

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

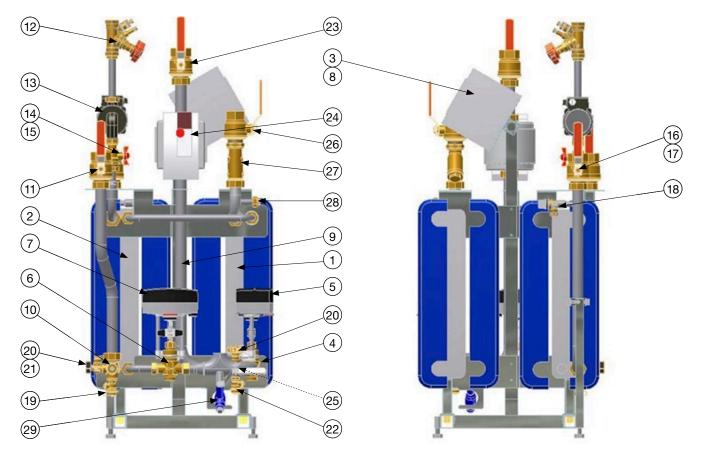
Installation is easy due to well planned pipework and pre-wiring. In addition, there is a pre-programmed controller and plugand-socked connection, which makes it easy to start the substation without delay. With its small size and light weight, the Midi Compact is easy to install and maintain in both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



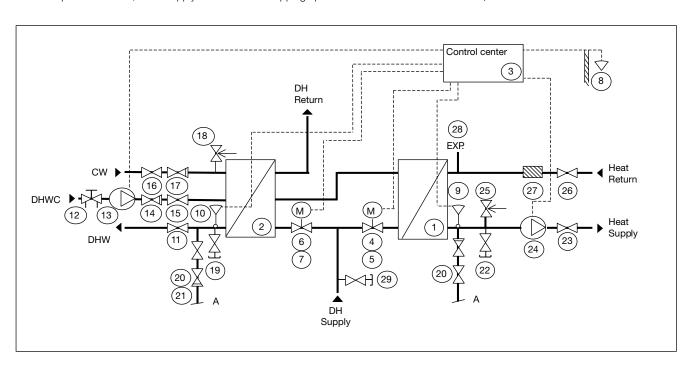


Components

- 1. Heat exchanger, heating
- 2. Heat exchanger, DHW
- 3. Control center*
- 4. Control valve, heating
- 5. Actuator, heating*
- 6. Control valve, DHW
- 7. Actuator, DHW*
- 8. Temperature sensor, outdoor*
- 9. Temperature sensor, heating supply*
- 10. Temperature sensor, DHW supply*

- 11. Shut-off valve, DHW
- 12. Balancing valve, DHWC
- 13. Pump, DHWC
- 14. Non return valve, DHWC
- 15. Shut-off valve, DHWC
- 16. Shut-off valve, CW
- 17. Non return valve, CW
- 18. Safety valve, CW
- 19. Draining valve, DH supply
- 20. Topping up

- 21. Hose
- 22. Draining valve, heat supply
- 23. Shut-off valve, heat supply
- 24. Pump heating
- 25. Safety valve, heating
- 26. Shut-off valve, heating return
- 27. Strainer, heat return
- 28. Connection expansion vessel
- 29. Draining valve, DH-supply
- *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	-	3 Bar	9 Bar
Volume, heat exchanger, L	1.81-4.66/1.81-3.2 L	1.9-4.75 L	1.81-3.2 L

Performance at primary operating pressure 100-600 kPa

Туре	Temperature programme (°C)	Capacity (kW)	Primary flow (I/s)	Actual return temp (°C)	Secondary flow (I/s)
Heating circuit					
Midi Compact 75	100-63/60-80	75	0.51	63	0.91
	100-43/40-60	106	0.47	43	1.29
Midi Compact 100	100-63/60-80	114	0.77	63	1.39
	100-43/40-60	151	0.66	43	1.83
Midi Compact 150	100-63/60-80	155	1.04	63	1.89
	100-43/40-60	188	0.82	43	2.27
Midi Compact 200	100-63/60-80	195	1.31	63	2.38
	100-43/40-60	216	0.94	43	2.61
Hot water circuit					
Midi Compact 75	65-22/10-55	110	0.61	22	0.58
	70-22/10-55	131	0.66	20.3	0.7
Midi Compact 100	65-22/10-55	109	0.61	22	0.58
	70-22/10-55	131	0.63	20.3	0.7
Midi Compact 150	65-22/10-55	147	0.82	22	0.78
	70-22/10-55	169	0.81	20	0.9
Midi Compact 200	65-22/10-55	184	1.03	22	0.98
	70-22/10-55	207	0.99	19.8	1.1

Connections	Weld	
District heating supply	DN32	
District heating return	DN32	
Connections	Thread	
Heating supply	G 1½"	
Heating return	G 1½"	
Cold water	G 1½"	
Hot water	G 1½"	
Hot water circulation	G 1"	
Expansion vessel	G ¾"	

Other information

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

Sound level: <70 dB(A), 1.6 meters above the floor and 1 meter from the sound source

Dimensions: Width 800 mm x depth 600 mm x height 1300 mm

Weight: 80-110 kg

