

Outline diagram

F1245 for heating systems and any accessories

Application

Houses with water-borne heating systems.

Function

F1245 prioritises hot water charging. The heat pump is controlled by the outdoor sensor (BT1) in combination with the internal flow sensor. The internal immersion heater is connected automatically when the energy requirement exceeds the capacity of the heat pump.

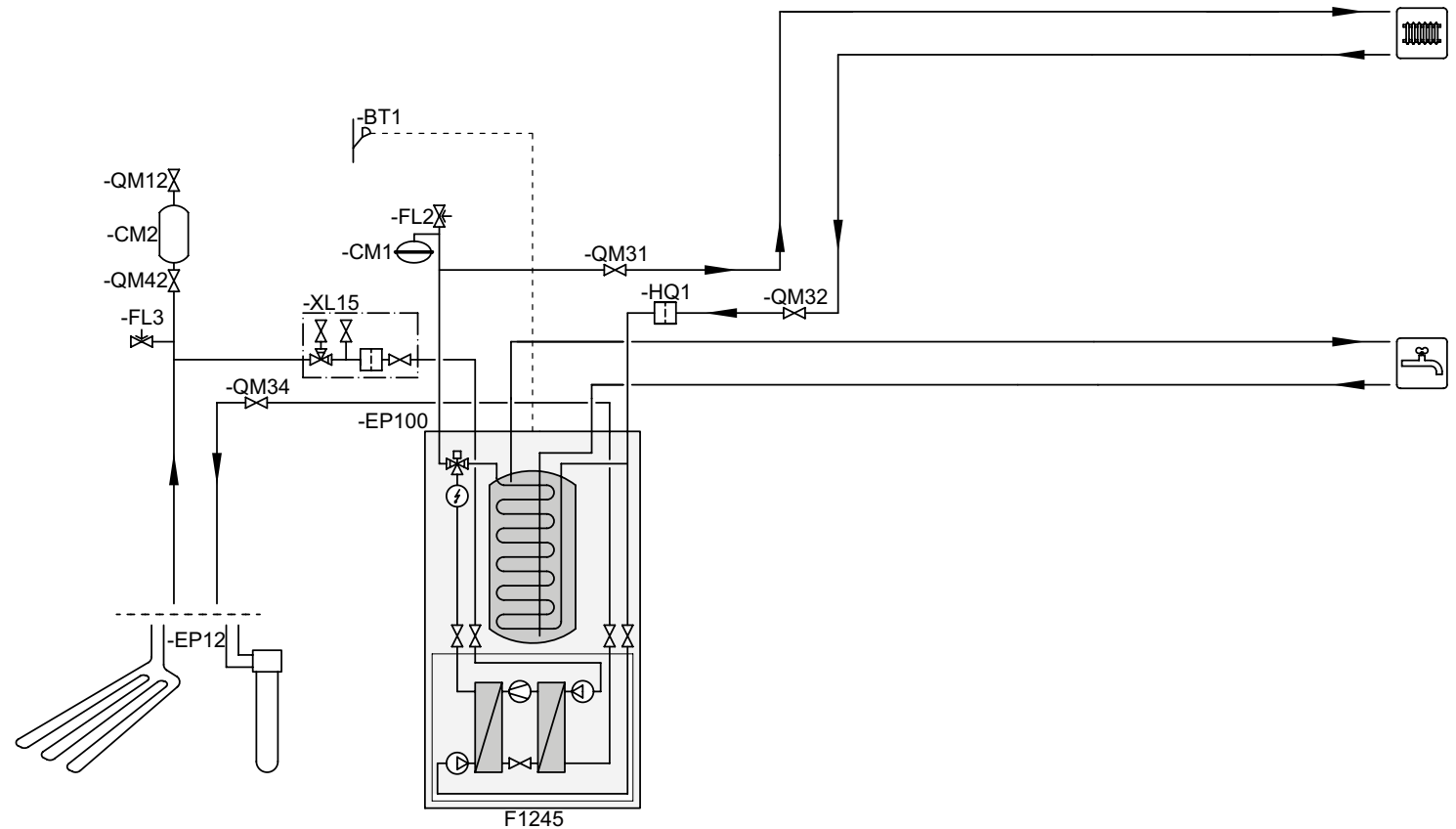
Heating system 2

The external circulation pump (EP21-GP20) is dimensioned for the under floor heating system's demand. The flow through the heat pump is adjusted using the heat medium pump and any applicable control valve.

NOTE!! In cases where the system volume in the heating system is below 20 l/kW (compressor output) and/or heating medium flow is choked uncontrolled, a UKV tank is installed as a volume increaser. For only under floor heating systems and UKV, 3 connections on the UKV tank must be used according to its installation instructions.

Note! This is an outline diagram. Actual installations must be planned according to applicable standards.

See the appropriate "Installer manual" for more information.



Designations according to standard IEC 61346-2

List of Components

F1245 for heating systems and any accessories

Pos	Name	Specification	Manufacturer	Art no.	Remarks
BP6	Manometer, Brine				
BT1	Temp.sensor, Outdoor		NIBE		Included in F1245
CM1	Expansion vessel, closed, HM				
CM2	Level vessel Brine				Level vessel at open system. Level vessel included in F1245.
CM3	Expansion vessel Brine				Expansion vessel at closed system.
EP12	Collector, Brine				
EP100	Heat pump	F1245	NIBE		
FL2	Valve, Safety, HM				
FL3	Valve, Safety, Brine		NIBE		Included in F1245
HQ1	Particle filter HM		NIBE		Included in F1245
QM12	Valve, Filling, Brine				
QM21	Valve, Bleeding, Brine				
QM31	Valve, Shut-off, HM-f				
QM32	Valve, Shut-off, HM-r				
QM34	Valve, Shut-off, Brine-r				
QM42	Valve, Shut-off, Brine-r				
XL 15	Filling set, Brine	KB R25/G32	NIBE	089 368/089 971	KB R25 (max 12 kW), KB G32 (max 30 kW)
	Hot water circulation				
AA5	Accessory card	AXC 40	NIBE	067 060	Required if the ground water pump or hot water circulation is to be connected to F1245 at the same time as the buzzer alarm. The relay outputs on the accessory card can have a max load of 2A (230V) in total.
EB2	Water heater				
GP11	Pump, Circulation, HW				
RM3	Valve, Non-return				
RM4	Valve, Non-return				
QN2	Valve, 4 way				

List of Components cont'd

F1245 for heating systems and any accessories

Pos	Name	Specification	Manufacturer	Art no.	Remarks
QN3	Valve, Regulator				
QN4	Valve, Regulator				
	Extra hot water				
EB2	Water heater	COMPACT	NIBE		
	Ground water collector				
AA5	Accessory card	AXC 40	NIBE	067 060	Required if the ground water pump or hot water circulation is to be connected to F1245 at the same time as the buzzer alarm. The relay outputs on the accessory card can have a max load of 2A (230V) in total.
EP4	Heat exchanger, groundwater				
EP12	Collector, Brine				
HQ2	Particle filter Brine				
	UKV				
CP5	Buffer vessel (UKV)	UKV 100/200/300/500	NIBE		Size varies depending on heat pump and system volume.
	Passive cooling				
AA5	Accessory card		NIBE		Included in PCS 44
BT64	Temp. sensor, Cooling flow line		NIBE		Included in PCS 44
BT65	Temp. sensor, Cooling return line		NIBE		Included in PCS 44
EP13	Supply air coil/Fan convector				
EQ1	Passive cooling system	PCS 44	NIBE	067 063	
GP13	Pump, Circulation, cooling		NIBE		Included in PCS 44
RM5	Valve, Non-return		NIBE		Included in PCS 44
QN18	Valve, Mixing, cooling		NIBE		Included in PCS 44
	Heating system 2				
AA5	Accessory card		NIBE		Included in ECS 40
BT2	Temp.sensor, HM, Flow		NIBE		Included in ECS 40

List of Components cont'd

F1245 for heating systems and any accessories

Pos	Name	Specification	Manufacturer	Art no.	Remarks
BT3	Temp.sensor, HM, Return		NIBE		Included in ECS 40
EP21	Climate system 2	ECS40	NIBE	067 061	
GP20	Pump, Circulation, HM Lower shunt		NIBE		Included in ECS 40
QN11	Valve, Mixing valve, addition		NIBE		Included in ECS 40
FLM					
AZ1	Air unit	NIBE FLM	NIBE	067 011	
RM6	Valve, Non-return		NIBE		Included in NIBE FLM
RN11	Valve, Adjusting		NIBE		Included in NIBE FLM
Pool					
AA5	Accessory card		NIBE		Included in POOL 40
BT25	Temp.sensor, HM, Flow, External		NIBE		Included in POOL 40
BT51	Temp.sensor, Pool		NIBE		Included in POOL 40
CL11	Pool kit	POOL 40	NIBE	067 062	
EP5	Exchanger pool				
GP9	Pool, pump				
GP10	Pump, Circulation, HM				
HQ4	Partikelfilter Pool				
RM2	Valve, Non-return				
RN10	Valve, Regulator				
QN19	Valve, Three-way		NIBE		Included in POOL 40