

**Fact Sheet** 

# VXe Solo HWP fully insulated substation

For indirect heating with 1 HE circuit & primary connection for DHW cylinder for single-family, semi-detached and terraced houses







# **Application**

The VXe Solo HWP (ECL 310/A337) is a fully insulated substation for indirect heating with one heating circuit and primary connection for DHW cylinder featuring high performance and simple operation. VXe Solo HWP is especially suitable for two-pipe systems and systems such as systems with radiator or floor heating. Designed for wall-mounting with pipes connection in bottom. The heating circuit and the cylinder temperature is controlled by electronic temperature controller Danfoss ECL 310/A337.

# 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 line, as well as strainer, thermometer and ball valves. The heating temperature is controlled by an electronic ECL 310/A337 controller with weather compensation.

#### **Heating (HE)**

The heating side consists of a stainless steel plate heat exchanger and the VXe Solo HWP substation is available with heat exchanger type XB 06H-26, XB 06H-40 for radiator heating and type XB 06L-1 24 for floor heating. The heating side also features safety valve, expansion vessel, strainer, thermometers, manometer, energy-efficient circulation pump and ball valves.

The HE circuit is controlled by the primary side two way motorized control valve VS 2 together with the actuator AMV with or without safety function, the temperature by

means of an electronic temperature controller (ECL 310/A337).

## Mounting of heat meter

The substation is equipped with 3/4" fitting pieces in the DH return flow for fitting of a heat meter.

## **Domestic hot water**

The VXe Solo HWP is supplied with connection pipes for domestic hot water cylinder on the primary side, and the temperature in the cylinder can be controlled by a self-acting thermostatic control valve or the Danfoss ECL controller.

## Design

The design emphasizes the user-friendly placement of all components.

The VXe Solo HWP is supplied with an elegant insulation cover and the removable cover plate in the front insulation allows easy access to components for regulation and maintenance purposes.

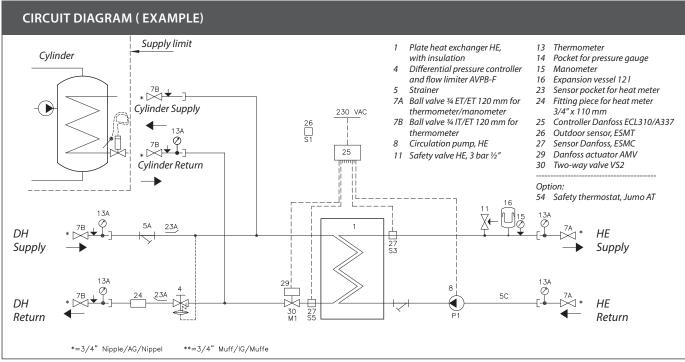
#### **Service and maintenance**

The substation is very service-friendly and easy to install. It is mounted on the wall and as all pipes are placed in pipe bracket distance, it is possible to establish a nice piping. The removable cover plate in the front allows easy access to the specially designed chamber, where the most frequently used components such as ECL310 are located. The easy access chamber enables faster commissioning and maintenance without removing the whole cover of the substation.

# **FEATURES AND BENEFITS**

- Connectivity with LeanHeat Monitor for monitoring and remote setting
- Fully insulated with very low heat losses
- Indirect heating, 1 HE circuit
- Primary connection for DHW cylinder
- Ensuring the lowest return temperature by special Danfoss technologies exclusively developed for substations.
- Customer-specific solutions, specially adapted to the applicable technical regulations
- Electronic control of heating (HE) temperature
- Pipes and heat exchanger made of stainless steel, connections with EPDM gaskets.
- Capacity: 20 30 kW HE, 15kW FH
- · Minimum space required for installation
- Pipes and plate heat exchanger made of stainless steel AISI 316/314
- Dezincification-free brass CuZn39Pb3
- · Electrical wiring from factory Plug & Play





## **Design specifications:**

Nominal pressure (prim/sec.): PN 16/PN 6

120°C (design temp.) Max. supply temperature: Min. ΔP: See capacity examples

Brazing material (HEX): Copper

Weight: Max. 55 kg

Insulation: Polypropylene

EPP λ 0.039

**Electrical supply:** 230 V AC

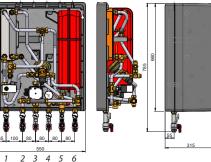
Dimensions (mm):

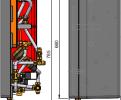
with insulation: H 785 x W 550 x D 315

**Connections sizes:** 

G 34" ET (ext. thread) DH + Cylinder: HF: G ¾"IT (int. thread)

### **Dimensional sketch:**





#### 5. Cylinder supply 6. Cylinder return **Basic type VXe Solo HWP** Code No Type 1, fully insulated 145F4445

Type 2, fully insulated 145F4446 Type 1, fully insulated, safety function\* 145F4447 Type 2, fully insulated, safety function\* 145F4448 Type 3, fully insulated, safety function\* 145F4449

\*Safety function = AMV13 / Jumo safety thermostat

Connections:

1. District heating (DH) supply

2. District heating (DH) return

3. Heating (HE) return

4. Heating (HE) supply

[	Options	Code No	
	Thermostatic valve RAVK/VMA for DHW	144B2021	

EATING: CAPACITY EXAMPLES										
Plate heat exchanger HEX	HE capacity [kW]	HE circuit primary [°C]	HE circuit secondary [°C]	Pressure loss primary [*kPa]	Flow rate primary [**I/h]	Flow rate secondary [I/h]	Residual pressure UPM3 15-70 [kPa]			
XB06H-1 26 Type 1	20	75/46	40/65	38	594	696	57			
	20	80/50	45/70	37	588	696	57			
	20	90/52	50/70	28	462	870	51			
XB06H-1 40 Type 2	30	75/45	40/65	60	882	1038	44			
	30	80/50	45/75	59	876	1044	44			
	30	90/52	50/70	42	696	1308	26			
XB06L-1 24	15	75/31	30/40	20	300	1296	25			
	15	80/31	30/40	18	270	1296	25			
Type 3	15	90/31	30/40	18	222	1296	25			

<sup>\*</sup> Heat meter and DHW capacity not incl. \*\* DHW capacity not incl.

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