VXi Solo H

Fully insulated district heating substation for single-family, semi-detached and terraced houses as well as flats.

Substation for indirect heating with one heating circut. Designed for wall-mounting with pipes connection in top or bottom. Electronic temperature controller ECL 310/A230

Application
The VXi Solo H (ECL 310/A230) is a fully insulated substation featuring high performance and simple operation. VXi Solo H is especially suitable for two-pipe systems and systems with floor heating. The heating circuit is controlled by electronic temperature controller Danfoss ECL 310/A230.

District heating (DH)
The substation is prefabricated with interconnecting components such as fitting piece and sensor pockets for insertion of a heat meter mounted in the DH return pipe, as well as strainer, thermometer and ball valves.

Heating (HE)
The heating side consists of a stainless steel plate heat exchanger, safety valve, expansion vessel, strainer, thermometers, manometer, circulatiopump and ball valves.
The radiator circuit is controlled by the primary side flow controller with integrated control valve AHQM together with the actuator AMV 150, the temperature by means of an electronic temperature controller (ECL 310/A230) .
Depending on substation's application, different heat exchangers dimensioned for central or floor heating can be used.

Construction
All pipes are made of stainless steel. The connections are made by nuts and gaskets. The substation offers variable connection possibilities, as connection of pipes can be established both in the top or in the bottom of the substation.
The white removable center part in the front insulation allows easy access to components for regulation and maintenance purposes.

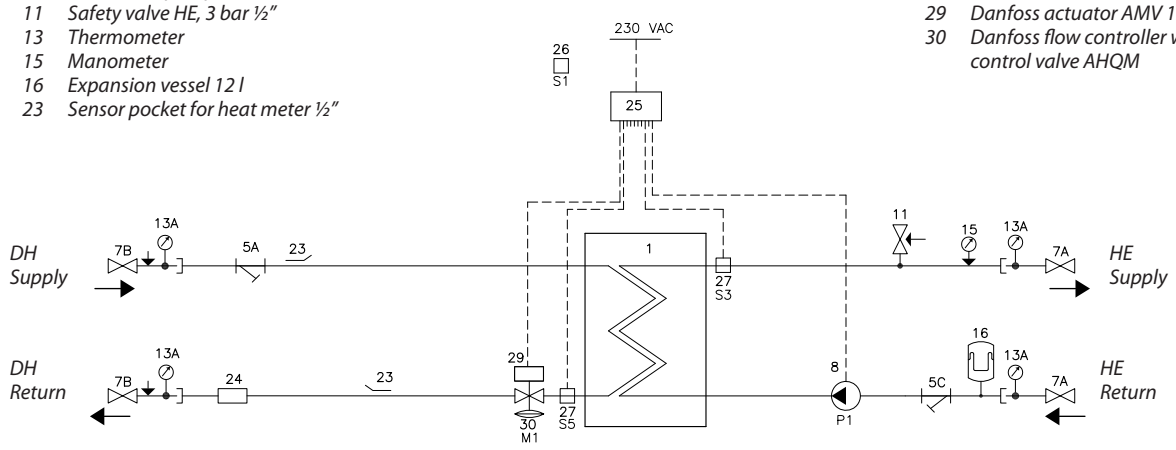
FEATURES AND BENEFITS

- District heating substation for single-family houses
- Indirect heating
- Fully insulated for very low heat losses
- Electronic temperature controller ECL 310/A230
- Capacity: 20-30 kW HE, 15 kW FH
- Low-energy circulation pump
- Minimum space required for installation
- Pipes and plate heat exchanger made of stainless steel
- Pipes connection in top or bottom of substation

VXi Solo H (ECL 310/A230)

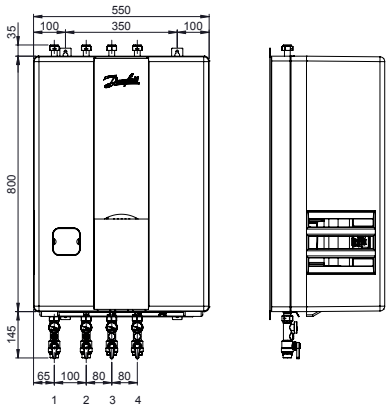
Circuit diagram - example

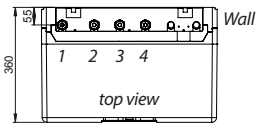
1 *Plate heat exchanger HE, with insulation*
5 *Strainer*
7 *Ball valve*
8 *Circulation pump, HE*
11 *Safety valve HE, 3 bar ½"*
13 *Thermometer*
15 *Manometer*
16 *Expansion vessel 12 l*
23 *Sensor pocket for heat meter ½"*
24 *Fitting piece for heat meter 3/4" x 110 mm*
25 *Controller Danfoss ECL210/A230*
26 *Outdoor sensor, ESMT*
27 *Sensor Danfoss, ESMC*
29 *Danfoss actuator AMV 150*
30 *Danfoss flow controller with integrated control valve AHQM*



Design specifications:

Nominal pressure (prim/sec.):	PN 16 / PN 3
Max. supply temperature:	120 °C (design temp.)
Min. ΔP:	See capacity examples
Brazing material (HEX):	Copper
Weight incl. cover:	49 kg
(incl. packing)	
Dimensions (mm):	
With insulation:	H 980 × W 550 × D 360
Electrical supply:	230 V AC
Connections sizes:	
DH:	G ¾" ET (ext. thread)
HE, DHW cylinder:	G ¾" ET (int. thread)





Connections:

1. District heating (DH) supply
2. District heating (DH) return
3. Heating (HE) return
4. Heating (HE) supply

Options:

- KFE filling and drain valve ¼" (for mounting in ball valve)
- Safety function - safety thermostat + actuator
- Connection of pipes can be established in the top or in the bottom of the substation
- Prepared for insertion of heat meter

Heating: Capacity examples

Heating capacity	Plate heat exchanger	HE circuit primary [° C]	HE circuit sedondary [° C]	Pressure loss primary* [kPa]	Pressure loss (only sec. side of heat exchanger) [kPa]	Flow rate primary ([l/h]	Flow rate secondary [l/h]
20	XB06H-1 26	75/44	40/65	35	6.0	555	688
20	XB06H-1 26	80/49	45/70	35	6.0	555	688
20	XB06H-1 26	90/51	50/70	29	8.5	441	860
30	XB06H-1 40	75/44	40/65	55	6.0	842	1032
30	XB06H-1 40	80/49	45/75	55	6.0	832	1032
30	XB06H-1 40	90/51	50/70	40	9.0	662	1290
15	XB06L-1 24	75/32	30/40	22	9.4	300	1290
15	XB06L-1 24	80/32	30/40	21	9.4	269	1290
15	XB06L-1 24	90/32	30/40	20	9.4	222	1290

* Heat meter not incl.

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