Electric preheating element self-regulating

Description

Each Vasco ventilation unit with heat recovery is equipped with a defrost cycle as standard. As an additional anti-freezing measure, an electrical pre-heating element can be integrated as an option. This element prevents freezing of the heat exchanger, which can occur when warm, humid extracted indoor air comes into indirect contact with cold extracted outdoor air. This protection preserves the efficiency of the ventilation system and ensures occupant comfort under all conditions.

Operation

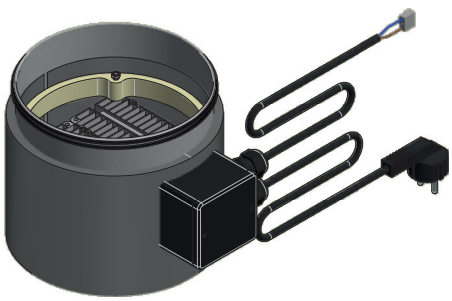
The electric preheating element is automatically activated when the following conditions are met:

- Supply fan is active
- The outside temperature measured by the sensor in the air intake is below the set switch-on temperature
- The average temperature of the outdoor air intake and indoor air discharge is below the set switch-on temperature

These conditions indicate an increased risk of freezing of the heat exchanger. The heating element switches off automatically when one of the following conditions is met:

- Supply fan is not active

The average temperature of the extracted outside air and exhausted inside air is above the set switch-off temperature.



Technical properties

- **Mounting:** Tob e mounted externally on the air inlet connection of the ventilation unit (air flow 'from outside')
- **Heating element:** Aluminium extruded PTC element (positive temperature coefficient) with minimal air resistance.
- **Control:**
  - Self-regulating capability
  - Modulating control for precise temperature control
  - Electrical control integrated in the housing
  - Controlled via signal from the ventilation unit PCB

- **Power supply:** External supply voltage of 230V AC.
- **Housing:**
  - High-quality galvanised metal housing
  - Fitted with insulation jacket to prevent condensation
- **Protection class:** IP43

Technical data

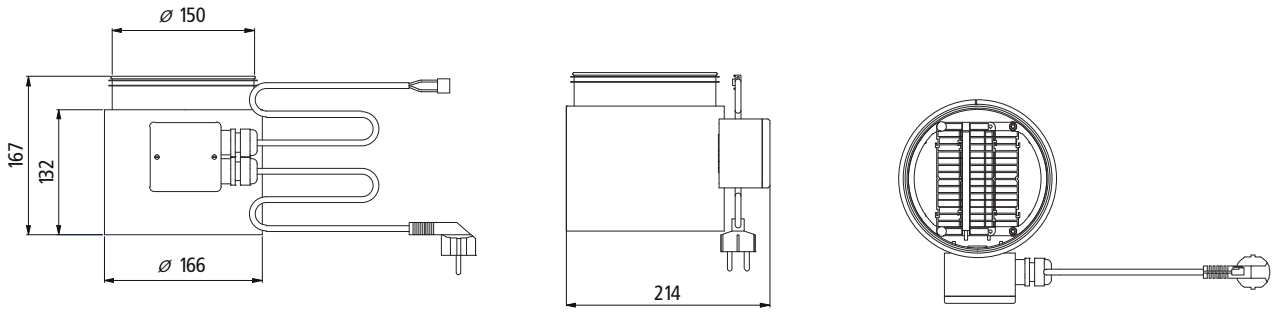
Type	Ø 150 - 700W	Ø 180 - 700W	Ø 180 - 1400W
Compatible with Vasco ventilation units	D275EP	D300E (II)	D500E (II)
	D275EP II	D400EP (II)	T / X 500 (E)
	D275(EP) III (E)	D / T / X 350 (E)	275 / 350 / 425/ 500 Boost
		D / X 425 (E)	DX5 (E)
		275 / 350 / 425/ 500 Boost	DX6 (E)
		DX4 (E)	

Dimensions (l x w x h)	mm	167 x 214 x 166	168 x 240 x 196	168 x 240 x 196
Dimensions incl. packaging (l x w x h)	mm	310 x 230 x 190	310 x 230 x 190	310 x 230 x 190
Connection diameter	mm	150	180	180
Weight	kg	1,8	1,7	2,4
Weight incl. packaging	kg	1,9	1,8	2,5
Maximum power	W	700	700	1400
Pressure loss	Pa	17,5 at 275m³/h*	13,7 at 400m³/h*	48,3 at 600m³/h*

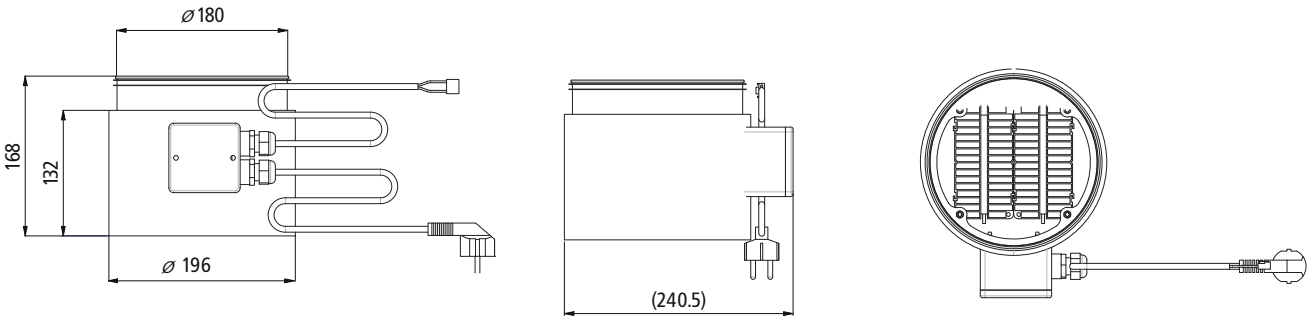
*at an ambient temperature of 21°C

Dimension drawings and connections

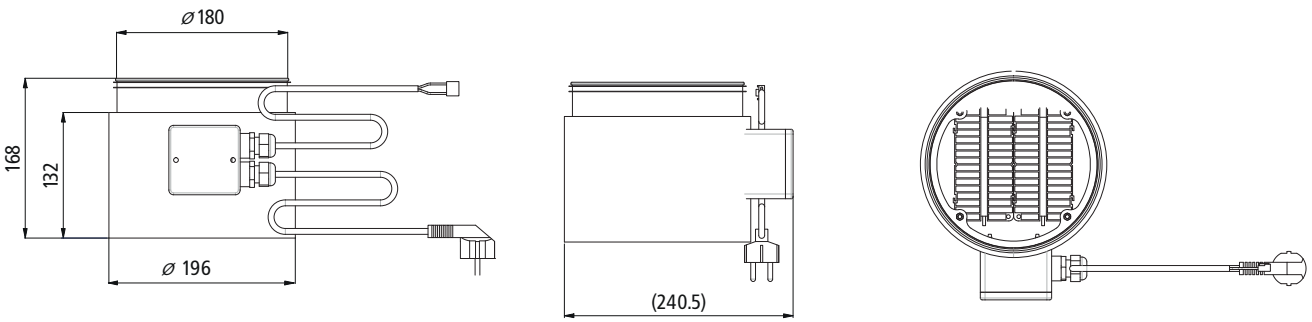
Type Ø 150 - 700W



Type Ø 180 - 700W



Type Ø 180 - 1400W



Dimensions in mm.