3006646-2023-06-29 **HCE-X**, **HE315**



HE315



Electric heating coil for VEX for third party control systems



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| 4 | Electrical installation | . Chapter | 3 |
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Original instructions

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3006646-2023-06-29 **Product information**

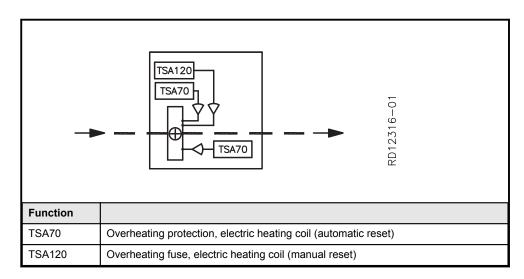


1. Product information

1.1 Use

The EXHAUSTO HE 315 is a heating coil and is used to increase the temperature of the supply air.

Designations used in these instructions

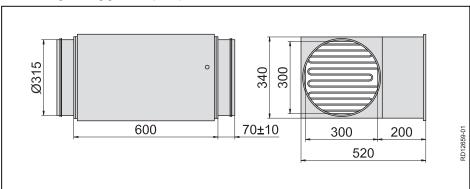


For more information about resetting thermal cut-outs, see section "Safety features".

1.2 Principal dimensions

HE315 heating coil

The following drawing gives the principal dimensions:



3006646-2023-06-29 **Mechanical assembly**



2. Mechanical assembly

2.1 Unpacking

Delivery

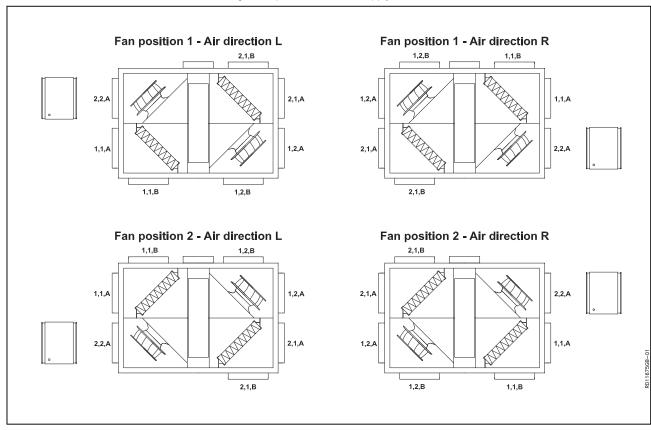
The following components are supplied:

• Electric heating coil

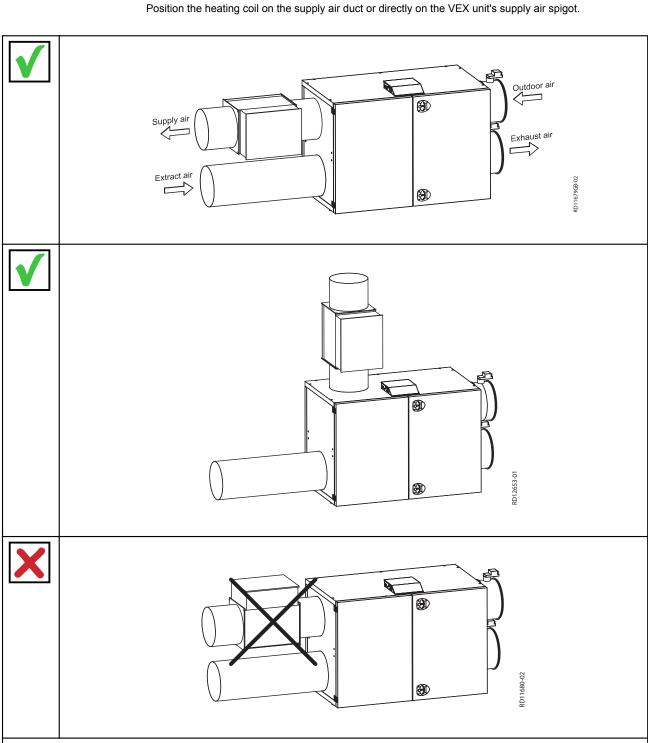
2.2 Position in relation to VEX

2.2.1 Left/right position (shown here on VEX240)

The electric heating coil is positioned on the supply air duct as shown below:



2.2.2 Correct installation on the duct system





The electric heating coil must always be supported - even during fitting (the fixture for this is not part of the EX-HAUSTO delivery).



The heating coil must always be positioned so that:

- - the air flows horizontally through it
- - or the air flows vertically upwards through it

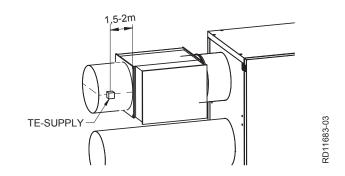


Take note of the air direction (see the air-direction arrow on the electric heating coil door).

3006646-2023-06-29 *Mechanical assembly*

2.2.3 Position of TE-SUPPLY

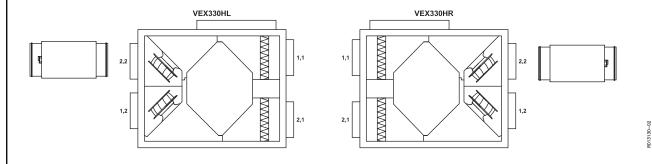
The temperature sensor is positioned here



2.2.4 Correct position of electric heating coil (shown here on VEX330H)

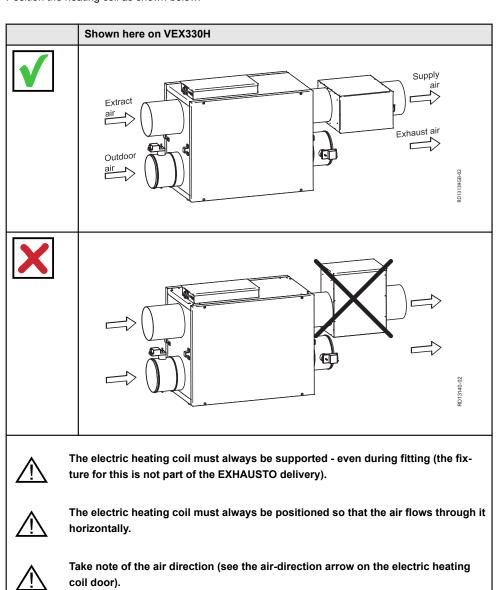
Left/Right position

Position the electric heating coil in the supply air duct or directly on the ventilation unit supply air spigot.



Correct position

Position the heating coil as shown below:

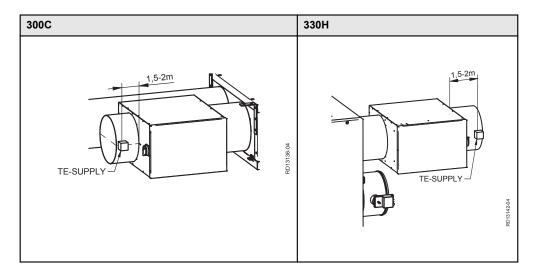


3006646-2023-06-29 *Mechanical assembly*

2.2.5 Position of temperature sensor TE-SUPPLY

The temperature sensor is positioned here

Example of position on a ceiling VEX and a horizontal VEX:



3006646-2023-06-29 Electrical installation



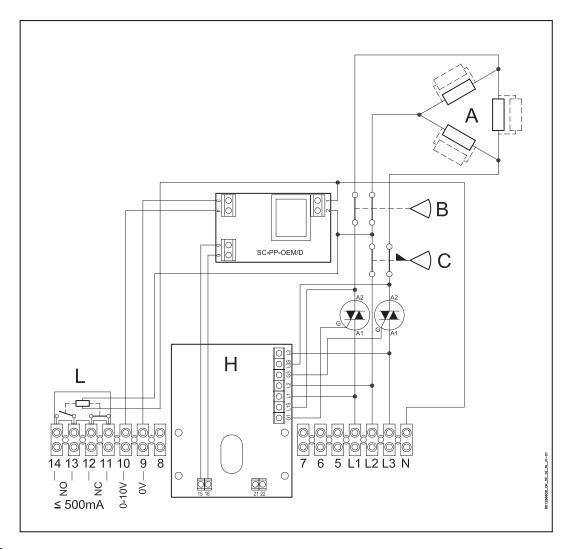
3. Electrical installation

3.1 Connection diagram

3.1.1 Connection diagram

Diagram

The diagram below illustrates the connection of the supply voltage and the electric heating coil connection box.



Key to diagram

| Designation Component | | | |
|---|--|--|--|
| A | Heating elements | | |
| B Overheating protection with automatic reset, TSA70 (qty. 2) | | | |
| С | C Overheating protection with manual reset, TSA120 | | |
| L | Alarm relay | | |
| Н | Thyristor | | |



4. Commissioning and operation

4.1 Warnings, commissioning

4.1.1 Warnings, overheating



Supply airflow must not fall below 486 $\rm m^3/h$ (135 l/s) when operating with the electric heating coil - this is to avoid overheating.

4.2 Safety features

4.2.1 Safety features

Power ramp limiting

- Power ramping is limited to max. 25% per minute.
- · Power is removed without ramping.
- Ramping can cause heating power levels to be read as higher than they actually are.

Electric heating co thermal cut-out

Electric heating coil The electric heating coil is protected against overheating by 3 thermal fuses:

- 2 x TSA70, which trip at 70°C and have automatic reset.
- 1 x TSA120, that trips at 120°C (measured at electric heating coil) and has manual reset.

Reset

| Reset | |
|-------------------------------------|--|
| Resetting the electric heating coil | S. S |

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5. Maintenance

5.1 Maintenance

Maintenance See section "Maintenance" in the product instructions for the VEX unit.

Troubleshooting 3006646-2023-06-29

6. Troubleshooting

6.1 Troubleshooting

Troubleshooting See the "Troubleshooting" section" for the relevant VEX unit.



7. Technical specifications

7.1 Electric heating coil

Electric heating coil

| Electric heat- ing coil HE315 | Total power | 4 kW | 6 kW | 8 kW |
|----------------------------------|---|--------------------------|------|------|
| Data | Weight | 23 kg | | |
| | Power supply for connection box* | 3 x 400V + N + PE, 50 Hz | | |
| | Thermal fuse, TSA70 | 70 ℃ | | |
| | Thermal fuse, TSA120 | 120 °C | | |
| | Temperature tol- erance | | ±5 K | |
| | Temperature drop before reconnection possible | 15 K | | |

^{*}The surface must be supplied with the voltage specified on the type plate.

Temperature increase

The air's temperature increase is determined by a given airflow and the size of the electric heating coil. For calculation, use the calculation tool EXselectPro





see www.exhausto.com

Pressure drop across electric heating coil

See capacity diagram in "Technical Data" section of the VEX product instructions.

7.2 Spare parts

7.2.1 Spare parts

Product number

When ordering spare parts, please state the item number. This will ensure that the correct spare parts are delivered. The production number is stated on the information plate on the VEX unit.

Contact your local EXHAUSTO office service department to order spare parts.

Visit www.exhausto.com or scan the QR code on the back cover of these instructions to obtain the telephone number.





Scan code and go to addresses at www.exhausto.com

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