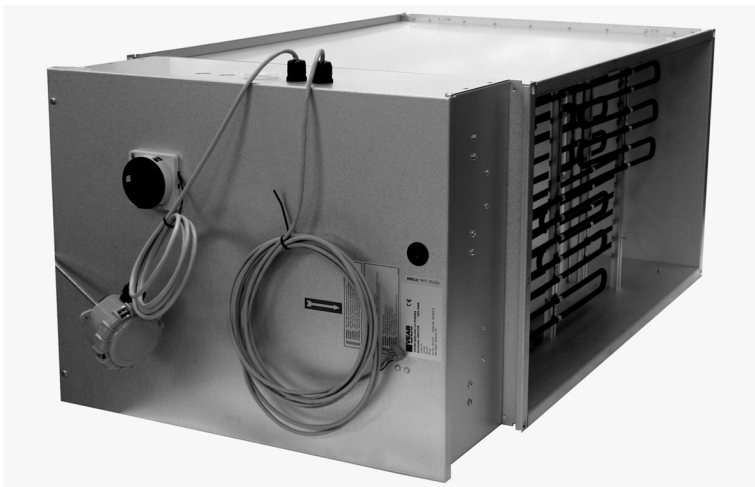







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# HCE electrical heating coil for VEX270HX for third-party control systems



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-  Mechanical assembly.....Chapter 2
-  Electrical installation.....Chapter 3
-  Commissioning and operation.....Chapter 4
-  Maintenance.....Chapter 5

**Original instructions**



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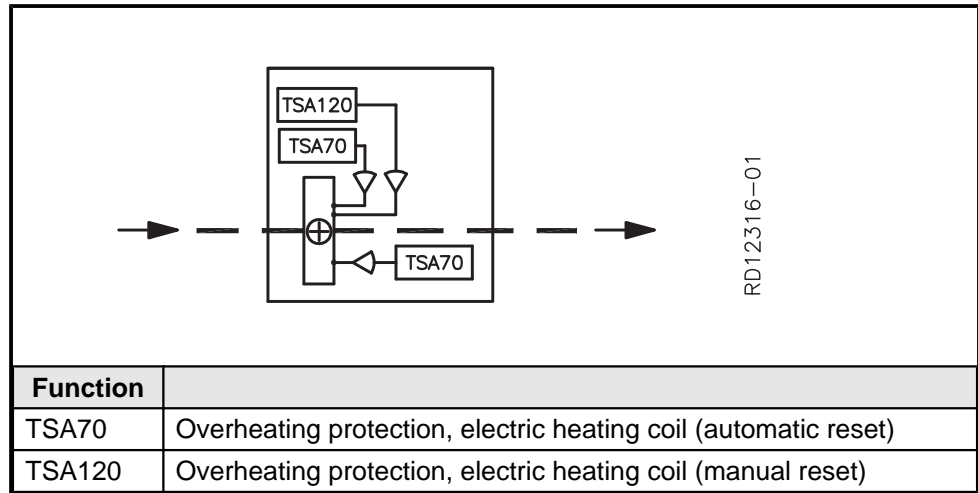
# 1. Product information

## 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



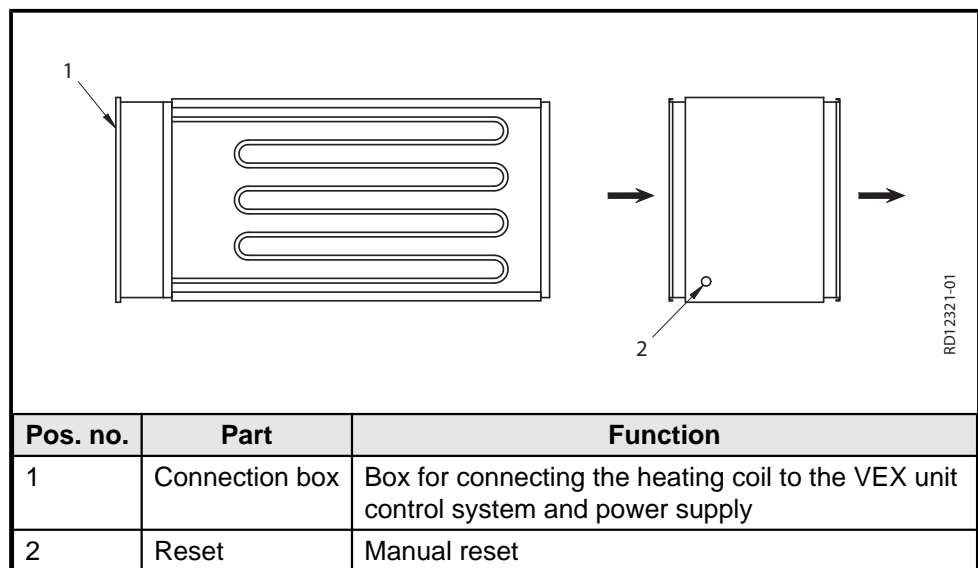
For more information about resetting thermal cut-outs, see section "Safety features".

## 1.2 Description

### 1.2.1 Construction of the heating coil

General drawing

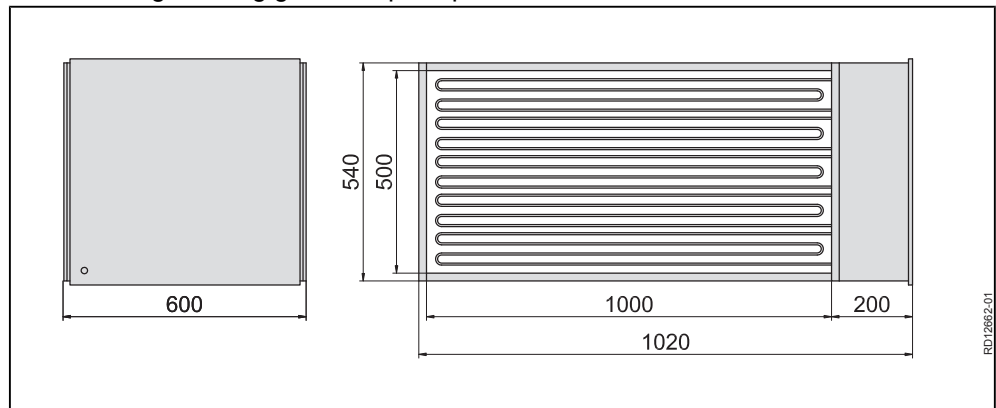
The drawing below shows the construction of the heating coil:



### 1.3 Principal dimensions

VEX270 heating coil  
HCE270HKX

The following drawing gives the principal dimensions:





## 2. Mechanical assembly

### 2.1 Unpacking

Supplied components

The following components are supplied:

- Heating coil

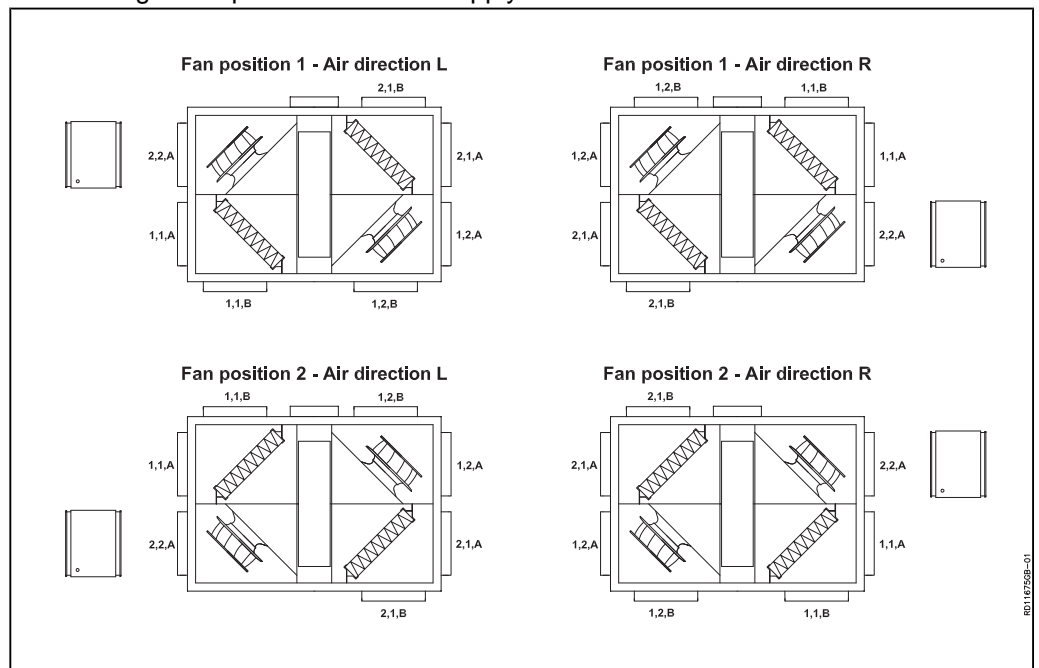
#### 2.1.1 Weight

Heating coil weighs 45 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:

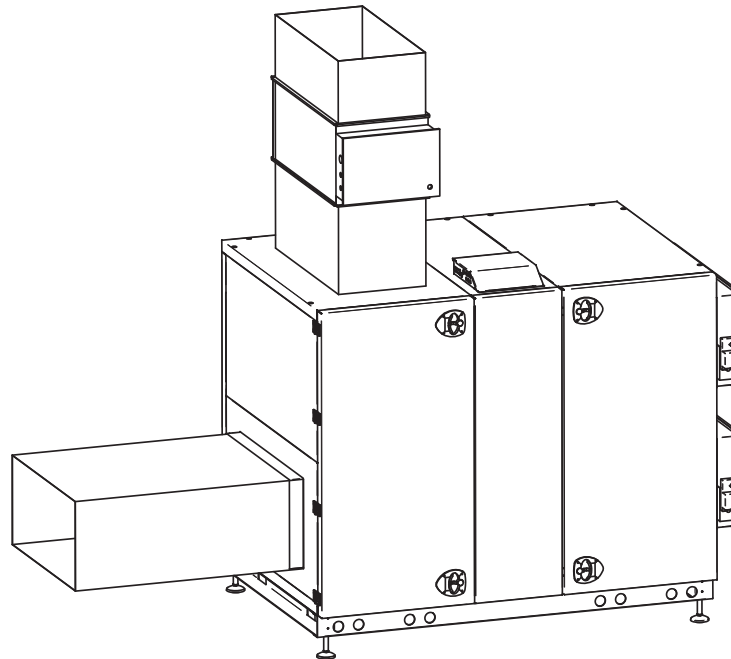
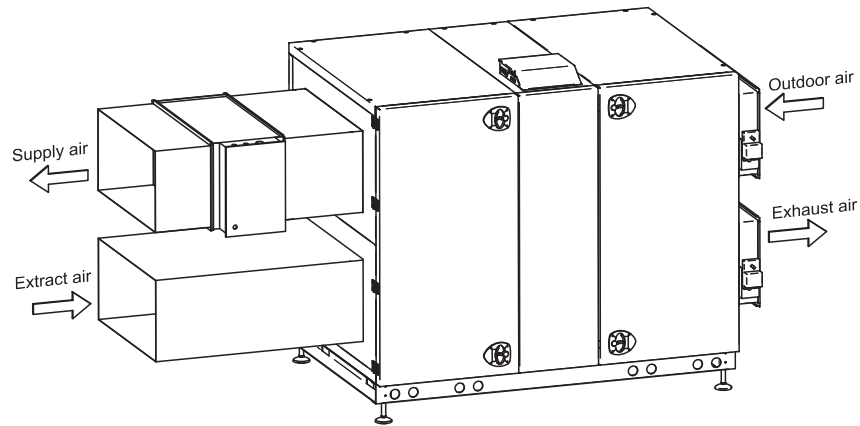


#### 2.2.2 Correct installation on the duct system

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

### 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.



The heating coil must always be supported - during fitting as well (The fixture for this is not part of the EXHAUSTO delivery).



The heating coil must always be positioned so that

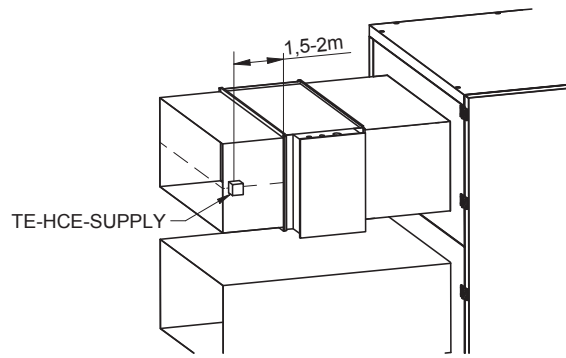
- air flows through it horizontally or
- air flows through it vertically upwards



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

### 2.2.4 Location of TE-HCE-SUPPLY

The temperature sensor is positioned here



RD11685-02



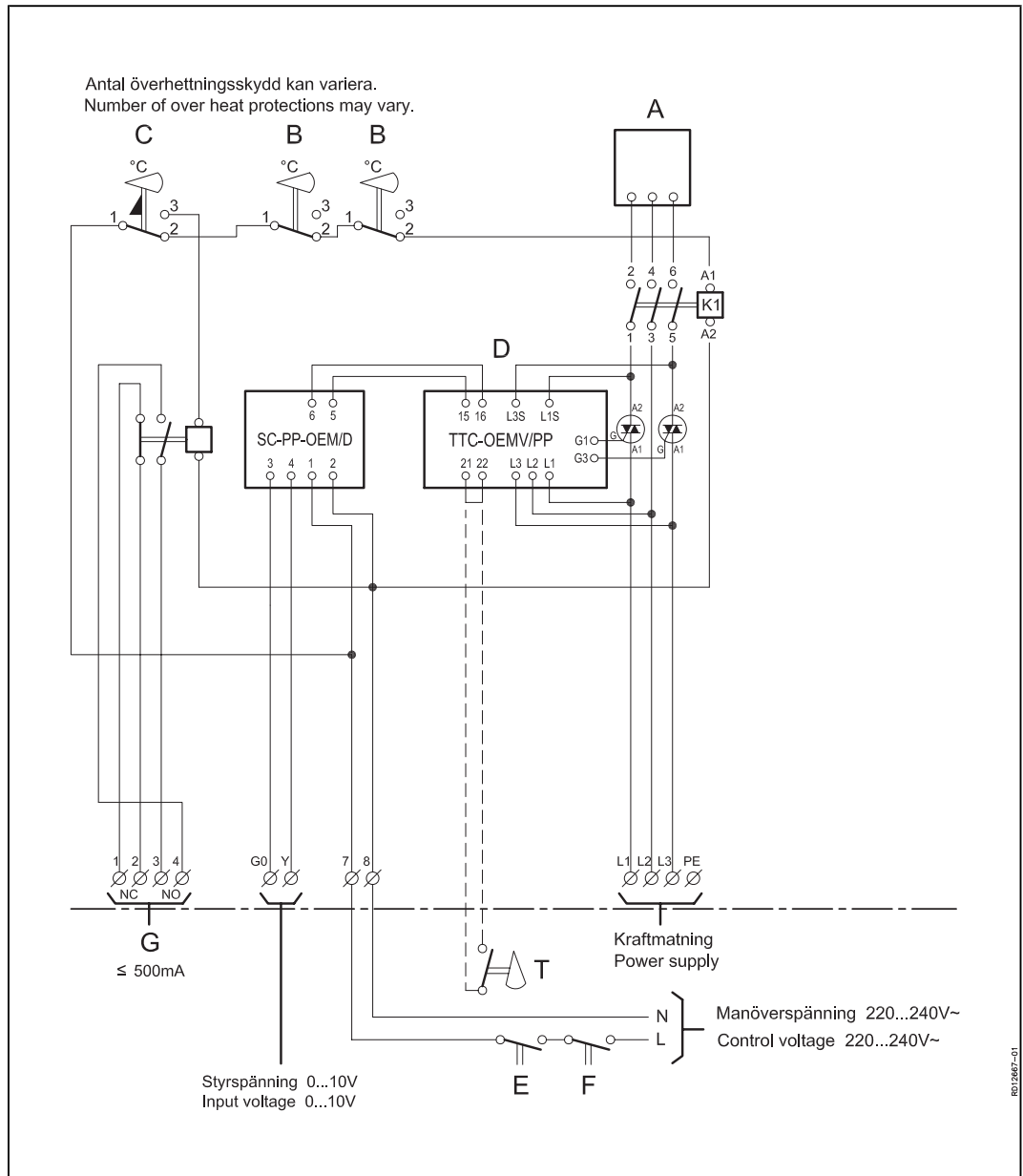
### 3. Electrical installation

#### 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.

##### 3.1.2 Diagram



#### Key to diagram

Designation	Component
A	Heating elements
B	Overheating protection with automatic reset, TSA70 (qty. 2)
C	Overheating protection with manual reset, TSA120



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<b>Designation</b>	<b>Component</b>
D	Triac regulation of heating elements
E	Isolation switch
F	Isolation switch
G	Potential free switches for tripped thermal fuse TSA120
T	Flow monitor

---



## 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 2700 m<sup>3</sup>/h (750 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.



## 5. Maintenance

### 5.1 Maintenance

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



## 6. Technical specifications

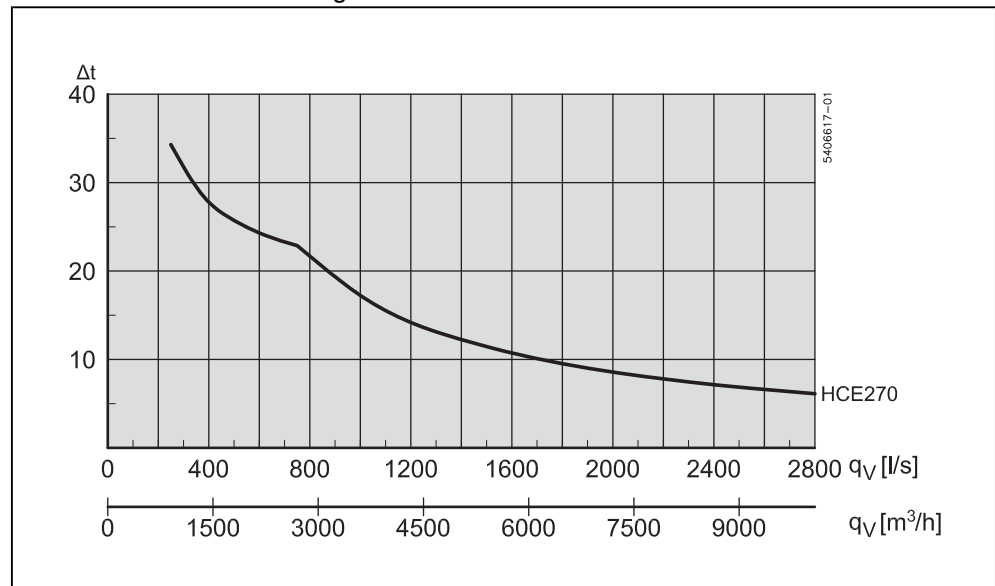
### 6.1 Heating coil

#### Electric heating coil

<b>Weight</b>	HCE heating coil, weight	45 kg
<b>Data</b>	Total power rating	21 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 electrical 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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