



Local and district heating stations for more energy efficiency and individual comfort

- One system from a single source for your project
- Standardised products and customer-specific solutions
- Completely pre-assembled systems with heat distribution
- Outputs available from 20 kW to 10 MW
- Also for the 4th generation of district heating systems





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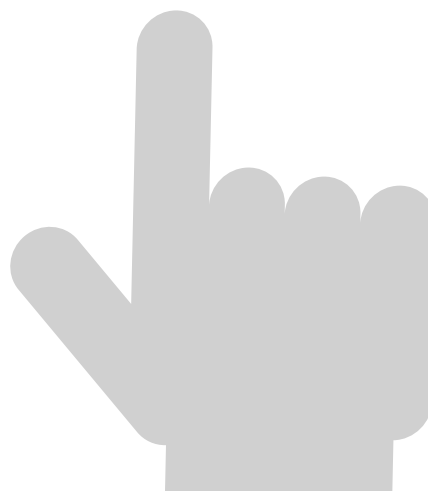
# 1. Local and district heating as a building block of our future



**Local and district heating** is one of the most important building blocks for the future-orientated, ecological supply of heat. Meibes knew this well over two decades ago. Ever since then, Meibes has been designing, planning and producing standardised as well as customer-specific and tailor-made transfer stations (local and district heating stations) for the international market. The resulting advantages are there to see.



- **An efficient and affordable supply of heating water and hot water**
- **Space savings** compared to other heat supply systems, as the transfer station needs only a small amount of space
- **All in one:** Transfer station with control system and the possibility to integrate consumption metering
- **Savings on maintenance** through lower expenditure compared to other heat supply systems.
- **No combustion or production of exhaust gases** within the building from the supply of thermal energy
- **No dependency on the procurement of fuel** or pre-financing such as for oil or wood-fired heating systems
- **No need to provide storage areas** for the fuel as for oil or wood-fired heating systems
- **Constant and need-appropriate supply up to the building**
- The district heating generated within a CHP system incorporates a **very good CO<sub>2</sub> balance**
- **Local and district heating systems are one of the ways to achieve the goals of the efficient energy revolution**



# 1. Local and district heating as a building block of our future

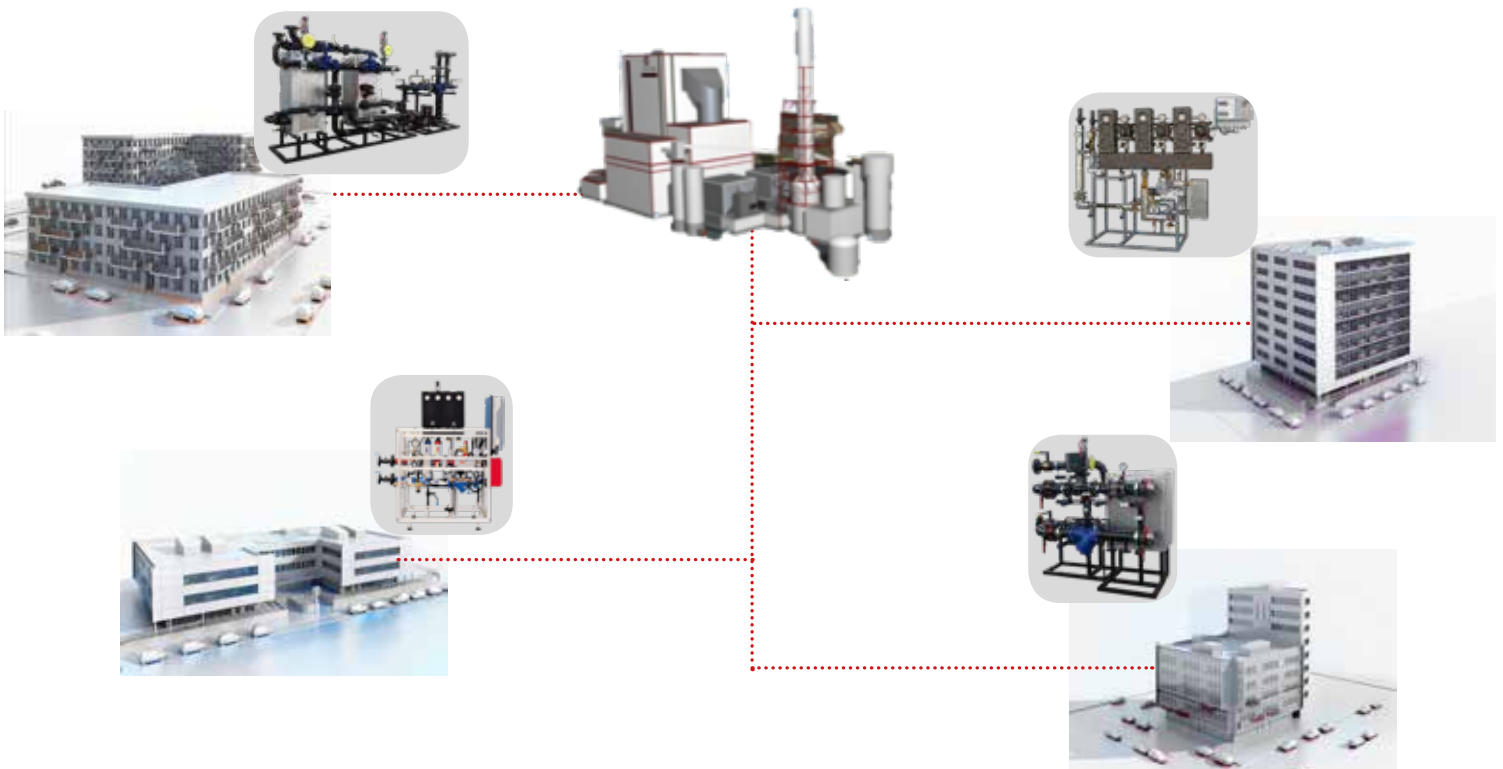


## 1.1 District heating systems

Due to the often large size of district heating networks, the sources of heat in district heating systems are fossil fuels (e.g. coal), waste (through the waste incineration plant connected to the district heating network) or biomass. These primary energy sources generate electricity, e.g. through cogeneration plants by means of combined heat and power (CHP) as well as heat, which is fed into the district heating network. Other sources of energy, such as geothermal or solar-thermal energy as regenerative sources of energy or waste heat from industrial processes, can also be integrated into the district heating system in order to minimise emissions of greenhouse gases and air pollutants and to improve the CO<sub>2</sub> balance.

District heating is distributed through large networks of pipes. Depending on the technical generation of the network, district heating networks are operated at different primary flow line temperatures, with the 2nd generation usually being more than 100 °C and the 3rd generation often less than 100 °C. The temperature in the upcoming 4th generation should be much lower and, depending on the design, only permit a maximum of 70 °C in the primary flow line. This should facilitate the integration of more renewable energy systems, thereby meeting the requirements for climate protection and sustainable energy generation.

The transfer station is the interface from supplier to consumer.



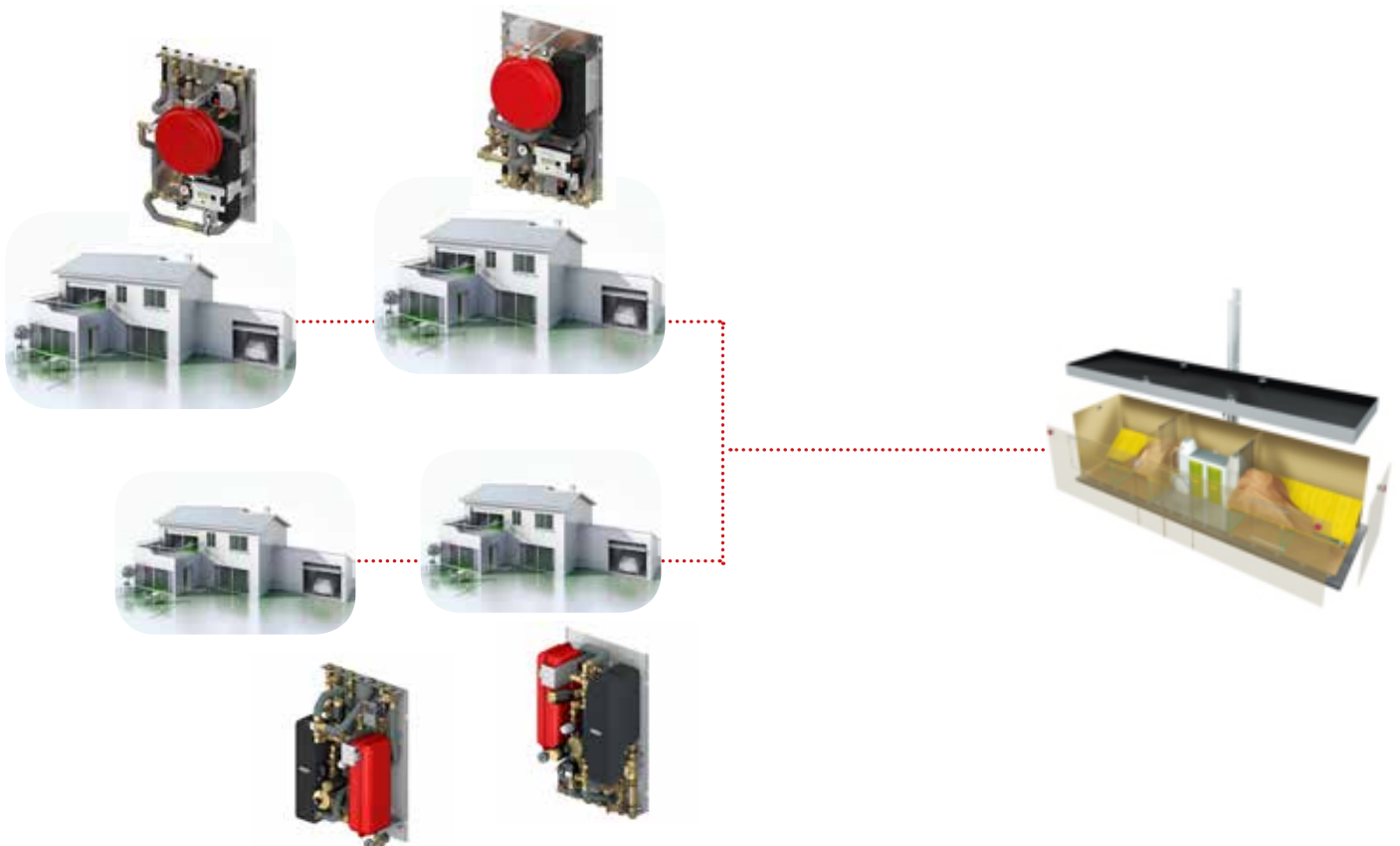


# 1. Local and district heating as a building block of our future

## 1.2 Local heating systems

In contrast to district heating networks, local heating networks are smaller networks with often more than one remote heat generation facility. It is typical for different primary energy sources such as co-generation plants, to be combined with, biomass heating plants or biogas plants, solar collector plants, geothermal plants, etc. The additional integration of storage facilities incidentally gives rise to the possibility to store discontinuous heat generating sources of energy such as solar thermal power.

The output range of a local heating system depends on the connected consumers, but starts at 50 kW and can be designed up to several megawatts. One of the special features of local heating systems is how they are operated with regard to maximum pressure and temperature load, which is often lower than that of district heating systems.

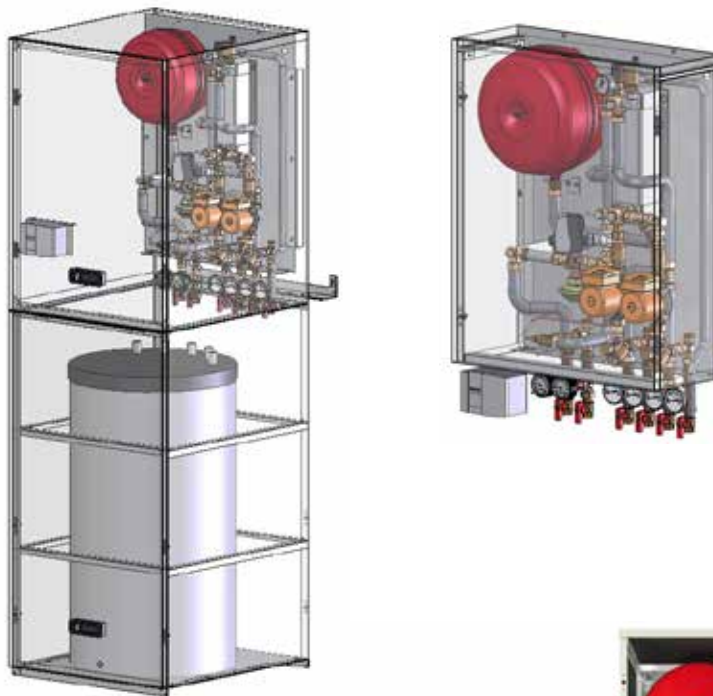


## 2. Series LogoMini - Small, compact systems

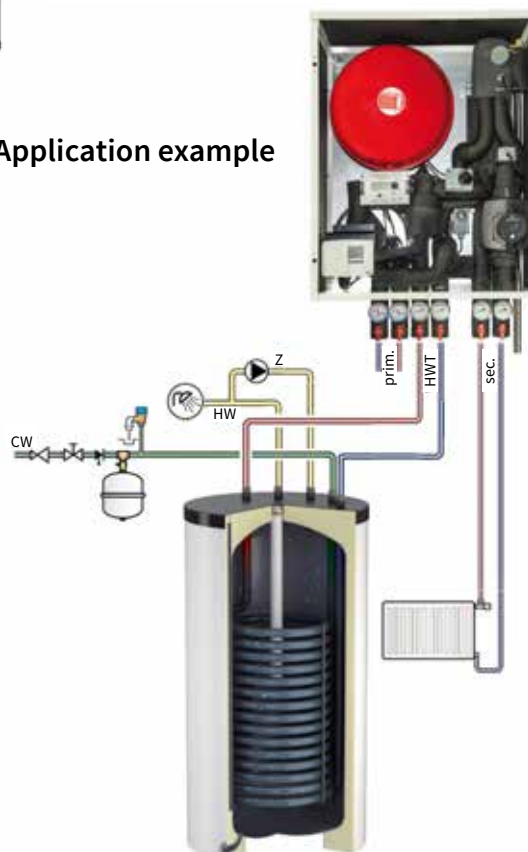


### 2.1 Series LogoMini - Stations for hot water provision via accumulator tank

These stations are available individually or with storage tank in the district heating cabinet:



#### 2.1.1 Series LogoMini - Application example





## 2. Series LogoMini - Small, compact systems



### 2.1.2 Series LogoMini - The station

- For indirect connection to the district heating network.
- Stations with a direct connection are also available.
- With weather-controlled heating circuit controller for one or more heating circuits on the secondary side.
- Hot water preparation on the primary or secondary side.

#### General technical details

- Output (see each station)
- Dimensions (without cabinet) incl. connections (H x W x D)  
940 x 650 x 330 mm
- Operating pressure: primary PN 10 (PN 16 in special design) and secondary PN 6
- Max. flow temperature 110 °C (for short periods)

#### This station is also available as a welded model with the following parameters:

- PN 16/130 °C or PN 25/150 °C (design on request)
- Housing thermally insulated on inside, 9 mm, thermal conductivity (DIN 52612 / EN ISO 12667)
- 0.040 W / MK at 40 °C
- Fitted with high-efficiency pumps and control components
- Special solutions on request

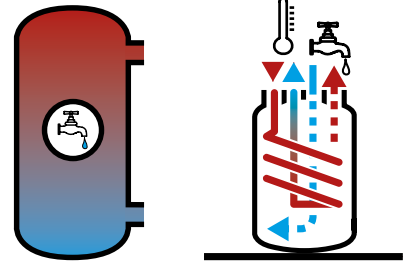


## 2. Series LogoMini - Small, compact systems



### 2.1.3 Storage tank UHP 110 and 160 L

- Indirectly heated storage tank with permanently welded-in bare-tube heat exchanger.
- High excess supply through very large heating surface area. Can be combined with all modern heating systems; especially suitable for heating via district heating compact stations. Fitted with a pocket for a temperature sensor and lateral drain connection.
- All system connections conveniently located on the top of the tank.



#### General technical details

- Permissible positive operating pressure: Tube length/tank: 16 bar / 10 bar
- Permissible operating temperature: Tube length/tank: 130 °C / 95 °C
- High-quality enamelling according to DIN 4753
- Incl. Mg anode
- Insulation: - Standard colour: white (RAL 9010)
- Thermal insulation: Direct foam insulation with polystyrene top layer

Type	Art. no.
Storage tank UHP 110	M10010.10
Storage tank UHP 160	M10010.11





## 2. Series LogoMini - Small, compact systems



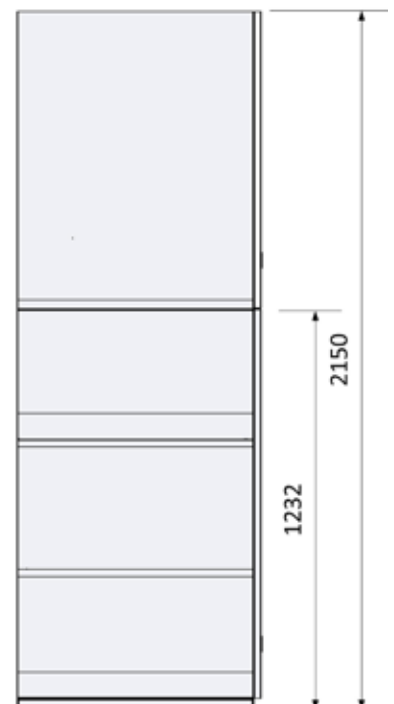
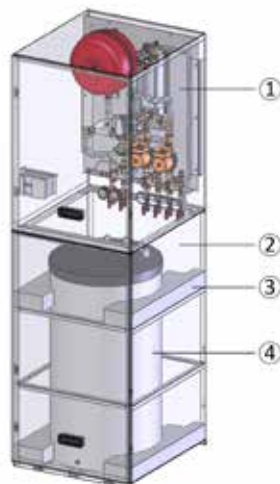
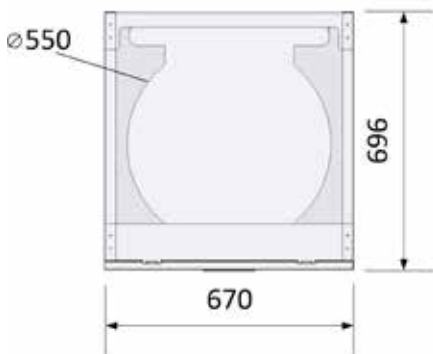
### 2.1.4 District heating cabinet



#### General technical details

- 1- Cabinet, upper part, incl. district heating station with controller
- 2- Cabinet, lower part
- 3- Transport lock for tank (if present)
- 4- Tank with connections at top

Type	Art. no.
Housing for tank complete	M10203.702
Housing for station complete	M10203.704
Pipe connection set	MB26800.900



## 2. Series LogoMini - Small, compact systems



### 2.1.5 Possible combinations (LogoMini with tank as cabinet installation)

Type of supply		Hot water tank connection		Hot water priority switching		Heating		Product type
Indirect	Direct	Secondary	Primary	Yes	Charging pump Yes	Unmixed	Mixed	
x	---	x	---	---	x	x	x	H26AF-SHF
x	---	x	---	---	x	x	---	H26AF-SH
x	---	---	x	x	---	x	---	H26AF-PH
x	---	---	x	x	---	x	x	H26AF-PHF
x	---	x	---	---	x	---	x	H26AF-SF
---	x	---	x	x	---	---	x	HAF-PH14

#### Legend for the following diagrams:

- 1 Heat exchanger
  - 2 Differential pressure regulator/volumetric flow limiter
  - 3 Motorised control valve
  - 4 Dirt trap
  - 5 Manometer
  - 6 Thermometer
  - 7 Ball valve
  - 8 Controller
  - 9 Outside temperature sensor
  - 10 Temperature sensor
  - 12 Heating circuit pump
  - 13 Temperature regulator
  - 14 Heat flow meter adaptor
  - 15 Check valve / backflow preventer
  - 16 Safety valve
  - 17 Venting
  - 18 Bleed valve
  - 19 MAG connections
  - 20 Three-way valve with actuator
  - 24 Valve with thermal actuator
  - 25 Thermal three-way valve
- FL Flow line  
 RL Return line  
 DH District heating  
 HC Heating circuit  
 UF Underfloor

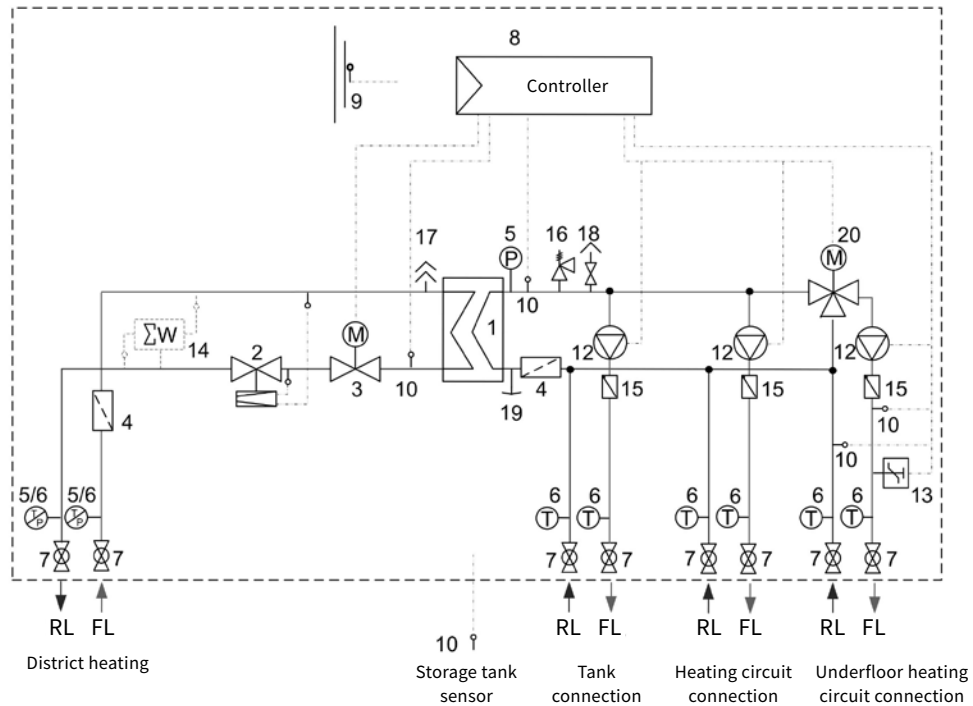
#### Additionally for local heating stations with hot water supply in continuous flow principle (see. chapter 2.2.1):

- 21 Thermal circulation bridge
- 22 Throttle plate / flow control valve
- 23 PF controller
- 25 Mixing valve
- 26 Twinlock nipple connection

#### Pipework connection

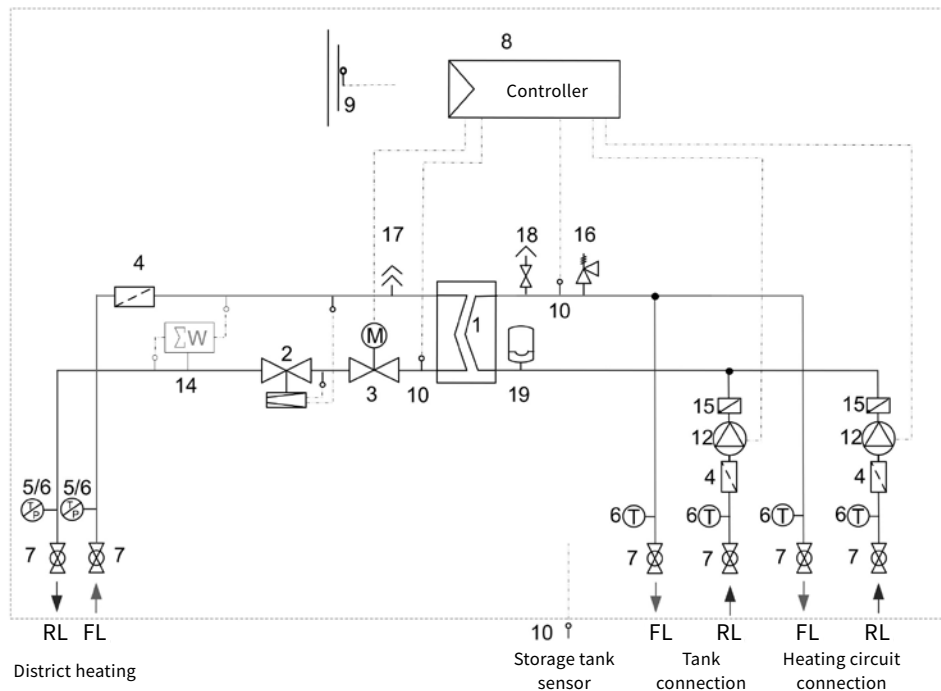


## 2. Series LogoMini - Small, compact systems



Indirect station with secondary side connections for hot water preparation, static heating circuit and underfloor heating circuit, each with a high-efficiency heating circuit pump.

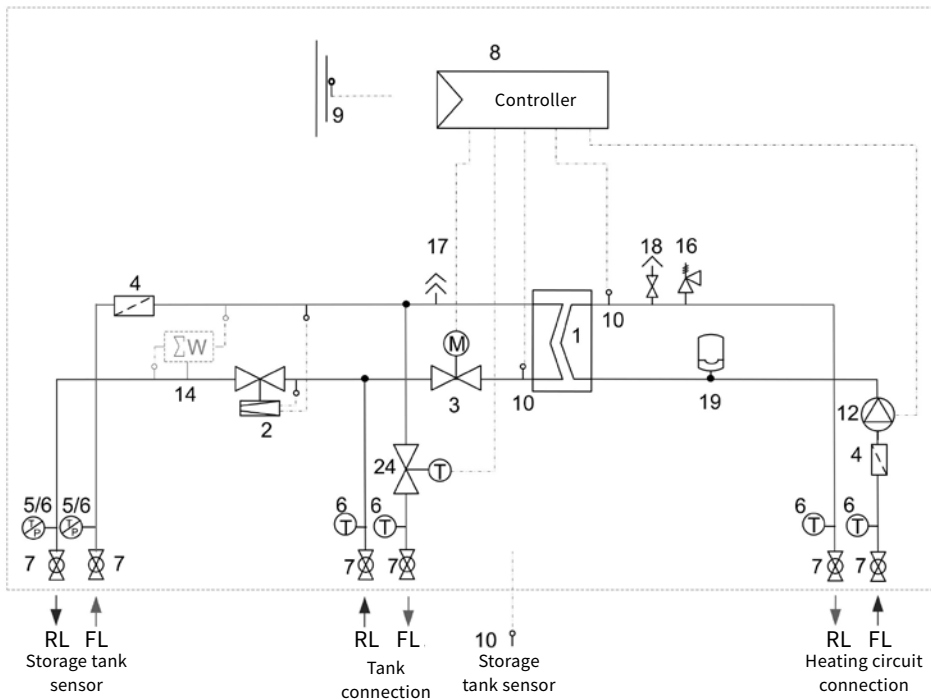
Type	Power	Art. no.
H 26 AF - SHF - SAMSON controller	up to 20 kW	M10810.26SHF7A
H 26 AF - SHF - Siemens controller	up to 20 kW	M10810.26SHF7A1



Indirect station with secondary side connections for hot water preparation with priority switching and static heating circuit, each with a high-efficiency heating circuit pump.

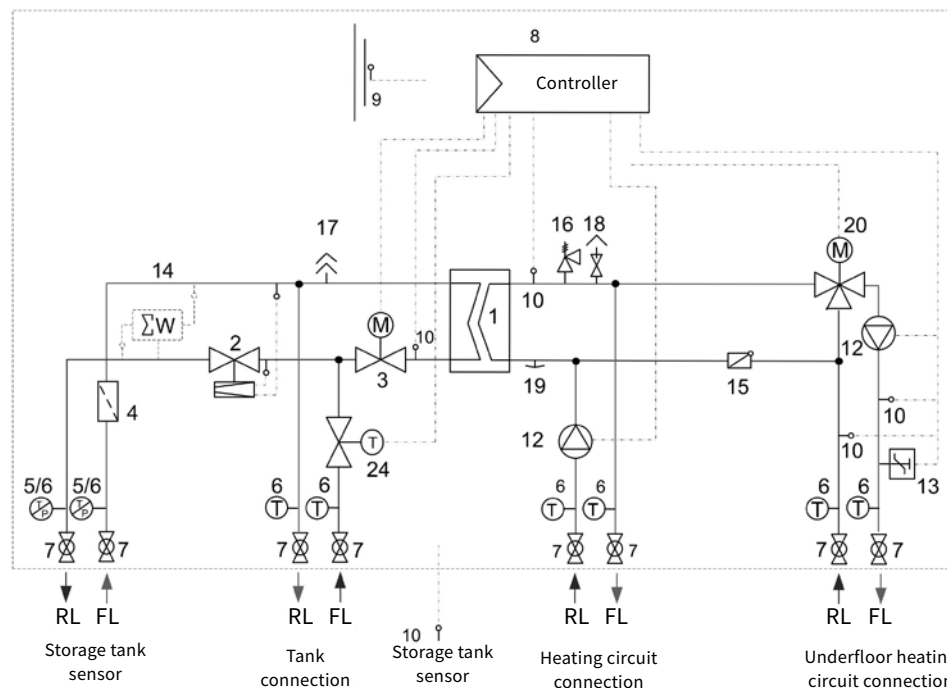
Type	Power	Art. no.
H 26 AF - SH - SAMSON controller	up to 20 kW	M10810.26SH22
H 26 AF - SH - Siemens controller	up to 20 kW	M10810.26SH23

## 2. Series LogoMini - Small, compact systems



Indirect station with primary side connections for hot water preparation with priority switching via thermoelectric actuator, and static heating circuit with high-efficiency heating circuit pump.

Type	Power	Art. no.
H 26 AF - PH - SAMSON controller	up to 20 kW	M10810.26PH25
H 26 AF - PH - Siemens controller	up to 20 kW	M10810.26PH26

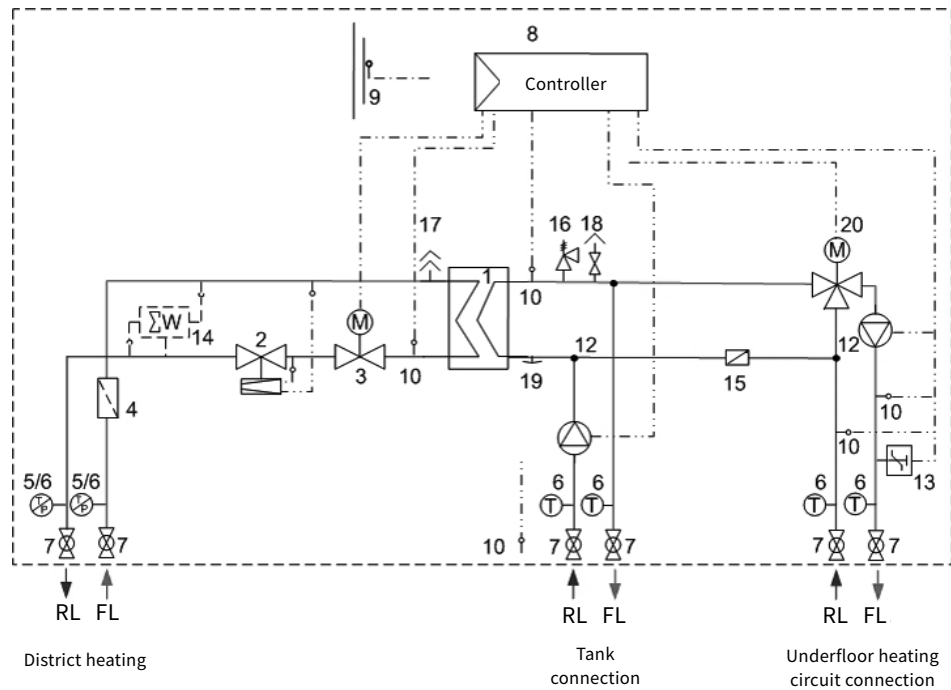


Indirect station with primary side connections for hot water preparation with priority switching via thermoelectric actuator, and one static and one underfloor heating circuit, each with a high-efficiency heating circuit pump.

Type	Power	Art. no.
H 26 AF - PHF - SAMSON controller	up to 20 kW	M10810.26PHF3.2
H 26 AF - PHF - Siemens controller	up to 20 kW	M10810.26PHF3.3

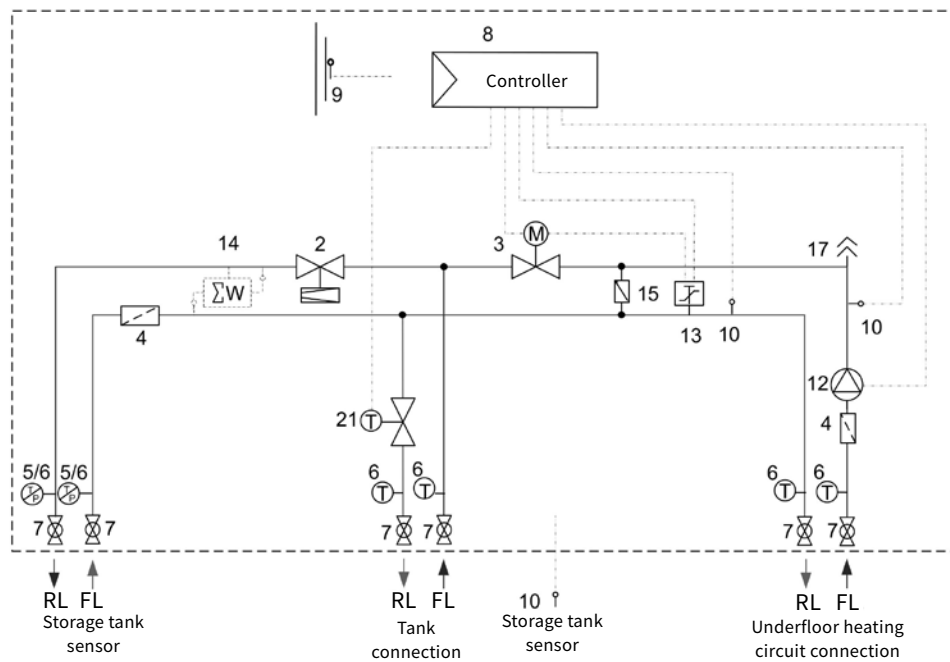


## 2. Series LogoMini - Small, compact systems



Indirect station with secondary side connections for hot water preparation in priority switching with charging pump and a connection for the underfloor heating circuit (via VMV mixing valve and Afriso type temperature controller)

Type	Power	Art. no.
H 26 AF - SF 5	up to 20 kW	M10810.26SF5



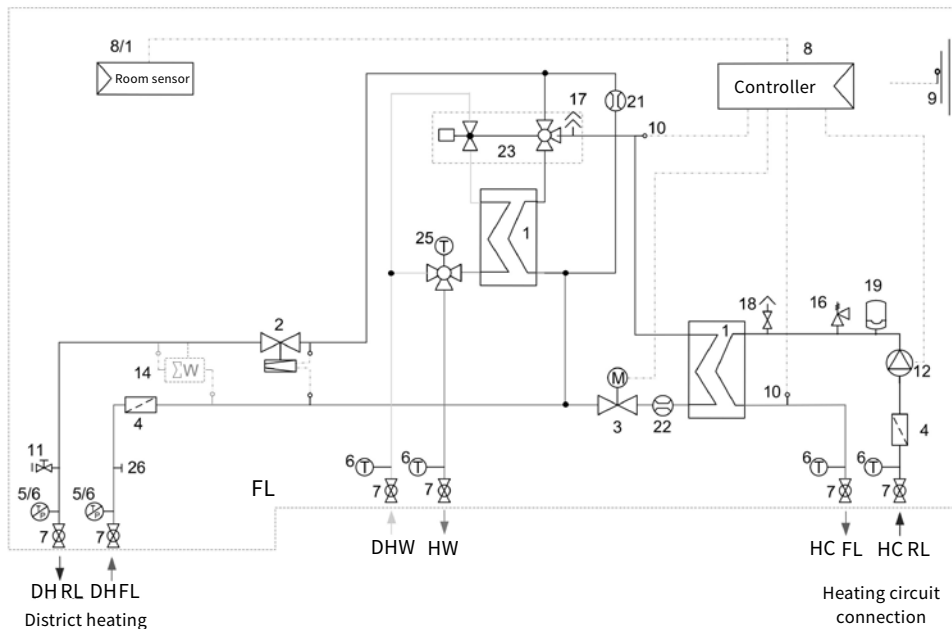
Direct station with hot water preparation via thermoelectric actuator and an underfloor heating circuit with high-efficiency heating circuit pump.

Type	Power	Art. no.
H AF - PH 14 - SAMSON controller	up to 20 kW	M10810.00PH14/1
H AF - PH 14 - Siemens controller	up to 20 kW	M10810.00PH14/2

## 2. Series LogoMini - Small, compact systems

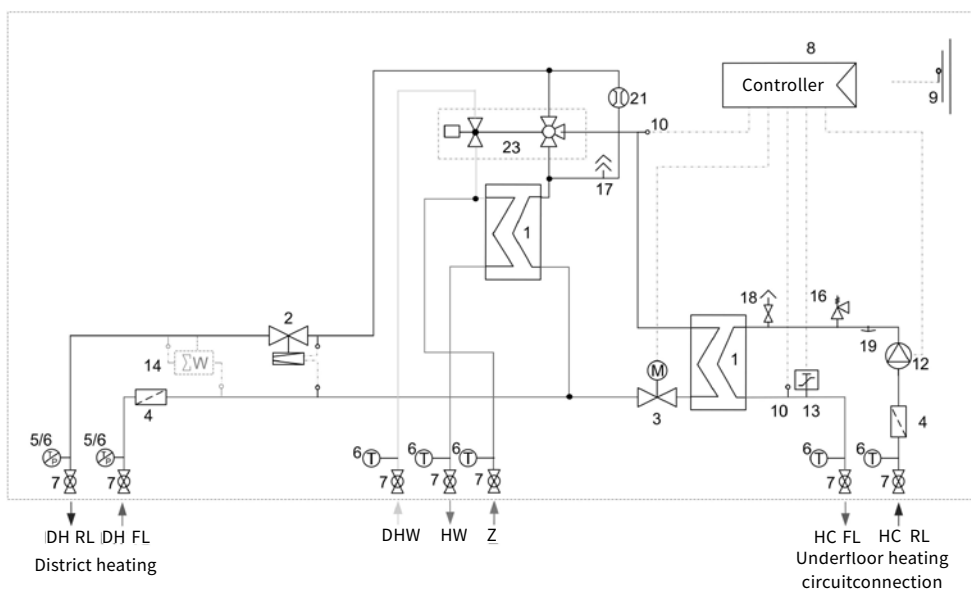


### 2.2 Stations with hot water tank in continuous flow principle 2.2.1 LogoMini - indirect stations



Indirect station (PN 10) with hot water preparation in continuous flow principle (12 l/min), thermostatic scalding protection and a secondary side static heating circuit with high-efficiency heating circuit pump.

Type	Power	Art. no.
HW 2 AF - OH2 - SAMSON controller	up to 20 kW	M10910.26OH2/7A
HW 2 AF - OH2 - Siemens controller	up to 20 kW	M10910.26OH2/8A



Indirect station (PN 10) with hot water preparation in continuous flow principle (15 l/min), domestic water circulation connection and a secondary side underfloor heating circuit with high-efficiency heating circuit pump.

Type	Power	Art. no.
HW 2 AF - OH8 - SAMSON controller	up to 20 kW	M10910.26OH8/8
HW 2 AF - OH8 - Siemens controller	up to 20 kW	M10910.26OH8/9



## 2. Series LogoMini - Small, compact systems

### 2.2.2 LogoTwin - indirect stations

The LogoTwin H (hydraulically controlled) and LogoTwin T (thermostatically controlled) complete stations are indirect, compact, plug-and-play, wall-mounted, decentralised transfer stations with housing in which the hot water preparation and heating of the living space are controlled proportionately according to volume. Indirect heating interface stations offer complete hydraulic separation between the primary and secondary sides via two stainless steel plate heat exchangers.



Fig. 1



Fig. 2

1 = Defined with a flow line temperature of 65 °C and heating of 40 K  
 2 = Defined with a flow line temperature of 65 °C and heating of 35 K

\* secondary side connections (room heating)

LogoTwin H		Hot water output				Fig.	Art. no.
		l/min <sup>1</sup>	kW <sup>1</sup>	l/min <sup>2</sup>	kW <sup>2</sup>		
35	Top connection	12	35	15	37		M10920.26OHT80
46	Top connection	17	46	20	50		M10920.40OHT80
35	Bottom connection	12	35	15	37	Fig. 1	M10920.26OHB80
46	Bottom connection	17	46	20	50		M10920.40OHB80

LogoTwin T		Hot water output		Fig.	Art. no.
		l/min <sup>1</sup>	kW <sup>1</sup>		
95	Top connection	30	95	Fig. 2	M10920.24OHT10
95	Bottom connection	30	95		M10920.24OHB10

LogoTwin - Design features		LogoTwin H 35 / 46	LogoTwin T
Dimensions (AP version)	Width in mm	500	500
	Height in mm (total length)	800	800
	Depth in mm	350	350
Connections		3/4"	1" (3/4")*
Max. pressure: primary heating / secondary heating / sanitary		PN10 / 3 bar / 6 bar	
Max. permissible temperatures: primary heating / secondary heating / sanitary		95 °C	
Supply voltage		230 V / 50 Hz	
Min. operating pressure (sanitary)		1.5 bar	
Max. differential pressure of the heating system (primary)		2.5 bar	
Heating capacity (65 °C flow line and 20 K spread)		10 kW	15 kW
Hot water preparation – stainless steel plate heat exchanger (copper-soldered), vertical design to reduce the risk of calcification			✓
Heating – stainless steel plate heat exchanger (copper-soldered), vertical design			✓
PF controller with priority switching, anti-calcification coating and DVGW approval		✓	-
Control valve for hot water (zone valve with actuator) in the primary circuit			✓
Bleed valve with hose connection on the heating side			✓
Adapter for heat meter in the primary circuit		¾" x 110 mm	1" x 130 mm
Adjustable thermostatic hot water control			✓
Pipework made from insulated stainless-steel corrugated pipes			✓
Mounted on base plate, with absolutely no mechanical stress, and inspected			✓
Dirt trap with stainless steel sieve insert in the primary and secondary circuit			✓
Heat retention function of the primary heating water feed can be set			✓
Differential pressure regulator for automatic hydraulic station balancing in the primary circuit			✓
Return line temperature limiter (preset to approx. 40 °C) in the primary circuit			✓
Membrane expansion tank in the secondary circuit			✓
Overpressure valve preset to 3 bar in the secondary circuit			✓
Manometer as pressure display in the secondary circuit			✓
Heating circulation pump (high-efficiency pump) in the secondary circuit			✓
Domestic water mixer in the hot water outlet, including scalding protection function (adjustable)			✓
Wall-mounted housing in white (RAL 9016)*			✓
Adapter for one valve for closing the primary circuit			✓

Accessories for LogoTwin H wall-mounted assembly rail	Art. No.
Top connection including ball valves 6 x DN20 straight	M10920.26OH183
Bottom connection including ball valves 6 x DN20 straight	M10920.26OH184
Accessories for LogoTwin T wall-mounted assembly rail	Art. No.
Top or bottom connections incl. ball valves 4x DN25 & 2x DN20 straight	M10920.24OH102

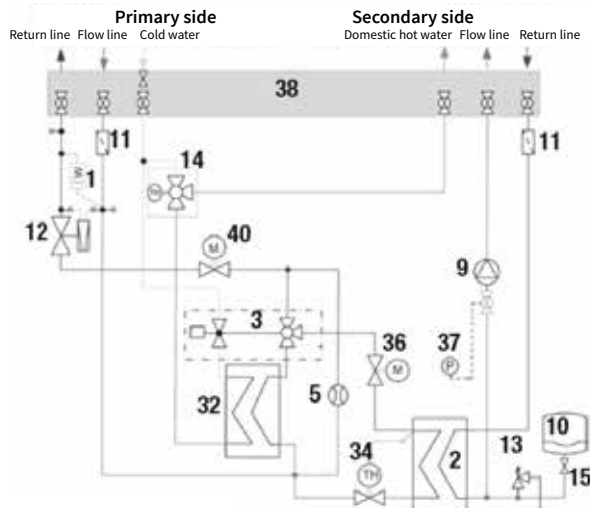


## 2. Series LogoMini - Small, compact systems

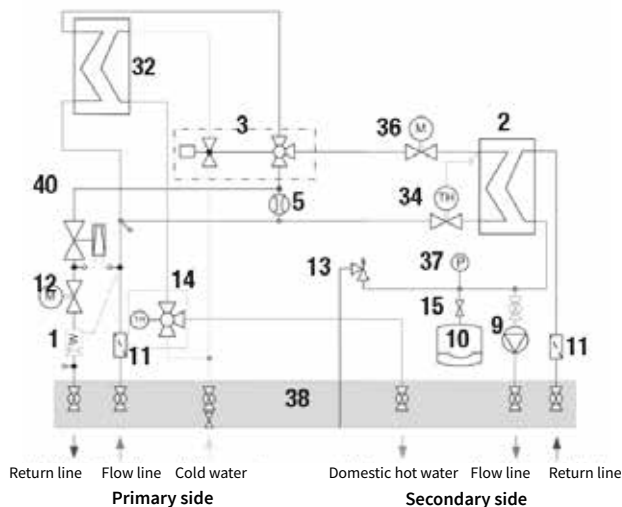


### LogoTwin H

Hydraulic structure and diagram of LogoTwin H with top connections



Hydraulic structure and diagram of LogoTwin H with bottom connections



#### Description of the parts

- 1 Heat meter
- 2 Plate heat exchanger for room heating
- 3 Proportional mixing controller (PM valve)
- 5 Thermostatic circulation bridge
- 9 Circulation pump, room heating
- 10 Expansion vessel, secondary circuit
- 11 Dirt trap with strainer
- 12 Differential pressure control valve
- 13 Overpressure limiting valve (3 bar)
- 14 Thermostatic mixing valve for domestic hot water
- 15 Quick connection for expansion vessel
- 32 Plate heat exchanger for domestic hot water
- 34 Return line temperature limiter (from room heating side), primary circuit
- 36 Zone valve for room heating, primary circuit
- 37 Manometer, secondary circuit
- 38 Mounting rail with ball valve (3/4" female) and flushing bypass
- 40 Shut-off valve, Prepayment, 230 V, 50 Hz (optional)

#### External connections

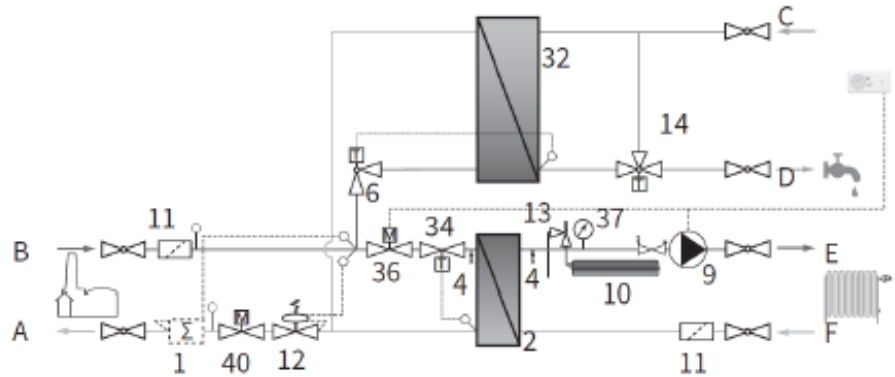
- A Primary return line
- B Primary flow line
- C Cold water
- D Domestic hot water
- E Secondary flow line, room heating
- F Secondary return line, room heating
- G Vent line safety valve



## 2. Series LogoMini - Small, compact systems

### LogoTwin T

LogoTwin T diagram



#### Description of the parts

- 1 Heat meter (not shown)
- 2 Plate heat exchanger for room heating
- 4 Bleed valve
- 6 Thermostatic valve (hot water regulation)
- 9 Circulation pump, room heating
- 10 Expansion vessel (10 l), secondary circuit
- 11 Dirt trap with strainer
- 12 Differential pressure control valve
- 13 Overpressure limiting valve (3 bar)
- 14 Thermostatic mixing valve for domestic hot water
- 15 Quick connection for expansion vessel
- 32 Plate heat exchanger for domestic hot water
- 34 Return line temperature limiter (from room heating side), primary circuit
- 36 Zone valve for room heating, primary circuit
- 37 Manometer, secondary circuit
- 40 Shut-off valve, Prepayment, 230 V, 50 Hz (optional, not shown)

#### External connections

- A Primary return line
- B Primary flow line
- C Cold water network
- D Domestic hot water
- E Secondary flow line, room heating
- F Secondary return line, room heating
- G Vent line safety valve

## 3. LogoDistrict



**LogoDistrict** are compact, connection-ready, indirect local and district heating stations for indirect heating supply and direct or indirect supply of the hot water tank, and can be individually configured according to the available technical connection conditions. The stations offer a space-saving setup, are easily mountable and developed for a high level of service-friendliness through the externally visible displays, the easily removable housing and the arrangement of the components within the station.



### Ideal for

- Fitting new residential builds with state-of-the-art technology
- Complete renovations of heating systems
- Exchange of existing local or district heating stations

### Your main advantages for a high level of customer satisfaction

- Space-saving, compact design
- Completely pre-assembled with full internal wiring
- Quick and simple installation
- Easy access to all components
- Visibility of all pressure and temperature displays and the controller without removing the cover
- High energy efficiency through complete insulation of the housing
- Project-specific and individual configuration options
- Can also be used with high primary network temperatures and pressures

### Optional

- Consumption metering with heat flow meters (with or without data communication via radio or M-Bus) from, for example, Rossweiner (110 mm – 3/4" or 130 mm – 1" / performance-dependent)
- Can be extended with modular assemblies such as manifolds, pump groups, etc.



## 3. LogoDistrict

### Models / output

- o LogoDistrict S-Line: 30 kW<sup>1</sup>
- o LogoDistrict M-Line: 50 kW<sup>1</sup>
- o LogoDistrict L-Line: 80 kW<sup>1</sup>

<sup>1</sup>for design temperatures of 110 °C / 130 °C flow line and 55 °C return line.

### Technical specifications

Max. pressure load:	PN16 <sup>2</sup>
Max. temperature load:	130 °C <sup>2</sup>
Dimensions (HxWxD) in mm:	1,250 x 790 x 510

<sup>2</sup>Depending on the type of model and selected control components (relay and control valves as well as connection sets)



### LogoDistrict (base station) equipment features

1. Primary connections (top or bottom, can be selected in advance)
2. Axial distances of 125 mm as standard dimension as also found in Meibes heating circuit manifolds and pump groups
3. Stainless steel plate heat exchanger for the heating supply
4. Adaptors for installation of a heat flow meter
5. Insulated housing for high efficiency
6. Dirt trap (primary flow line and secondary return line) for protecting the station
7. Safety group on secondary side incl. display manometer, connection for expansion vessel 1" male thread (DN20) secondary side, sensor mount 1/2" female thread (100 mm) for temperature controller/safety temperature monitor (secondary flow line)



### LogoDistrict – individual project-specific equipment options

1. Relay valves, flow rate controllers, differential pressure regulators (or combination valves) in the primary flow or return line
2. Electronic controller for efficient hot water and heating system regulation
3. Temperature monitor, safety temperature monitor (or combination device)
4. Manometer and thermometer capable of being shut off
5. Ball valves for shutting off the primary and secondary circuits
6. Filling and drain connections in the secondary circuit
7. Tank temperature sensor
8. Outside temperature sensor
9. Integration of heat flow meter

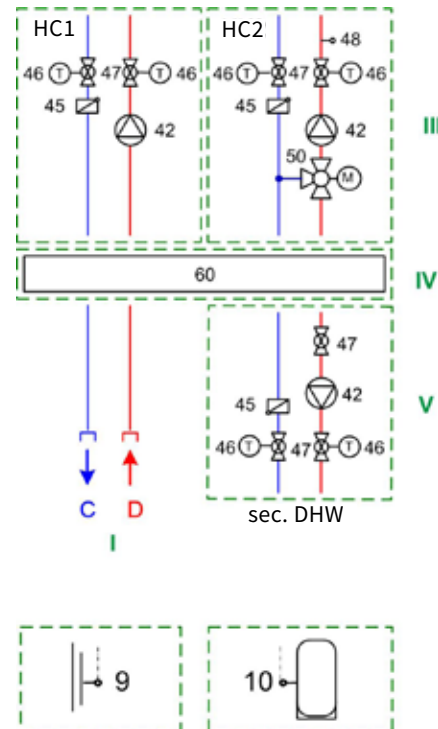
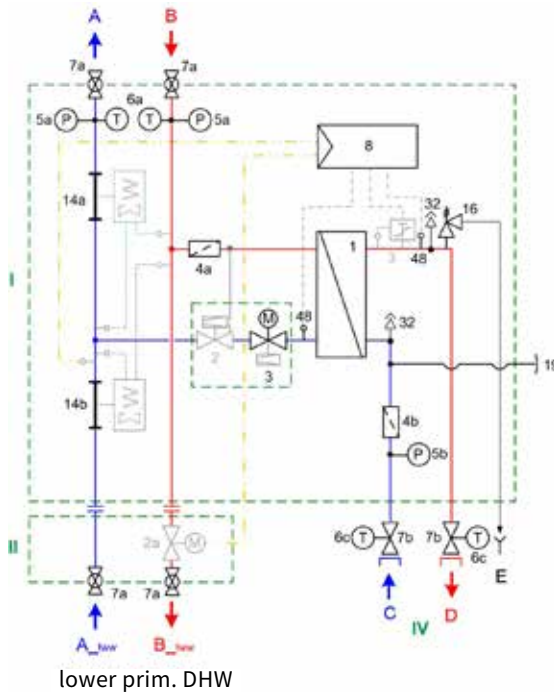


# 3. LogoDistrict

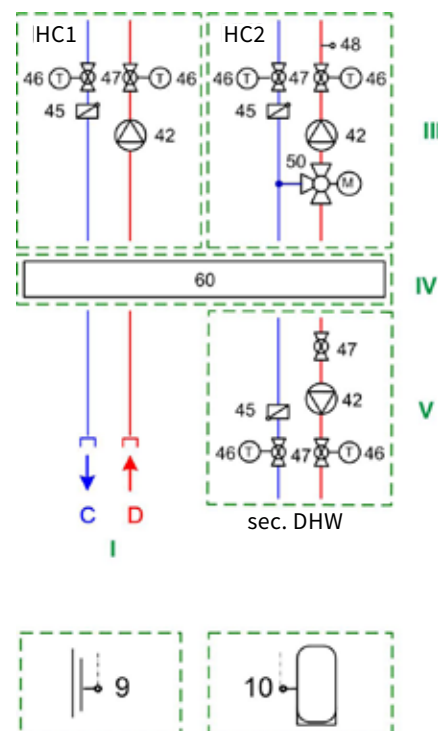
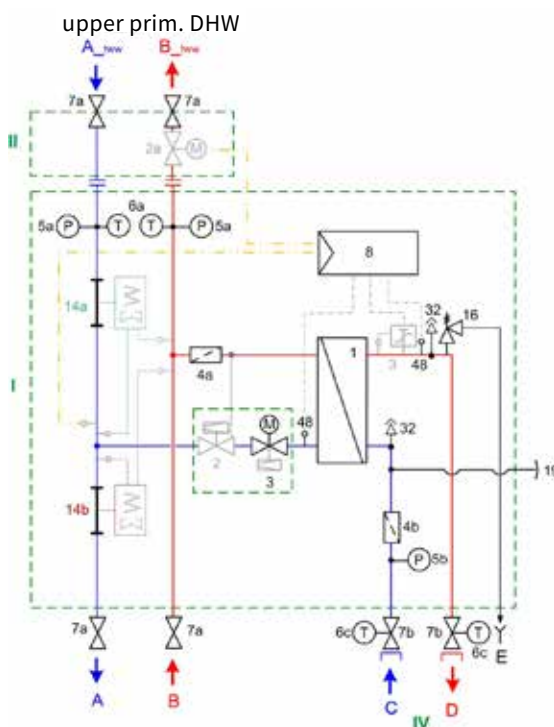


## Hydraulic diagrams of the LogoDistrict basic modules and optional accessories

Variant with district heating connections at top:



Variant with district heating connections at bottom:





## 3. LogoDistrict

Pos. <i>(Options)</i>	Brief description	Components/elements	Type
1		Stainless steel plate heat exchanger (copper welded) with thermal insulation	
2	1V / 3V, 3CV	Differential pressure/flow rate controller in return line (also possible in flow line)	optional
3	1V-FC / 3V-FC, 1V-FC-DP / 3V-FC-DP	Relay valve with actuator in return line (also possible in flow line)	optional as combination valve
2a	1M- / 3M-DHW	Relay valve for domestic hot water (DHW), primary side	optional
4a		Dirt trap with strainer, primary side	with stopper DN25
4b		Dirt trap with strainer, secondary side	with stopper DN50
5a	1M / 3M	Manometer with remote sensor, primary side	max. 16 bar
5b		Manometer with remote sensor, secondary side	max. 4 bar
6a	3T	Thermometer 0 - 160 °C (red/blue), primary side, 130 °C variant	sep., with remote sensor
6b	1VS	Thermometer 0 - 120 °C (red/blue), primary side, 110 °C variant	at primary side shut-off valve
6c	CS-T	Thermometer 0 - 120 °C (red/blue), secondary side	at secondary side shut-off valve
7a	1VS / 3VS	Shut-off valves, primary side	optional
7b	CS-T	Shut-off valves, secondary side	optional
7c	1OS / 3OS	Ball valves for venting/draining, primary side, top or bottom depending on connection	optional, required e.g. for subsequent heat flow meter (HFM) installation (for 14a, b)
8	EC	Controller	optional
9		Outside temperature sensor	optional control accessory
10		Storage tank sensor	optional control accessory
13	Temperature regulator/safety temperature controller	Double thermostat with TH, secondary side safeguard	variant-dependent
14		Meter adaptor for ¾" x 110 mm HFM	2 pcs., if available
14a, b		Meter adaptor for 1" x 130 mm HFM	each mounted
16		Safety valve ½" x ¾" 3 bar, with vent line	
19		Connecting pieces for expansion vessel, 1" male thread with SW 36 mm	
31		Stopper MS 1" with O-ring	
32		Vent stopper ½", 10 bar	
34		EPP thermal insulation	
42		Heating circuit pump	optional
45		Backflow preventer	optional
46		Thermometer	
47		Shut-off ball valve	
48		Temperature sensor	
50		Mixing valve with actuator	optional
60		Heating circuit manifold	optional

### Connections

A	District heating return line, primary side 1"	DN 25
B	District heating flow line, primary side 1"	DN 25
C	Return line, secondary side 1 ¼" female thread	
D	Flow line, secondary side 1 ¼" female thread	
E	Safety valve exhaust pipe (led outside the housing)	DN 20

### Components and modules

I	Basic module of district heating station
II	DHW module primary side, optional
III	Heating circuit pumps, optional
IV	Heating circuit manifold, optional
V	Pump group for DHW provision secondary side, optional

# 3. LogoDistrict



Technical data of the LogoDistrict for the primary side application are up to 110 °C or PN10:

Base station		S-Line		M-Line		L-Line	
		30 kW <sup>1</sup>		50 kW <sup>1</sup>		80 kW <sup>1</sup>	
Primary power supply:	top	12001.3T		12001.5T		12001.8T	
Primary power supply:	bottom	12001.3B		12001.5B		12001.8B	
<b>Nominal layout of the base station &amp; basic data</b>							
<small><sup>1</sup> Power ratings based on the indicated primary flow and return line temperatures</small>							
Flow rate on primary side at 110 °C flow line and 55 °C return line		0.5 m <sup>3</sup> /h		0.8 m <sup>3</sup> /h		1.25 m <sup>3</sup> /h	
Flow rate on secondary side at 70 °C flow line and 55 °C return line		1.3 m <sup>3</sup> /h		2.2 m <sup>3</sup> /h		3.5 m <sup>3</sup> /h	
Primary / secondary connections:				DN25 / DN32			
Max. temperature & pressure load on secondary side:				110 °C - PN6			
Differential pressure on primary side min./max.:				0.6 bar / 8.0 bar			
<b>Primary side relay and control valves up to 110 °C / PN10 for use in the primary return line</b>							
<small><sup>2</sup> further relay and control valves for use in the flow line available on request</small>							
1P	Adaptors installed (possible use of relay and control valves by the customer)			TS-12001.000			
1V	Relay valve with 3-point actuator <sup>2</sup> (V)	V	TS-12101 S001	TS-12101 M001	TS-12101 L001		
			Kvs 1.6	Kvs 2.5	Kvs 4.0		
1V-FC	Relay valve with 3-point actuator <sup>2</sup> (V) & flow rate controller of type "Samson 45-9" (FC)	V	TS-12101 S003	TS-12101 M003	TS-12101 L003		
			Kvs 1.6	Kvs 2.5	Kvs 4.0		
1V-FC-DP	Relay valve with 3-point actuator <sup>2</sup> (V) & flow rate/differential pressure limiter of type "Samson 46-6" (FC-DP)	FC	Kvs 1.0	Kvs 2.5	Kvs 4.0		
			TS-12101 S004	TS-12101 M004	TS-12101 L004		
1V-FC-DP		V	Kvs 1.6	Kvs 2.5	Kvs 4.0		
			FC-DP	Kvs 2.5	Kvs 2.5	Kvs 4.0	
<b>Primary side modules &amp; connection assemblies up to 110 °C / PN10</b>							
1M-DHW	Control module for connection to primary side hot water preparation (accumulator tank), relay valve with 3-point actuator, incl. 2x temperature sensor (primary return line & hot water tank)			TS-12101 S101	TS-12101 M101	TS-12101 L101	
		M-DHW	Kvs 1.6	Kvs 2.5	Kvs 4.0		
1VS	Shut-off set with 2x screw-on ball valves with integrated display thermometer			TS-12101.101			
1M	2x display thermometer flow line/return line in EPP insulation with remote sensor			TS-12001.201			
1OS	2x drain/vent ball valves up to 110 °C (Use for primary side venting for power supply from below / draining for power supply from top)			TS-12001.202			
<b>Secondary side modules &amp; connection assemblies</b>							
<small><sup>3</sup> for actuator drives with emergency function, mandatory for primary temperatures &gt;120 °C</small>							
STC <sup>3</sup>	Safety temperature monitor, type "5343-2"			TS-12001.903			
TR/STC <sup>3</sup>	Double thermostat for protecting the secondary side type "5348-1"			TS-12001.902			
CS-T	Shut-off set with 2x screw-on ball valves & with integrated display thermometer			TS-12001.901			
<b>Electronic system controller</b>							
EC	Type "Samson Trovis 5573" for controlling the primary side, incl. 2x temperature sensors (primary return line & secondary flow line). Additionally regulates up to three further secondary supply circuits: 1x mixed heating circuit, 1x unmixed heating circuit, 1x hot water tank (further control circuits possible on request)			TS-12001.001			
<b>Generally separate accessories</b>							
80590.26	Storage tank sensor / control sensor						
10211.038	Outside temperature sensor						
80592.353	Safety temperature monitor (STW) type "5343-2", with 1/2" thread, TL=100 x 8 mm, 40-100 °C						
80592.0491	Stainless steel immersion sleeve with 1/2" thread, TL=100 x 8 mm						
M80592.055	Temperature controller/safety temperature monitor type "5348-2", with 1/2" thread, 0-120 °C or 40-100 °C						
80592.048	Stainless steel immersion sleeve with 1/2" thread, TL=150 x 15 mm						
M45160.01	Contact thermostat 230 V						





## 3. LogoDistrict

Technical data of the LogoDistrict for the primary side application are up to 130 °C or PN16:

Base station		S-Line		M-Line		L-Line		
		30 kW <sup>1</sup>		50 kW <sup>1</sup>		80 kW <sup>1</sup>		
Primary power supply: top		12001.3T		12001.5T		12001.8T		
Primary power supply: bottom		12001.3B		12001.5B		12001.8B		
<b>Nominal layout of the base station</b>								
<small><sup>1</sup> Power ratings based on the indicated primary flow and return line temperatures</small>								
Flow rate on primary side at 130 °C flow line and 55 °C return line		0.4 m³/h		0.6 m³/h		1.00 m³/h		
Flow rate on secondary side at 70 °C flow line and 55 °C return line		1.3 m³/h		2.2 m³/h		3.5 m³/h		
Primary / secondary connections:		DN25 / DN32						
Max. temperature & pressure load on secondary side:		110 °C - PN6						
Differential pressure on primary side min./max.:		0.6 bar / 8.0 bar						
<b>Primary side relay and control valves up to 130 °C / PN16 for use in the primary return line</b>								
<small><sup>2</sup> further relay and control valves for use in the flow line available on request</small>								
<b>3P</b>	Adaptors installed (possible use of relay and control valves by the customer)	<b>TS-12201.000</b>						
<b>3V</b>	Relay valve type "Samson 3222" <sup>2</sup> with actuator type "Samson 5825-10" (emergency function) - (V)		<b>TS-12201 S001</b>		<b>TS-12201 M001</b>		<b>TS-12201 L001</b>	
		V	Kvs 1.6		Kvs 2.5		Kvs 4.0	
<b>3CV</b>	Combination flow rate controller type "Samson 2488" with actuator type "Samson 5825-10" (emergency function) - (CV)		<b>TS-12201 S002</b>		<b>TS-12201 M002</b>		<b>TS-12201 L002</b>	
		CV	Kvs 1.0		Kvs 2.5		Kvs 4.0	
<b>3V-FC</b>	Samson relay valve type "3222" <sup>2</sup> with relay valve type "5825-10" (emergency function) - (V) & flow rate controller of type "45-9" (FC)		<b>TS-12201 S003</b>		<b>TS-12201 M003</b>		<b>TS-12201 L003</b>	
		V	Kvs 1.6		Kvs 2.5		Kvs 4.0	
<b>3V-FC-DP</b>	Relay valve type "Samson 3222" <sup>2</sup> with actuator type "Samson 5825-10" (emergency function) (V) & flow rate/differential pressure controller type "46-7" (FC-DP)		<b>TS-12201 S004</b>		<b>TS-12201 M004</b>		<b>TS-12201 L004</b>	
		V	Kvs 1.6		Kvs 2.5		Kvs 4.0	
<b>3V-FC-DP</b>		FC-DP	Kvs 1.0		Kvs 2.5		Kvs 4.0	
			Kvs 1.0		Kvs 2.5		Kvs 4.0	
<b>Primary side modules &amp; connection assemblies up to 130 °C / PN16</b>								
<b>3M-DHW</b>	Control module for connection to primary side hot water preparation (accumulator tank), relay valve of type "Samson 3222" with actuator type "Samson 5825-10" (emergency function), incl. 2x temperature sensor (primary return line & hot water tank)		<b>TS-12201 S101</b>		<b>TS-12201 M101</b>		<b>TS-12201 L101</b>	
		M-DHW	Kvs 1.6		Kvs 2.5		Kvs 4.0	
<b>3VS</b>	Shut-off set with 2x welded-on ball valves	<b>TS-12201.101</b>						
<b>3T</b>	2x display thermometer flow line/return line in EPP insulation with remote sensor	<b>TS-12201.201</b>						
<b>3M</b>	2x display pressure gauge flow line/return line in EPP insulation with remote sensor	<b>TS-12001.201</b>						
<b>3OS</b>	2x drain/vent ball valves (Use for primary side venting for power supply from below / draining for power supply from top)	<b>TS-12001.202</b>						
<b>Secondary side modules &amp; connection assemblies</b>								
<small><sup>3</sup> for actuator drives with emergency function, mandatory for primary temperatures ≥120 °C</small>								
<b>STC<sup>3</sup></b>	Safety temperature monitor type "5343-2"	<b>TS-12001.903</b>						
<b>TR/STC<sup>3</sup></b>	Double thermostat for protecting the secondary side type "5348-1"	<b>TS-12001.902</b>						
<b>CS-T</b>	Shut-off set with 2x screw-on ball valves & with integrated display thermometer	<b>TS-12001.901</b>						
<b>Electronic system controller</b>								
<b>EC</b>	Type "Samson Trovis 5573" for controlling the primary side, incl. 2x temperature sensors (primary return line & secondary flow line). Additionally regulates up to three further secondary supply circuits: 1x mixed heating circuit, 1x unmixed heating circuit, 1x hot water tank (further control circuits possible on request)	<b>TS-12001.001</b>						
<b>Generally separate accessories</b>								
<b>80590.26</b>	Storage tank sensor / control sensor							
<b>10211.038</b>	Outside temperature sensor							
<b>80592.353</b>	Safety temperature monitor (STW) type "5343-2", with 1/2" thread, TL=100 x 8 mm, 40-100 °C							
<b>80592.0491</b>	Stainless steel immersion sleeve with 1/2" thread, TL=100 x 8 mm							
<b>M80592.055</b>	Temperature controller/safety temperature monitor type "5348-2", with 1/2" thread, 0-120 °C or 40-100 °C							
<b>80592.048</b>	Stainless steel immersion sleeve with 1/2" thread, TL=150 x 15 mm							
<b>M45160.01</b>	Contact thermostat 230 V							





## 4. Complementary products



### Complementary products for your project-specific implementation



#### Accumulator tank

Indirectly heated stainless steel free-standing tank with tube heat exchanger for domestic water heating. Installation-friendly design. Fitted with connections for thermometer and temperature sensor/thermostat.



**MeiFlow S-Line MF - heating manifold up to 70 kW with 3, 5 or 7 heating circuits** with EPP insulation, with 2, 3 or 4 connection pairs each at top and bottom (lower connections additionally usable), for setting up the pump groups, fitting on pipe connection groups, complete with the necessary screw fittings and connection parts.



**Wall bracket for MeiFlow S-Line MF - heating manifold**



**MeiFlow S-Line BG - boiler guard K up to 70 kW incl. air/gas separator, dirt separators and a magnetite separator.**

Horizontal and vertical axial distance 125 mm. Including immersion sleeve for flow line sensor with diameters up to 10 mm and insulation.



**Connector set for direct installation for pump groups on MeiFlow S-Line BG - boiler guard (use without manifold)**



#### MeiFlow Top S-Line UC

Pump group for an unmixed heating circuit or tank charging



#### MeiFlow Top S-Line MC

Pump group for an unmixed heating circuit or tank charging

Application for manifold up to 70 kW; axial distance 125 mm; complete with or without recirculation pump (EL 180 mm, various types available); interchangeable 3-way T mixer (right/left) with continuously adjustable bypass (MC version only); with contact thermometer; with EPP insulation



**Servomotor with integrated regulation of the temperature incl. assembly kit** for direct installation on the mixer. Voltage supply 230 V~, 50 Hz digital setpoint setting and temperature indicator, emergency manual mode, position indicator



#### MeiFlow Combi - compact pump groups

Thermally insulated, compact pump group for two different or identical heating circuits (UK/MK), available with various pump types and servomotor for mixing circuit application, with common manifold, connection options for temperature sensors, backflow preventer in respective supply line, contact thermometer integrated into the grip elements of the flow and return lines, third heating circuit e.g. for tank charging in the optional accessory, e.g. for domestic water heating



#### Heat flow meter (MID approved) from Rossweiner

Available as mechanical or ultrasound heat flow meters as well as, depending on the model, simple meters or with remote communication by radio (OMS) or M-Bus.



## 5. LogoMax - large systems and stations

In the area of medium-size and large local and district heating systems, Meibes offers a large number of existing solutions and possibilities for customer-specific concepts. Here are just 2 examples of standardised solutions which can also be adapted to the individual customer.

**LogoMax Basic** consisting of:

- welded and powder-coated steel frame.
- welded shut-offs on the primary network side (all other fittings, valves and connections are bolted).
- water top-up system for manual operation.
- Control system with the power supply and outside temperature sensor as well as the main switch in the control cabinet. All electrical wiring is sheathed in corrugated plastic tubing and fastened to the frame with ties.
- simple, soft pipe insulation of straight pipe sections and insulation of the heat exchanger. Material EPDM synthetic rubber (without freon and PVC) with temperature resistance of up to 175 °C.

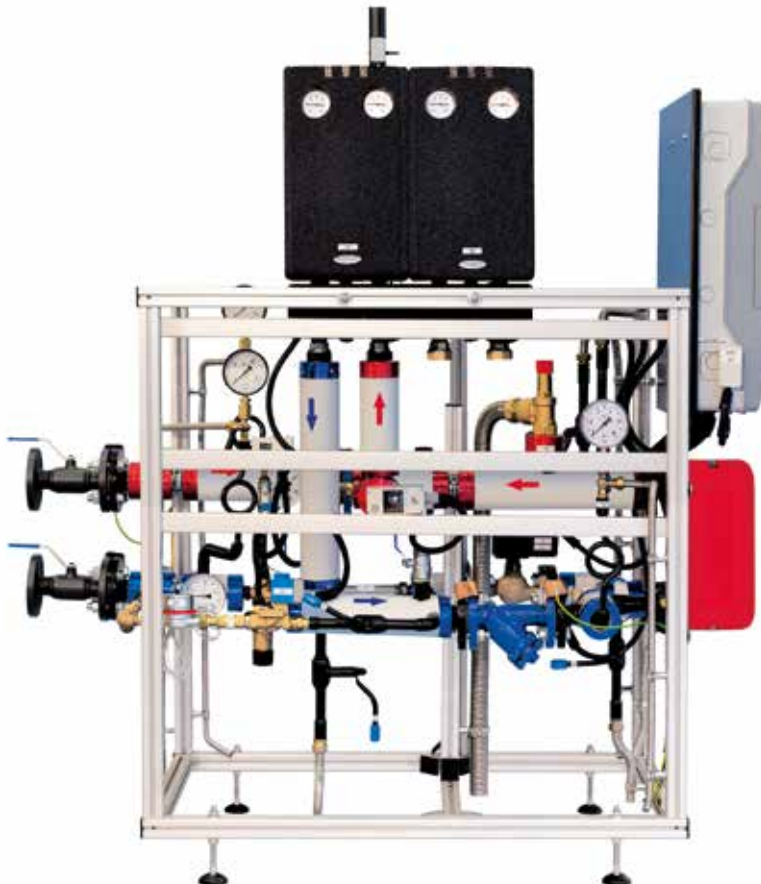


## 5. LogoMax - large systems and stations



**LogoMax Profi** consisting of:

- a lightweight and corrosion-resistant frame made from high-quality aluminium profiles.
- flanged network shut-off valves and valves in the system as well as flanged fittings (excluding the system part of the domestic water installation, which is bolted). Moreover, welded drain and bleed valves as well as welded shut-off valves on the water top-up system.
- an automatic water top-up system with solenoid valve and pressure switch, and optionally with automatic or manual control in the control cabinet.
- a control system housed in the metal control cabinet containing the main switch and the connections for the main supply as well as the outside temperature sensor in separate compartments. The connections of the potential equalisation (earth) are laid to the terminal strip. Electrical and signal cables are laid separately from each other in aluminium ducts.
- hard insulation for the heat exchanger (original from the manufacturer of the heat exchanger). The station pipes are insulated with PVC-coated polyurethane foam with aluminium coating and flow labelling (blue - return line, red - flow line).
- a drain from safety valves, drains and bleed openings made from stainless steel up to the level of the frame pedestal.



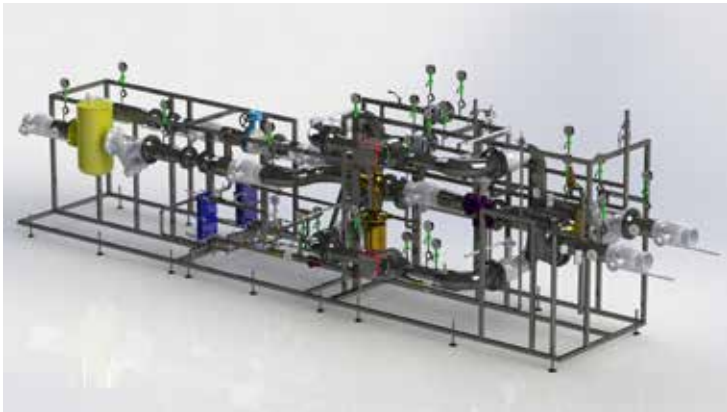


## 5. LogoMax - large systems and stations

**Examples of customer-specific solutions and products**



## 5. LogoMax - large systems and stations





## 5. LogoMax - large systems and stations



## 6. Large systems for distributing heat



The **Meibes large manifold system** consists of a manifold with 2 and/or 3 circuit modules, pump groups and the boiler guard (with or without hydraulic diverter).

The modular system makes insertion easy, and installation quick and simple.

The system can be very flexibly and individually planned and installed, thus permitting its use also in tight spaces, e.g. in a corner installation. In this variant, the modules are connected accordingly using a 90° bracket, and the ends of both module versions are sealed with a blind cover.

Pump groups DN25 to DN65 come pre-assembled, including dirt trap (for pump groups DN40 - DN65), shut-off valves, backflow limiter and insulation.

They must simply be connected to the manifold. If required, a meter installation fitting can also be provided.

A wide selection of high-efficiency pumps is available.

The boiler guard is a complete unit which is installed between the boiler and the manifold. This contains an air separator and a dirt trap with magnetite separator (to protect the HE pumps) and can be delivered either with or without a hydraulic diverter.

The connections are made to fit the manifold, ensuring easy installation. Individual assemblies are connected securely and easily using instant release clamps (BigFixLock). These have been tried and tested in pressure systems (e. g. sprinklers) for many years.



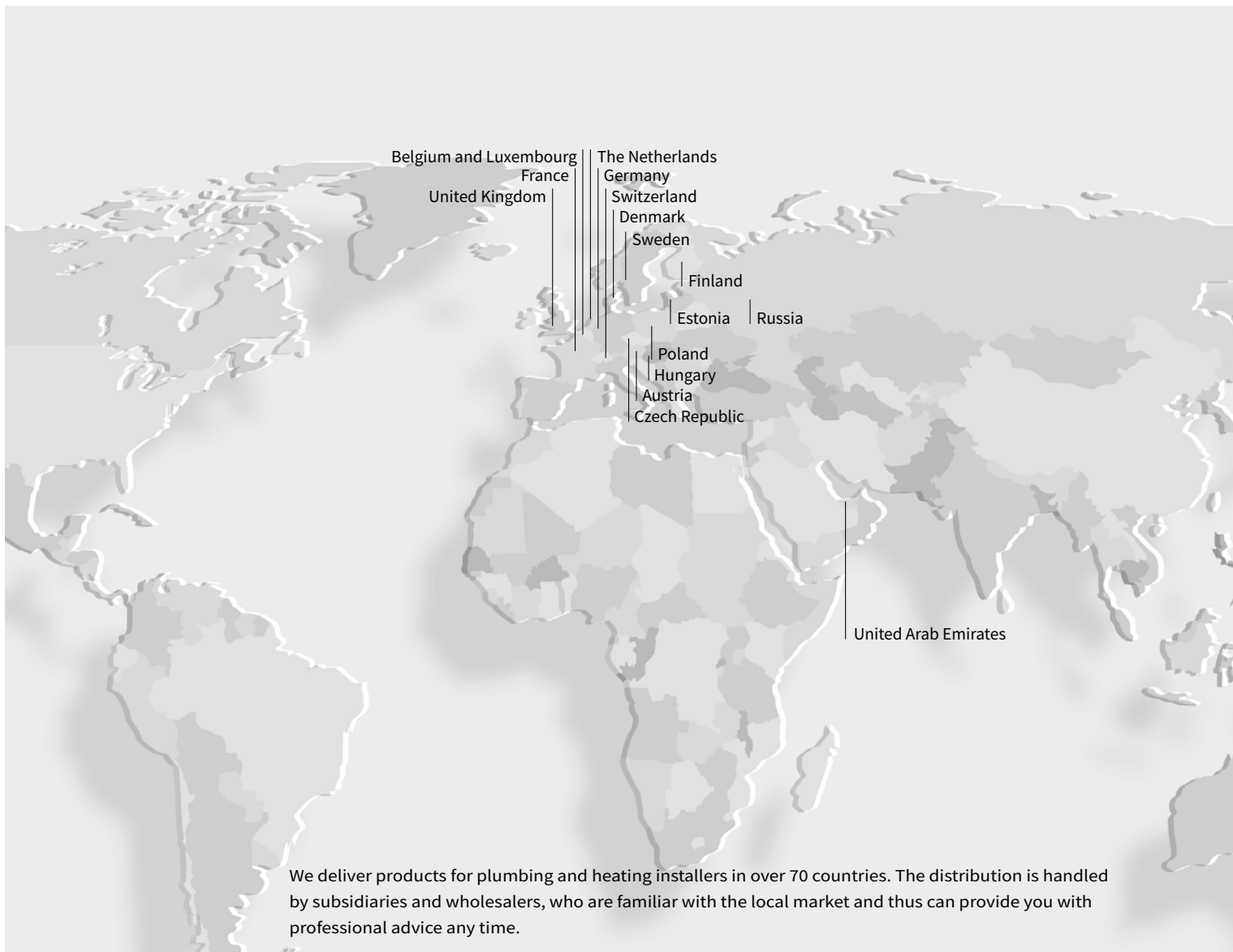
### Your advantages

- Planning/costing made simple thanks to the configuration of prefabricated modules to create complex systems
- Perfect system integration thanks to a comprehensive range of connectable accessories
- Short assembly times thanks to a high degree of prefabrication and matched components
- Small installation dimensions / light weight due to a construction geared to the conditions on construction sites
- Guaranteed leak-tight thanks to factory checks and BigFixLock (BFL) connections
- No unwanted heat transfer thanks to the thermal separation of flow and return lines
- Low heat loss due to thick EPP insulation shell
- Clean appearance with smooth surfaces and without gaps

**Flamco B.V.**  
www.flamcogroup.com

**Meibes System-Technik GmbH**  
www.meibes.de

**Simplex Armaturen & Systeme GmbH**  
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Flow of Innovation



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