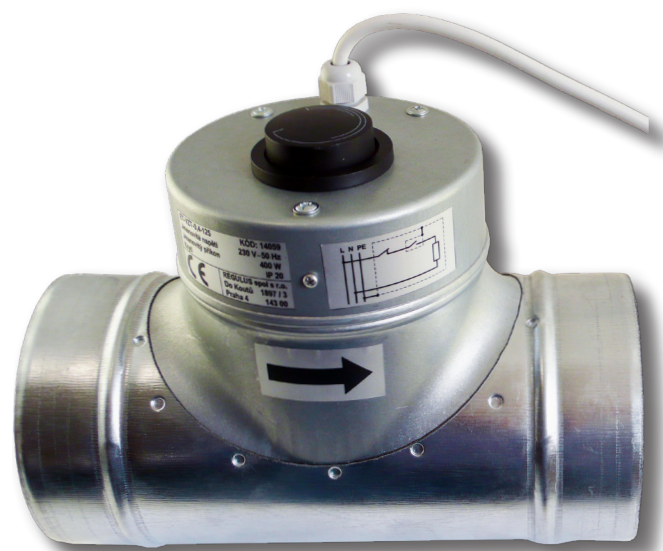


# Regulus

[www.regulus.eu](http://www.regulus.eu)



ET-VZT

Instruction Manual | **EN**  
**ELECTRIC DUCT HEATER**  
**ET-VZT**

**ET-VZT**

## 1 Application

This circular electric air duct heater is designed to preheat incoming air and prevent heat exchanger freezing in heat recovery ventilation units. Its thermostat is knob adjustable to a desired outgoing air temperature between 0 °C and +10 °C. We recommend rotating the knob counterclockwise till stop, to 0°C.

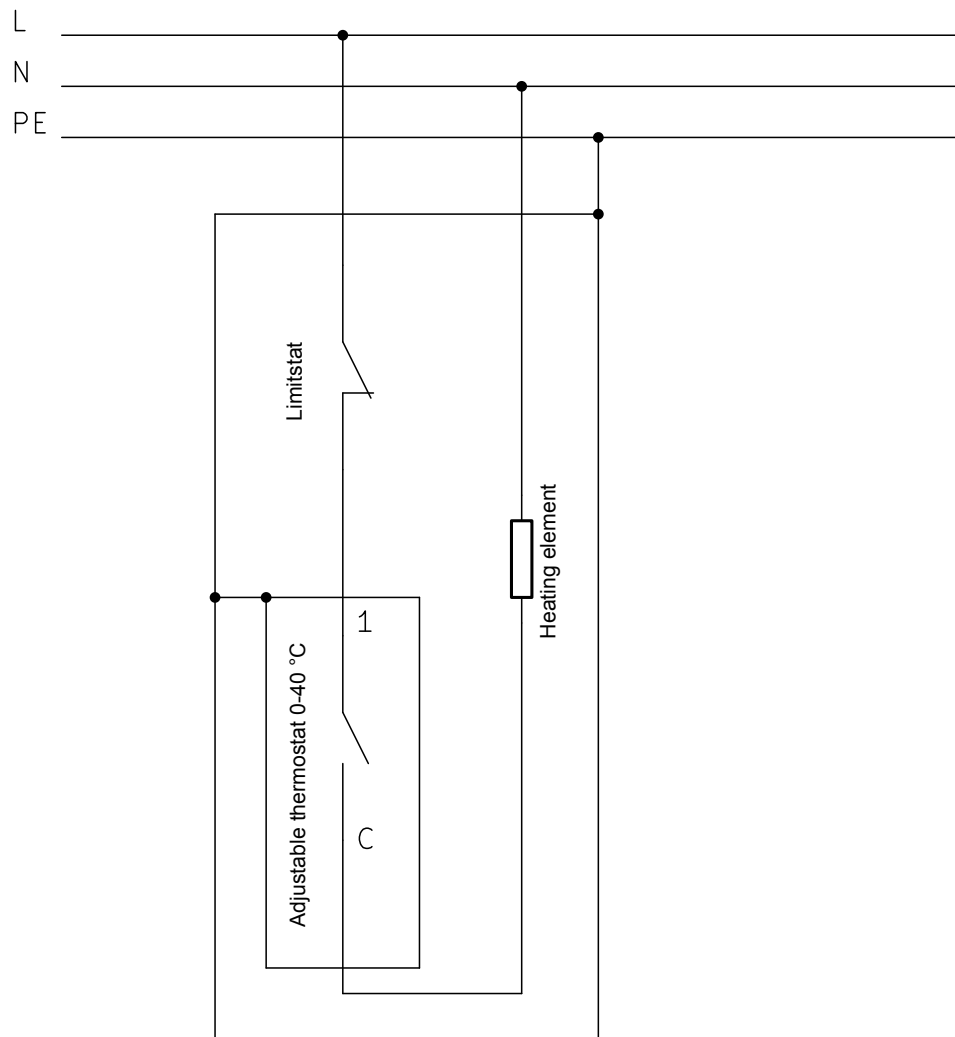
## 2 Installation

The heater shall be installed downstream of an intake filter, before the unit inlet. Connection to the ducts is done by sliding flexible or rigid air ducts onto the heater sleeves. Respect the air flow direction, marked by an arrow on the heater housing. In case of contaminated air, an air filter shall be installed upstream of the heater. The heater can be installed in air ducts with the wiring box upwards or sideways. The distance between the heater and an elbow, fan, damper etc. in the duct shall be at least twice the connection diameter, i.e. 250 (300) mm. The min. distance from combustible materials is 100 mm. In the air flow direction (arrow on the case) there shall be no combustible material in the distance of 500 mm at each side. The heater shall be installed in a dry room with ambient temperature between -5 °C and +30 °C, RH up to 80%. Outgoing air temperature shall not exceed 30 °C.

The case is made of zinc-plated sheet iron. The wiring box contains a terminal board, two thermostats and heating rod wiring.

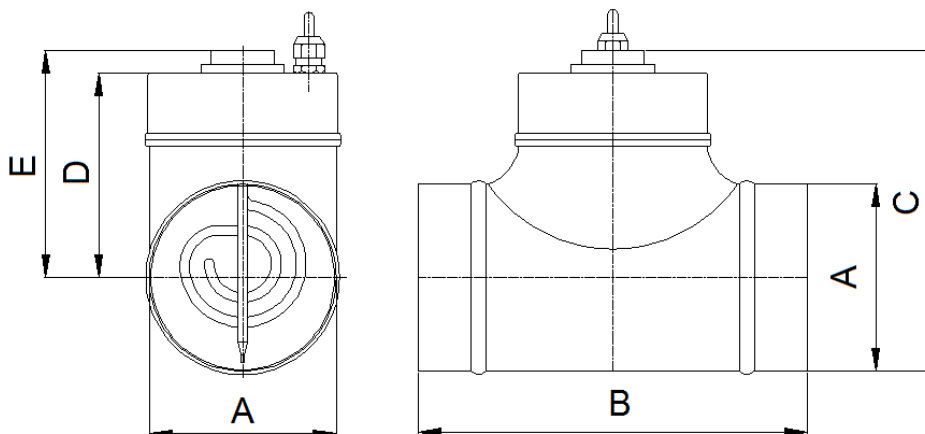
## 3 Electric Wiring

The heater shall be installed in such a way that free and safe access for electric wiring is ensured. A 3m long power supply cable, 3x0.75 sq mm, is included in the supply. The heater shall be wired to a circuit protected by the same circuit breaker as the HRV unit, so that air flow through the heater is ensured.



## 4 Technical Data

		ET-VZT-0,4-125	ET-VZT-0,6-150
Voltage	V	230	230
Frequency	Hz	50	50
Power input	W	400	600
Nominal current	A	1.7	2.6
Connection diameter	mm	125	150
Min. flow rate	m <sup>3</sup> /h	30	45

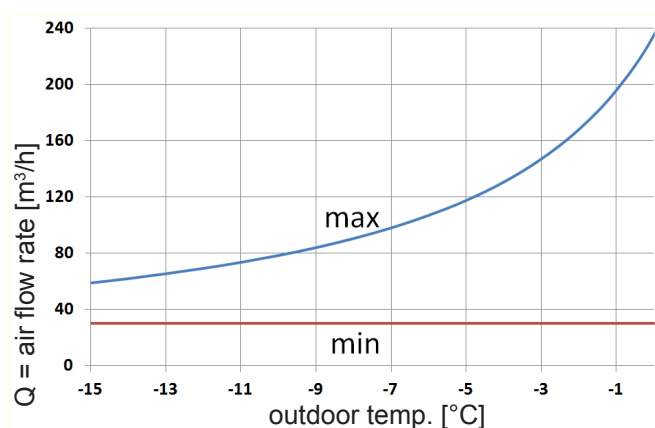


	ET-VZT-0,4-125	ET-VZT-0,6-150
A [mm]	125	150
B [mm]	258	258
C [mm]	213	238
D [mm]	136	148
E [mm]	151	163

## 5 Air Heating in the Heater

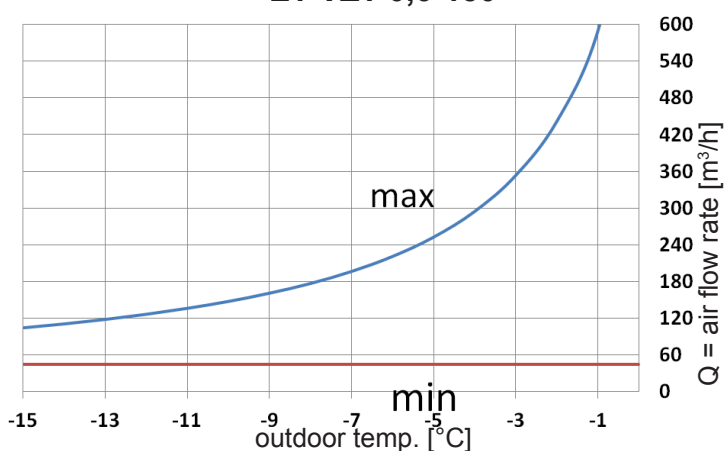
**Application example for HRV pre-heating to 5 °C**

**ET-VZT-0,4-125**



at 0 °C outdoor temp. the application range is up to 220 m<sup>3</sup>/h - Sentinel Kinetic to 90%  
 at -5 °C outdoor temp. the application range is up to 115 m<sup>3</sup>/h - Sentinel Kinetic to 55%  
 at -10 °C outdoor temp. the application range is up to 75 m<sup>3</sup>/h - Sentinel Kinetic to 40%

**ET-VZT-0,6-150**



at 0 °C outdoor temp. the application range is up to 880 m<sup>3</sup>/h - Sentinel Kinetic plus to 90%  
 at -5 °C outdoor temp. the application range is up to 250 m<sup>3</sup>/h - Sentinel Kinetic plus to 70%  
 at -10 °C outdoor temp. the application range is up to 150 m<sup>3</sup>/h - Sentinel Kinetic plus to 45%

## 6 Adjustable Thermostat Settings

The adjustable thermostat range is factory limited between 0 °C and +10 °C.

How to use Air Duct Heater with Sentinel Kinetic heat recovery ventilation unit:

It is recommended to set the temperature to 0 °C (knob turned counterclockwise to the limit).

Under high flow rates and deep frost, the Defrost Mode may be activated in Sentinel Kinetic. This mode can be terminated by reducing the flow rate and turning the thermostat knob clockwise. This will cause the incoming air temperature to rise over 10 °C and the Defrost Mode will be switched off.

The thermostat operation range limitation removed by pulling out the knob and either taking out the limiting springs, or repositioning them. The total operation range is then 0 °C to +40 °C, however when +30 °C temperature limit is exceeded, the limitstat will switch off

## 7 Overheating Protection

The heater features an integrated limitstat with automatic reset. When the air temperature exceeds 30 °C, the limitstat switches off, after the heater cools down to about +15 °C it switches on again and is ready for operation.

## 8 Air Speed

The electric heater may be switched on only when the min. air flow rate of 30 cubic meters per hour is ensured for ET-VZT-0,4-125 and 45 m<sup>3</sup>/h for ET-VZT-0,6-150.

The heater is designed for the max. outgoing air temperature of +30 °C.