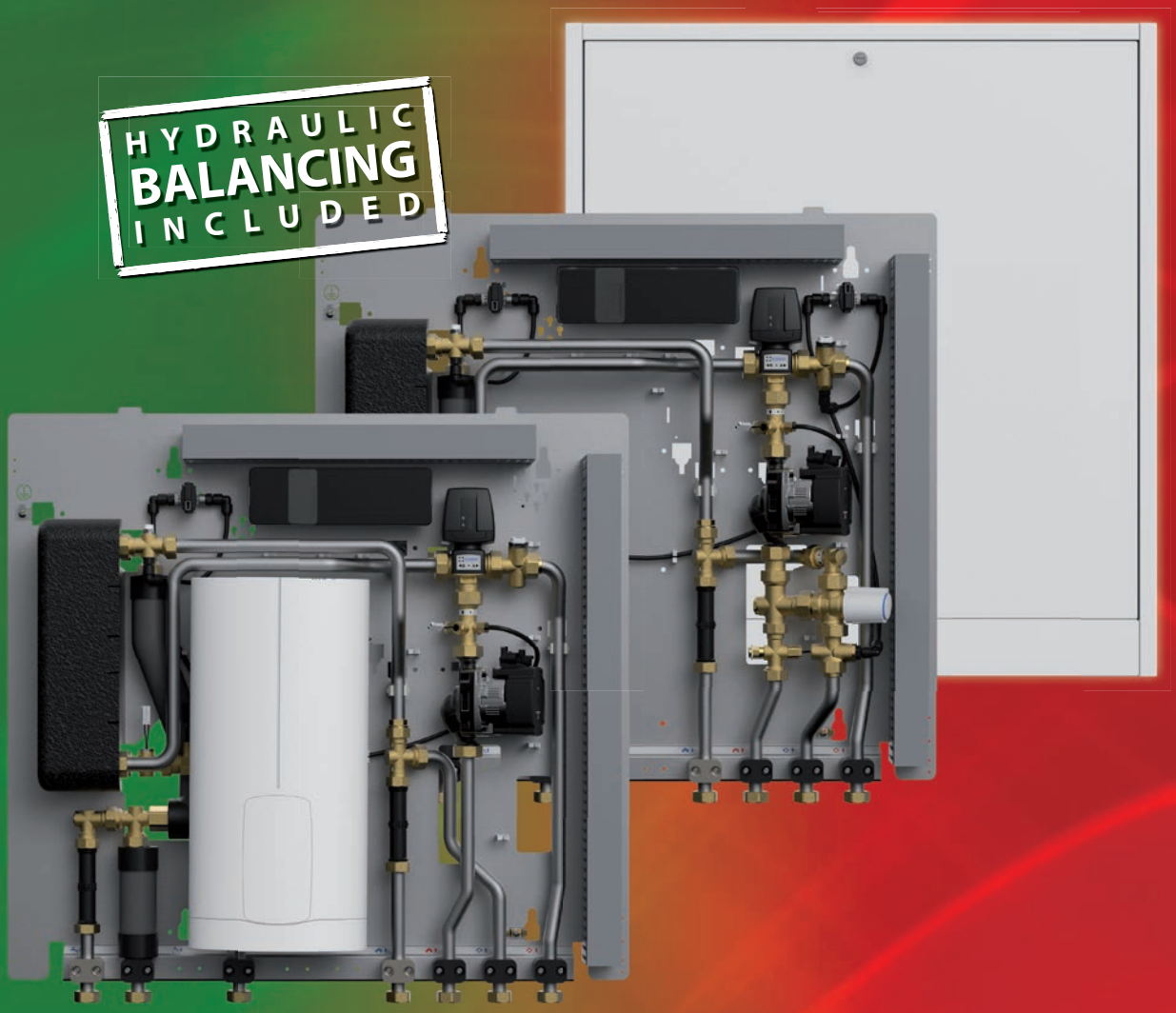
HomeBloC®
Flat stations

HYDRAULIC BALANCING INCLUDED



HomeBloC® Digital

Technical data and product information

Discover the HomeBloC® Digital – the future of flat stations

The innovative solution for

- effective power
- minimum planning effort
- highest living comfort

HomeBloC® Digital

INVEST IN THE **FUTURE OF LIVING** FOR YOUR CUSTOMERS

Advantages HomeBloC® Digital:

Energy-optimised operation
State-of-the-art technology with integrated automatic hydraulic balancing – completely without components that cause pressure loss, the system ensures optimum operation

Minimised maintenance effort
Thanks to comprehensive data availability (BMS connection), maintenance work is extremely efficient. Predictive maintenance can be realised effortlessly.

Maximum comfort
The electronically tuned system of the HomeBloC® Digital ensures even heat distribution.

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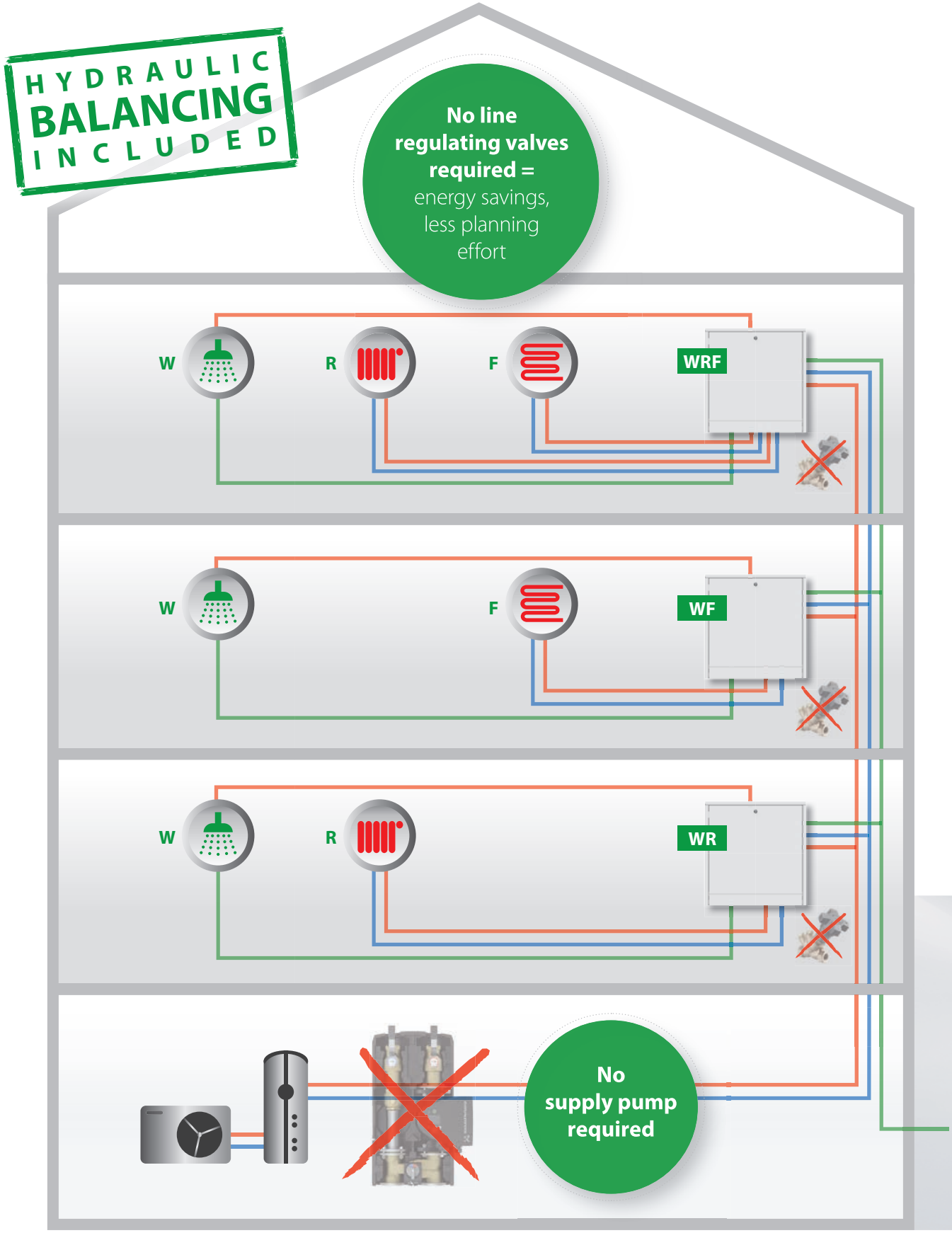
Demand-led consumption
Integrated balancing of the floor distribution manifold, no supply pump with high power consumption required.

Maximum customer satisfaction
The continuously developed and proven PAW domestic hot water control system is designed for optimum convenience. No waiting times thanks to intelligent heat retention.

Minimised planning effort
Adaptive and self-learning, which makes planning much easier. No line balancing/differential pressure valves required!



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HomeBloC® Digital: efficiency redefined.

1. **Thanks to the HomeBloC® Digital, line regulating/differential pressure valves are no longer required in every residential unit for the first time.** This means:
   - *targeted use of energy*
   - *investment cost savings*
   - *less planning effort*
   - *quick installation without adjustment effort*

2. **With the HomeBloC® Digital, a central supply pump is no longer required.** This means:
   - *further energy cost savings = reduction in operating costs*
   - *installation cost savings*
   - *improved security of supply and availability of spare parts*

3. **The HomeBloC® Digital ensures demand-orientated and efficient heat distribution in all residential units.** This means:
   - *optimum comfort*
   - *no disturbing operating noise*

4. **Thanks to the high degree of prefabrication, the HomeBloC® Digital is quick and easy to install.** Time-consuming planning and commissioning are a thing of the past!

5. **Full flexibility in individual design** - your customised solution!

Legend for versions:

W:
hot water preparation, controlled according to demand, fully electronically regulated with degree accuracy

F:
fully electronic and differential pressure controlled connection for radiant floor / panel heating circuits incl. mixing unit

R:
fully electronic and differential pressure controlled radiator connection

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Save energy conveniently now!

The PAW HomeBloC® Digital is a highly efficient, fully electronically controlled home transfer station for decentralised domestic hot water heating and heat supply.

The integrated differential pressure control in conjunction with a speed-controlled pump enables energy-optimised and hydraulically balanced operation. Components that cause pressure loss, such as differential pressure controllers, are no longer required.
Domestic hot water is heated as required in the high-performance heat exchanger in the station. The temperature is regulated to the exact degree. The generously dimensioned heat exchangers enable operation with an extremely low primary flow temperature.
The HomeBloC® Digital is therefore ideally suited for optimum operation with a heat pump.

As in the PAW domestic hot water stations, domestic hot water is heated using the instantaneous water heater principle.
No energy is stored in the drinking water, which ensures fast, efficient and above all hygienic heating of drinking water.
The self-learning control algorithm specially developed by PAW ensures fast and degree-accurate domestic hot water heating. Here, too, no pressure loss-causing components are required, which means that high output capacities of up to 25 l/min can be achieved.

Adjustable time programmes and operation modes (e.g. holiday, party etc) allow a very individual and optimally adapted operation.

The controller is operated and set via one or more room control units and/or an app.

The room control unit is available in both wired and wireless versions. The controller can conveniently control five independent zones.

Various standard interfaces/protocols are already available in the basic controller for simple integration into a building management system. An appropriate parametrisation leads to a minimisation of standstill losses and a decrease of heating-up times, which has a positive influence on the energy performance level of the building.

All messages, operating times, parameters and statistics can be retrieved so that a possibly required maintenance assignment on site can be prepared accordingly. Predictive maintenance is also possible thanks to the information available. Heat quantity and cold water meters with an installation length of 110 mm can be easily integrated into the installation sections provided for this purpose.

The PAW HomeBloC® Digital is available in the three basic versions WR, WF and WRF-E which mainly differ in the equipment features of the heating circuits to be supplied. **WR** stands for hot water and radiator circuit, **WF** for hot water and radiant floor circuit and **WRF-E** is a combination of hot water, radiator und radiant floor circuit.

**What are you waiting for?
Start saving energy now without sacrificing the comfort you are used to.**

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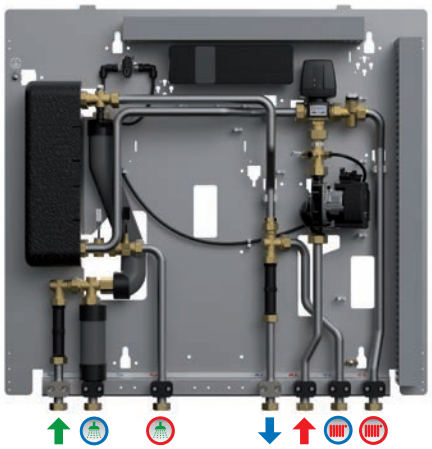
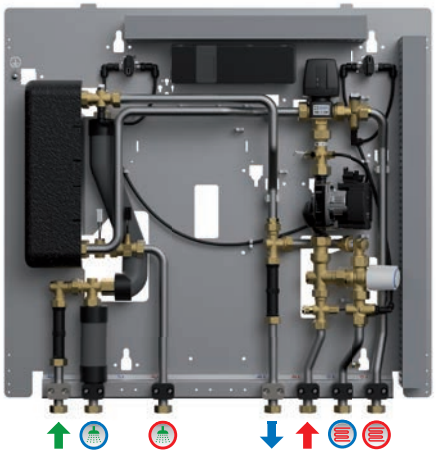
HomeBloC® Digital WR

- drinking water heater
- radiator connection



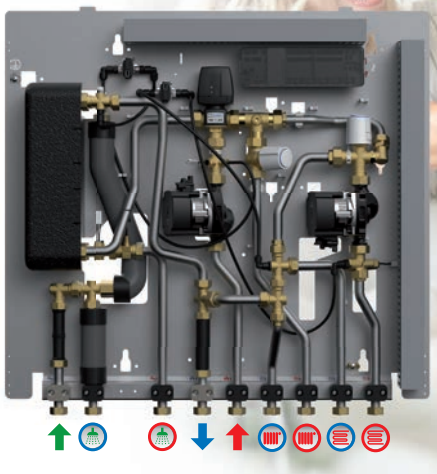
HomeBloC® Digital WF

- drinking water heater
- connection floor distribution manifold



HomeBloC® Digital WRF-E

- drinking water heater
- radiator connection and connection floor distribution manifold
- injection-type circuit



Legend for versions:

W: hot water preparation, controlled according to demand, fully electronically regulated with degree accuracy

F: fully electronic and differential pressure controlled connection for radiant floor / panel heating circuits incl. mixing unit

R: fully electronic and differential pressure controlled radiator connection

Legend for connections:

- **Cold water inlet**
- **Domestic cold water**
- **Domestic hot water**
- **Heat generation return**
- **Heat generation flow**
- **Radiator circuit return**
- **Radiator circuit flow**
- **Radiant floor circuit return**
- **Radiant floor circuit flow**

Improve the efficiency of your overall system even further – with a DHW postheating system!

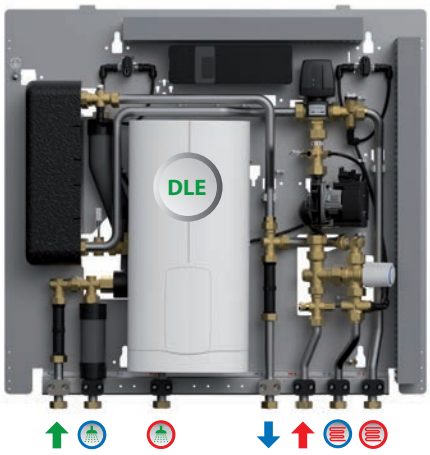
The PAW HomeBloC® Digital with instantaneous water heater (DLE) unlocks additional potential for system optimisation.

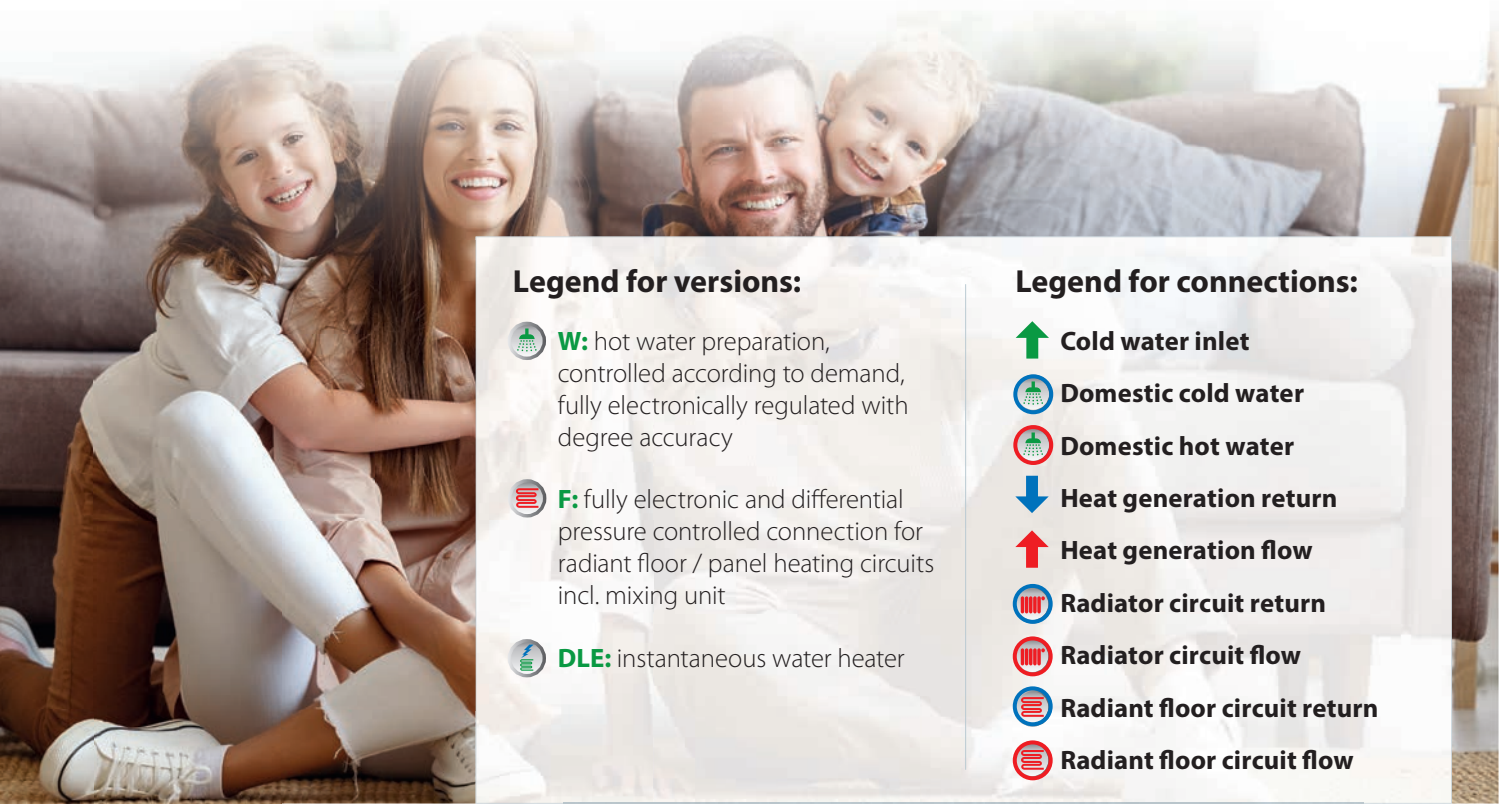
The drinking water is preheated in the high-performance heat exchanger and reheated to the desired outlet temperature to the exact degree with the help of the instantaneous water heater.
The integrated instantaneous water heater enables extremely low heating flow temperatures, which would not be sufficient for domestic hot water heating.

The principle of DHW postheating using the electric instantaneous water heater enables resource-saving operation of a heat pump. Optimised COP values can be achieved.

HomeBloC® Digital WF + DLE

- drinking water heater
- connection floor distribution manifold
- instantaneous water heater





Legend for versions:

W: hot water preparation, controlled according to demand, fully electronically regulated with degree accuracy

F: fully electronic and differential pressure controlled connection for radiant floor / panel heating circuits incl. mixing unit

DLE: instantaneous water heater

Legend for connections:

- **Cold water inlet**
- **Domestic cold water**
- **Domestic hot water**
- **Heat generation return**
- **Heat generation flow**
- **Radiator circuit return**
- **Radiator circuit flow**
- **Radiant floor circuit return**
- **Radiant floor circuit flow**

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Dimensions	
All connections	¾ " int. thread, flat sealing
Construction depth	110 mm possible, dependent on the equipment and the requirements
Height / width	dependent on the equipment and the requirements
Electrical connection	power supply 230 V~, 50 Hz
Power consumption controller	5 W
Maximum power consumption	specific to equipment

Materials	
Base plate / Flush-mounted cupboard	zinc-galvanised steel sheet
Cover frame, door, plinth panel	standard: steel sheets, white powder-coated (RAL 9016), other colours or designs possible on request optional: plastic, solid-coloured or printed
Ball valves, fittings: domestic hot water circuit	brass, approved for drinking water
Ball valves, fittings: heating circuit	brass
Pipes	stainless steel (1.4401), approved for drinking water
Seals	fibre composite / EPDM / teflon
Heat exchanger	standard: plate heat exchanger, stainless steel plates soldered with copper optional: coated for corrosion protection or version in full stainless steel, dimensioning according to your needs

Operating temperature	
Operating pressure: domestic hot water	max. 10 bar
Operating pressure: heating system	max. 3 bar
Operating temperature: domestic hot water	max. 60 °C
Operating temperature: heating system	max. 70 °C

Outputs	
Output capacity (10 -> 45 °C)	up to 25 l/min (equates to 61 kW)
Heating capacity	up to 9 kW (when $\Delta T = 10$ K)

Instantaneous water heater	11 kW allows the decrease of the flow temperatures on the boiler side or the increase of the domestic hot water output

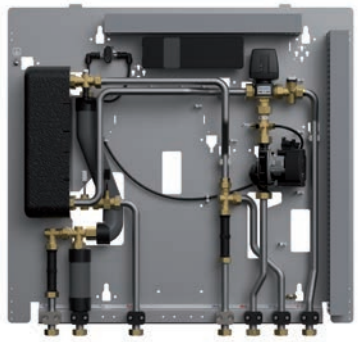
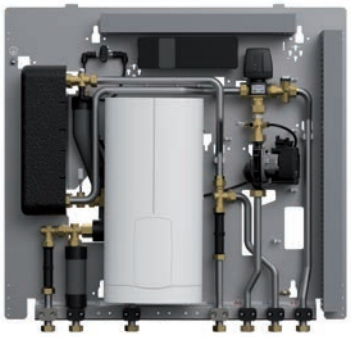
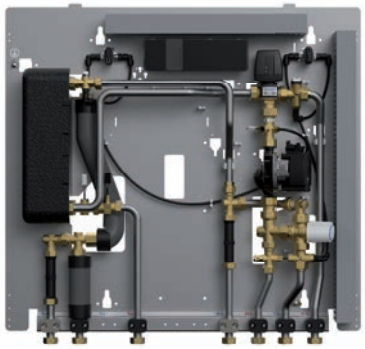
Illustration		Item no.
	**HomeBloC® Digital, type WR** Domestic hot water output: 16 l/min with 45 °C at 50 °C flow primary 20 l/min with 45°C at 55 °C flow primary Heat exchanger with stainless steel plates, soldered with copper. Optional: full stainless steel or Sealix® coating Heating output = 9 kW at ΔT = 10 K Heating circuit connection = direct, differential pressure controlled Pump Grundfos UPM4 15/75	
	HomeBloC® Digital, type WR – 16 l/min	**125437101**
	HomeBloC® Digital, type WR – 20-25 l/min	**125537101**
	**HomeBloC® Digital, type WR + DLE** Domestic hot water output: 16 l/min with 45 °C at 42 °C flow primary 20 l/min with 45°C at 45 °C flow primary and postheating with instantaneous water heater Heat exchanger with stainless steel plates, soldered with copper. Optional: full stainless steel or Sealix® coating Heating capacity = 9 kW at ΔT = 10 K Heating circuit connection = direct, differential pressure controlled Pump Grundfos UPM4 15/75	
	HomeBloC® Digital, type WR + DLE – 16 l/min	**126417101**
	HomeBloC® Digital, type WR + DLE – 20-25 l/min	**126517101**
	**HomeBloC® Digital, type WF** Domestic hot water output: 16 l/min with 45 °C at 50 °C flow primary 20 l/min with 45 °C at 55 °C flow primary Heat exchanger with stainless steel plates, soldered with copper. Optional: full stainless steel or Sealix® coating Heating capacity = 9 kW at ΔT = 10 K Pump Grundfos UPM4 15/75 Mixing valve unit for demand-dependent flow temperature, differential pressure-controlled	
	HomeBloC® Digital, type WF – 16 l/min	**125439101**
	HomeBloC® Digital, type WF – 20-25 l/min	**125539101**

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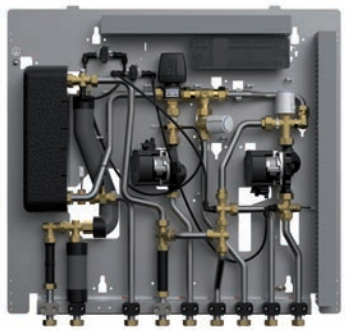
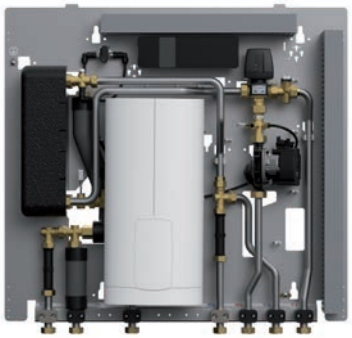
Illustration		Item no.
	**HomeBloC® Digital, type WF + DLE** Domestic hot water output: 16 l/min with 45 °C at 42 °C flow primary 20 l/min with 45 °C at 45 °C flow primary and postheating with instantaneous water heater Heat exchanger with stainless steel plates, soldered with copper. Optional: full stainless steel or Sealix® coating Heating capacity = 9 kW at ΔT = 10 K Pump Grundfos UPM4 15/75 Mixing valve unit for demand-dependent flow temperature, differential pressure-controlled	
	HomeBloC® Digital, type WF + DLE – 16 l/min	**126419101**
	HomeBloC® Digital, type WF + DLE – 20-25 l/min	**126519101**
	**HomeBloC® Digital, type WRF-E** Domestic hot water output: 16 l/min with 45 °C at 50 °C flow primary 20 l/min with 45°C at 55 °C flow primary Heat exchanger with stainless steel plates, soldered with copper. Optional: full stainless steel or Sealix® coating Heating capacity = 9 kW at ΔT = 10 K Primary pump Grundfos UPM4 15-75 Shut-off valve for direct heating circuit, direct heating circuit differential pressure-controlled Injection-type circuit for demand-dependent flow temperature of the panel heating circuit, constant pressure-controlled Heating circuit pump Grundfos UPM4 15-75	
	HomeBloC® Digital, type WRF-E – 16 l/min	**125438102**
	HomeBloC® Digital, type WRF-E – 20-25 l/min	**125538102**
	**HomeBloC® Digital, type WRF + DLE** Domestic hot water output: 16 l/min with 45 °C at 42 °C flow primary 20 l/min with 45 °C at 45 °C flow primary and postheating with instantaneous water heater Heat exchanger with stainless steel plates, soldered with copper. Optional: full stainless steel or Sealix® coating Heating capacity = 9 kW at ΔT = 10 K Shut-off valve for direct heating circuit, direct heating circuit differential pressure-controlled The HomeBloC® Digital WRF + DLE requires a floor distribution manifold with injection circuit. (item no. 128500x102, see page 13)	
	HomeBloC® Digital, type WRF + DLE – 16 l/min	**126418101**
	HomeBloC® Digital, type WRF + DLE – 20-25 l/min	**126518101**

Illustration		Item no.
	**Ball valves with our without mounting rail** To shut off the lines during commissioning and maintenance. Marked in colour for easy assignment, DVGW approved, connection side G¾" internal thread. Including covering caps to avoid contamination of the ball valves until installation of the station. The ball valves can be ordered with or without mounting rail. When using the mounting rail, the ball valves are mounted to the wall even before the installation of the station. This allows all lines to be installed and the system to be pressurised - the station can be installed very quickly and easily.	
	7 ball valves with mounting rail	**1280207201**
	7 ball valves	**1280107101**
	**Supplementary set domestic water circulation**	**1280817101**
	Including pipe set, connection fittings with ball valve and required sensor technology. Required for downstreamed hot water connection pipings with a content of more than 3 litres (according to DIN 1988-200) to the most distant withdrawal point or for an increased demand of comfort. During operation, it provides instantly available hot domestic water. **Only suitable for types WR and WF!**	
	**Room control unit**	**13676100**
	For commissioning the station and setting the hot water nominal temperature. A room control unit is already included in the scope of delivery of the stations. Up to 4 additional room control units per station (controller) can be added.	
	**Thermoelectric actuator NC, 230 V, with connecting adapter for PAW injection-type circuit**	**1288601105**
	Thermoelectric actuator NC, 230 V. The actuator is controlled by a 230 V standard room temperature controller with a 2-point output or a pulse width modulation.	

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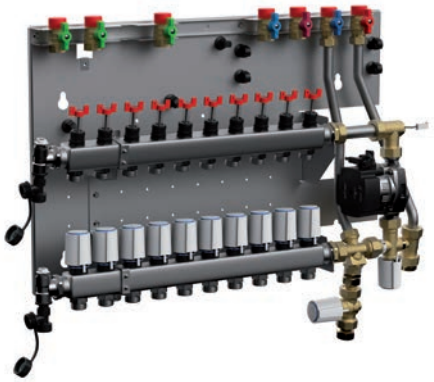
Illustration		Item no.
	**Floor distribution manifold, complete set for all HomeBloC® Digital types, except WRF + DLE** The PAW heating distribution manifold for radiant floor heating ensures a steady and comfortable heat distribution in the home. Completely equipped with ball valve rail, piping and thermal drives, pre-mounted on a mounting plate for an easy and quick installation in wall-mounted or flush-mounted cupboards. Filling, draining and venting is easily possible. The complete set with floor distribution manifolds is available from a 4-fold version up to a 10-fold version. Connections: Ball valves: ¾" int. thread / ext. thread, floor distribution manifold: ¾" ext. thread Eurocone	
	Floor distribution manifold 4-fold	**1285004103**
	Floor distribution manifold 5-fold	**1285005103**
	Floor distribution manifold 6-fold	**1285006103**
	Floor distribution manifold 7-fold	**1285007103**
	Floor distribution manifold 8-fold	**1285008103**
	Floor distribution manifold 9-fold	**1285009103**
	Floor distribution manifold 10-fold	**1285010103**
	**Floor distribution manifold for HomeBloC® Digital, type WRF + DLE** With injection-type circuit, allows the connection of a floor distribution manifold and a radiator circuit. Injection-type circuit complete with pump, injection valve and temperature sensor. The PAW heating distribution manifold for radiant floor heating ensures a steady and comfortable heat distribution in the home. Completely equipped with ball valve rail, piping and thermal drives, pre-mounted on a mounting plate for an easy and quick installation in wall-mounted or flush-mounted cupboards. Filling, draining and venting is easily possible. The complete set with floor distribution manifolds is available from a 4-fold version up to a 10-fold version. Connections: Ball valves: ¾" int. thread / ext. thread, floor distribution manifold: ¾" ext. thread Eurocone	
	Floor distribution manifold 4-fold	**1285004102**
	Floor distribution manifold 5-fold	**1285005102**
	Floor distribution manifold 6-fold	**1285006102**
	Floor distribution manifold 7-fold	**1285007102**
	Floor distribution manifold 8-fold	**1285008102**
	Floor distribution manifold 9-fold	**1285009102**
	Floor distribution manifold 10-fold	**1285010102**

Illustration		Item no.
	**Flush-mounted cupboard, short, for stations WR, WF, WRF-E, WR + DLE and WF + DLE, without floor distribution manifolds** suited for stations of type WR, WF, WRF-E, WR + DLE, and WF + DLE, without floor distribution manifold consisting of: • built-in body made of zinc-galvanised steel sheet; installation dimensions W= 856 mm x H= 898 mm x D= 109-179 mm, with height-adjustable feet (can be extended up to 160 mm) • plinth panel and cover frame made of zinc-galvanised steel sheet, white powder-coated (RAL9016), cover frame W x H x D 906 x 927 x 120-190 mm • door to hang in, with rotary lock, made of zinc-galvanised steel sheet, white powder-coated (RAL9016), with ventilation slots Other colours or printing on request, lock interchangeable	**1282002101**
	**Flush-mounted cupboard, high, for stations AND floor distribution manifolds** suited for stations AND floor distribution manifolds, also with instantaneous water heater consisting of: • built-in body made of zinc-galvanised steel sheet; installation dimensions W= 885 mm x H= 1,432 mm x D= 124-192 mm, with height-adjustable feet (can be extended up to 160 mm) • plinth panel and cover frame made of zinc-galvanised steel sheet, white powder-coated (RAL9016), cover frame W x H x D 907 x 1,457 x 135-205 mm • door to hang in, with rotary lock, made of zinc-galvanised steel sheet, white powder-coated (RAL9016), with ventilation slots Other colours or printing on request, lock interchangeable	**1282602101**

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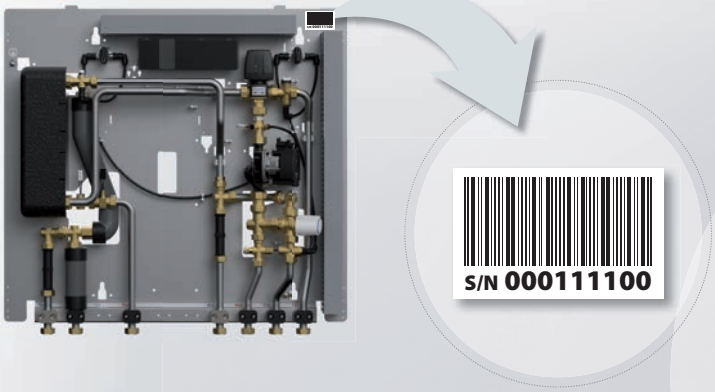
Illustration		Item no.
	**Wall-mounted cupboard, short, for stations WR, WF and WRF-E, without instantaneous water heater** suited for stations of type WR, WF and WRF-E, without floor distribution manifold, without instantaneous water heater consisting of: • frame with plinth panel made of zinc-galvanised steel sheet, white powder-coated (RAL9016), dimensions: W = 880 mm x H = 973 mm x D = 130 mm • door to hang in, with rotary lock, made of zinc-galvanised steel sheet, white powder-coated (RAL9016), with ventilation slots Other colours or printing on request, lock interchangeable	**1282102101**
	**Wall-mounted cupboard, short, for stations WR + DLE and WF + DLE, without floor distribution manifold** suited for stations of type WR + DLE and WF + DLE, without floor distribution manifold consisting of: • frame with plinth panel made of zinc-galvanised steel sheet, white powder-coated (RAL9016), dimensions: W = 880 mm x H = 972 mm x D = 190 mm • door to hang in, with rotary lock, made of zinc-galvanised steel sheet, white powder-coated (RAL9016), with ventilation slots Other colours or printing on request, lock interchangeable	**1282102102**
	**Wall-mounted cupboard, high, for stations AND floor distribution manifold** suited for stations AND floor distribution manifolds, also with instantaneous water heater consisting of: • frame with plinth panel made of zinc-galvanised steel sheet, white powder-coated (RAL9016), dimensions: W = 880 mm x H = 1440 mm x D = 190 mm • door to hang in, with rotary lock, made of zinc-galvanised steel sheet, white powder-coated (RAL9016), with ventilation slots Other colours or printing on request, lock interchangeable	**1282702101**

Good reasons for PAW ...

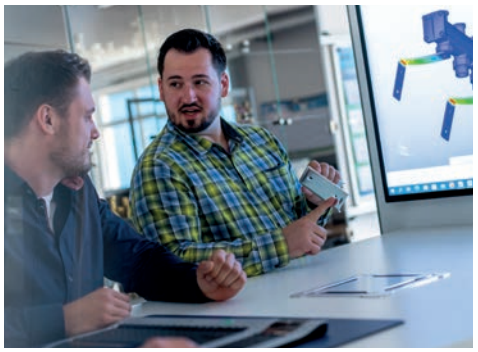
Customised requirements
are implemented individually through flexible development

Serial number
for traceability in the event of a warranty claim and spare parts identification



Continuous process optimisation
with our PAW production system PPS





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PAW – Highlights

Customer care
from field service to technical support:

- *planning assistance*
- *service case*
- *support for the installer*

BMS connection
of many devices possible via Modbus RTU

5 years manufacturer's warranty

Spare parts guarantee for at least 10 years

Other complementary and innovative products

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