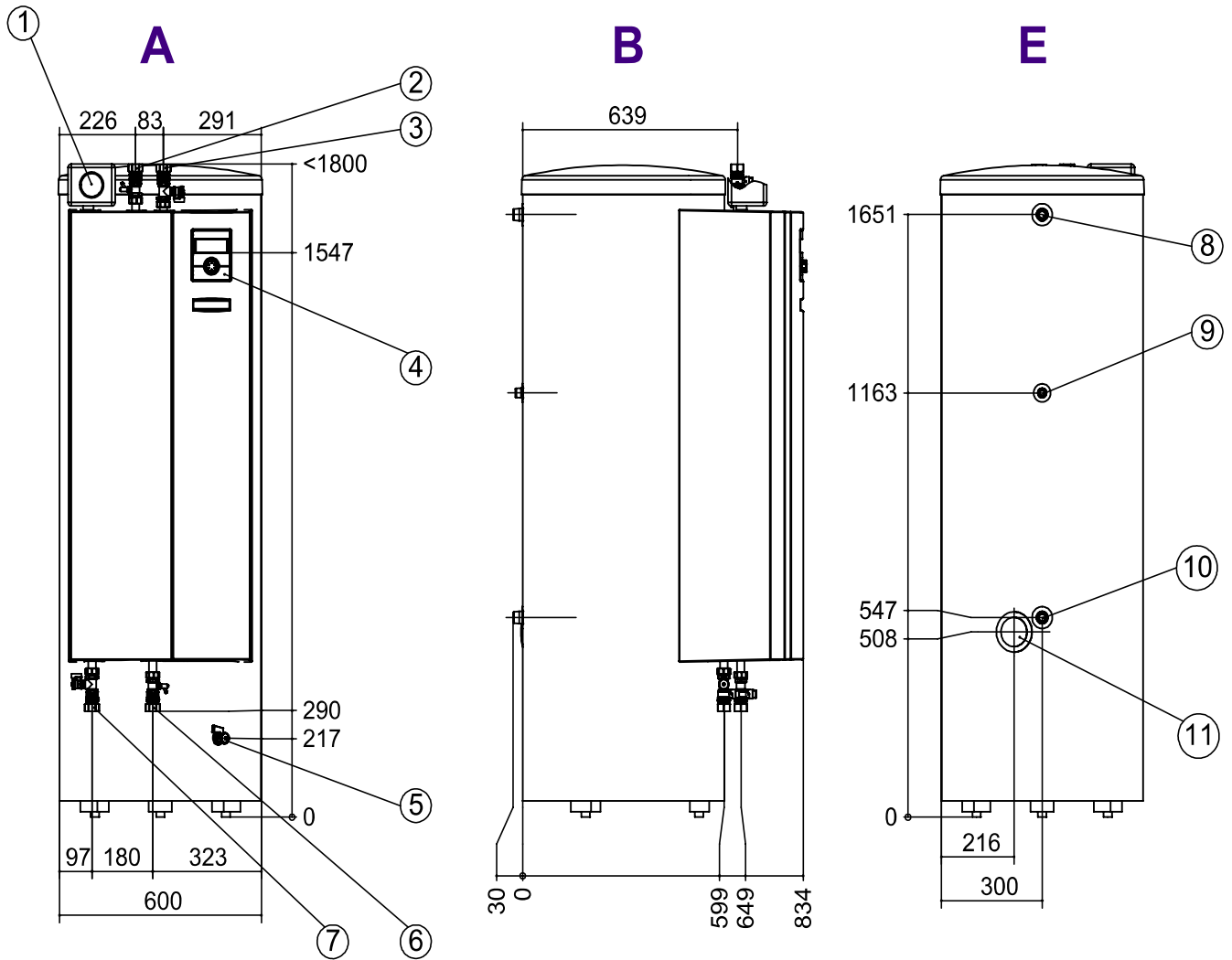




HTD

Dimensioned drawings



Legend: UK819417-  
All dimensions in mm.

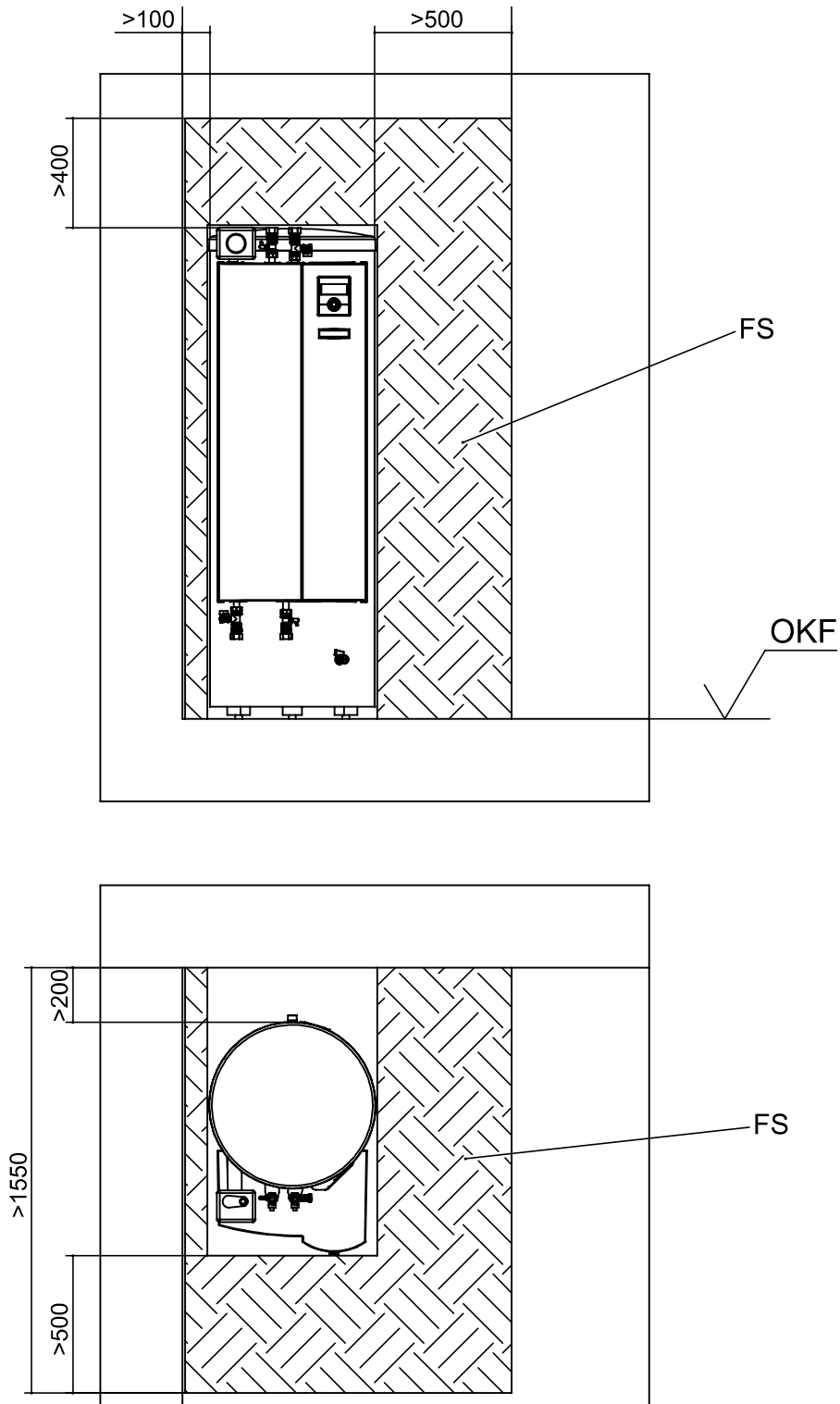
- A Front view
- B Side view from left
- E Rear view

Item	Designation	Dim.
1	Safety assembly	
2	Heating water inflow (from heating circuit)	Rp 1" IG
3	Heating water outlet (in the heating circuit)	Rp 1" IG
4	Control unit	
5	Draining, buffer storage	G 1/2"
6	Heating water inflow (from heat pump)	Rp 1" IG
7	Heating water outflow (to heat pump)	Rp 1" IG
8	Domestic hot water	R 1" AG
9	Circulation	R 3/4" AG
10	Cold water	R 1" AG
11	Penetrations for electric/sensor cables	



# Installation plan

HTD



Legend: UK819418  
All dimensions in mm.

FFL Finished floor level

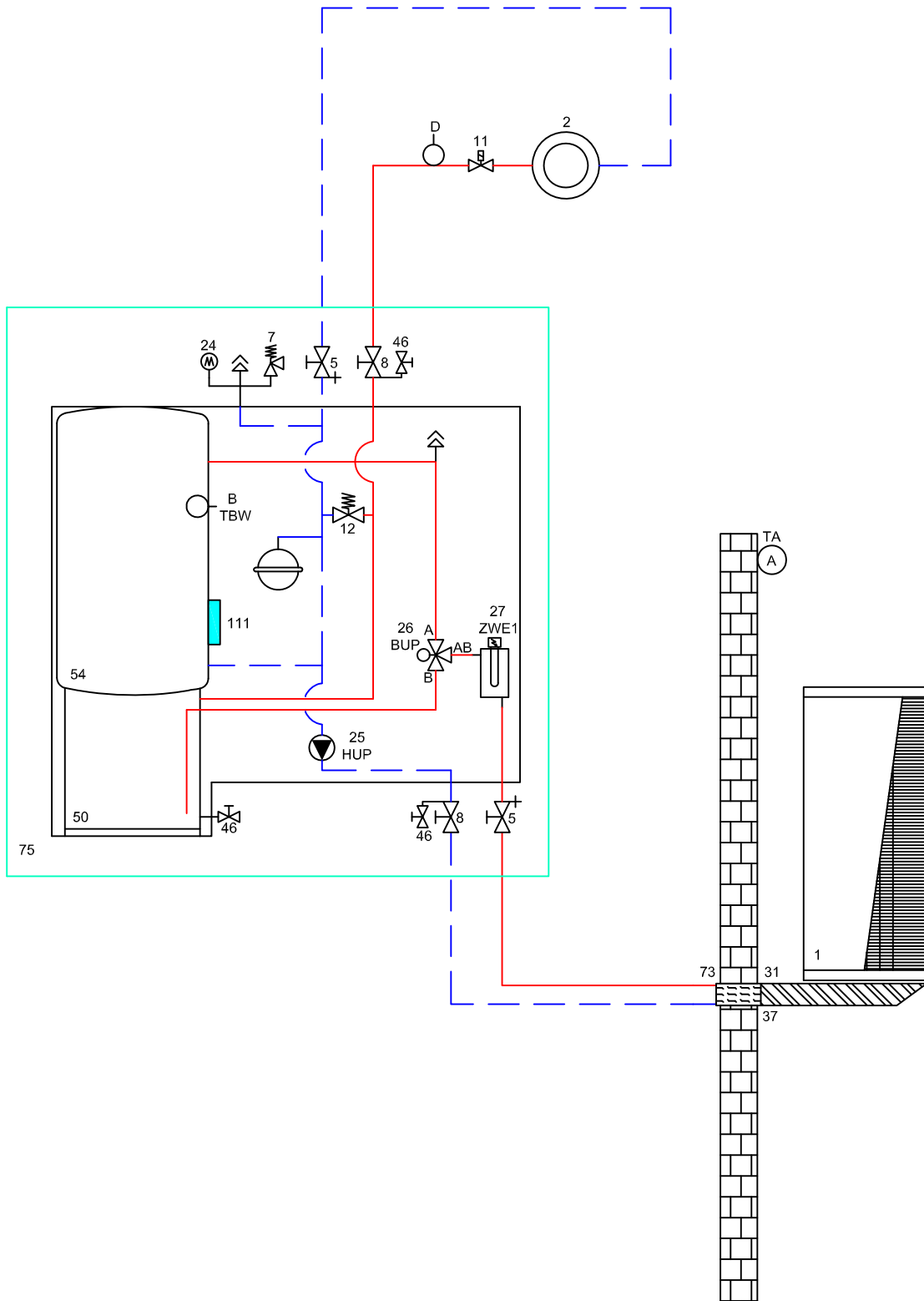
FS Shaded area = free space for service purposes





# Hydraulic integration

# HTD / LWD





### Legend hydraulic diagramm

1	Heat pump	51	Separation tank	TA/A	External sensor
2	Underfloor heating / radiators	52	Gas- or oil-boiler	TBW/B	Domestic hot water sensor
3	Vibration isolation	53	Wood boiler	TB1/C	Feedwater sensor mixer circuits 1
4	Sylomer strip machine underlay	54	Hot water cylinder	D	Floor temperature limiter
5	Closure and drainage	55	Brine pressure switch	TRL/G	Sensor external return
6	Expansion vessel packing list	56	Swimming pool heat exchanger	STA	Line pressure regulator valve
7	Safety valve	57	Geothermal heat exchanger	TRL/H	Sensor return (hydraulic module, dual)
8	Closure	58	Ventilation system	79	Motor valve
9	Heating circulation pump	59	Plate heat exchanger	80	Mixing valve
10	Non return valve/ one way valve	61	Cooling cylinder	81	Split heat pump outdoor unit
11	Individual room regulation	65	Compact distributor	82	Split heat pump indoor unit
12	Overflow valve	66	Fancoils	83	Circulation pump
13	Steamtight insulation	67	Solar/ service water cylinder	84	Switching valve
14	Service water circulation pump	68	Solar/ service water cylinder	113	Connection 2nd heat generator
15	Mixer circuit three-way mixer (MK1 discharge)	69	Multifunction tank	BT1	Outdoor temperature sensor
16	Expansion vessel supplied by customer	71	Dual hydraulic module	BT2	Flow temperature sensor
18	Heating rod (heating)	72	Buffer tank wall mounted	BT3	Return temperature sensor
19	Mixer circuit four-way mixer (MK1 charge)	73	Pipe lead-in	BT6	Domestic hot water temperature sensor
20	Heating rod (SW)	74	Ventower	BT12	Flow temperature liquefier
21	Mixer circuit circulation pump (FP1)	75	Scope of delivery, hydraulic tower, dual	BT19	Temperature sensor immersion heater
23	Feed circulating pump (reconnect the integrated circulating pump in the heat pump)	76	Fresh water station	BT24	Temperature sensor 2nd heat generator
24	Manifold	77	Scope of supply water/water booster		
25	Heating circulation pump	78	Accessories water/water booster optional		
26	Switching valve (heating/service water)(B = normally open)				
27	Heating element				
28	Brine circulation pump				
29	Dirt-trap 0.6 mm mesh				
30	Spill-tray für brine mix				
31	Wall breakthrough				
32	Inlet pipe				
33	Brine manifold				
34	Ground collector				
35	Ground slinkies				
36	Groundwater spring pump				
37	Wall bracket				
38	Flow switch				
39	Suction well				
40	Inverted well				
41	Rinse fitting heating circuit				
42	Circulation pump				
43	Brine / Water heat exchanger (cooling function)				
44	Three-way mixer valve (cooling function MK1)				
45	Cap valve				
46	Filler and drainage valve				
48	Domestic hot water charging pump				
49	Direction of groundwater flow				
50	Buffer storage				
100	Room thermostat for cooling (optional)	100	Room thermostat for cooling (optional)	15	Mixer circuit three-way mixer (MK2-3 discharge)
101	Controls supplied by customer	101	Controls supplied by customer	17	Temperature difference regulator
102	Dew-point monitor (optional)	102	Dew-point monitor (optional)	19	Mixer circuit four-way mixer (MK2 charge)
103	Room thermostat for reference space in packing list	103	Room thermostat for reference space in packing list	21	Mixer circuit circulation pump (FP2-3)
104	Supply heat pump	104	Supply heat pump	22	Swimming pool circulating pump
105	Cooling circuit module box removeable for installation	105	Cooling circuit module box removeable for installation	44	Three-way mixer valve (cooling function MK2)
106	Specific glycole mixture	106	Specific glycole mixture	47	Changeover valve swimming bath preparation(B = normally open)
107	Scald protection / thermostatic mixer valve	107	Scald protection / thermostatic mixer valve	60	Changeover valve cooling operation(B = normally open)
108	Solar pump assembly	108	Solar pump assembly	62	Heat meter (optional)
109	Overflow valve must be closed	109	Overflow valve must be closed	63	Changeover valve solar circuit(B = normally open)
110	Packing list hydraulic tower	110	Packing list hydraulic tower	64	Cooling circulation pump
111	Mounting for additional heating element	111	Mounting for additional heating element	70	Solar separation module
112	Minimum distance to thermal decoupling of the mixing valve	112	Minimum distance to thermal decoupling of the mixing valve	TB2-3/C	Feedwater sensor mixer circuits 2-3
				TSS/E	Sensor, temperature difference control (low temperature)
				TSK/E	Sensor, temperature difference control (high temperature)
				TEE/F	Sensor external energy source

### Comfort board:

15	Mixer circuit three-way mixer (MK2-3 discharge)
17	Temperature difference regulator
19	Mixer circuit four-way mixer (MK2 charge)
21	Mixer circuit circulation pump (FP2-3)
22	Swimming pool circulating pump
44	Three-way mixer valve (cooling function MK2)
47	Changeover valve swimming bath preparation(B = normally open)
60	Changeover valve cooling operation(B = normally open)
62	Heat meter (optional)
63	Changeover valve solar circuit(B = normally open)
64	Cooling circulation pump
70	Solar separation module
TB2-3/C	Feedwater sensor mixer circuits 2-3
TSS/E	Sensor, temperature difference control (low temperature)
TSK/E	Sensor, temperature difference control (high temperature)
TEE/F	Sensor external energy source

### Important notice!

These hydraulic diagrams are schematic representations and are for assistance only. They do not relieve of the obligation to carry out appropriate planning! They do not include all necessary shut-off valves, ventilator fittings or safety devices. These must be incorporated in accordance with the standards and regulations applicable to the respective installation. All country-specific standards, laws and regulations must be observed! The tubes have to be dimensioned according to the nominal volume flow of the heat pump resp. the free pressing of the integrated circulating pump. For detailed information and advice please contact our local sales partner!