



Alfa Laval Midi Wall

District heating substation for multi-family houses (10-30 dwellings)



Alfa Laval Midi Wall is a complete, ready-to-install district heating substation for heating and hot water. Midi Wall is available in three sizes. The sizes offered are 70, 100 and 135 kW heating, with matching hot water output.

Alfa Laval has many years of experience in district heating technology, which is put to expert use in the Midi Wall, resulting in well-planned pipe-work and with all components easily accessible for inspection and future servicing.

Comfort

Midi Wall 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.

To achieve the very best control performance and lowest return temperature, Midi Wall has been equipped with a DHW Heat Exchanger in two stroke.

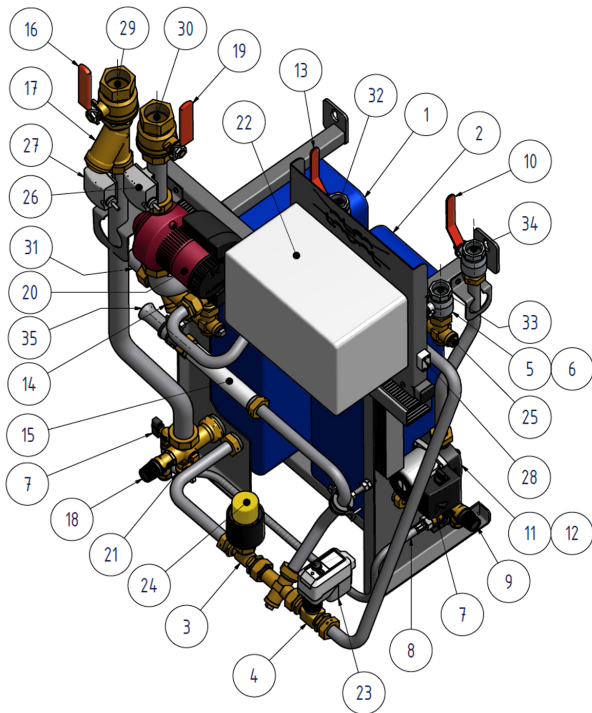
Simple installation

Compact dimensions, light weight, well-planned pipe runs and factory-installed interior electrical routing all make installation very simple. The pre-programmed control device and plug connection make life even simpler in that the system can be activated immediately.

Long-term security

The Midi Wall represents the most modern technology, and provides the answer to stringent demands for long-term performance. The heat exchanger plates and all piping are manufactured in acid-resistant stainless steel. All components are closely matched and carefully tested for function in accordance with Alfa Laval's quality assurance system ISO 9001:2008.

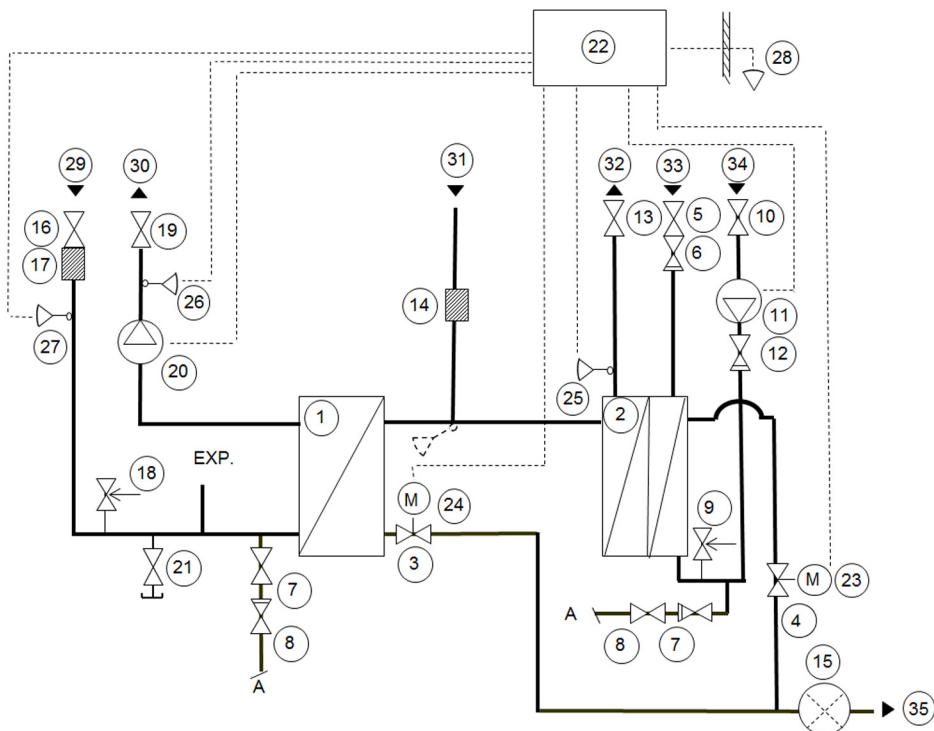
Midi Wall is CE-marked to certify that the substation conforms to international safety regulations. To maintain the validity of the CE marking, only identical replacement parts may be used.



Components

1. Heat exchanger, heating
2. Heat exchanger, DHW
3. Control valve, heating
4. Control valve, DHW
5. Shut-off valve, CW
6. Non-return valve, CW
7. Topping up
8. Hose
9. Safety valve, CW
10. Shut-off valve, DHWC
11. Pump, DHWC
12. Non-return valve, DHWC
13. Shut-off valve, DHW
14. Strainer, primary in
15. Dummy, heat meter
16. Shut-off valve, heating return
17. Strainer, heating return
18. Safety valve, heating
19. Shut-off valve, heat supply
20. Pump, heating
21. Draining valve, heating return
22. Control center
23. Actuator, DHW
24. Actuator, heating
25. Temperature sensor, DHW supply
26. Temperature sensor, heating supply
27. Temperature sensor, heating return
28. Temperature sensor, outdoor
29. Heating return
30. Heating supply
31. District heating supply
32. DHW
33. CW
34. DHWC
35. District heating return

Connections for district heating are welded connections in DN25, for tap water side internal threaded connections in G 1" and for heating side internal threaded connections in G 1½".



Operating data

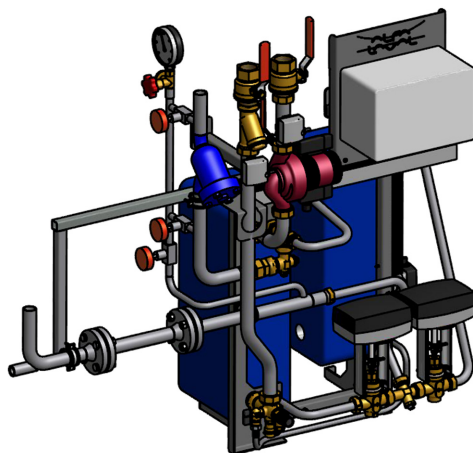
	Primary side	Heating	DHW
Design pressure, PS	16 bar	6 bar	10 bar
Design temperature TS, °C	120	90	90
Relief pressure safety valve	-	3 bar	9 bar
Volume, heat exchanger, L	1.44-3.0/2.1	1.55-3.0	2.1

Performance at available primary differential pressure 100-600 kPa

Type	Temperature programme (°C)	Capacity (kW)	Primary flow (l/s)	Actual return temperature (°C)	Secondary flow (l/s)
Heating circuit					
Midi Wall 70	100-63/60-80	74	0.48	62.5	0.89
	100-43/40-60	73	0.31	41.3	0.87
Midi Wall 100	100-63/60-80	119	0.77	62.2	1.42
	100-43/40-60	116	0.49	40.6	1.39
Midi Wall 135	100-63/60-80	139	0.90	62.1	1.66
	100-43/40-60	136	0.57	40.4	1.63
Hot water circuit					
Midi Wall 70	65-22/10-55	124	0.71	22	0.66
	70-22/10-55	137	0.70	22	0.73
	70-25/10-55	137	0.75	25	0.73
Midi Wall 100	65-22/10-55	124	0.71	22	0.66
	70-22/10-55	137	0.70	22	0.73
	70-25/10-55	137	0.75	25	0.73
Midi Wall 135	65-22/10-55	124	0.71	22	0.66
	70-22/10-55	137	0.70	22	0.73
	70-25/10-55	137	0.75	25	0.73

Connections	Weld	Thread	Other information
District heating supply	DN25		Electrical data: 230 V 50 Hz, single phase, 290-315 W
District heating return	DN25		Sound level: <70 dB(A), 1.6 meters above the floor and 1 meter from the sound source
Heating supply		G 1½"	Dimensions: 730 x 510 x 1115 mm (W x D x H)
Heating return		G 1½"	Weight: 65-85 kg
Cold water		G 1"	Support leg is included in all deliveries
Hot water		G 1"	
Hot water circulation		G 1"	
Expansion vessel		G 3/4 "	

Options



3-point HB measurement
item. nr 738662



Floor stand
item nr FR-1183

- Underfloor heating thermostat
item nr AM-1069
- Adjustable valve DHWC
item. nr VAB-1013
- GENI Module
item.nr SP-1104

How to contact Alfa Laval

Up-to-date AlfaLaval contact details for all countries are always available on our website on www.alfalaval.com