in mm.

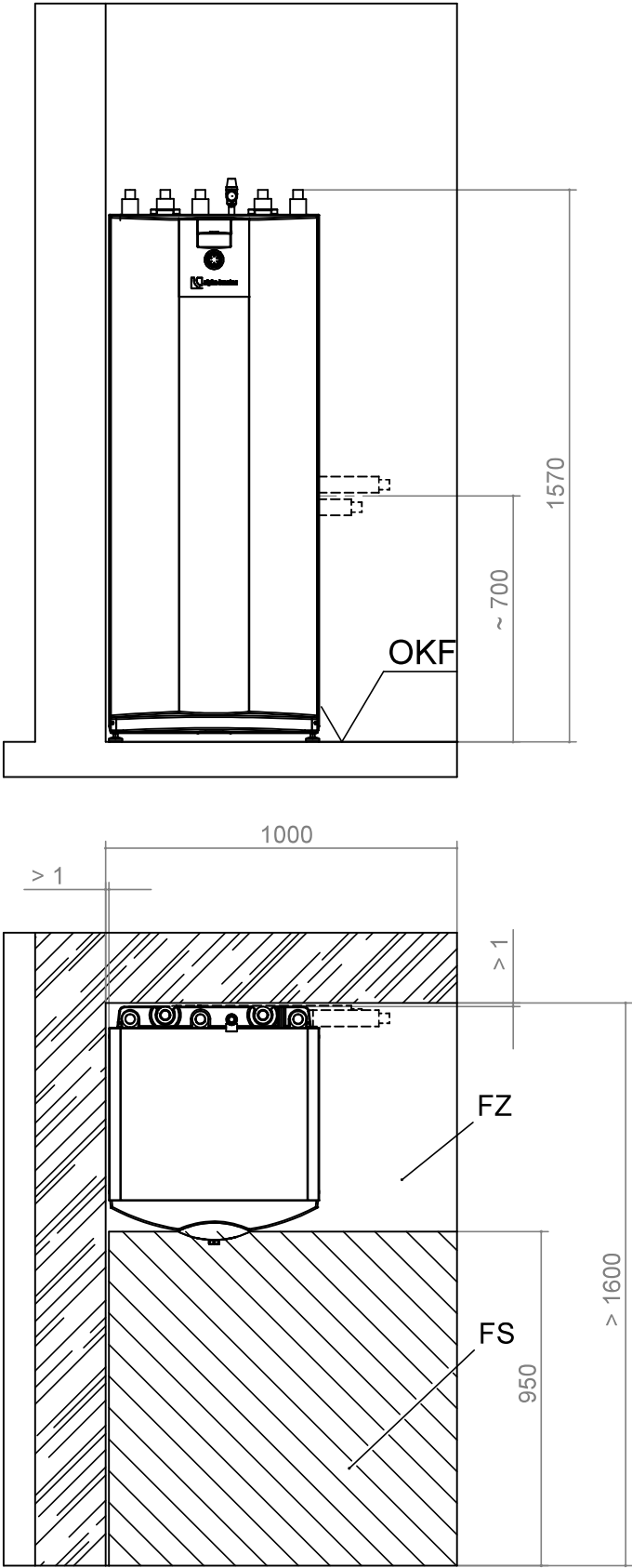
V1	Version 1	FS	Free space for service purposes
OKF	Finished floor level	FZ	Free space for functionally necessary accessories



Installation plan 2

SWC 42(H)(K)3 – SWC 192(H)(K)3

V2



Keys: UK819452
All dimensions in mm.

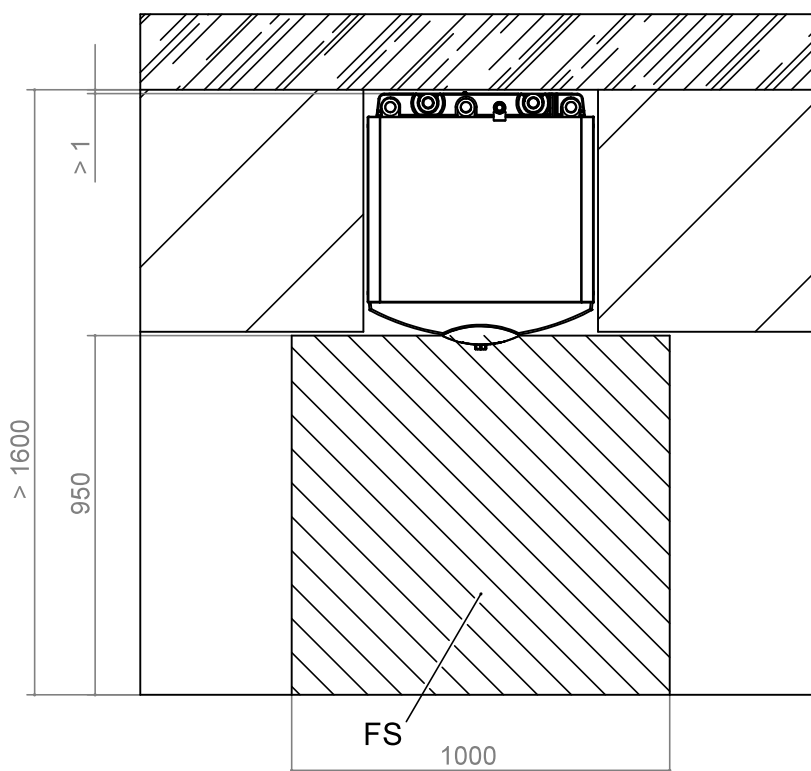
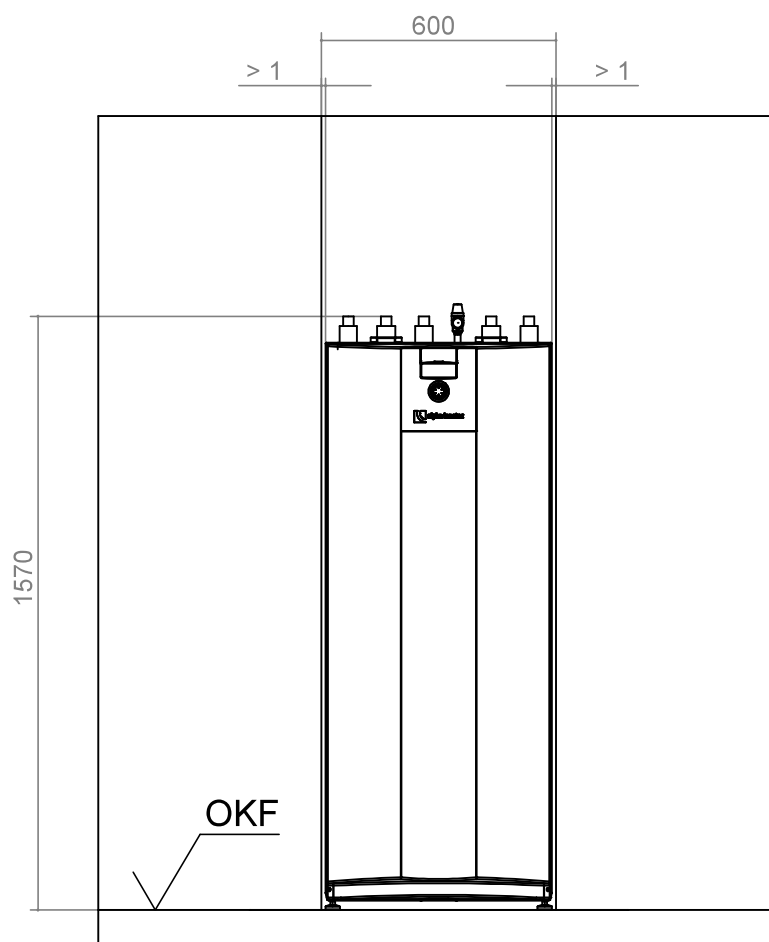
V2	Version 2	FS	Free space for service purposes
OKF	Finished floor level	FZ	Free space for functionally necessary accessories



SWC 42(H)(K)3 – SWC 192(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