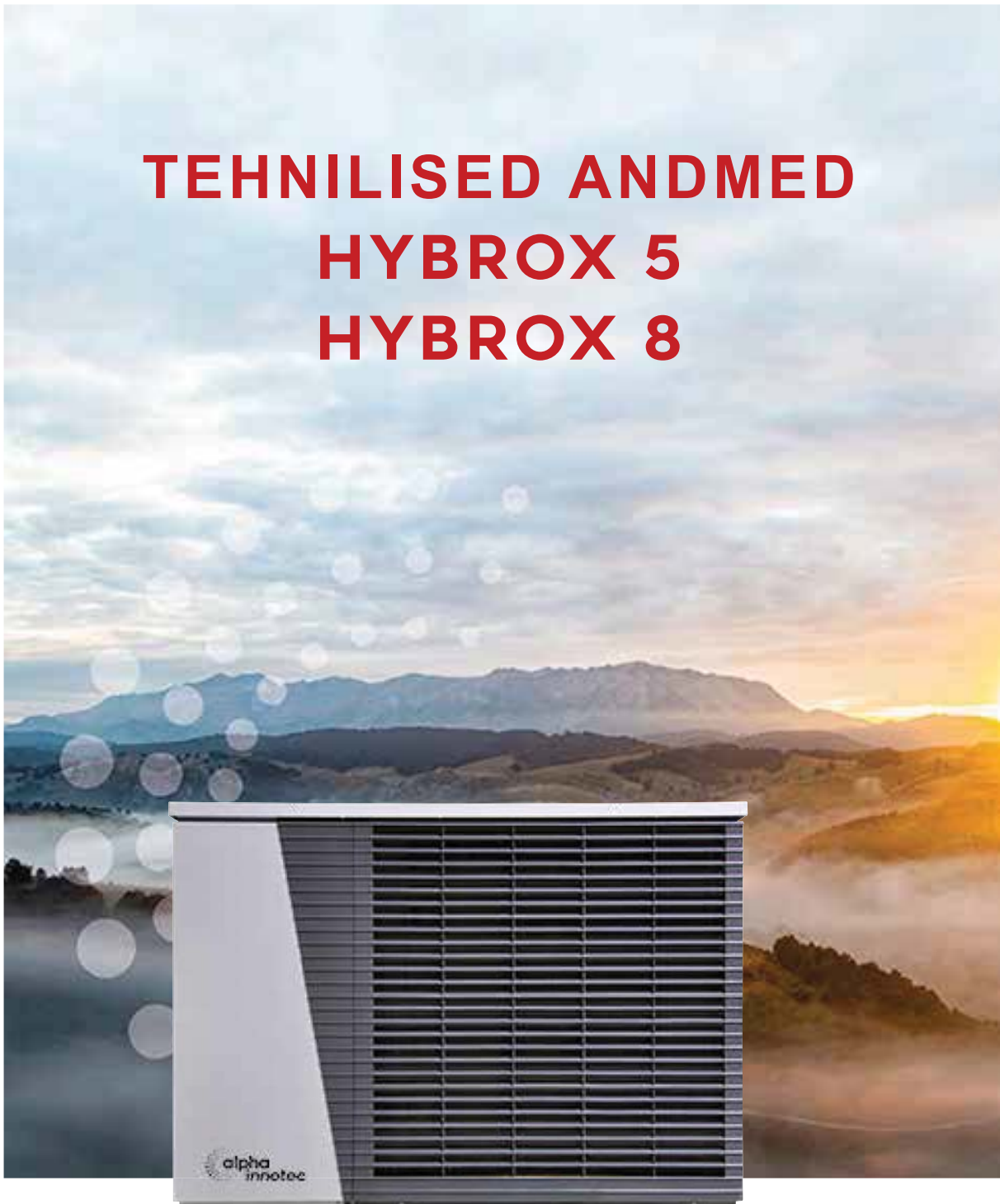


TEHNILISED ANDMED HYBROX 5 HYBROX 8



83026200bUK

UK

**ÕHK-VESI
SOOJUMPUMBAD**



Technical data / scope of supply

Performance data				Hybrox 5	Hybrox 8
Heating capacity COP	for A10/W35 acc. to DIN EN 14511-x	Partial load operation	kW COP	2.16 5.09	3.07 5.25
	for A7/W35 acc. to DIN EN 14511-x	Partial load operation	kW COP	2.12 4.98	3.14 5.24
	for A7/W55 acc. to DIN EN 14511-x	Partial load operation	kW COP	1.82 2.79	2.72 3.05
	for A2/W35 acc. to DIN EN 14511-x	Partial load operation	kW COP	3.28 4.12	4.61 4.20
	for A-7/W35 acc. to DIN EN 14511-x	Full load operation	kW COP	5.41 3.08	7.33 3.00
Heating capacity	for A10/W35	min. max.	kW kW	2.16 5.50	3.07 8.00
	for A7/W35	min. max.	kW kW	2.05 5.50	3.01 8.00
	for A7/W55	min. max.	kW kW	1.56 5.50	2.57 8.00
	for A2/W35	min. max.	kW kW	1.82 5.50	2.73 7.60
	for A-7/W35	min. max.	kW kW	1.16 5.41	1.93 7.30
Cooling capacity EER	for A35/W18	Partial load operation	kW EER	3.75 4.20	5.39 4.26
	for A35/W7	Partial load operation	kW EER	- -	- -
Cooling capacity	for A35/W18	min. max.	kW kW	2.15 5.50	2.98 8.00
	for A35/W7	min. max.	kW kW	- -	- -
Heating capacity domestic hot water preparation			kW	5.5	8
Operating limits					
Heating circuit return min. Heating circuit flow max. Heating		within heat source min./max.		°C	20 60
Heat source, heating		min. max.		°C	-22 35
Additional operating points				...	A-7/W70
Installation location (only valid for indoor installation)					
Room temperature		min. max.		°C	-
Relative humidity maximum (non-condensing)				%	-
Sound					
Sound power level inside		min. Night max.		dB(A)	- - -
Sound power level outside ¹⁾ combined		min. Night max.		dB(A)	45 51 59
Sound power level outside ¹⁾ Air inlet		min. Night max.		dB(A)	- - -
Sound power level outside ¹⁾ Air outlet		min. Night max.		dB(A)	- - -
Sound power level acc. to DIN EN 12102-1		inside outside		dB(A)	- 45
Tonality Low-frequency				dB(A) • yes - no	- -
Heat source					
Air flow rate at maximum external pressing Maximum external pressure			m³/h Pa	3500 -	3500 -
Heating circuit					
Flow rate (pipe dimensioning) Min. volume buffer tank in series Min. volume separation buffer tank			l/h	1200 60 60	1400 60 60
Free pressing Pressure loss Flow rate			bar bar l/h	- 0.23 1200	- 0.12 1200
Max. allowable operating pressure			bar	3	3
Circulation pump control range			min. max.	l/h	-
General unit data					
Data of the standards according to version			EN14511-x DIN EN 12102-1	2022 2018	2022 2018
Total weight			kg	122	133
Weight of heat pump module Compact module Fan module			kg kg kg	-	-
Max. allowable operating pressure refrigerating circuit			high pressure low pressure	MPa (g) MPa (g)	3.15 2.8
Refrigerant type Refrigerant capacity			...	kg	R290 1.00
Electrics					
Voltage code all-pole fuse protection for heat pump **)			... A	1~N/PE/230V/50Hz B16	1~N/PE/230V/50Hz B16
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 **)			1 phase	...	- -
Voltage code Electric heating element fuse protection **)			3 phases	...	- -
HP*): effect. power consumption A7/W35 (partial load operation) DIN EN 14511-x Electric consumption I cosφ			kW A ...	0.77 1.19 0.95	0.58 0.89 0.95
HP*): effective power consumption A7/W35 acc. to DIN EN 14511-x: min. max.			kW kW	0.43 1.10	0.58 1.76
HP*): max. machine current max. power consumption within the operating limits			A kW	14 3.5	14 3.5
Starting current: direct with soft starter			A A	< 5 -	< 5 -
Degree of protection			IP	24	24
Zmax			Ω	0.26	0.26
Residual current circuit breaker			if required	type	B
Electric heating element output			3 2 1 phase	kW kW kW	- - -
Circulation pump power consumption, heating circuit			min. max.	W	-
Other unit information					
Safety valve heating circuit Response pressure			included in scope of supply: • yes - no bar		- -
Buffer tank Volume			included in scope of supply: • yes - no l		- -
Heating circuit expansion vessel Volume Prepressure			incl. in scope of supply: • yes - no l bar		- -
Overflow valve Changeover valve, heating - domestic hot water			integrated: • yes - no		-
Heating circuit vibration decoupling			incl. in scope of supply or integrated: • yes - no		-
Controller Heat quantity recording Extension board			incl. in scope of supply or integrated: • yes - no		- • -

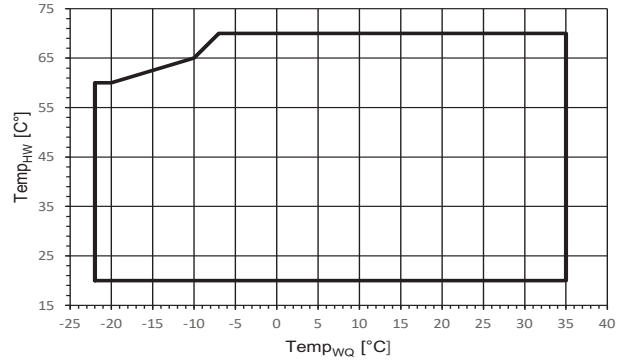
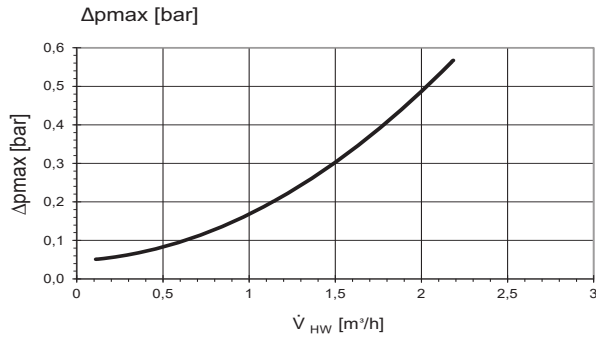
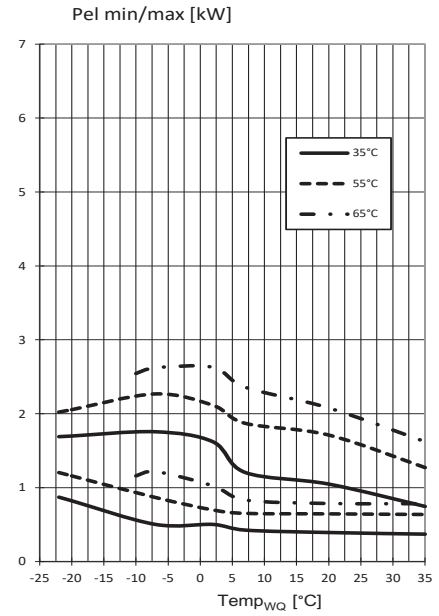
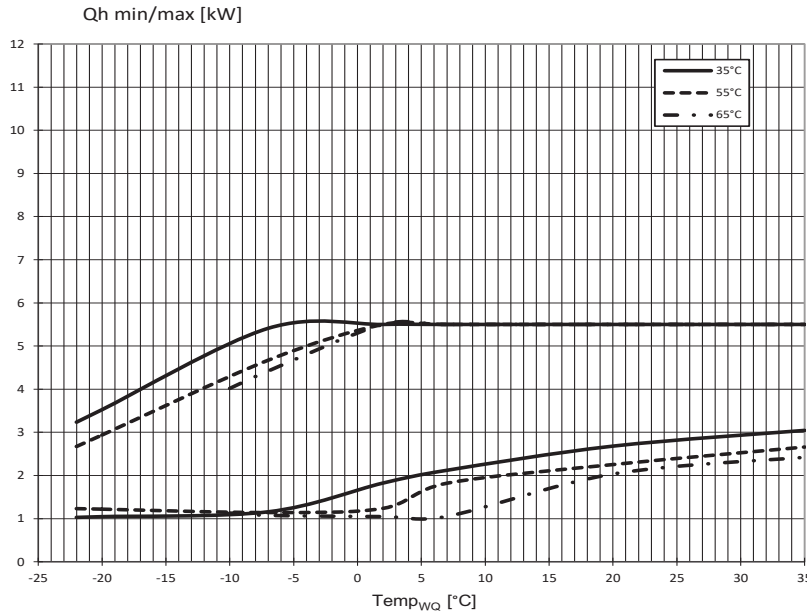
¹⁾ compressor only, ^{**)} note local regulations ¹⁾ Indoor and outdoor installation.
The performance data and the operating limits apply to clean heat exchangers | Index: o

813655a 813656a



Hybrox 5 Heating mode

Performance curves



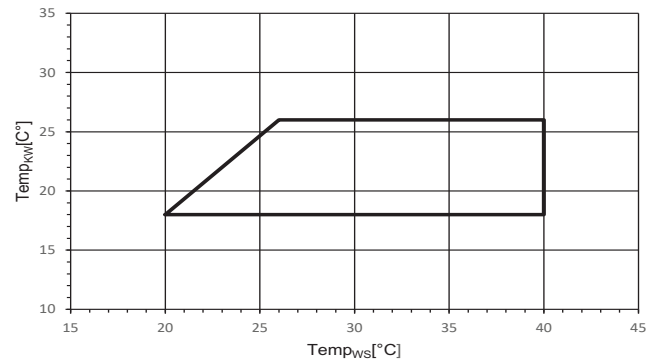
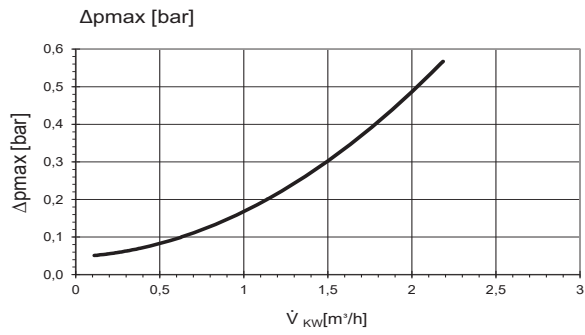
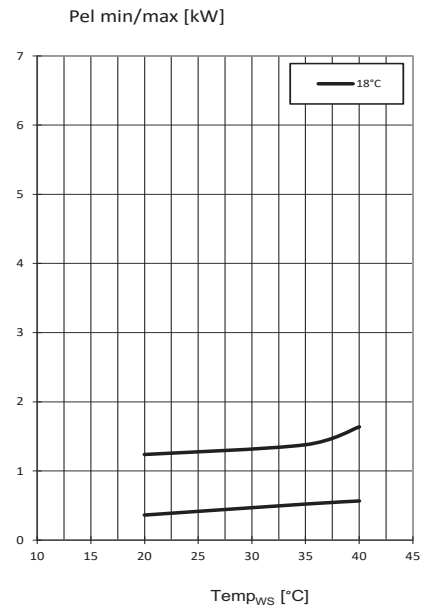
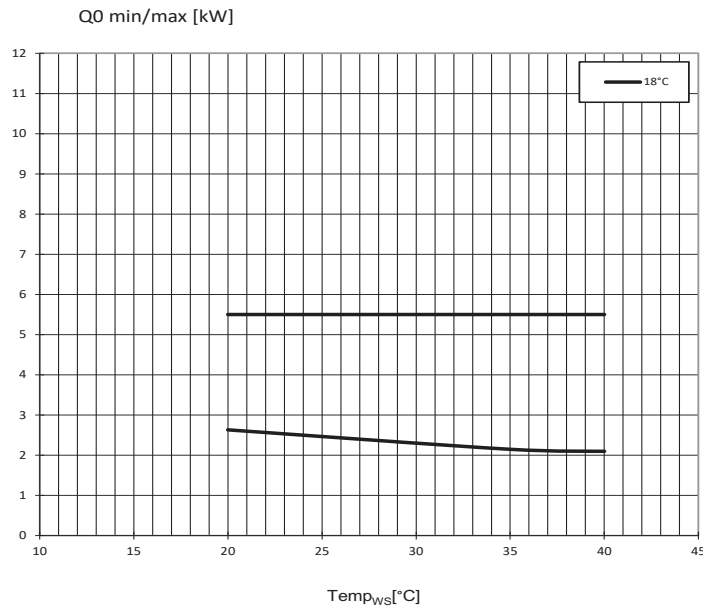
823332

- | | |
|--------------------|-------------------------------------|
| Keys: | UK823332 |
| \dot{V}_{HW} | Volume flow heating water |
| Temp _{HW} | Temperature heating water |
| Temp _{wQ} | Temperature heat source |
| Qh min/max | minimum / maximum heating capacity |
| Pel min/max | minimum / maximum power consumption |
| Δpmax | maximum power loss |



Performance curves

Hybrox 5 Cooling mode



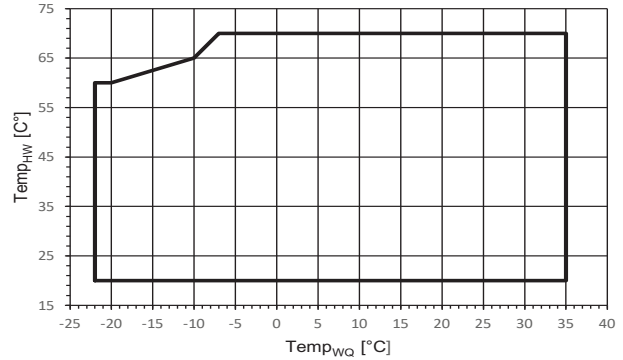
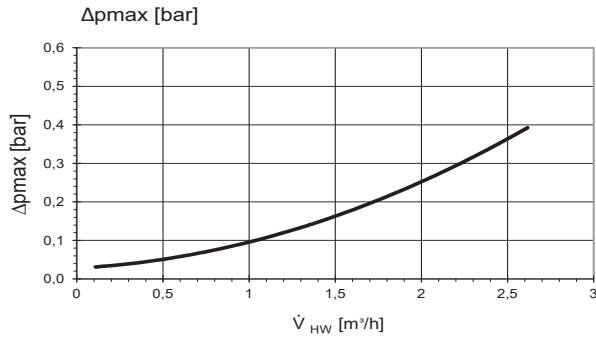
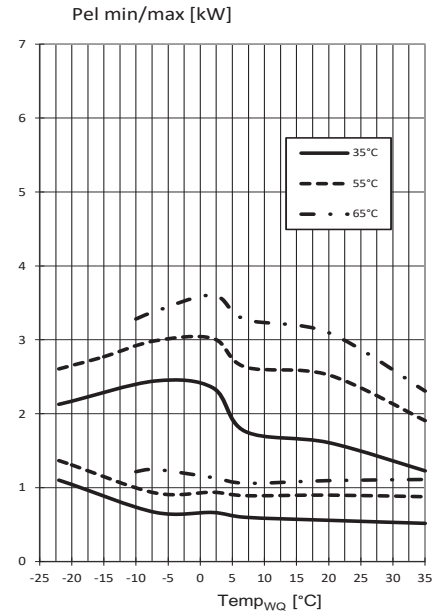
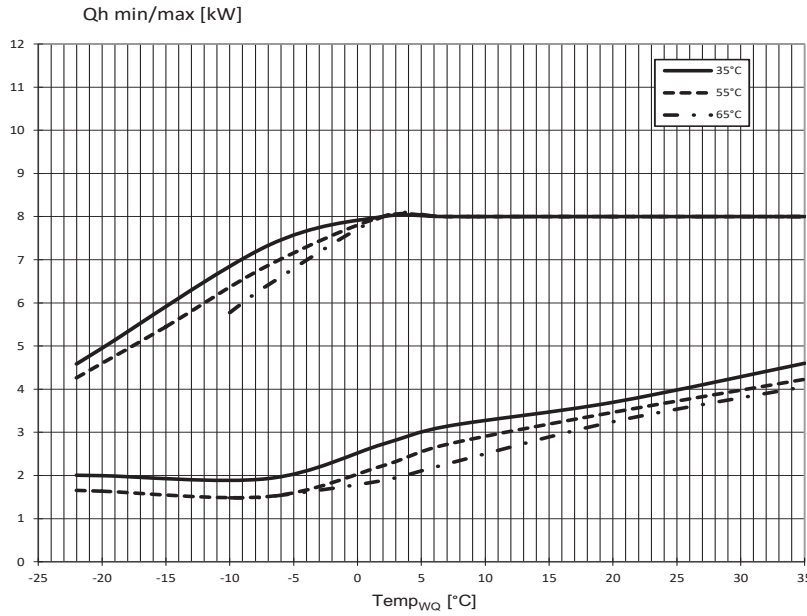
823332

- Keys: UK823332
- \dot{V}_{KW} Volume flow cooling water
 - Temp_{KW} Temperature cooling water
 - Temp_{WS} Temperature heat sink
 - Q0 min/max minimum / maximum cooling capacity
 - Pel min/max minimum / maximum power consumption
 - Δpmax maximum power loss



Hybrox 8 Heating mode

Performance curves



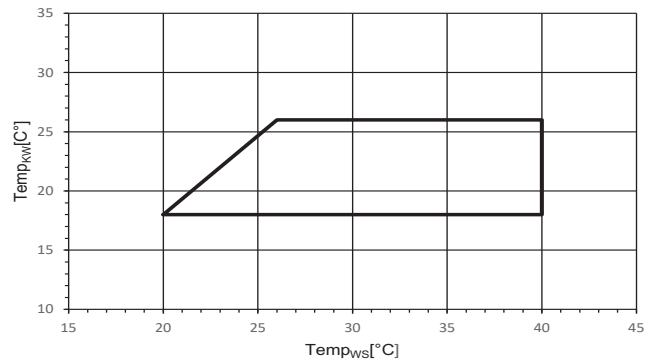
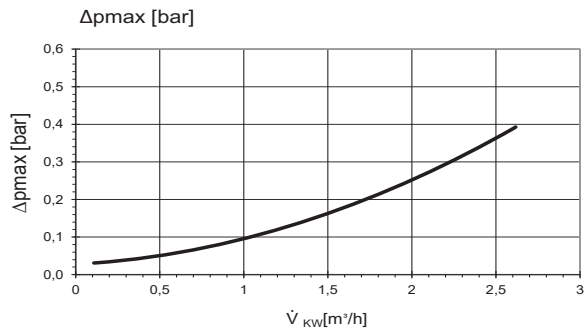
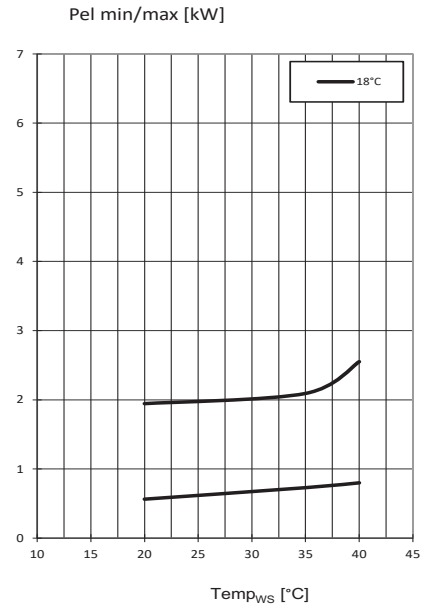
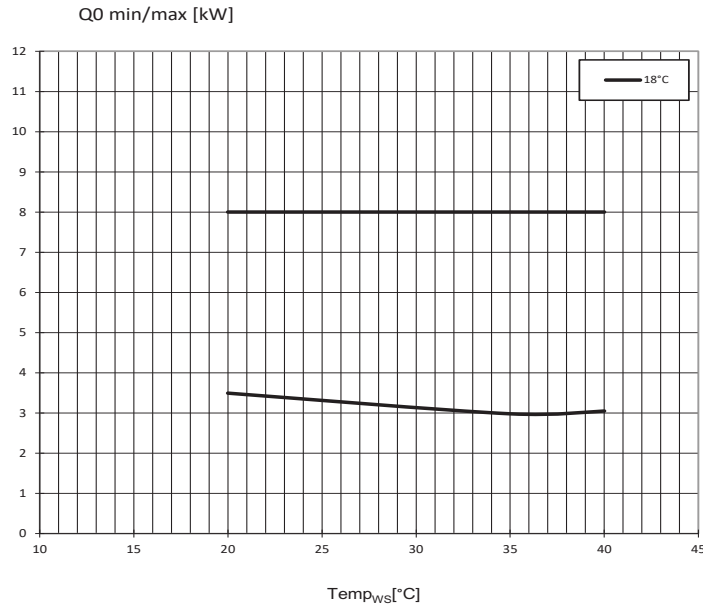
823333

- Keys: UK823333
- V_{HW} Volume flow heating water
- Temp_{HW} Temperature heating water
- Temp_{WQ} Temperature heat source
- Qh min/max minimum / maximum eating capacity
- Pel min/max minimum / maximum power consumption
- Δpmax maximum power loss



Performance curves

Hybrox 8 Cooling mode



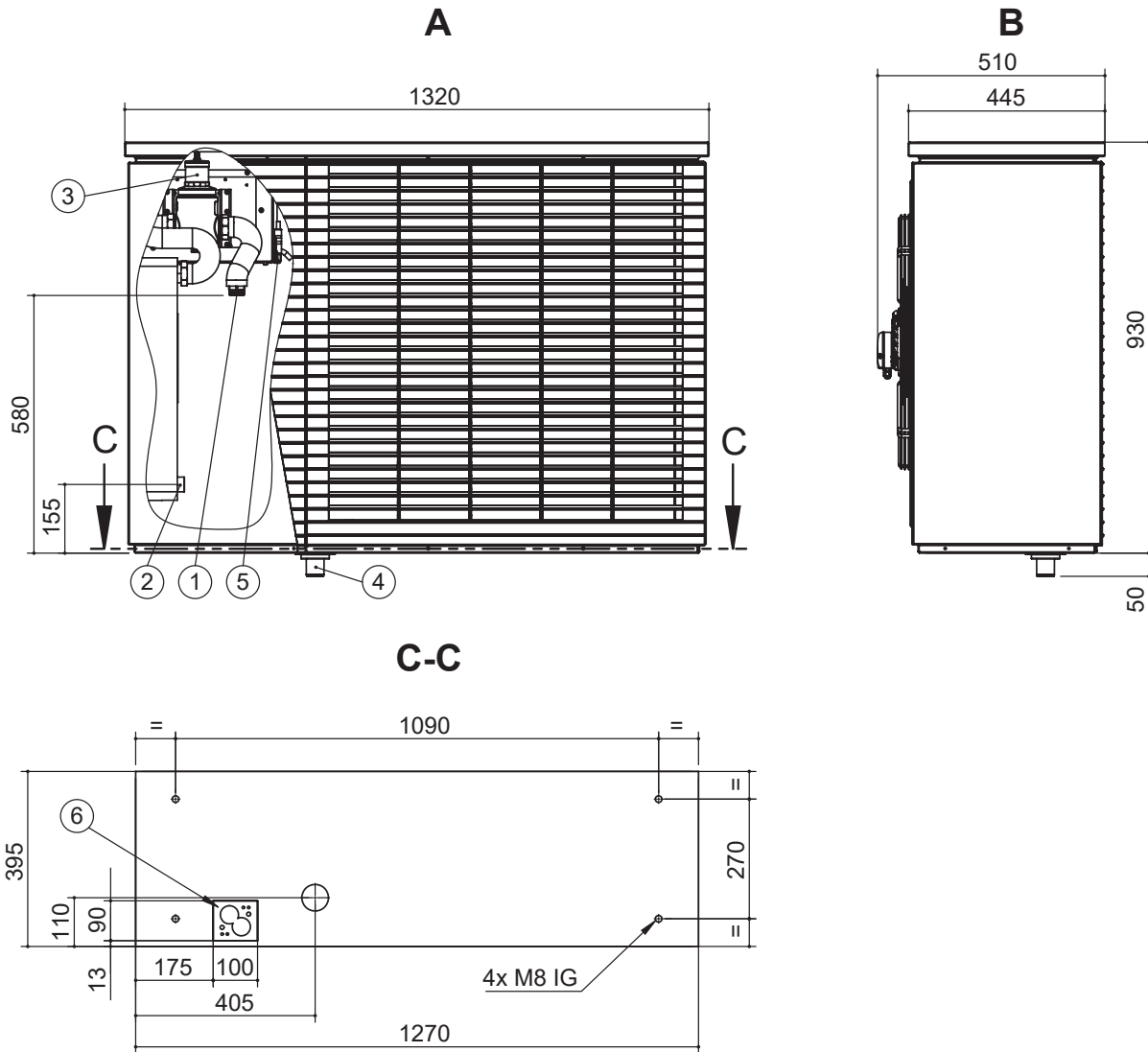
823333

- Keys: UK823333
- \dot{V}_{KW} Volume flow cooling water
 - Temp_{KW} Temperature cooling water
 - Temp_{WS} Temperature heat sink
 - Q0 min/max minimum / maximum cooling capacity
 - Pel min/max minimum / maximum power consumption
 - Δpmax maximum power loss



Hybrox 5 / Hybrox 8

Dimensional drawings



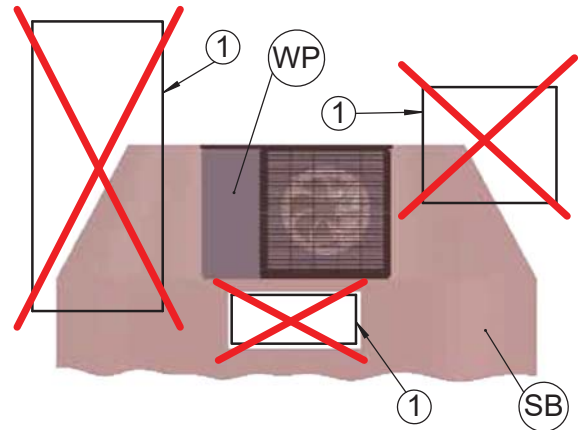
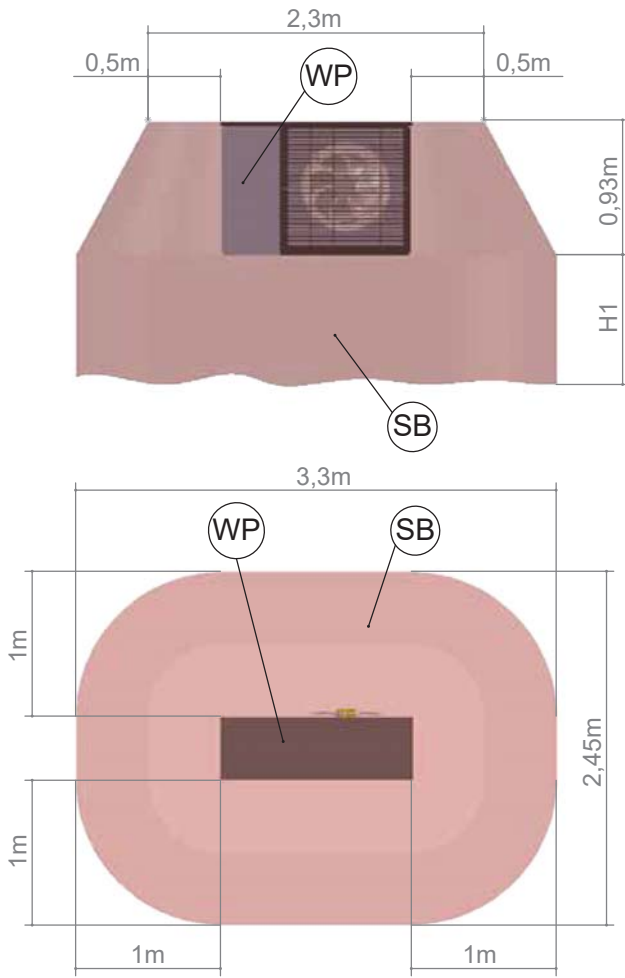
Keys: UK819543
 All dimensions in mm.

Pos.	Name	Dim.
A	Front view	–
B	Side view from left	–
C-C	Section (floor slab)	–
1	Heating water outlet (supply)	G1" external thread
2	Heating water inlet (return)	G1" external thread
3	Microbubble separator with bleeder	–
4	Connection socket (in extra box) for condensate drain pipe	DN40
5	Electrical connection (plug-in connections)	–
6	Penetration for flow & return and cables (in extra box)	–



Protection zones / safety distances

Hybrox 5 / Hybrox 8



Keys: UK819401

Pos.	Name
WP	Heat pump
SB	Protection zone
H1	to the floor
1	Doors, windows, light wells etc. into the building

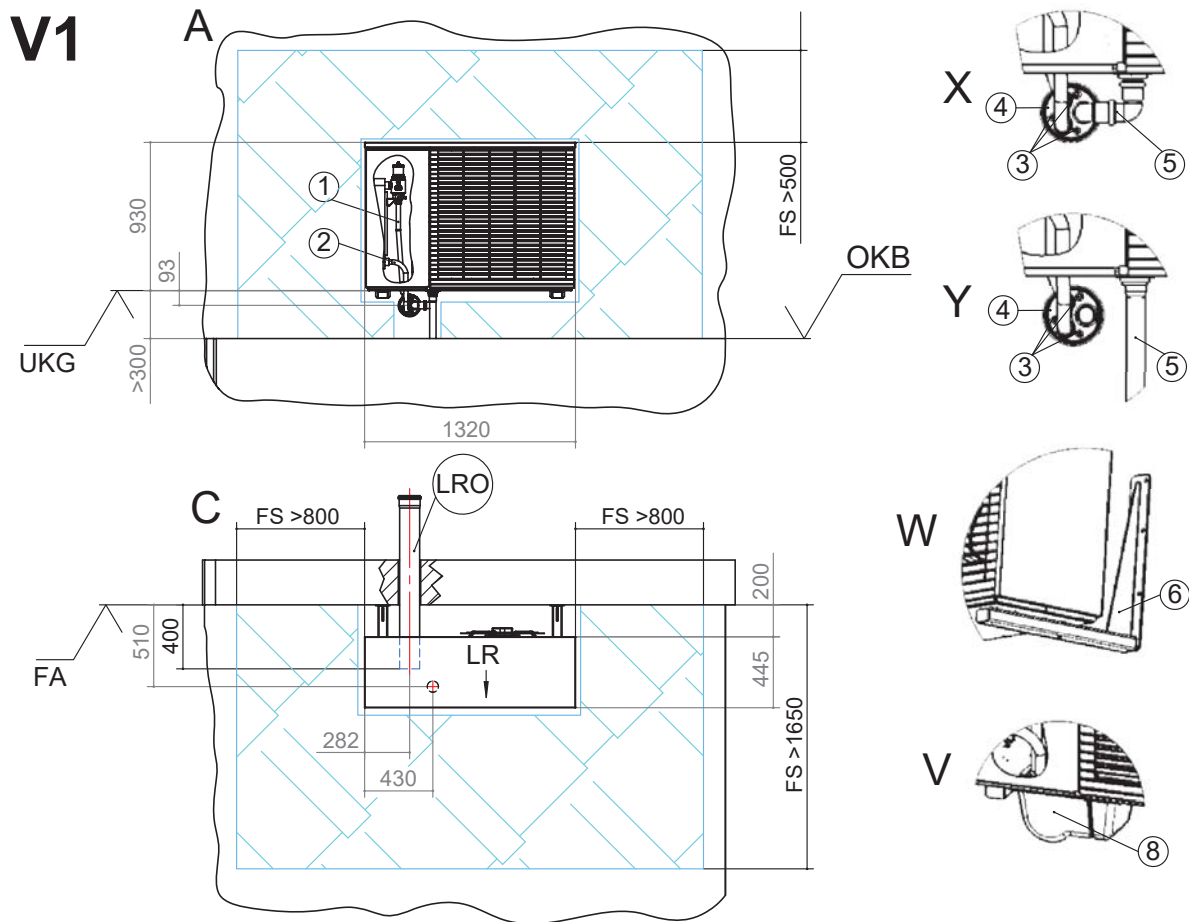
Important: The heat pump must only be installed outdoors! The heat pump must not be set up in depressions or in places where refrigerant can accumulate in the event of a leak.
 The heat pump must be positioned so that, in the event of a leak, no refrigerant can enter the building or endanger persons in any other way.

In the protection zone between the upper edge of the device and the floor, there must not be any sources of ignition, windows, doors, ventilation openings, light wells or similar.
 The protection zone must not reach into neighbouring properties or public traffic areas.
 The wall duct through the building envelope must be designed to be gas-tight.



Hybrox 5 / Hybrox 8

Wall bracket with wall duct



Keys: UK819393-1f
All dimensions in mm.

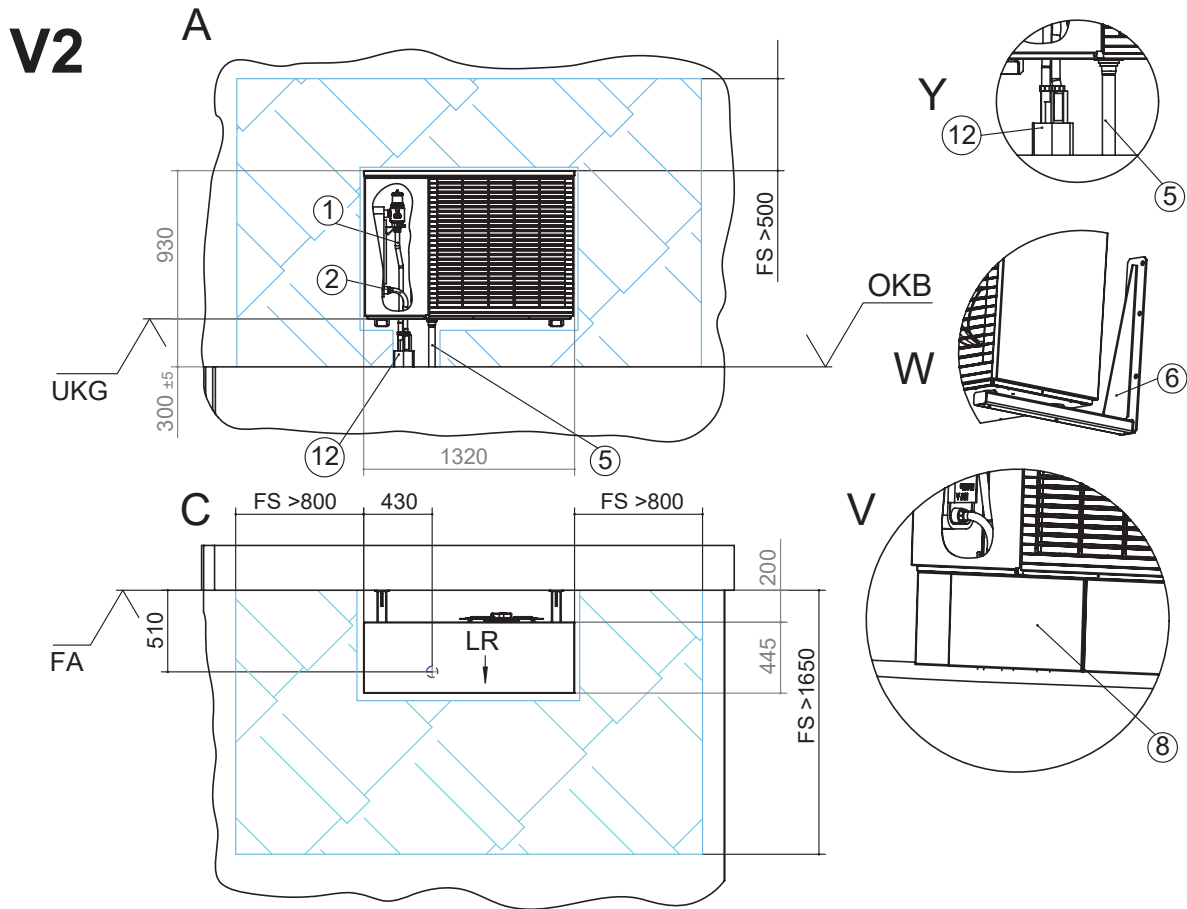
Pos.	Name
V1	Variant 1
A	Front view
C	Top view
V	Detailed view of cladding
W	Detailed view of wall attachment
X	Detailed view of condensate line inside building
Y	Detailed view of condensate line outside building
FA	Complete external facade
UKG	Lower edge of device
OKB	Upper edge of ground
LRO	Empty sewer conduit DN 125, Øa 125 (shorten on site)
LR	Direction of air
FS	Clearance for servicing

Pos.	Name
1	Heating water supply (accessory)
2	Heating water return (accessory)
3	Cable bushing
4	Wall duct (accessory)
5	Condensate drain / waste trap
6	Bracket for wall attachment (accessory)
8	Cladding of wall duct (accessory)



Wall bracket with hydraulic connection line

Hybrox 5 / Hybrox 8



Keys: UK819393-2f
All dimensions in mm.

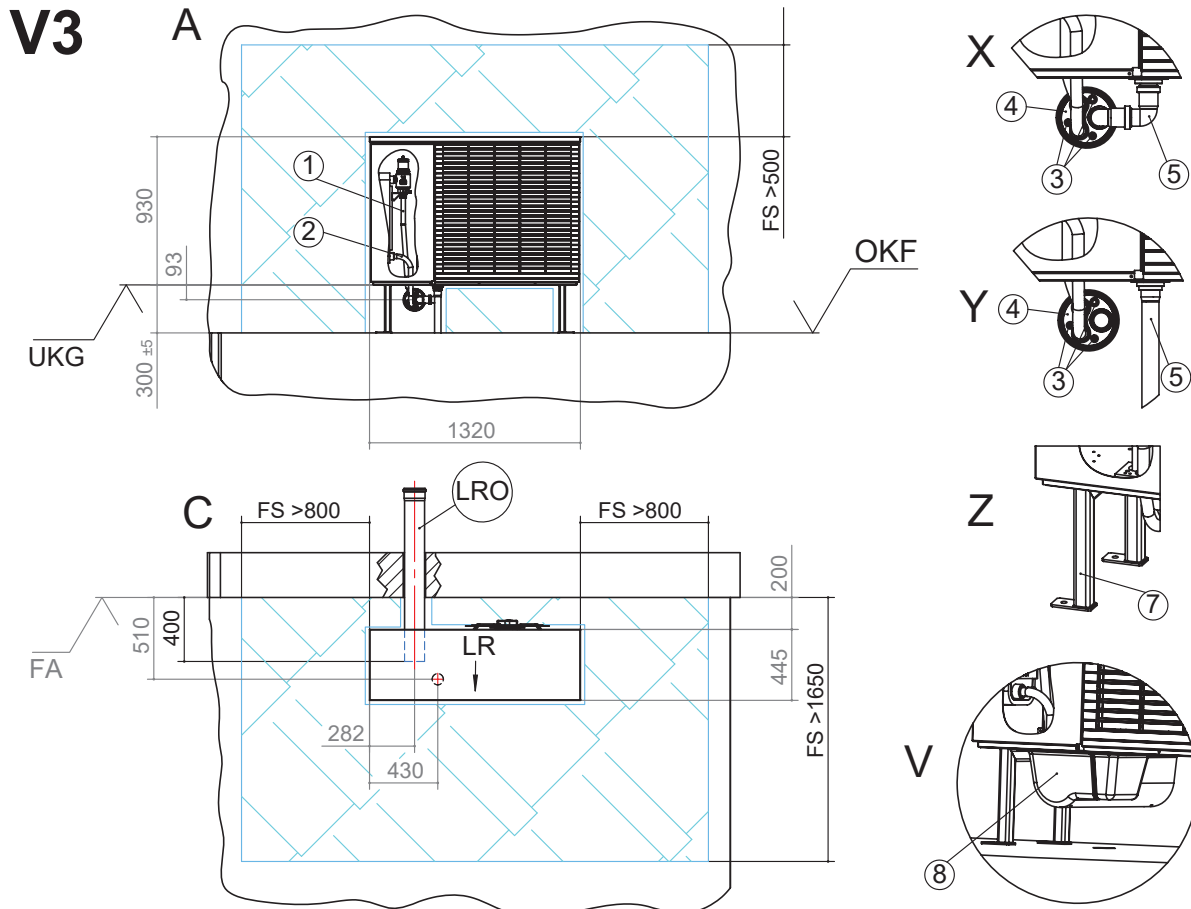
Pos.	Name
V2	Variant 2
A	Front view
C	Top view
V	Detailed view of cladding
W	Detailed view of wall attachment
Y	Detailed view of condensate line outside building
FA	Complete external facade
UKG	Lower edge of device
OKB	Upper edge of ground
LR	Direction of air
FS	Clearance for servicing

Pos.	Name
1	Heating water supply (accessory)
2	Heating water return (accessory)
5	Condensate drain/waste trap
6	Bracket for wall attachment (accessory)
8	Cladding of wall duct (accessory)
12	Hydraulic connection line



Hybrox 5 / Hybrox 8

Floor bracket with wall duct



Keys: UK819393-3f
All dimensions in mm.

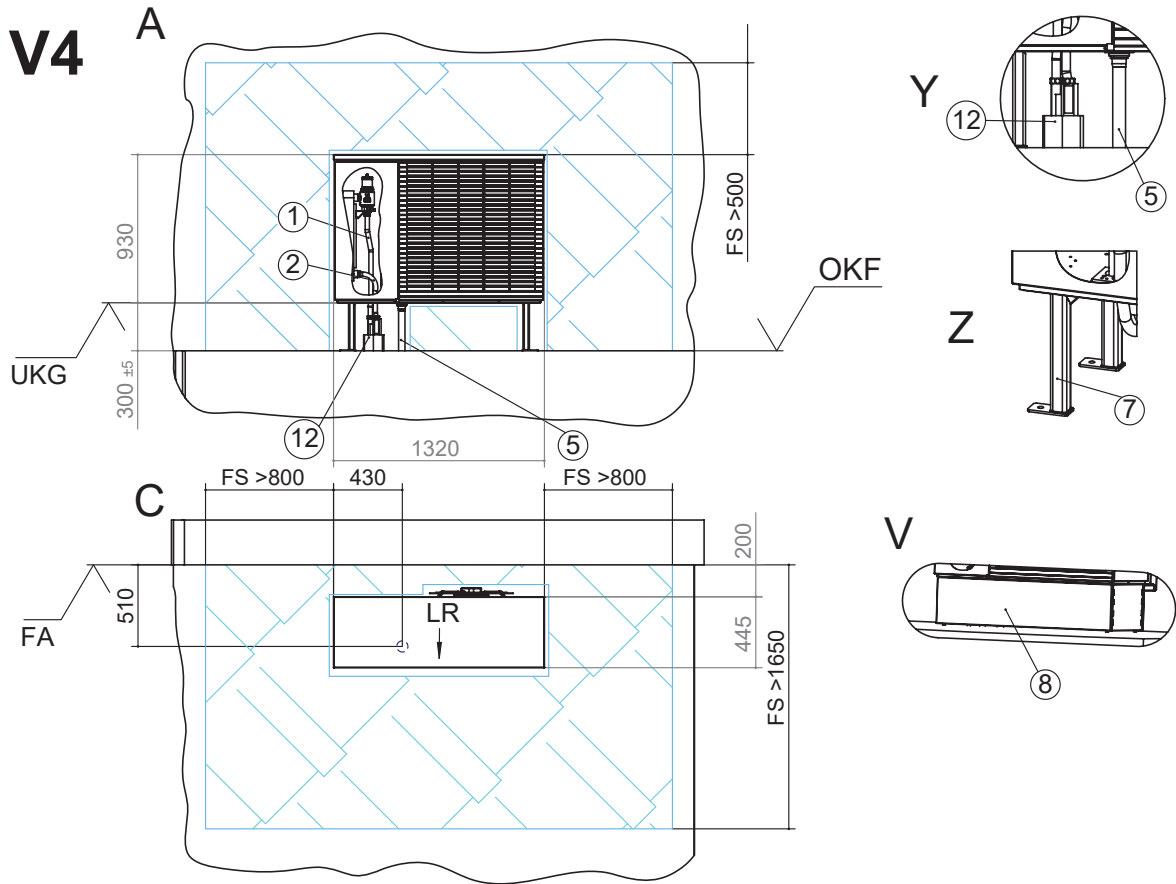
Pos.	Name
V3	Variant 3
A	Front view
C	Top view
V	Detailed view of cladding
X	Detailed view of condensate line inside building
Y	Detailed view of condensate line outside building
Z	Detailed view of floor attachment
FA	Complete external facade
UKG	Lower edge of device
OKF	Upper edge of foundation
LRO	Empty sewer conduit DN 125, Øa 125 (shorten on site)
LR	Direction of air
FS	Clearance for servicing

Pos.	Name
1	Heating water supply (accessory)
2	Heating water return (accessory)
3	Cable bushing
4	Wall duct (accessory)
5	Condensate drain/waste trap
7	Bracket for floor attachment (accessory)
8	Cladding of wall duct (accessory)



Floor bracket with hydraulic connection line

Hybrox 5 / Hybrox 8



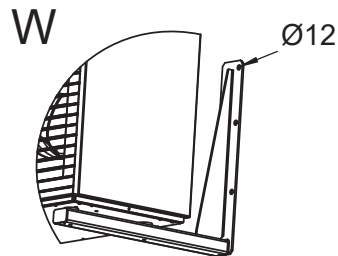
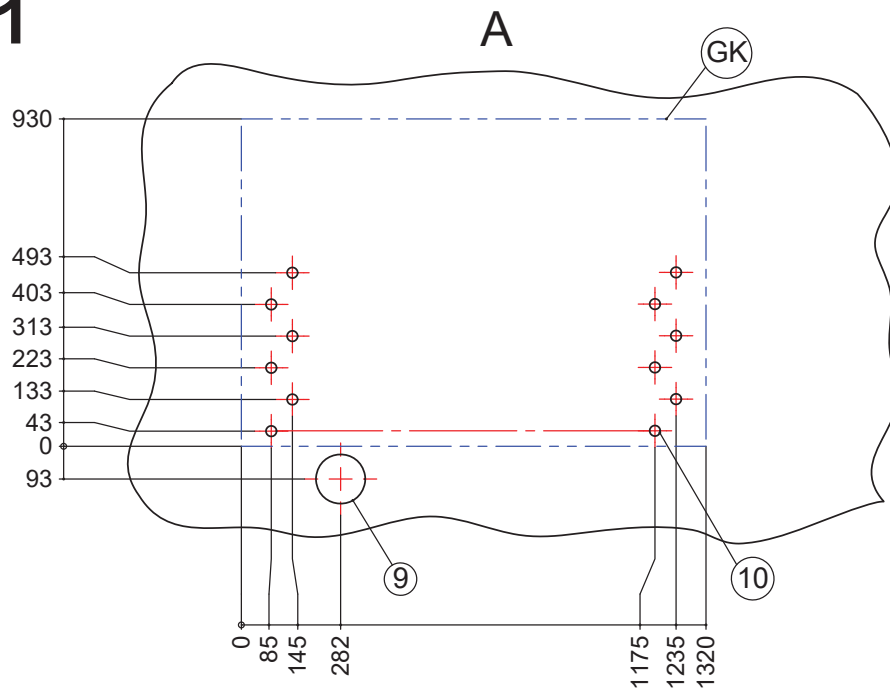
Keys: UK819393-4f
All dimensions in mm.

Pos.	Name
V4	Variant 4
A	Front view
C	Top view
V	Detailed view of cladding
Y	Detailed view of condensate line outside building
Z	Detailed view of floor attachment
FA	Complete external facade
UKG	Lower edge of device
OKF	Upper edge of foundation
LR	Direction of air
FS	Clearance for servicing

Pos.	Name
1	Heating water supply (accessory)
2	Heating water return (accessory)
5	Condensate drain/waste trap
7	Bracket for floor attachment (accessory)
8	Cladding of floor bracket (accessory)
12	Hydraulic connection line



BB1



Keys: UK819393-5f
All dimensions in mm.

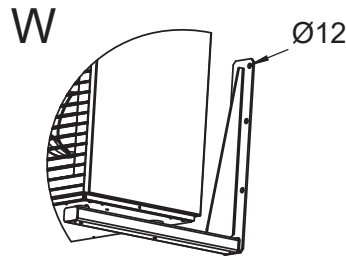
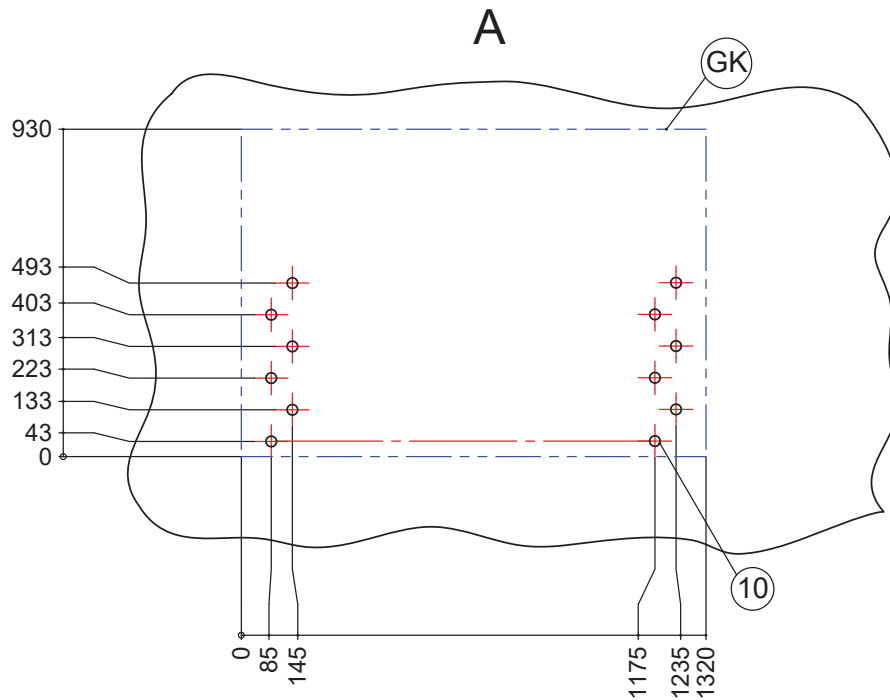
Pos.	Name
BB1	Drill template for wall bracket (accessory) on mounting wall for V1
A	Front view
W	Detailed view of wall attachment
GK	Device contour
9	Bore for empty sewer conduit KG DN125, $\text{Ø}a$ 125
10	Mounting bores for wall brackets



Drill template for wall bracket with hydraulic connection line

Hybrox 5 / Hybrox 8

BB2

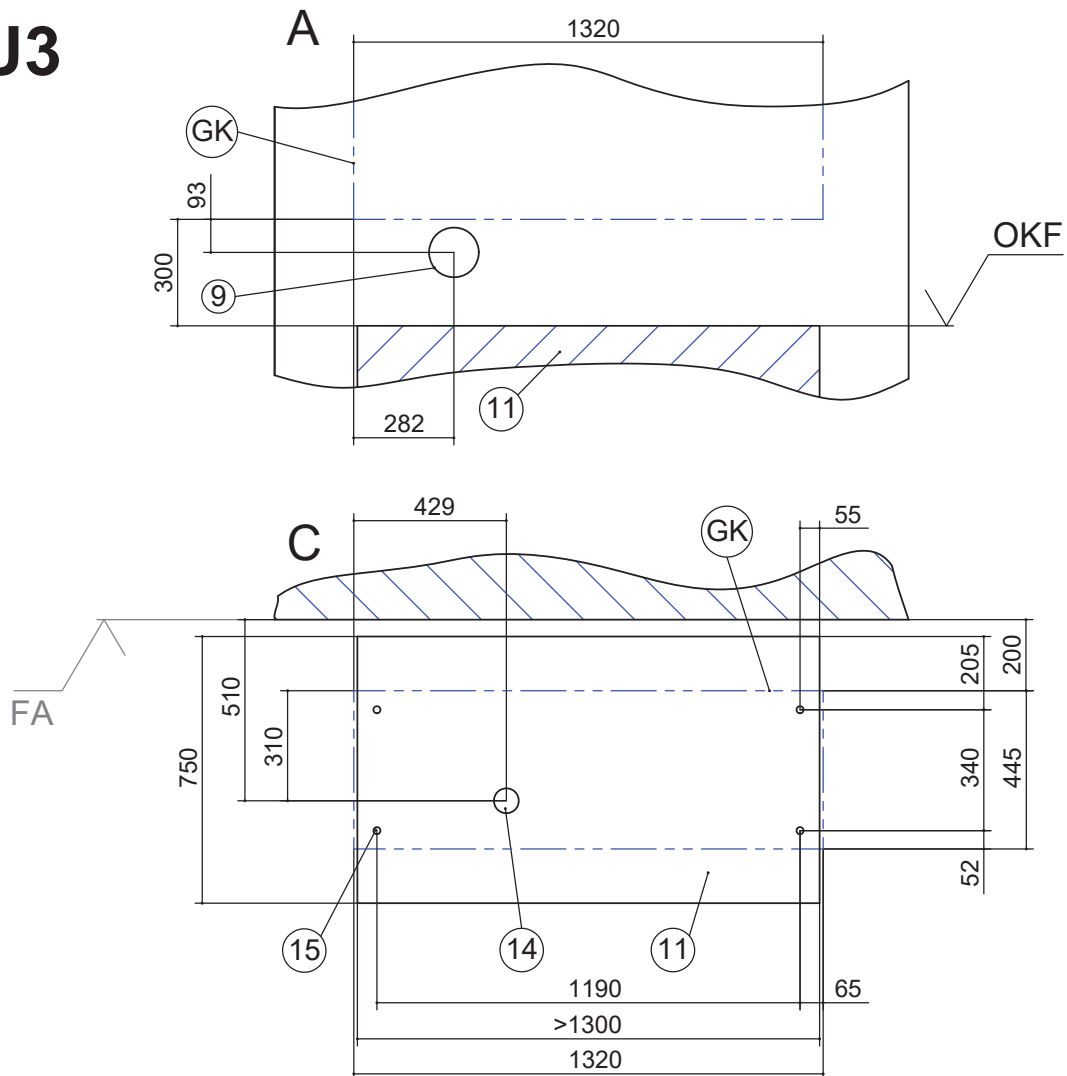


Keys: UK819393-6f
All dimensions in mm.

Pos.	Name
BB2	Drill template for wall bracket (accessory) on mounting wall for V2
A	Front view
W	Detailed view of wall attachment
GK	Device contour
10	Mounting bores for wall brackets



FU3



Keys: UK819393-7f
All dimensions in mm.

Pos.	Name
FU3	View of foundation for V3
A	Front view
C	Top view
FA	Complete external facade
OKF	Upper edge of foundation
GK	Device contour

Pos.	Name
9	Bore for empty sewer conduit KG DN125, Øa 125
11	Foundation
14	Condensate drain pipe $\geq \text{Ø}50$
15	Mounting bores for floor bracket

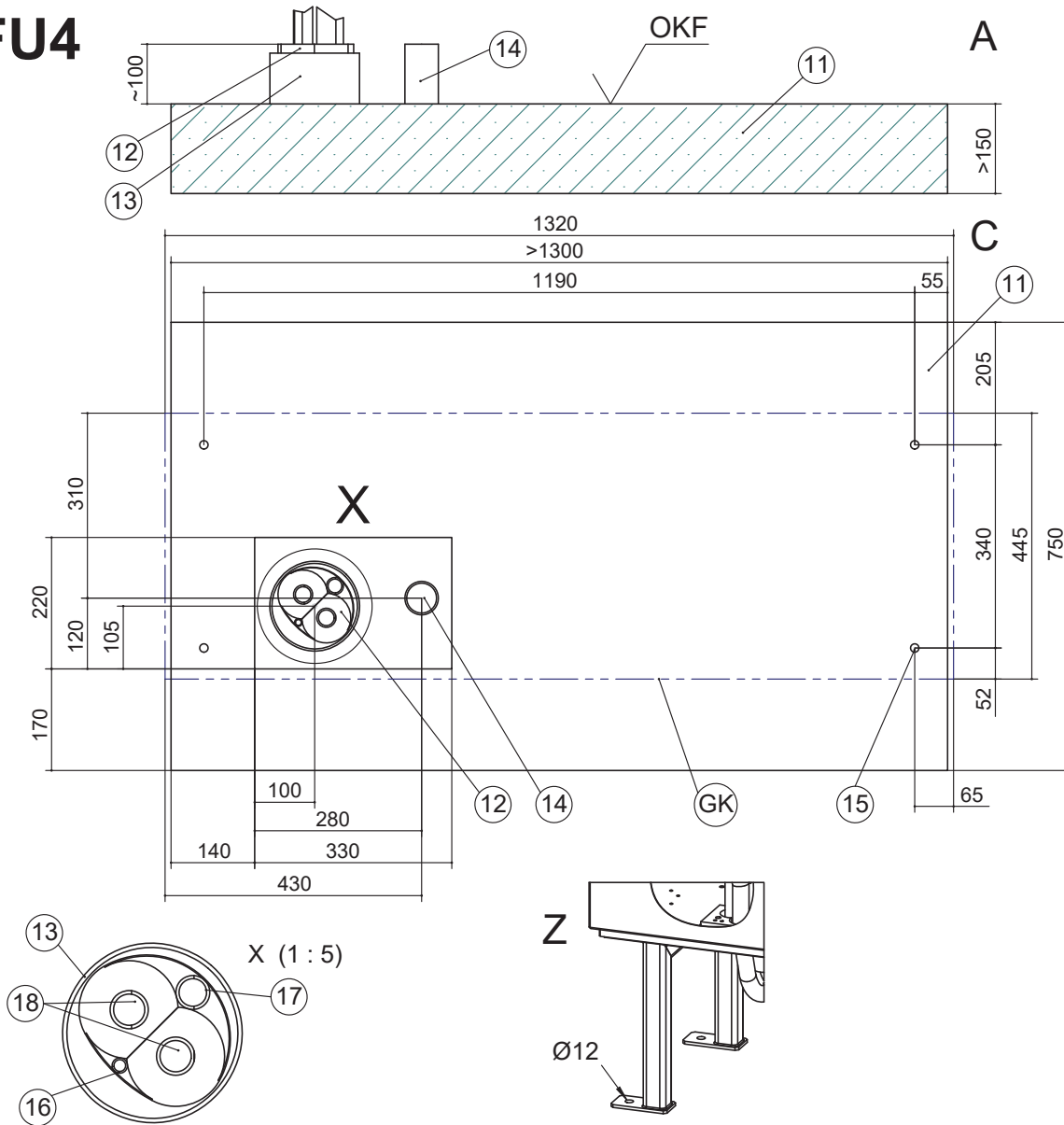
The foundation must not have any structure-borne sound contact with the building.



Foundation for V4 with hydraulic connection line

Hybrox 5 / Hybrox 8

FU4



Keys: UK819393-8f
All dimensions in mm.

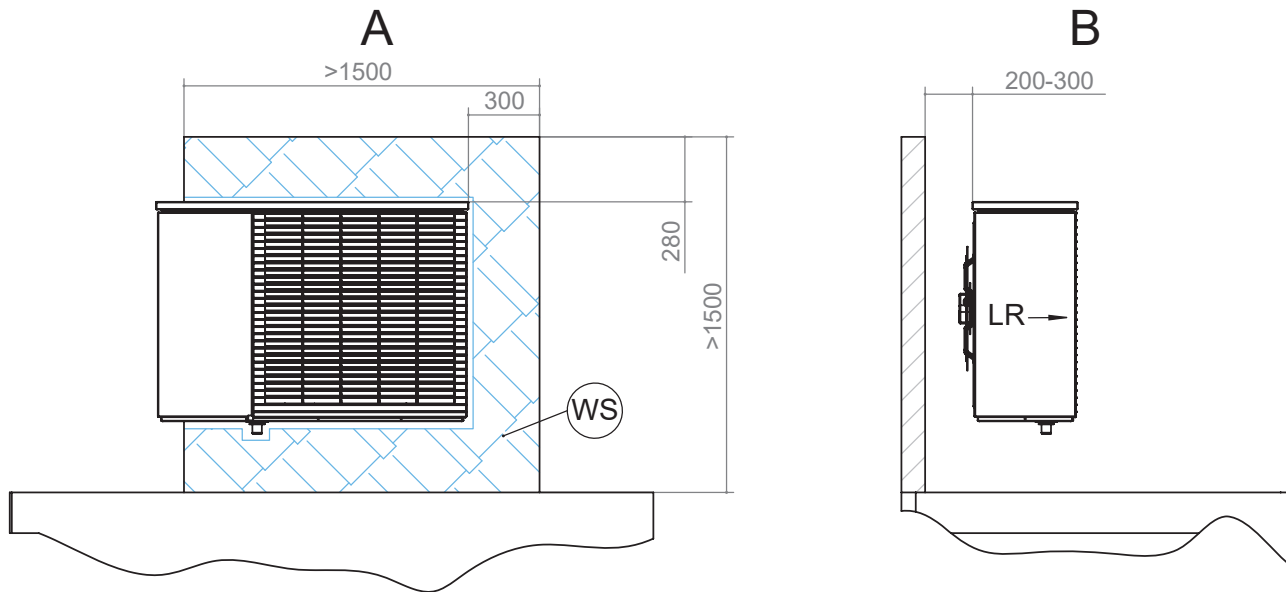
Pos.	Name
FU4	View of foundation for V4
A	Front view
C	Top view
X	Detailed view X
Z	Detailed view of floor attachment
OKF	Upper edge of foundation
GK	Device contour

Pos.	Name
11	Foundation
12	Hydraulic connection line
13	Empty conduit DN 150 (on site)
14	Condensate drain pipe $\geq \text{Ø} 50$
15	Mounting bores for floor bracket
16	Empty conduit for bus cable (Ø inside: 9.80)
17	Empty conduit for electric cable (Ø inside: 23.10)
18	Heating water supply and return lines (Ø inside: 26.20)

The foundation must not have any structure-borne sound contact with the building.



FW1

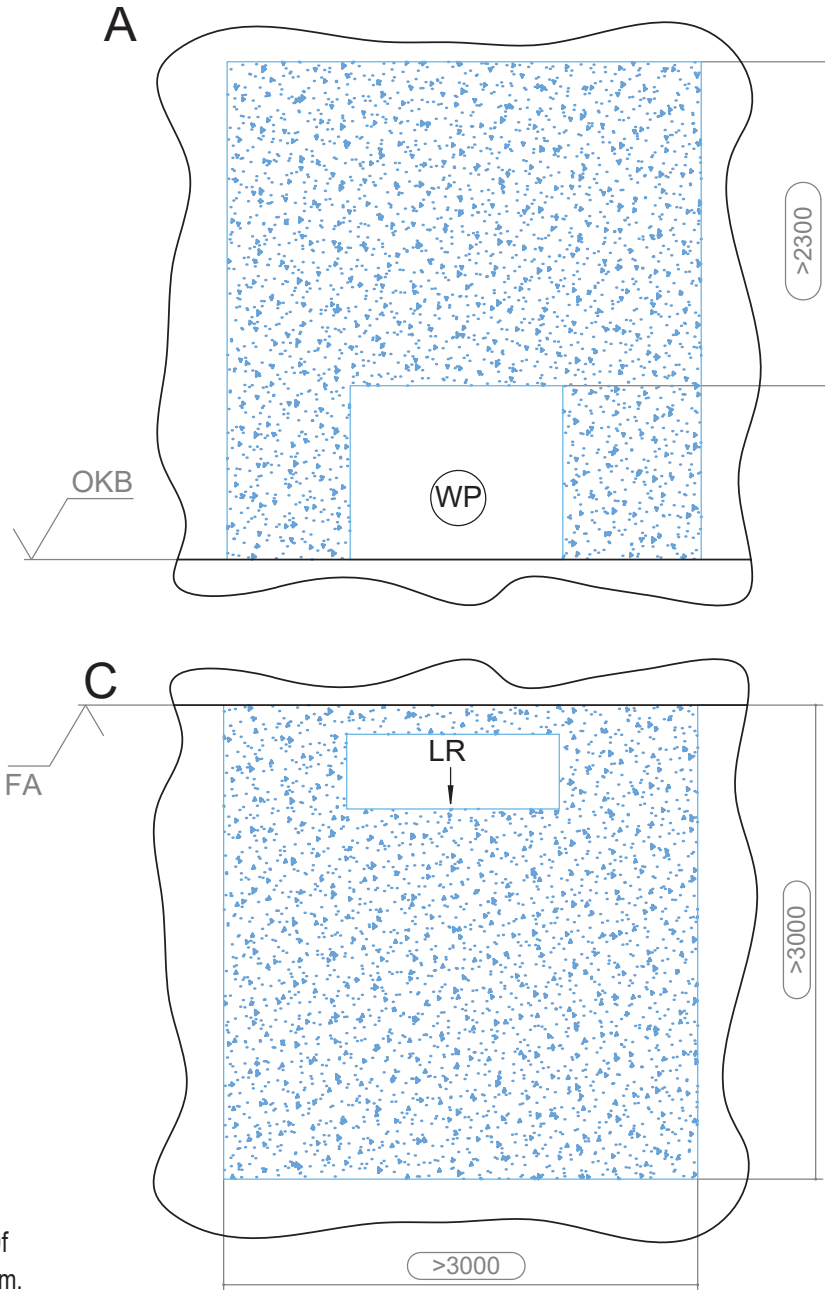


Keys: UK819393-9f
All dimensions in mm.

Pos.	Name
FW1	Outdoor installation in open field only allowed with wind protection!
A	Front view
B	Side view from left
WS	Wind protection, functionally relevant area for heat pump
LR	Air direction



FW2



Keys: UK819393-10f
 All dimensions in mm.

Pos.	Name
FW2	Functionally necessary minimum clearances
A	Front view
C	Top view
FA	Complete external facade
LR	Direction of air
OKB	Upper edge of ground
WP	Heat pump
>	Minimum clearances