



Midi Compact

District heating substation for multi-family houses (10-50 dwellings)

Midi Compact is a complete, ready-to-install district heating substation for heating and hot water. Midi Compact is available in four sizes and is designed for buildings that have a primary connection to a district heating network. The sizes offered are 75, 100, 150 and 200 kW heating, with matching hot water output.

Alfa Laval has years of experience in district heating technology and has developed Midi Compact with well-planned pipework and with all components easily accessible for inspection and future servicing.

Comfort

Midi Compact has fully-automatic temperature control for heating and hot water. The outside temperature is used to control heating. The hot water temperature is set and maintained at the desired temperature. The unit has been designed with a two-step connection in order to optimize cooling of the primary return.

Installation

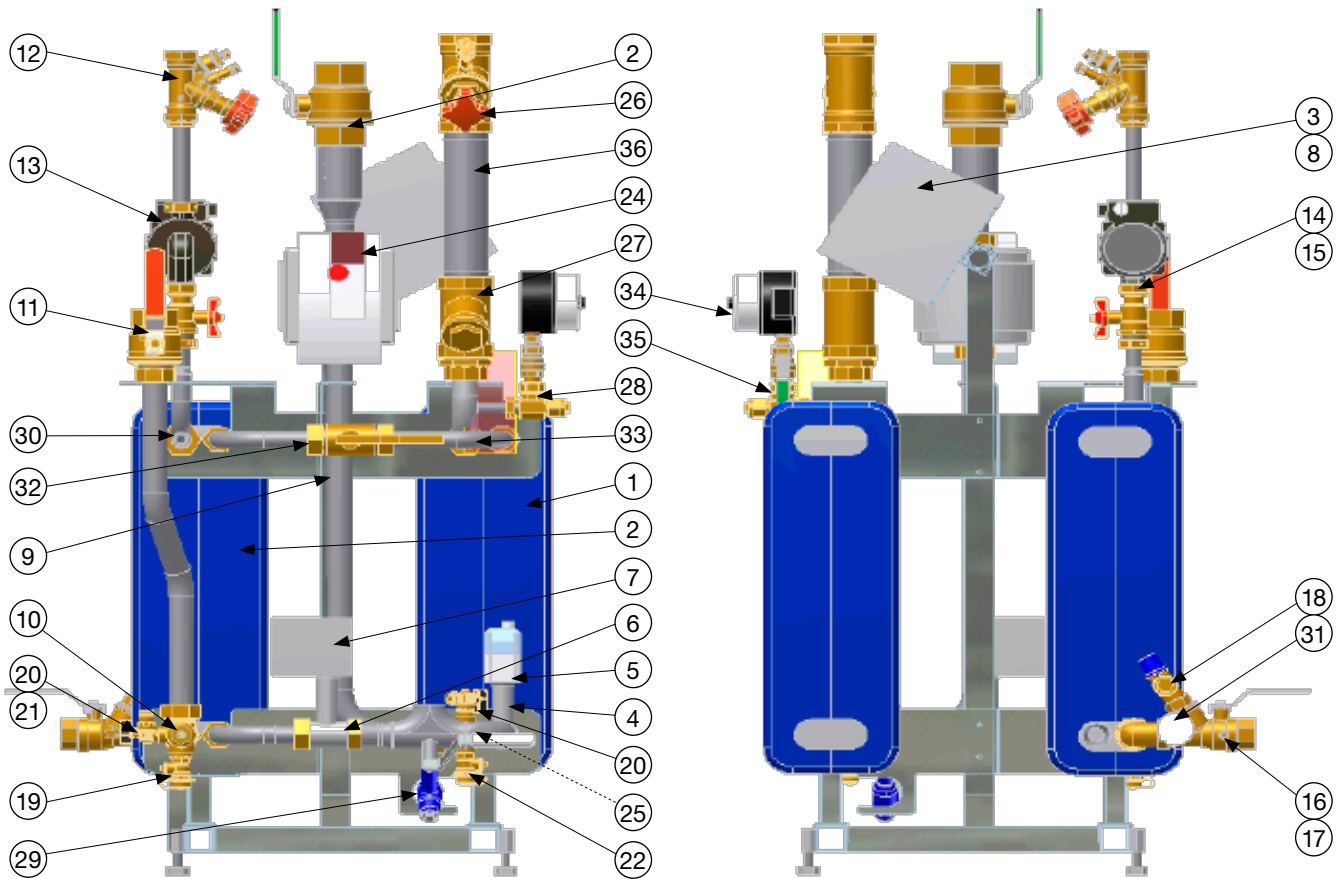
Installation is easy due to well planned pipework and pre-wiring. In addition, there is a pre-programmed controller and plug-and-socket connection, which makes it easy to start the substation without delay. With its small size and light weight, the Midi Compact is easy to install and maintain in both new and renovated buildings.

Long-term security

All of the plates and pipes in the heat exchanger are made of acid-resistant stainless steel for long life. All components are adjusted together and undergo thorough functional testing in accordance with Alfa Laval's ISO 9001:2008 quality assurance system. All components are easily accessible and can be individually replaced in order to facilitate future servicing.

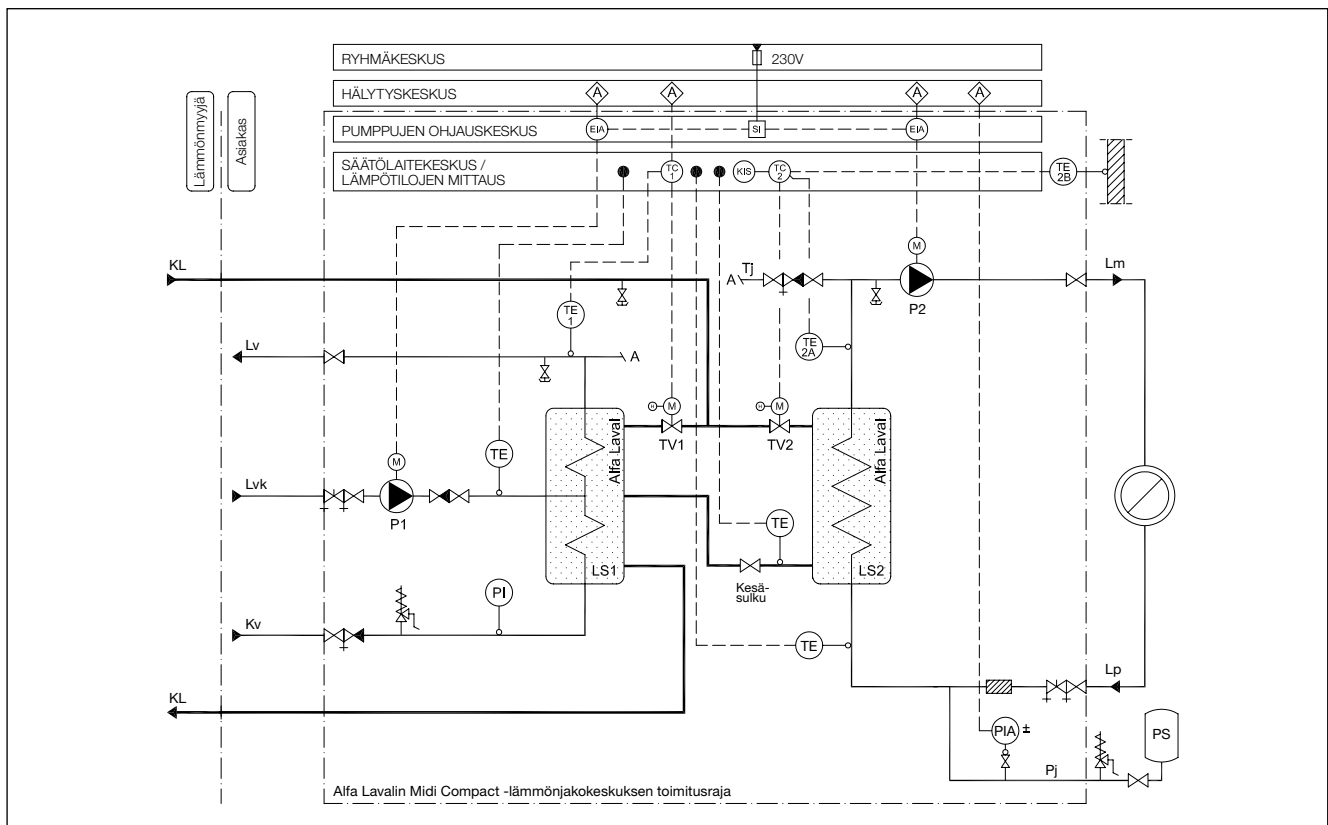
Midi Compact is CE-marked to certify that the substation conforms to international safety regulations. To maintain the validity of the CE marking, only identical replacement parts may be used.





Components

- | | | | |
|-------------------------------|----------------------------|------------------------------------|--|
| 1 Heat exchanger heat | 10 Temp.sensor DHW Supply* | 19 Draining valve DHW Supply | 28 Connection expansionvessel |
| 2 Heat exchanger DHW | 11 Shut off valve DHW | 20 Topping up | 29 Draining valve DH-Supply |
| 3 Control center* | 12 Balancing valve DHWC | 21 Hose | 30 Temp.sensor DHWC* |
| 4 Control valve heating | 13 Pump DHWC | 22 Draining valve heat supply | 31 Pressure gauge CW |
| 5 Actuator heating* | 14 Non return valve DHWC | 23 Shut off valve heat supply | 32 Summer shut off valve heating |
| 6 Control valve DHW | 15 Shut off valve DHWC | 24 Pump heating | 33 Temp.sensor primary heating return* |
| 7 Actuator DHW* | 16 Shut off valve CW | 25 Connection safety valve heating | 34 Pressure gauge heating |
| 8 Temp.sensor outdoor* | 17 Non return valve CW | 26 Balancing valve heat | 35 Shut off valve pressure gauge |
| 9 Temp.sensor heating Supply* | 18 Safety valve CW | 27 Strainer heat return | 36 Temp.sensor heating return* |
- *Option



Operating data Midi Compact

	Primary side	Heating	DHW
Design pressure, PS	16 Bar	6 Bar	10 Bar
Design temperature, TS	120°C	100°C	100°C
Relief pressure safety-valve SE	–	–	10 Bar
Volume, heat exchanger, L	1.33-3.71/4.66-5.61 L	1.43-3.8 L	4.66-5.61 L

Performance at primary operating pressure 60-400 kPa

Type	Temperature programme (°C)	Capacity (kW)	Primary flow (l/s)	Actual return temp (°C)	Secondary flow (l/s)
Heating circuit					
Midi Compact 75	115-65/60-80	96	0.44	63	1.14
	115-45/40-70	118	0.40	45	0.95
Midi Compact 100	115-65/60-80	125	0.57	62.7	1.50
	115-45/40-70	160	0.55	45	1.28
Midi Compact 150	115-65/60-80	176	0,80	62,4	2,11
	115-45/40-70	254	0,87	45	2,03
Midi Compact 200	115-65/60-80	216	0.97	62.1	2.59
	115-45/40-70	320	1.09	44.7	2.56
Hot water circuit					
Midi Compact 75	70-25/10-58	247	1.18	19.8	1.23
	70-25/10-55	256	1.18	18.1	1.36
Midi Compact 100	70-25/10-58	247	1.18	19.8	1.23
	70-25/10-55	256	1.18	18.1	1.36
Midi Compact 150	70-25/10-58	285	1.35	19.6	1.42
	70-25/10-55	293	1.35	17.7	1.56
Midi Compact 200	70-25/10-58	285	1.35	19.6	1.42
	70-25/10-55	293	1.34	17.7	1.56

Connections

Weld

District heating supply
District heating return

DN32
DN32

Connections

Thread

Heating supply (75)
Heating supply (100-200)
Heating return (75)
Heating return (100-200)
Cold water
Hot water
Hot water circulation
Expansion vessel

G 1½" / DN40
G 2" / DN50
G 1½" / DN40
G 2" / DN50
G 1¼" / DN32
G 1½" / DN40
G 1" / DN25
G ¾" / DN20

Other information

Electrical data: 230V 50Hz Single phase 227-458W

Sound level: <70dB(A), 1,6 meters above the floor and 1 meter from the sound source

Dimensions: 800x600x1300mm(WxDxH)

Weight: 80-110 kg