3005135-2014-09-24 HCE-X\_VEX240



# HCE electrical heating coil for VEX240HX for third-party control systems





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**Original instructions** 

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6. Technical specifications

3005135-2014-09-24 **Product information** 



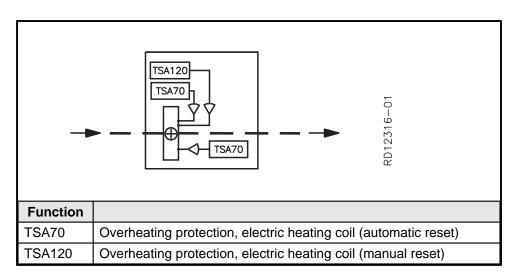
## 1. Product information

## 1.1 Application

#### 1.1.1 Application

The EXHAUSTO VEX200 HCE heating coil is an accessory to the VEX200 range and is used to increase the temperature of the supply air.

## Designations used in these instructions



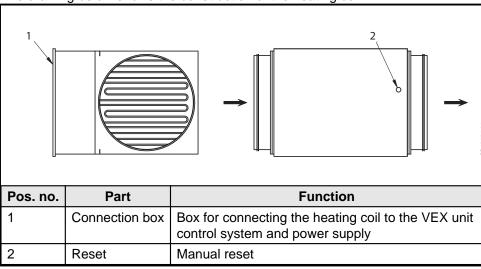
For more information about resetting thermal cut-outs, see section "Safety features".

## 1.2 Description

#### 1.2.1 Construction of the heating coil

## **General drawing**

The drawing below shows the construction of the heating coil:

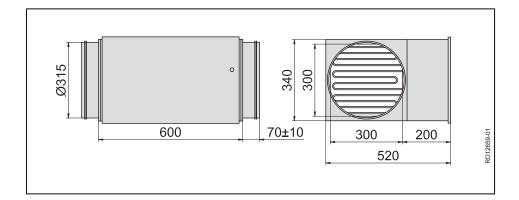


## 1.3 Principal dimensions

VEX240 heating coil HCE240HKX

The following drawing gives the principal dimensions:

3005135-2014-09-24 **Product information** 



3005135-2014-09-24 **Mechanical assembly** 



## 2. Mechanical assembly

## 2.1 Unpacking

Supplied components

The following components are supplied:

Heating coil

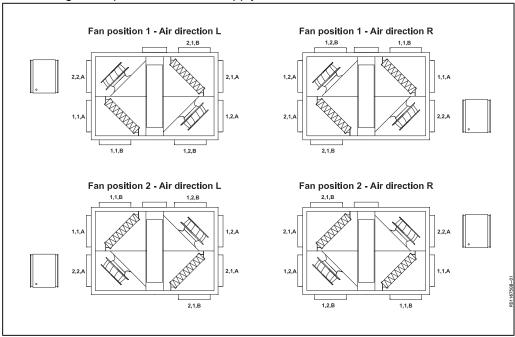
2.1.1 Weight, 240HCE

Heating coil weighs 23 kg

## 2.2 Position in relation to VEX

## 2.2.1 Left/Right positioning

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



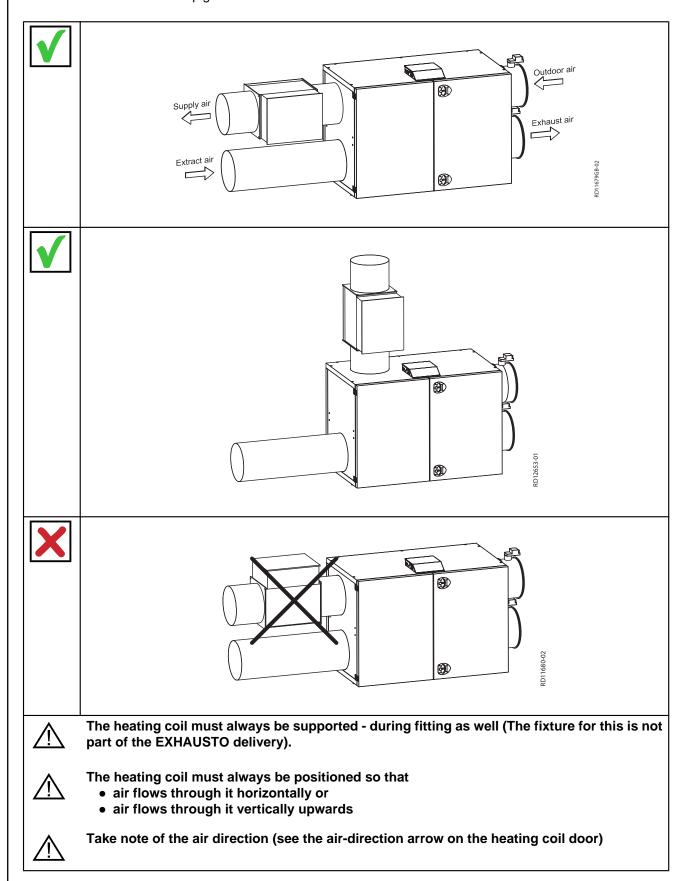
## 2.2.2 Correct installation on the duct system

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

3005135-2014-09-24 *Mechanical assembly* 

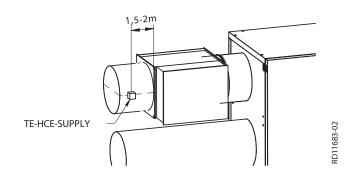
## 2.2.3 Correct installation on the duct system

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



## 2.2.4 Location of TE-HCE-SUPPLY

The temperature sensor is positioned here



3005135-2014-09-24 Electrical installation



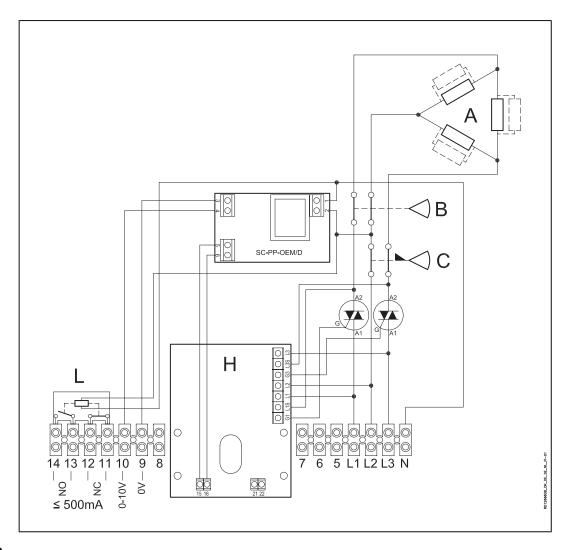
## 3. Electrical installation

## 3.1 Connection diagram

## 3.1.1 Connection diagram

**Diagram** 

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



## Key to diagram

Designation	Component	
Α	Heating elements	
В	Overheating protection with automatic reset, TSA70 (qty. 2)	
С	Overheating protection with manual reset, TSA120	
L	Alarm relay	
Н	Thyristor	



## 4. Commissioning and operation

## 4.1 Warnings, commissioning

**Warnings** 



During commissioning, it may be necessary to work with the control system boxes open. Use only electrically-insulated tools.



Do not touch the heating coil - risk of burns.

NB!

The ventilators must run on for 3 minutes.

#### 4.1.1 Warnings, overheating



Supply airflow must not fall below 486 m<sup>3</sup>/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

Heating coil thermal cut-out

The 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 heating coil) and has manual reset.

3005135-2014-09-24 *Maintenance* 



## 5. Maintenance

## **5.1 Maintenance**

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



## 6. Technical specifications

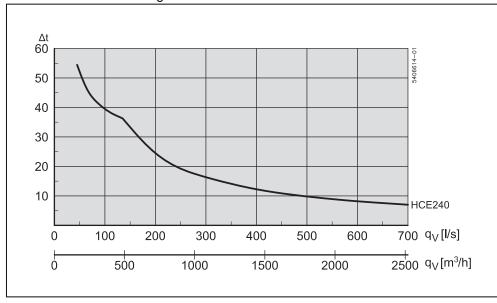
## 6.1 Heating coil

## **Electric heating coil**

Weight	HCE heating coil, weight	23 kg
Data	Total power rating	6 kW
	Supply voltage to connection box	3 x 400 V + N + PE, 50 Hz
	Thermal fuse, TSA70	70°C
	Thermal fuse, TSA120	120°C
	Temperature tolerance	±5 K
	Temperature drop before reconnection possible	15 K

## Diagram

The diagram below can be used to determine the air temperature increase at a given airflow and electric heating coil size.



Pressure drop across electric heating coil

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



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