

# EVH

## Electric duct preheater for heat exchanger freeze protection

### Features

- Heat exchanger freeze protection by means of preheating of the intake air.
- Maintains the duct air temperature at a point that prevents the heat exchanger freezing.
- Compatible with Ø 125 up to 250 mm air ducts.



### Design

- The casing is internally filled with 20 mm layer of non-flammable mineral wool.
- The casing and the junction box are made of galvanized steel.
- Heating elements are made of stainless steel.
- Airtight connection to air ducts due to rubber seals.

### Control

- Equipped with a power cable.
- The signal cable for connection to the controller of the air handling unit.
- Equipped with a triac power regulator. Regulation is carried out via switching-on and switching-off the full load. Load commutation is carried out by the semiconductor device (triac). The switching unit has no wearing mechanical elements.
- Equipped with overheat thermostats:**
  - main protection with automatic restart at +50 °C;
  - emergency protection with manual restart at +90 °C.

### Mounting

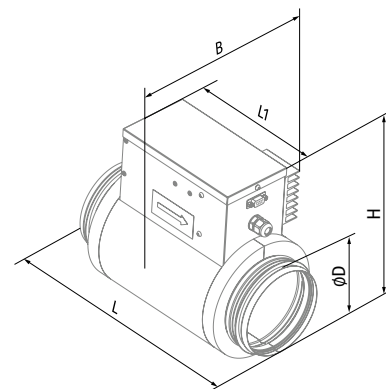
- Fixation to round air ducts by means of clamps (included in the delivery).
- In case of horizontal mounting position the control box cover must be directed upwards only. Permitted deviation up to 90°. The control box cover may not be positioned downwards!

### Compatibility chart

Heater model	Unit model
EVH 125	KOMFORT with spigot Ø 125 mm and S21 control panel
EVH 150	KOMFORT with spigot Ø 150 mm and S21 control panel
EVH 160	KOMFORT with spigot Ø 160 mm and S21 control panel
EVH 200	KOMFORT with spigot Ø 200 mm and S21 control panel
EVH 250	KOMFORT with spigot Ø 250 mm and S21 control panel

### Overall dimensions [mm]

Model	Ø D	B	H	L	L1
EVH 125-0.6-1	124	155	251	306	190
EVH 125-0.8-1	124	155	251	306	190
EVH 125-1.2-1	124	155	251	306	190
EVH 150-0.8-1	149	170	282	306	190
EVH 150-1.2-1	149	170	282	306	190
EVH 150-1.7-1	149	170	282	306	190
EVH 150-2.0-1	149	170	282	306	190
EVH 160-0.8-1	159	175	293	306	190
EVH 160-1.2-1	159	175	293	306	190
EVH 160-1.7-1	159	175	293	306	190
EVH 160-2.0-1	159	175	293	306	190
EVH 200-1.2-1	199	195	337	306	190
EVH 200-1.7-1	199	195	337	306	190
EVH 200-2.0-1	199	195	337	306	190
EVH 250-1.2-1	247	287	388	307	190
EVH 250-2.0-1	247	287	388	307	190
EVH 250-3.0-1	247	287	388	307	190

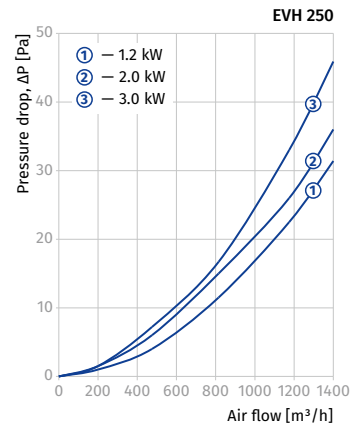
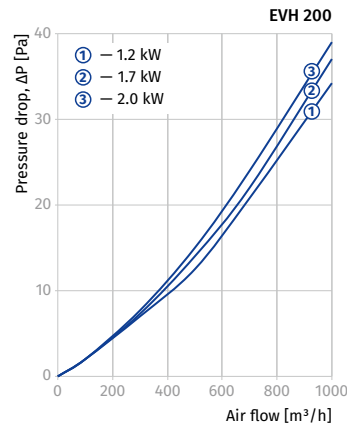
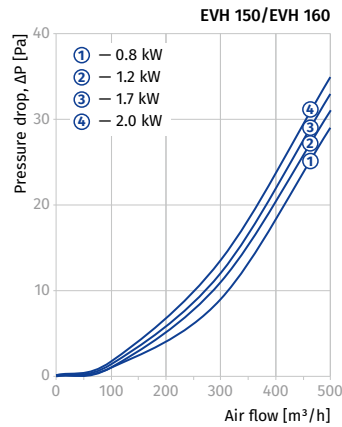
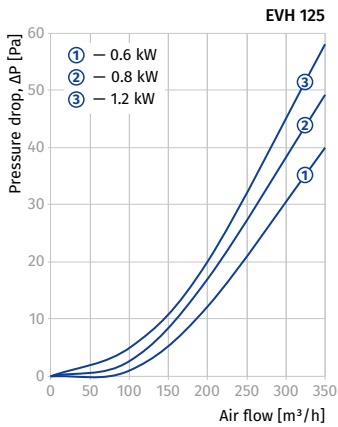


### Designation key

Series	Connected air duct diameter [mm]	Heater power [kW]	Number of phases
EVH	125; 150; 160; 200; 250	– 0.6; 0.8; 1.2; 1.7; 2.0; 3.0	– 1: single-phase

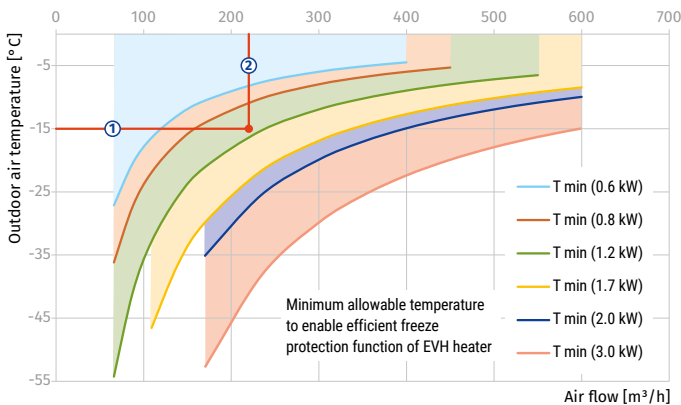
### Technical data

Parameters	Min. air flow [m³/h (l/s)]	Power [kW]	Current [A]
EVH 125-0.6-1	60 (17)	0.6	2.6
EVH 125-0.8-1	80 (22)	0.8	3.5
EVH 125-1.2-1	90 (25)	1.2	5.2
EVH 150-0.8-1	80 (22)	0.8	3.5
EVH 150-1.2-1	90 (25)	1.2	5.2
EVH 150-1.7-1	160 (44)	1.7	7.4
EVH 150-2.0-1	170 (47)	2.0	8.7
EVH 160-0.8-1	80 (22)	0.8	3.5
EVH 160-1.2-1	150 (42)	1.2	5.2
EVH 160-1.7-1	160 (44)	1.7	7.4
EVH 160-2.0-1	170 (47)	2.0	8.7
EVH 200-1.2-1	150 (42)	1.2	5.2
EVH 200-1.7-1	160 (44)	1.7	7.4
EVH 200-2.0-1	170 (47)	2.0	8.7
EVH 250-1.2-1	180 (50)	1.2	5.2
EVH 250-2.0-1	200 (56)	2.0	8.7
EVH 250-3.0-1	375 (104)	3.0	13.0



HEATERS

### Heater capacity selection diagram



o **EVH heater parameters calculation example:**

- It is necessary to select EVH freeze protection heater for the KOMFORT EC SB 350 S21 unit. Design outdoor air temperature in cold season is -15 °C. Design capacity is 220 m³/h.
- Identify the interception point of the air flow line (1) with the outdoor temperature line (2). In this case the heater with the capacity of 1200 W will assure efficient freeze protection of the heat exchanger. Select the **EVH 160-1.2-1** heater with the diameter corresponding to the diameter of the spigot of the KOMFORT EC SB 350 S21 unit.