

Fact sheet

VX Solo 22

District heating substation for small properties and apartment houses



Application

The VX Solo 22 is made in a compact design and is especially suitable for supply of heating for small properties and apartment houses. The substation is suitable for two pipe systems.

The substation features a plate heat exchanger for the heating circuit and it is prepared for connection to a domestic hot water cylinder.

The VX Solo 22 is available in two basic variants, - one variant with Danfoss ECL 310 for control of the heating circuit, and another variant with Danfoss ECL 310 for control of both the heating as well as the DHW cylinder circuits.

The VX Solo 22 variants offer capacities ranging from 44 to 110 kW heating and 13 to 75 kW domestic hot water. Please contact our sales department and together we shall find the optimum solution for your exact requirements.

Construction

The VX Solo 22 is supplied with a brazed plate heat exchanger for heating, electronic actuator(s) and valve(s), safety valves, pump, shut-off valves, mano- and thermometers, strainers, sensor pockets, differential pressure controller as well as connections pipes for DHW cylinder.

Actuators and pumps are electrically wired from factory and supplied with CEE plug for connection to 220 V. The electronic control is prepared for WebAccess, which enables remote control and remote monitoring via the internet/intranet. The substations are delivered preassembled, electrically wired internally and the electronic control is tested for function and preset from factory. The substation is supplied without fitting piece for heat meter. Fitting piece for heat meter is available as an option.

Design

The VX Solo 22 is designed for wall-mounting and during the construction much importance has been attached to a clear and user-friendly placement of all components. The VX Solo 22 can be supplied with a white-lacquered steel cover with door, which enables easy access for meter reading and service purposes.

Connection pipes for domestic hot water cylinder (DHW)

As standard the VX Solo 22 is supplied with primary connection pipes for DHW cylinder, with or without actuator and electronic control of the cylinder circuit.

FEATURES AND BENEFITS

- Indirect heating
- Connection pipes for DHW cylinder
- Supplied with Danfoss ECL 310, prepared for WebAccess
- Equipped with A-labelled low-energy pump
- Pipes and heat exchanger in stainless steel
- Minimized risk of lime scale and bacteria formation
- The substation is very service-friendly due to practical piping and assembly with nuts and gaskets
- Excellent operating economy

Heat exchanger for DHW heating

The heat exchanger used in the VX Solo 22 is a brazed, highly efficient Danfoss plate heat exchanger, which has been tested and approved according to the PED-directive.

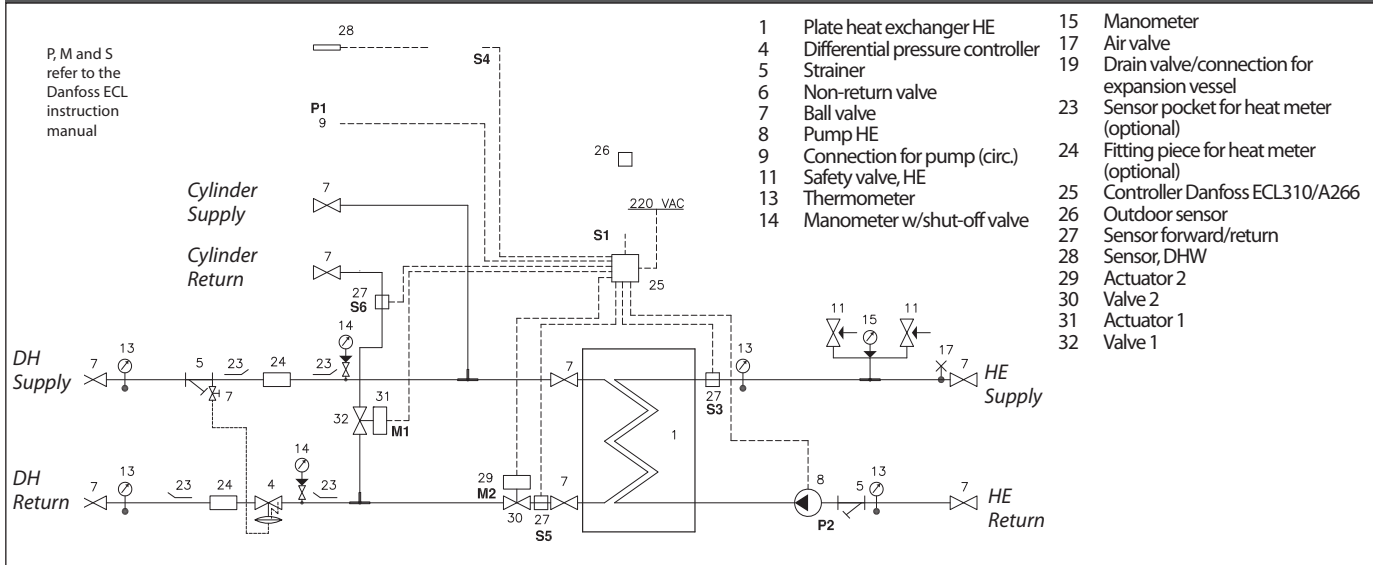
Reading and setting

All thermometers are placed so they are easy to read. Components, which can be adjusted, are easily accessible.

Service og maintenance

The substation is very service-friendly due to practical piping and assembly with nuts and gaskets. It is mounted on the wall and as all pipes are placed in pipe bracket distance, it is possible to establish a nice piping.

CIRCUIT DIAGRAM - EXAMPLE



Design specifications:

Nominal pressure (prim/sec): PN 10 / PN 10
 Max. supply temperature: 120 °C
 Min. ΔP: 0,75 bar incl. differential pressure controller (alternatively 0,5 bar)

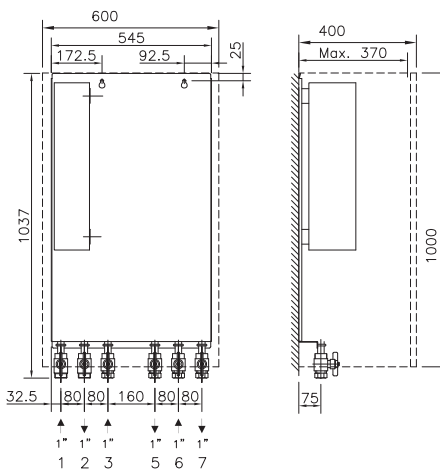
Weight: Max. 65 kg

Colour (cover): White RAL 9010

Electrical supply: 220 V AC

Dimensions (mm):

Without cover: H 1037 x W 545 x D 370
 With cover: H 1037 x W 600 x D 400



Connections:

- 1. DCW inlet
- 2. DHW
- 3. DCW outlet
- 4. DH supply
- 5. DH return
- 6. HE supply
- 7. HE return

Options:

- White cover
- Ball valves
- Mounting of heat meter
- Pipe set with 7 pipes
- Pipe set with 4 pipes
- Circulation set
- Electrical control box
- Room thermostat TP 7000
- Insulation of pipes
- W/o cold water pipe

DHW: Capacity examples with electronic control, ECL 310, A230						Connection for cylinder		Total (winter)	
Plate heat exchanger	Capacity kW	HE circuit Primary °C	HE circuit Secondary °C	Pressure loss Primary bar ¹	Flow Primary l/h	Ydelse, kW		Pressure loss Primary total ² bar	Flow Primary total ² l/h
						DH supply 60 °C	DH supply 65 °C		
XB37M-1 30	44	70/40	35/60	0.45	1257	20	-	0.75	1450
XB37M-1 40	60	70/40	35/60	0.65	1709	50	-	0.72	2630
XB37M-1 50	75	70/40	35/60	0.40	2129	30	-	0.76	2350
XB37L-1 40	37	70/46	45/57 ³	0.29	1348	30	-	0.67	1800
XB37L-1 20	15	70/31	30/35 ⁴	0.82	324	50	-	0.44	1660
XB37M-1 40	75	90/45	40/74	0.54	1463	-	30	0.68	1540
XB37M-1 50	110	90/45	40/74	0.57	2107	-	45	0.73	2250

1) Incl. differential pressure controller, (excl. heat meter), 2) Total flow calculated at 70% of the heating capacity + 100% DHW at 60/40°C and 65/40°C.

3) Example of substation for one-pipe system, 4) Floor heating.

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