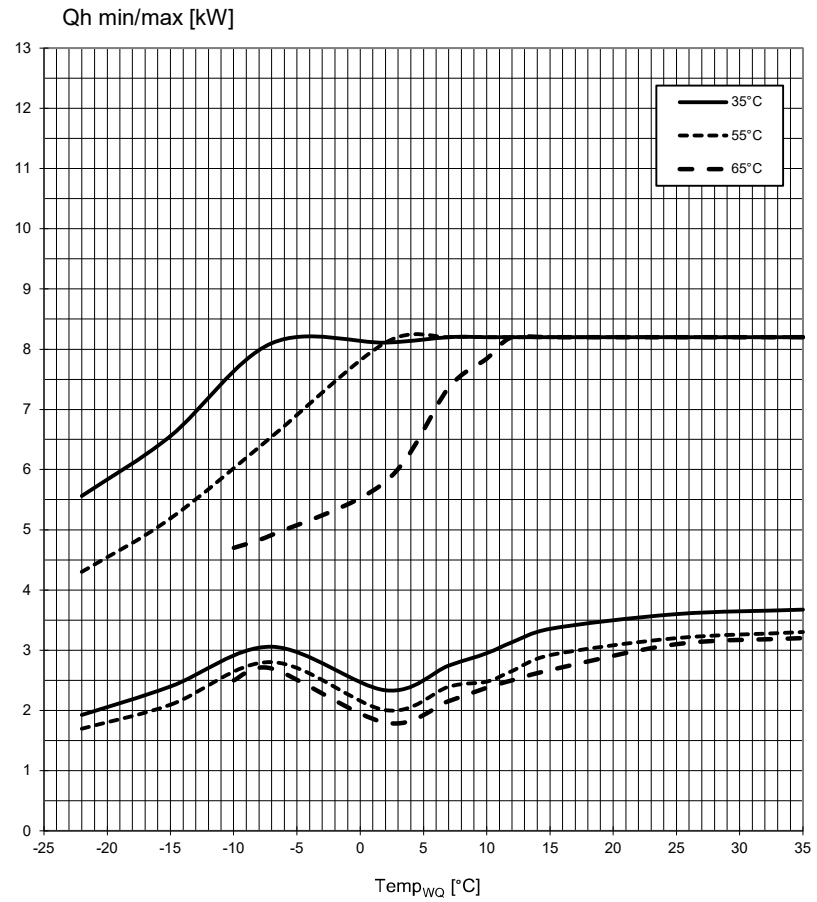
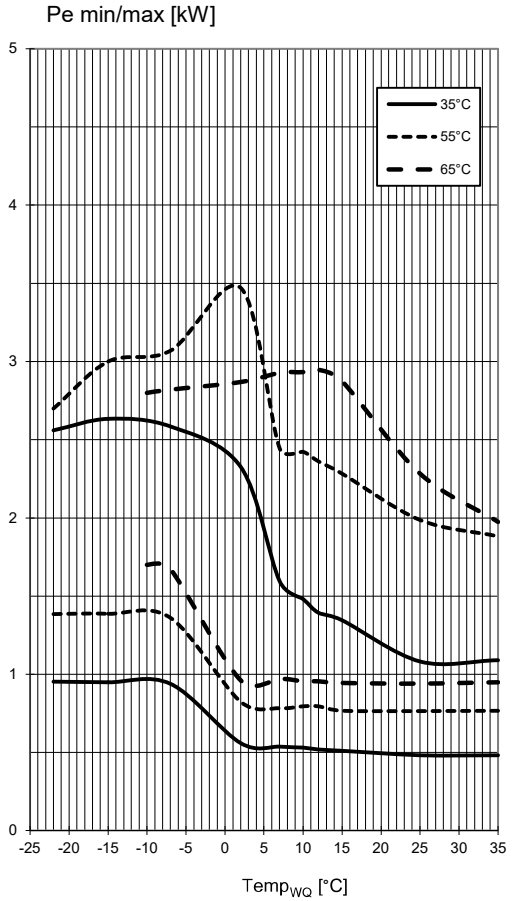
Performance data	Values in brackets: (1 Compressor)			LWDV 91-1/3
Heating capacity | COP	for A10/W35 acc. to EN14511	Partial load operation	kW | COP	3,01 | 6,03
	for A7/W35 acc. to EN14511	Partial load operation	kW | COP	2,77 | 5,41
	for A7/W55 acc. to EN14511	Partial load operation	kW | COP	4,23 | 3,35
	for A2/W35 acc. to EN14511	Partial load operation	kW | COP	5,08 | 4,61
	for A-7/W35 acc. to EN14511	Full load operation	kW | COP	8,11 | 3,14
	for A-7/W55 acc. to EN 14511	Full load operation	kW | COP	6,55 | 2,13
Heating capacity	for A10/W35	min. I max.	kW | kW	2,95 | 8,20
	for A7/W35	min. I max.	kW | kW	2,74 | 8,20
	for A7/W55	min. I max.	kW | kW	2,39 | 8,20
	for A2/W35	min. I max.	kW | kW	2,33 | 8,20
	for A-7/W35	min. I max.	kW | kW	3,06 | 8,11
	for A-7/W55	min. I max.	kW | kW	2,80 | 6,55
Cooling capacity | EER	for A35/W18	Partial load operation	kW | EER	– | –
	for A35/W7	Partial load operation	kW | EER	– | –
Cooling capacity	for A35/W18	min. I max.	kW | kW	– | –
	for A35/W7	min. I max.	kW | kW	– | –
Operating limits				
Heating circuit return min. | Heating circuit flow max. Heating		within heat source min./max.	°C	20 | 70
Heat source, heating		min. I max.	°C	–22 | 35
Additional operating points			…	A–10/W65
Sound				
Sound power level inside		min. | Night | max.	dB(A)	– | – | –
Sound power level outside 1)		min. | Night | max.	dB(A)	49 | 53 | 59
Sound power level acc. to EN12102		inside | outside	dB(A)	– | 54
Tonality | Low-frequency			dB(A) | • yes – no	– | –
Heat source				
Air flow rate at maximum external pressing | Maximum external pressure			m³/h | Pa	3500 | –
Heating circuit				
Flow rate (pipe dimensioning) I Min. volume buffer tank in series I Min. volume separation buffer tank			l/h | l | l	1600 | 60 | 60
Free pressing | Pressure loss | Flow rate			bar | bar | l/h	– | 0,07 | 1150
Max. allowable operating pressure			bar	3
Circulation pump control range		min. I max.	l/h	– | –
General unit data				
Total weight			kg	141
Weight of heat pump module | Compact module | Fan module			kg | kg | kg	– | – | –
Refrigerant type | Refrigerant capacity			… | kg	R290 | 1,05
Electrics				
Voltage code | all-pole fuse protection for heat pump *)**)			… | A	1~N/PE/230V/50Hz | B16
Voltage code | Control voltage fuse protection **)			… | A	1~N/PE/230V/50Hz | B16
Voltage code | Electric heating element fuse protection **)			… | A	–
WP*): effect. Power consumption A7/W35 (partial load operation) EN14511 I Electric consumption I cosφ			kW | A | …	1,38 | 2,11 | 0,8
WP*): effective power consumption A7/W35 acc. to EN14511: min. I max.			kW | kW	0,53 | 1,6
WP*): Max. machine current I Max. power consumption within the operating limits			A | kW	16 | 3,7
Starting current: direct | with soft starter			A | A	< 5 | –
Degree of protection			IP	24
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. I 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 I Heat quantity recording I Extension board			incl. in scope of supply or integrated: • yes – no	– | – | –

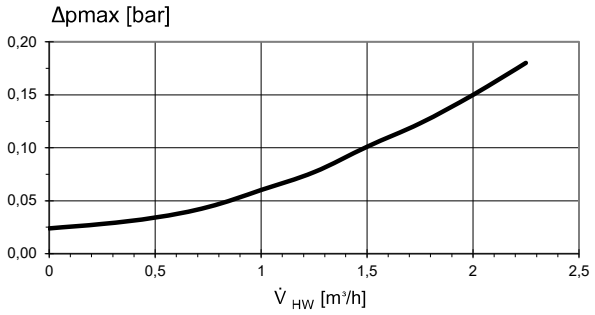
*) compressor only, **) note local regulations 1) Indoor and outdoor installation.

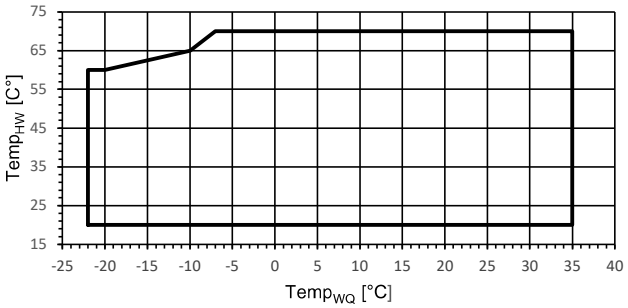
For indoor installation: Intake 1.5m air duct, Blow-out 1.5m air duct + air duct bend (original accessories)

813585b





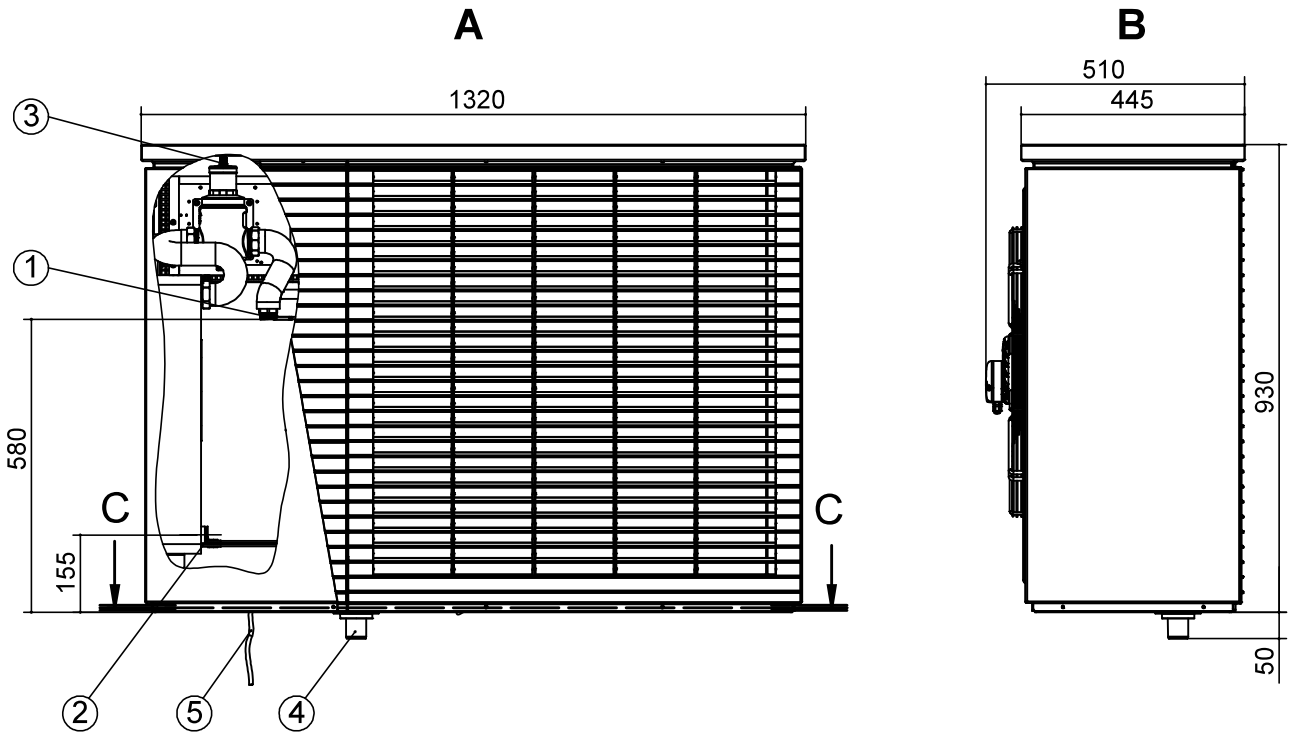


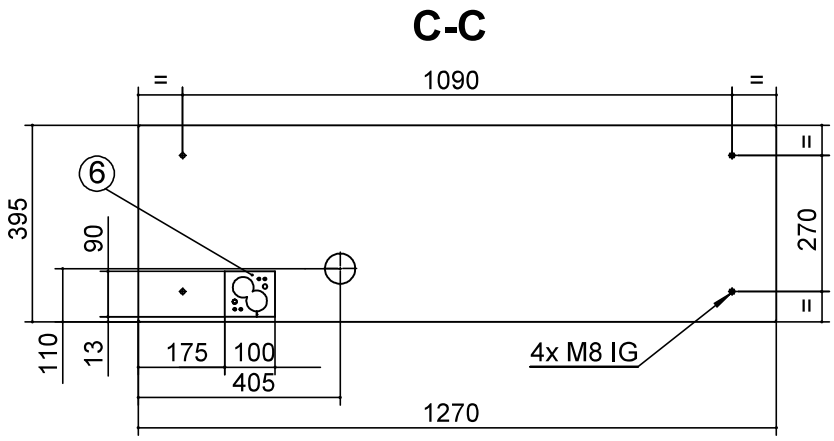


823296a

Keys: UK823296a

$\dot{V}_{HW}$	Heating water flow rate
Temp $_{WQ}$	Heat source temperature
Temp $_{HW}$	Heating water temperature
Δpmax	Maximum pressure loss
Qh min/max	Minimum/maximum heating load
Pe min/max	Minimum/maximum power consumption

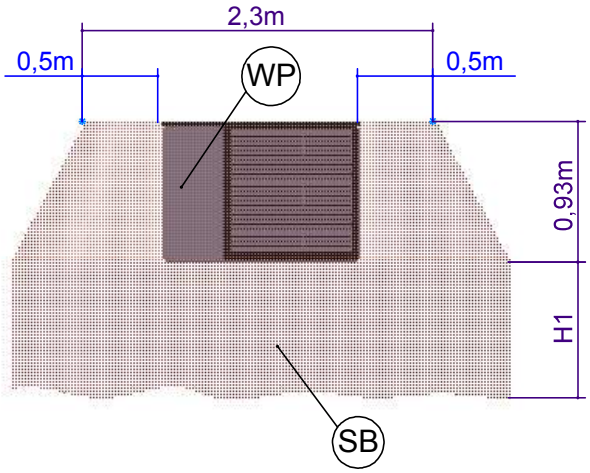


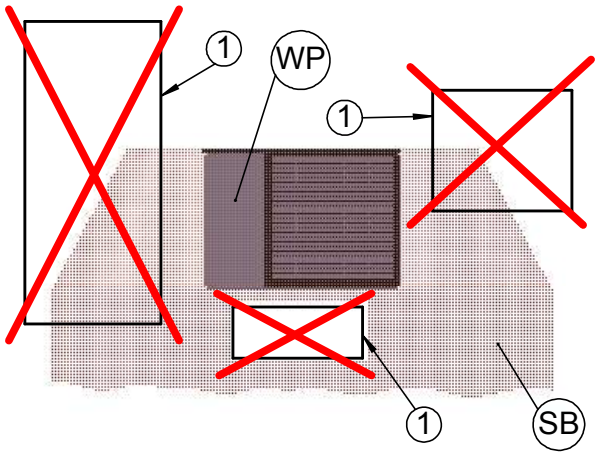


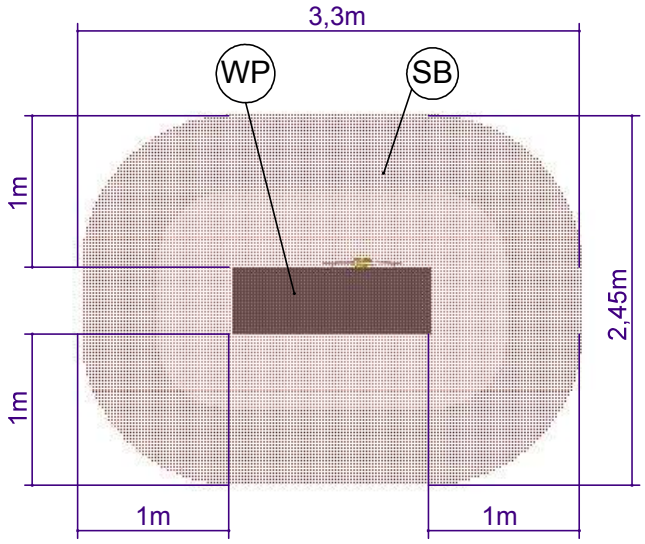
Keys: UK819504
All dimensions in mm.

Pos.	Name
A	Front view
B	Side view
C-C	Cross-section baseplate

Pos.	Name
1	Heating water outlet (supply) G 1" external thread
2	Heating water inlet (return) G 1" external thread
3	Vent
4	Nozzle (in separate package) for condensate drain pipe
5	Cable for power, control, BUS, length ~8 m from device
6	Feed-through for supply and return and cable (in separate package)





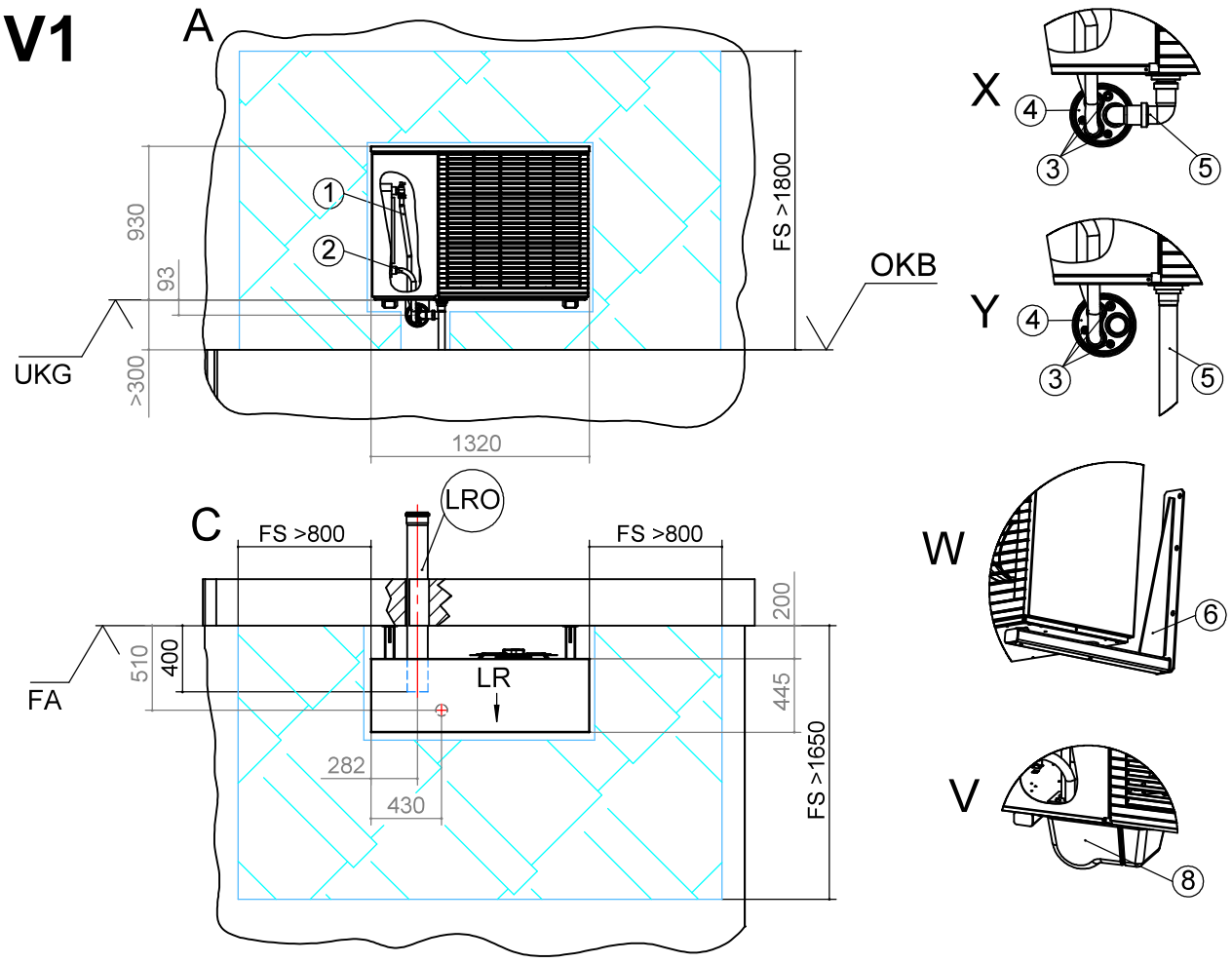


Keys: UK819401

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 be installed outdoors!
The device should 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 (see illustration) 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 should be designed to be airtight.



Keys: 819393-1c

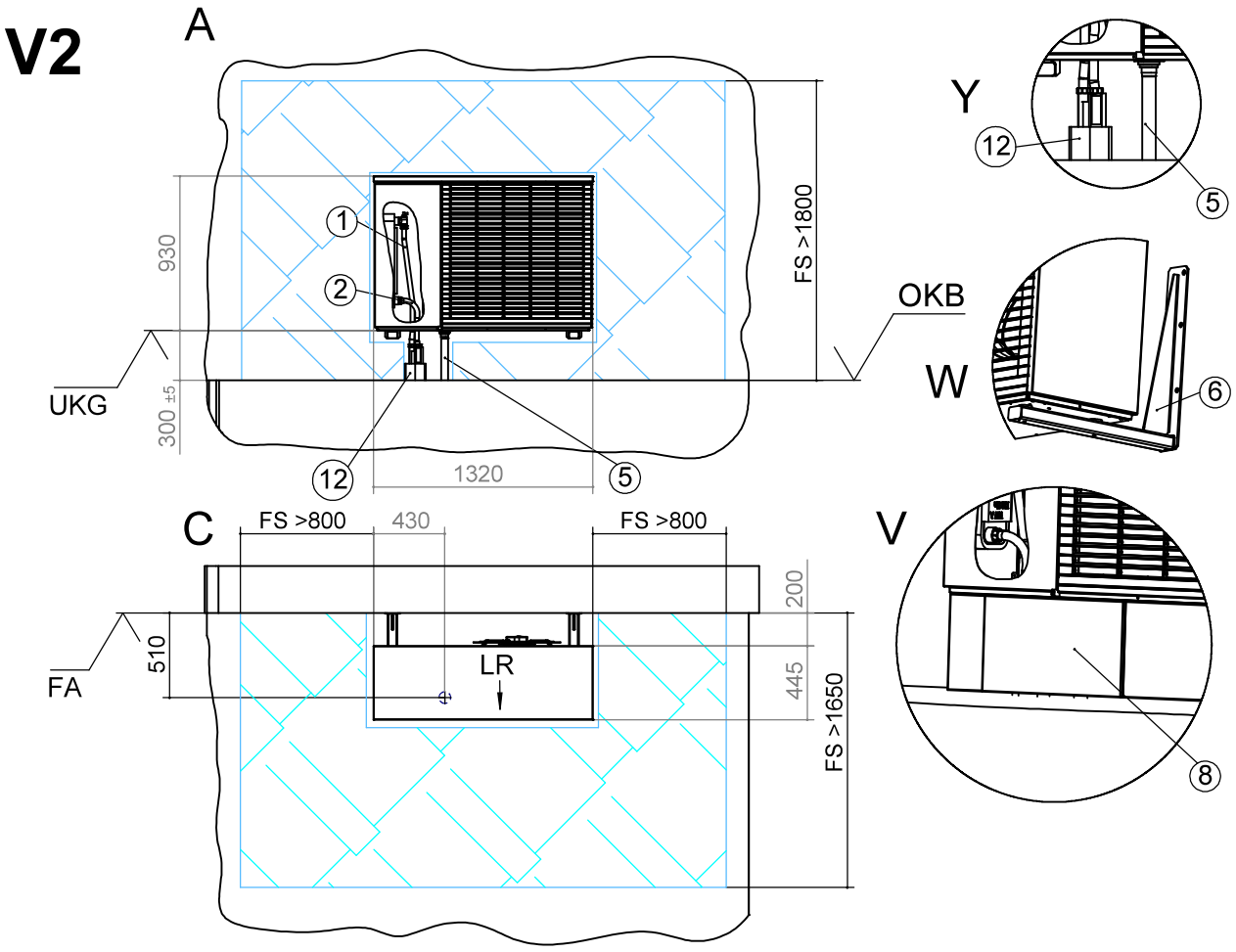
All dimensions in mm.

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

LWDV

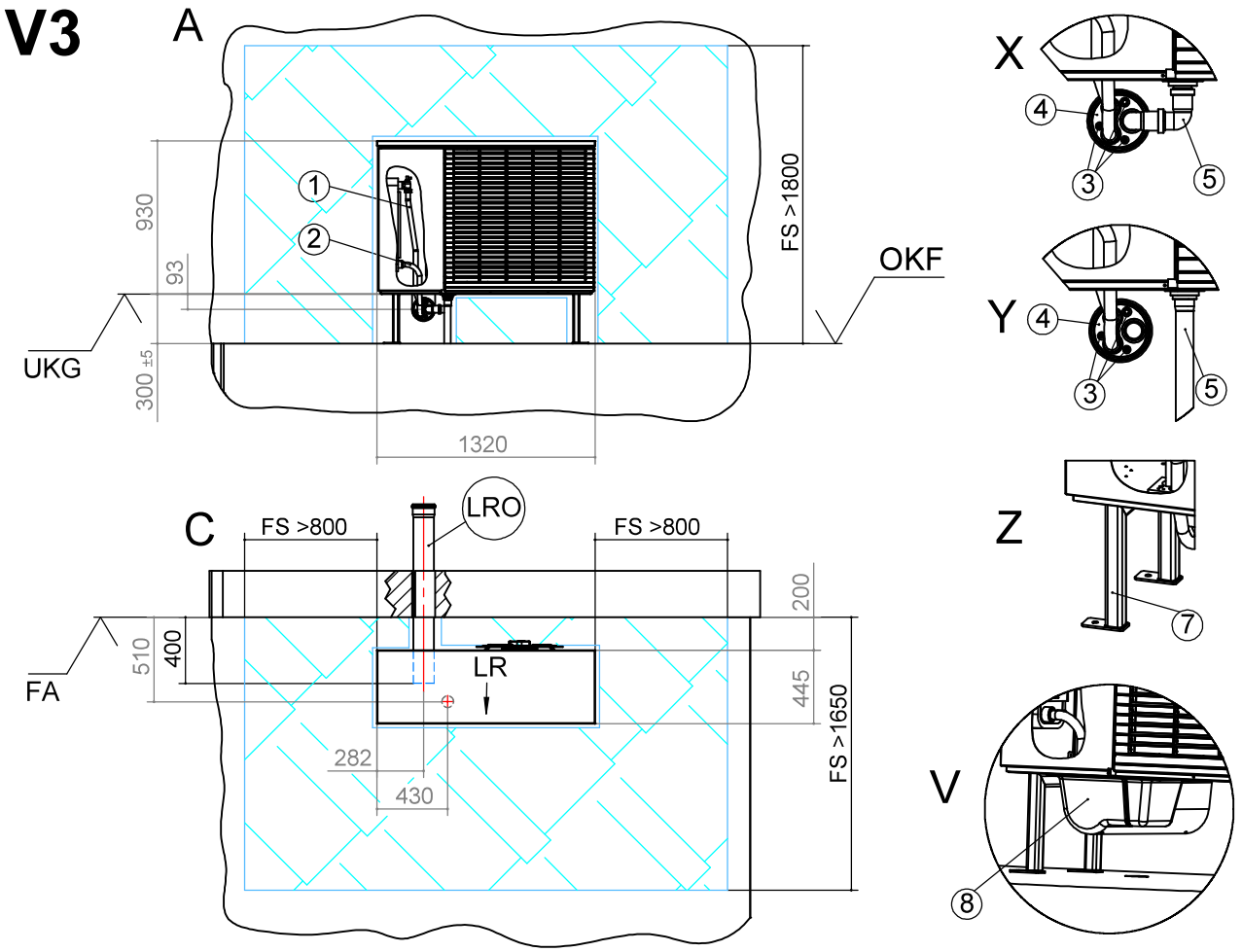


Keys: 819393-2c

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



Keys: 819393-3c

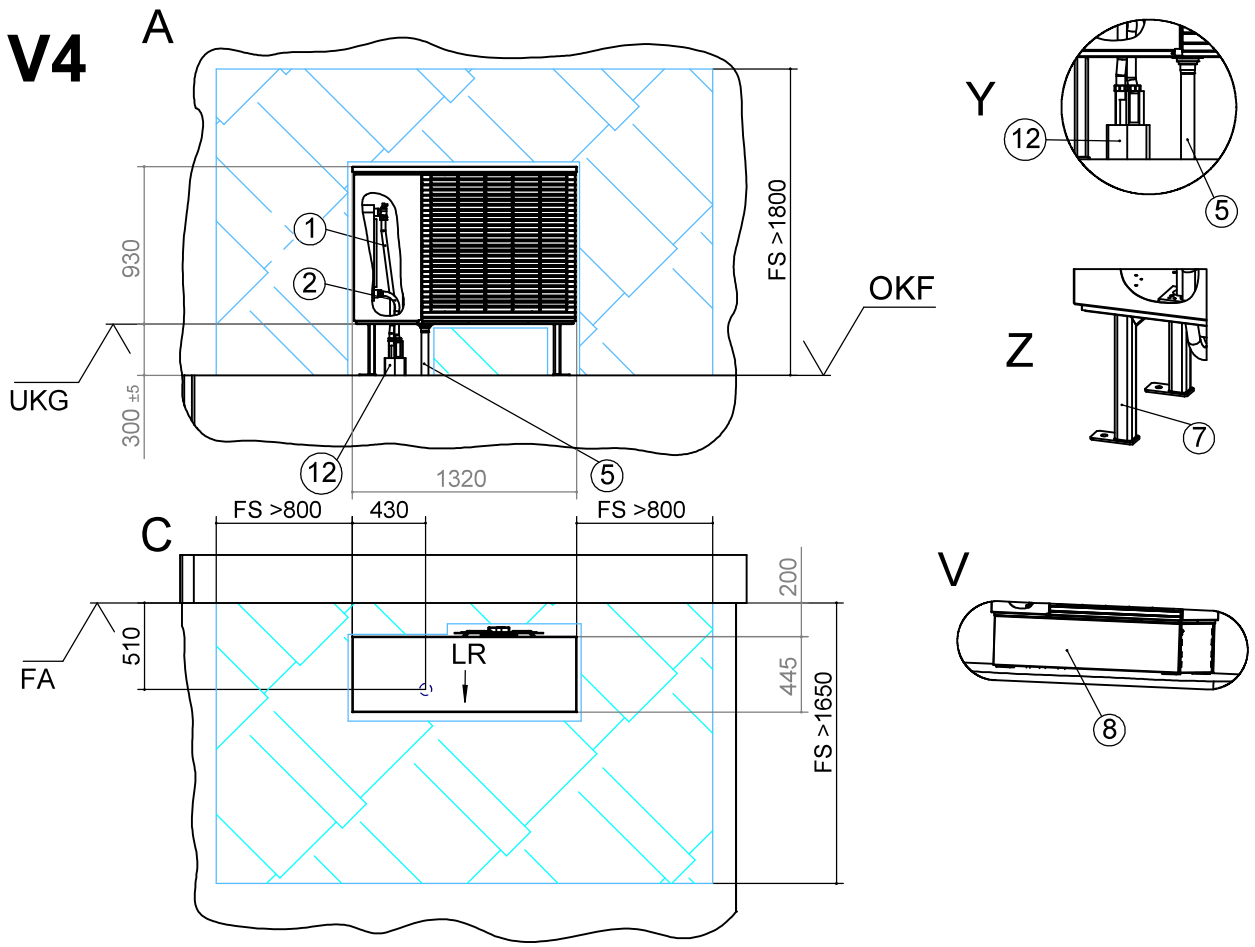
All dimensions in mm.

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

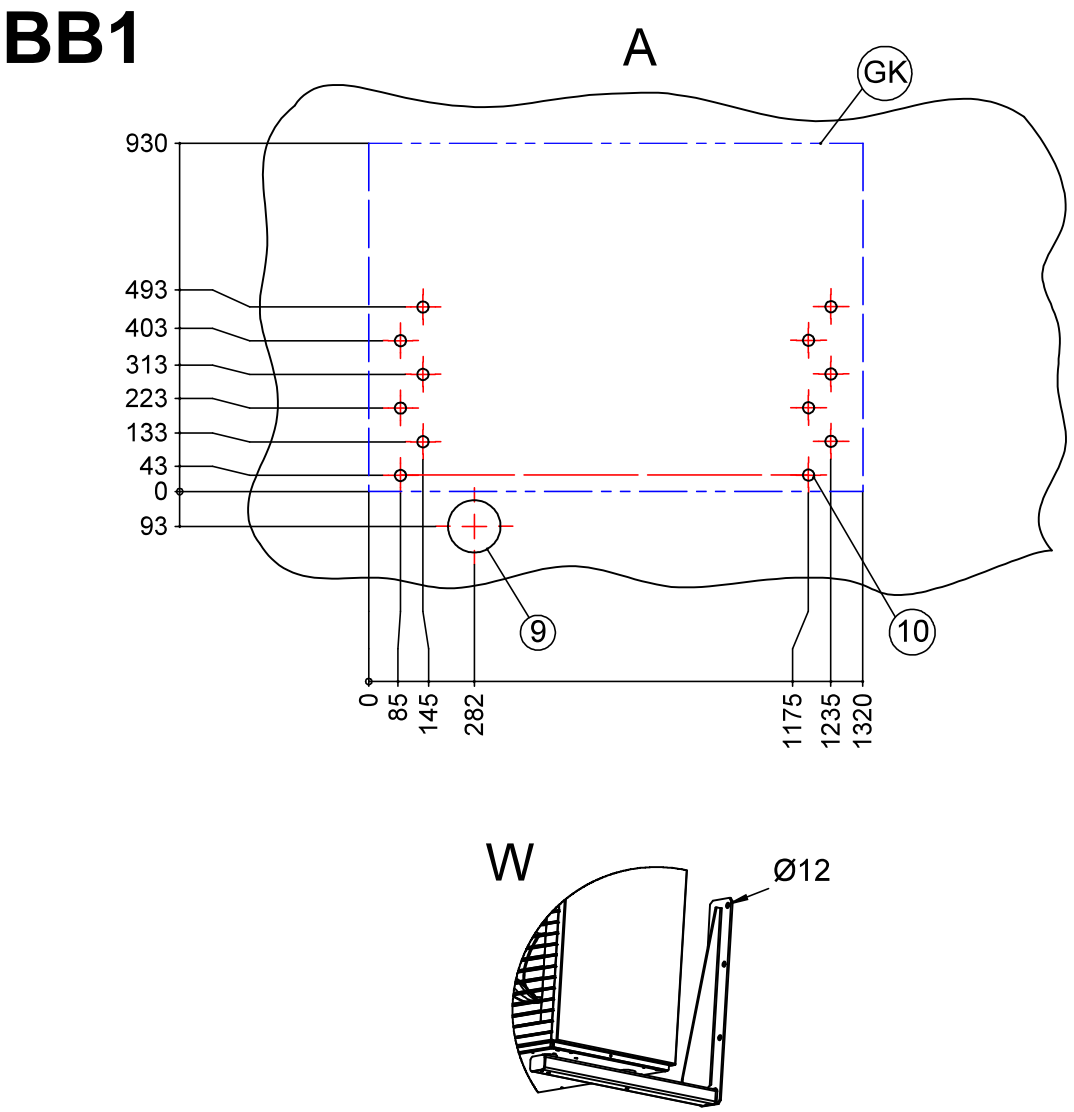
LWDV



Keys: 819393-4c
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



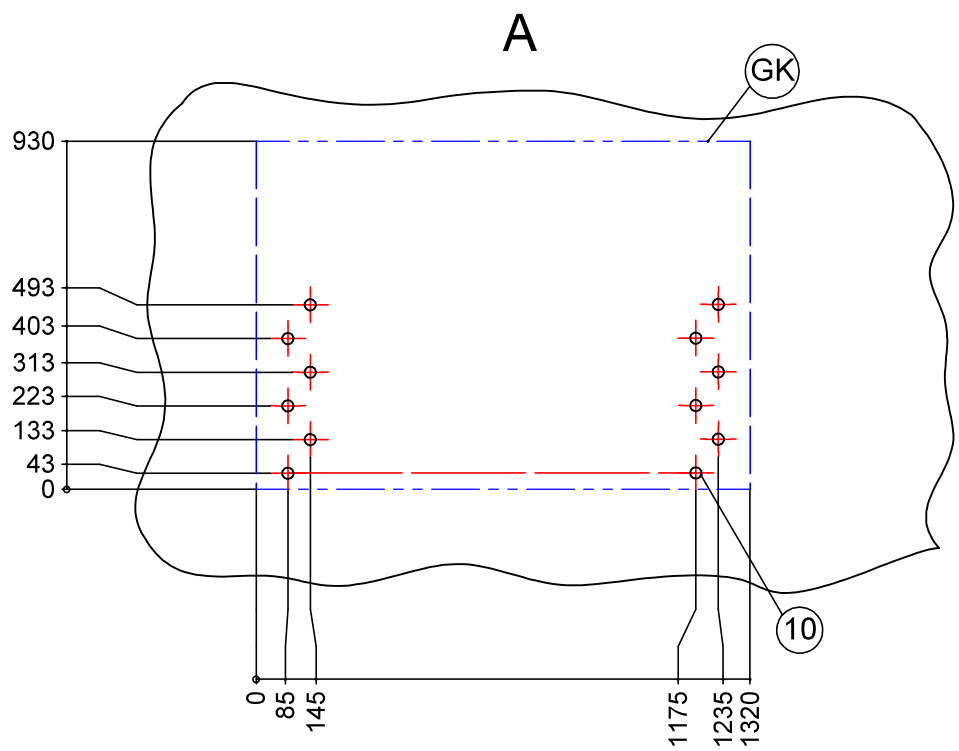
Keys: 819393-5c

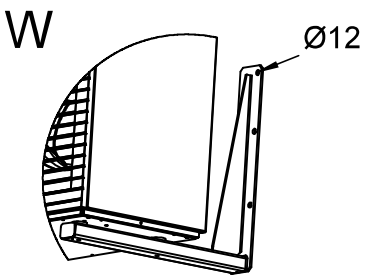
All dimensions in mm.

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, Øa 125
10	Mounting bores for wall brackets

Drill template for wall bracket with hydraulic connection line

BB2



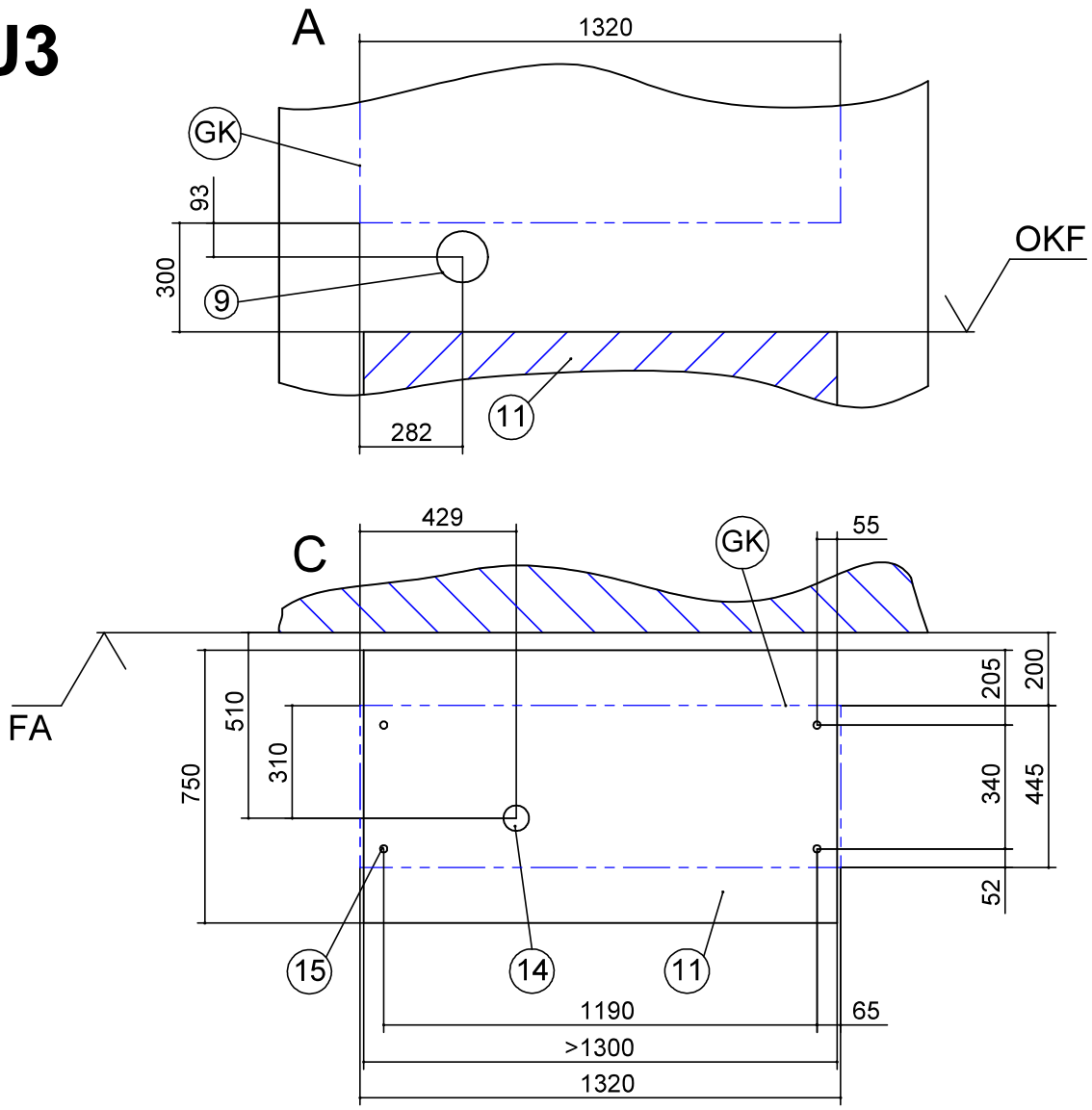


Keys: 819393-6c

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: 819393-7c

All dimensions in mm.

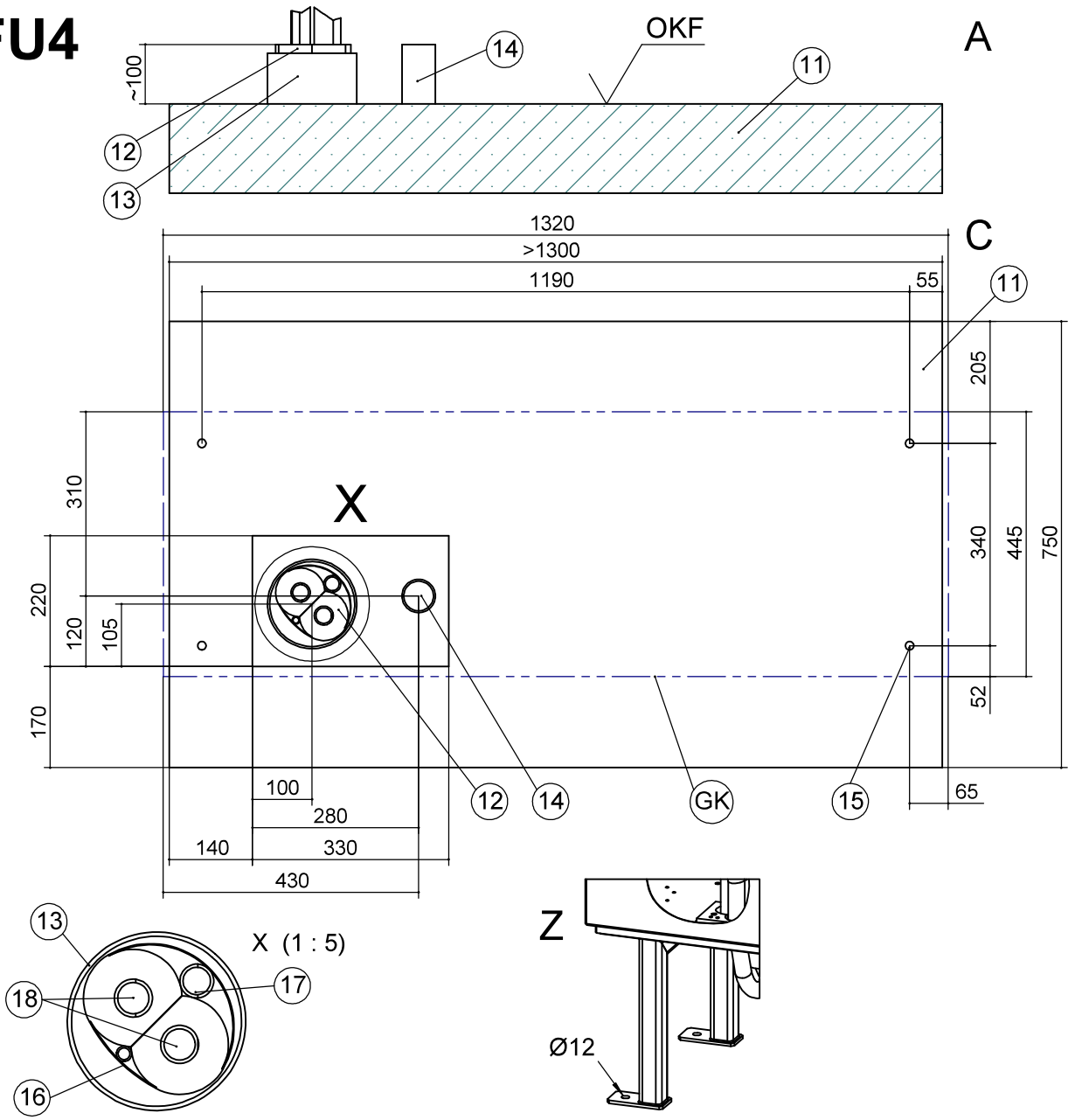
Pos.	Name
FU3	View of foundation for V3
A	Front view
C	Top view
FA	Complete external facade
OKF	Upper edge of foundation
GK	Device contour

Pos.	Name
9	Bore for empty sewer conduit KG DN125, Ø a 125
11	Foundation
14	Condensate drain pipe ≥ 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

FU4



Keys: 819393-8c

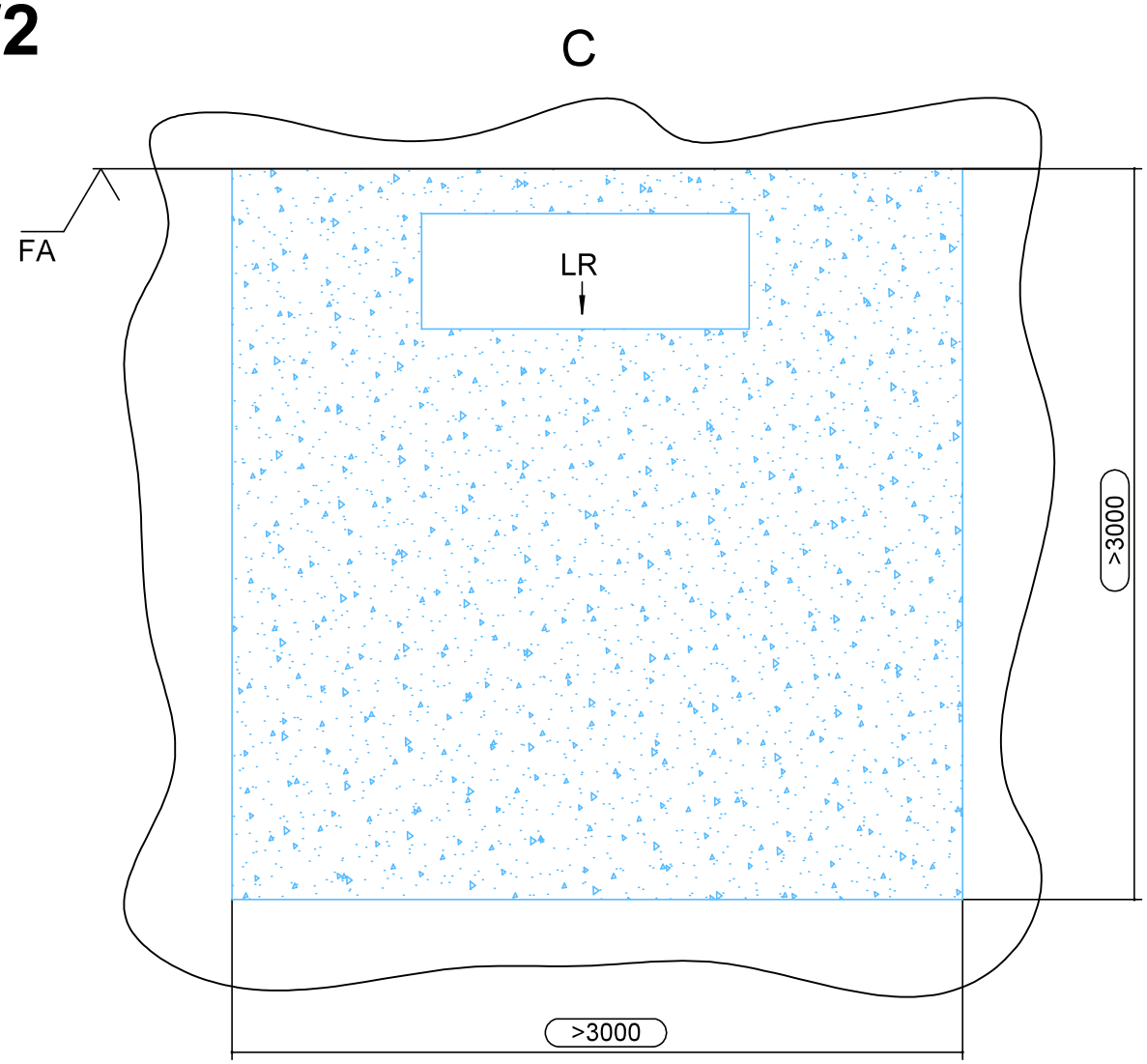
All dimensions in mm.

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 ≥ 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)

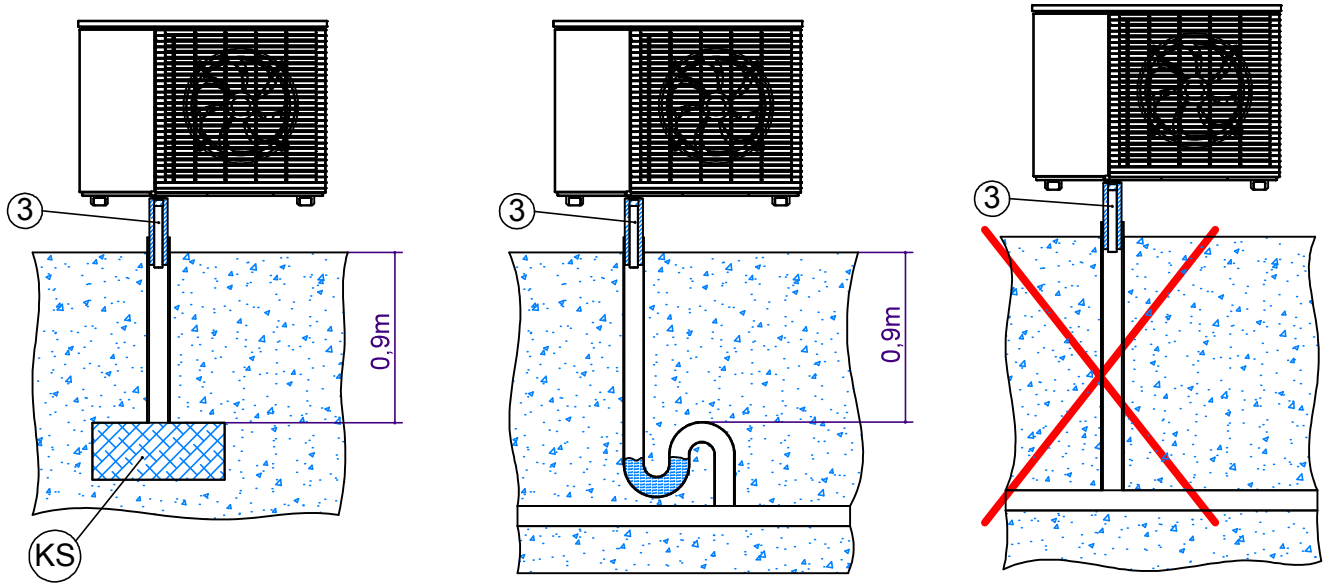
The foundation must not have any structure-borne sound contact with the building.

FW2



Keys: 819393-10c
All dimensions in mm.

Pos.	Name
FW2	Functionally necessary minimum clearances
C	Top view
FA	Complete external facade
LR	Direction of air
>	Minimum clearances



1a 1b 1c

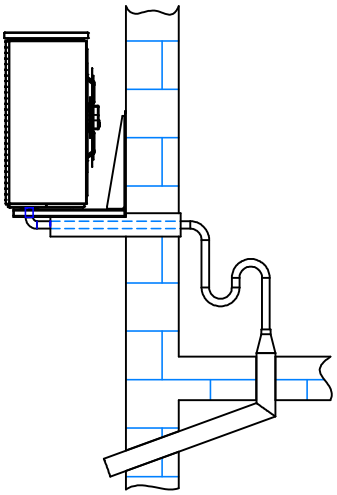
Keys: 819400-1

Pos.	Name
KS	Gravel bed for holding up to 50 l condensate per day as buffer zone for seepage
3	Condensate drain pipe DN 40 (on site)

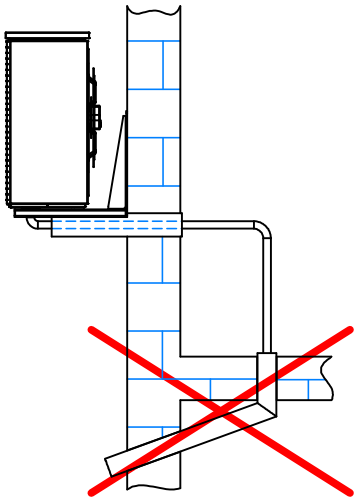
Important: If the condensate is discharged directly into the ground (figure 1a), the condensate drain pipe (3) must be insulated between the ground and the heat pump.

Important: If the condensate is discharged directly into a sewage or rainwater pipe, a waste trap must be applied (figure 1b). A vertically installed, insulated plastic pipe must be used above the ground. In addition, no non-return valves or similar must be installed in the drain pipe. The condensate drain pipe must be connected in such a way that the condensate drain pipe can flow freely into the main pipe. If the condensate is discharged into drains or the sewage system, ensure installation with a gradient.

It must be ensured that the condensate is discharged frost-free in all cases (figure 1a and figure 1b).



2a



2b

Keys: 819400-2

Important: If the condensate line is connected inside a building, a waste trap must be installed with an airtight connection to the drain pipe (see figure 2a).

No additional drain pipes may be connected to the condensate drain pipe of the heat pump. The drain pipe into the sewage system must be clear, i.e. neither a non-return valve nor a waste trap must be installed downstream of the heat pump's connection cable.

It must be ensured that the condensate is discharged frost-free in all cases (figure 2a).