

Fact sheet

S - Solo

Substation for single-family, semi-detached and terraced houses as well as flats



FEATURES AND BENEFITS

- District heating substation for direct heating
- Connection pipes for DHW cylinder
- Supplied with Danfoss ECL 210 or 310 controller
- 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

Application

The S-Solo is a complete district heating substation for direct heating with mixing loop for single-family, semi-detached and terraced houses as well as flats. The substation features one heating circuit and it is prepared for connection to a domestic hot water cylinder. The substation is especially suitable for one pipe systems and systems with floor heating.

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, ball valves and pockets for pressure gauge.

Heating (HE)

The heating side features manometer, thermometers, ball valves and a mixing loop, with circulation pump and a throttle valve, which provides a suitable temperature level e.g. for floor heating, and protects the heating circuit against too high temperatures.

The heating side is controlled by an electronic temperature controller Danfoss ECL 210 or 310 with weather compensation, in combination with an actuator and valve. Actuator and pump are electrically wired from factory and supplied with CEE plug for connection to 230 V.

The electronic control ECL 310 is prepared for WebAccess, which enables remote control and remote monitoring via the internet/intranet.

The substation is delivered pre-assembled, electrically wired internally and the electronic control is tested for function and preset from factory.

Connection pipes for domestic hot water cylinder (DHW)

As standard the S-Solo is supplied with primary connection pipes for DHW cylinder.

Design

The S-Solo 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 S-Solo can be supplied with a white-lacquered steel cover with door, which enables easy access for meter reading and service purposes.

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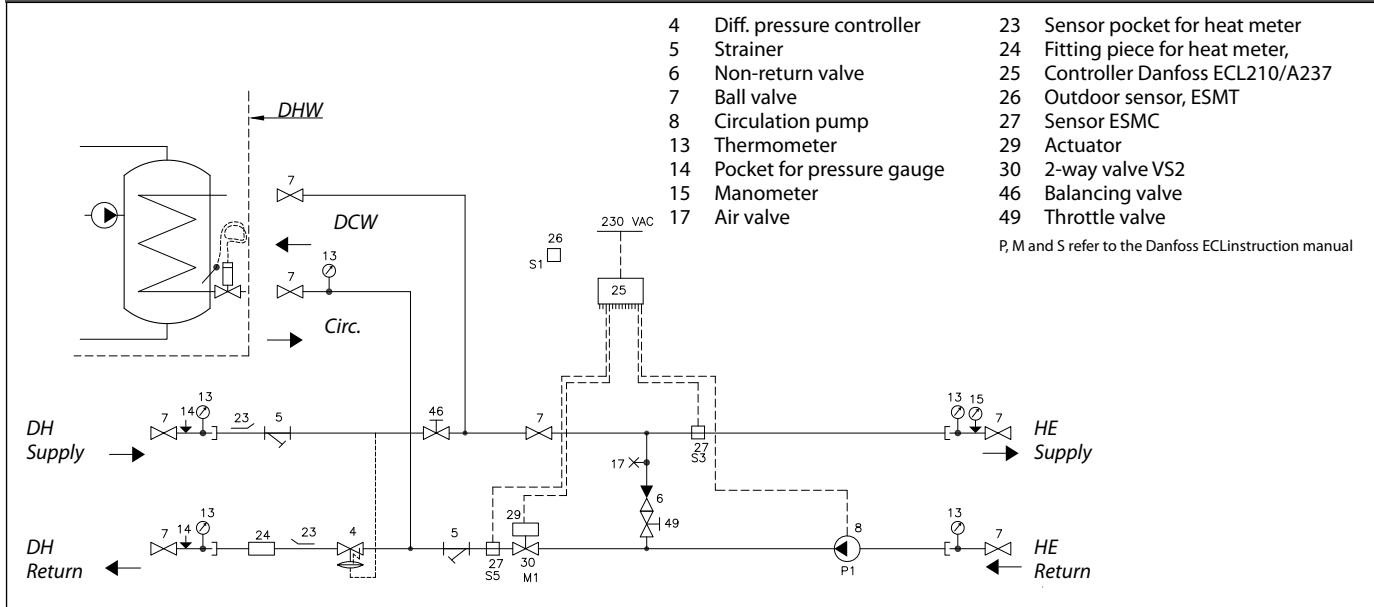
Reading and setting

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 - S-SOLO WITH ECL 210, A237



Design specifications:

Nominal pressure (prim/sec): PN 10 / PN 3
Max. supply temperature: 120 °C

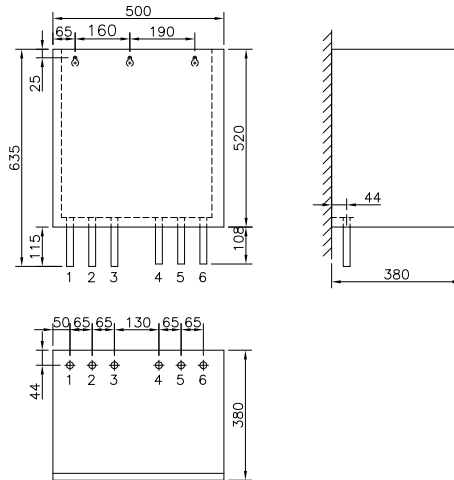
Weight: Max. 30 kg

Colour (cover): White RAL 9010

Electrical supply: 230 V AC

Dimensions (mm):

Without cover: H 635 x W 500 x D 295
Cover: H 520 x W 500 x D 380



Connections:

- 1. DH supply
- 2. DH return
- 3. Cylinder return
- 4. Cylinder supply
- 5. HE supply
- 6. HE return

Connections sizes:

DH, HE, Cylinder: G 3/4" (int. thread)

DHW: Capacity examples with electronic control, ECL 310, A230

Heating capacity	Heating circuit Primary °C	Heating circuit Secondary °C	Pressure loss Primary *kPa	Pressure loss (Only sec. side of heat exchanger) kPa	Flow rate Primary l/h	Flow rate Primary l/h
20	75/40	40/65	25	3.0	491	688
20	80/45	45/70	25	3.0	491	688
20	90/50	50/70	19	4.0	430	860
30	75/40	40/65	56	6.0	737	1032
30	80/45	45/75	52	6.0	737	1032
30	90/50	50/70	43	9.0	645	1290
15	75/30	30/40	9	9.0	287	1290
15	80/30	30/40	7	9.0	258	1290
15	90/30	30/40	5	9.0	215	1290

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