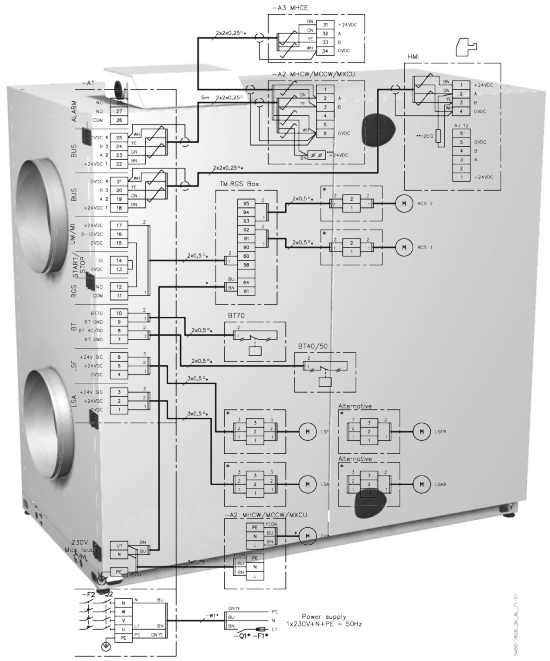
GB

Electrical installation guide

VEX340HX for third-party control systems

VEX300
RANGE
COUNTER FLOW
HEAT EXCHANGER



Original instructions

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EXHAUSTO

Symbols, terms and warnings

Prohibition symbol

Failure to observe instructions marked with a prohibition symbol may result in serious or fatal injury.

Danger symbol

Failure to observe instructions marked with a danger symbol may result in personal injury and/or damage to the unit.

Warnings

The work must be performed by an authorised electrician, in accordance with locally applicable regulations and legislation.

Isolation switch

In accordance with The Machinery Directive*, an isolation switch must be permanently installed in the unit.

The isolation switch must:

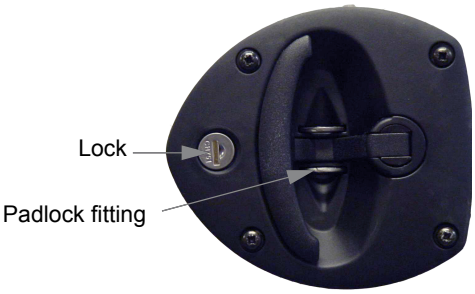
- be lockable or positioned in plain sight in the immediate vicinity of the unit
- disconnect all poles from the supply voltage
- be constructed in accordance with EN 60204-1

The isolation switch is **not** supplied by EXHAUSTO.

Lock the air handling unit during operation

The VEX unit must always be locked during operation:

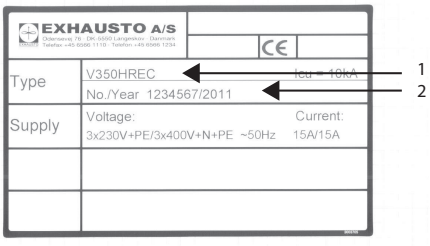
- Use the cylinder lock in the handle. **Remember** to remove the key from the lock.
- Or use a padlock. Use the handle's built-in padlock fixture



Rating plate

The VEX unit rating plate shows:

- VEX model (1)
- Production order no. (2)



NB

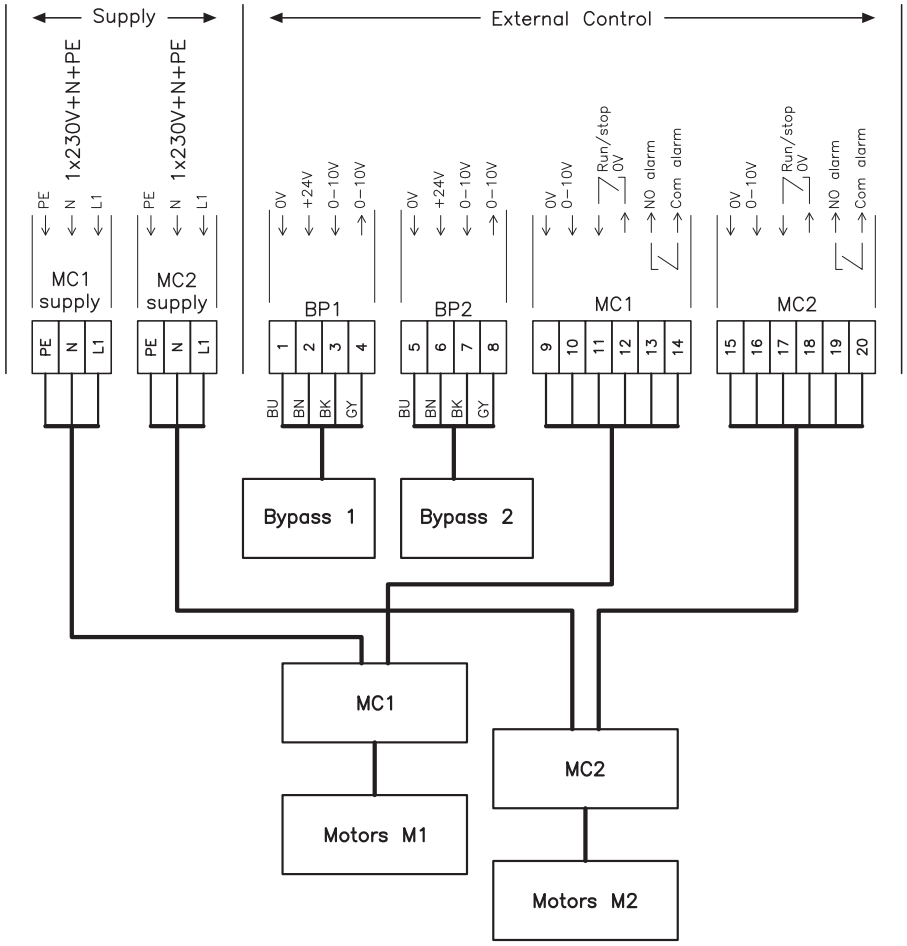
Always have the production number ready when contacting EXHAUSTO A/S.

1. Connection diagram for supply voltage

1.1 Connection diagram for VEX with motor control (MC)

Diagram, 1 x 230 V

The diagram below illustrates connection of the supply voltage to the motor control and bypass damper.



Explanation of diagram

Term	Description
MC1	Control signal for motor control M1 (exhaust air/extract air)
MC2	Control signal for motor control M2 (supply air/outdoor air)
Bypass 1	Control signal for bypass damper 1 (bottom)
Bypass 2	Control signal for bypass damper 2 (rear)
MC1 Supply	Power supply for motor control MC1 (exhaust air/extract air)
MC2 Supply	Power supply for motor control MC2 (supply air/outdoor air)

NB:

Other parts, shown on the front page of the VEX instructions, are supplied by EXHAUSTO

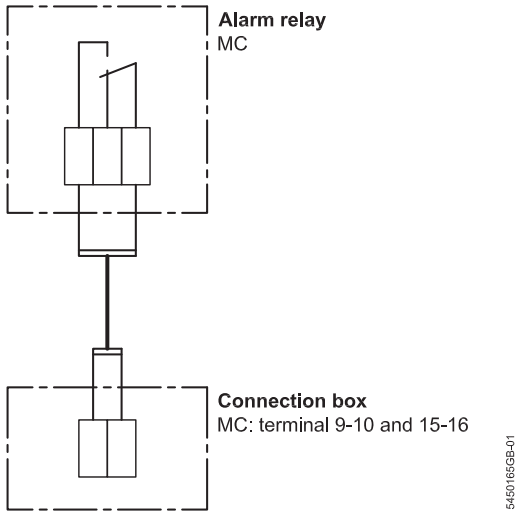
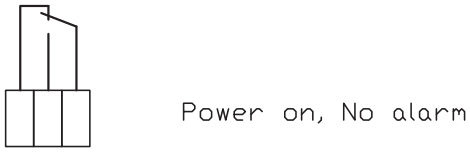
Electrical data

The table below shows how the total phase current is shared between MC1 and MC2.

Type	Supply voltage	Dimensioned power consumption Max. phase current (total)	MC1 Phase current	MC2 Phase current
VEX340	1 x 230 V + N + PE	10 A	5.0 A	5.0 A

NB: Power consumption is not sinusoidal.

1.1.1 Alarm relay function

	Description	Drawing
Connection	The diagram shows which two terminals for the MC are connected to the terminal block in the connection box	
Function	The alarm relay position in the case of power failure or similar	
	The alarm relay position in case of alarm	
	The alarm relay position during operation	

2. Installation of the VEX

2.1 Scope of installation

VEX unit

The electrical installation for the VEX unit comprises the following connections:

Connection box

Wiring configurations for the terminal board in the connection box:

- Motor and motor control (MC) supply voltage
- Motor control signal (MC) and alarm relay
- Bypass damper control signal

Bypass damper function

When connecting bypass damper to the control signal, the following must be taken into consideration:

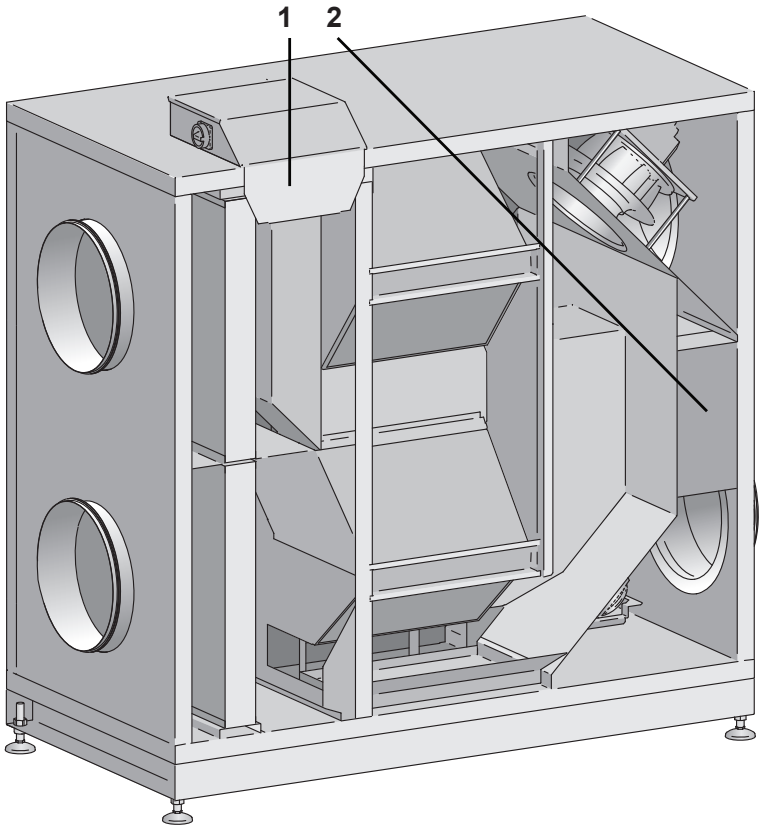
If	And	Then
Bypass damper BP1 (bottom) is closed	Bypass damper BP2 (rear) is open	Extract air is directed through the counter flow heat exchanger (100% heat recovery)
Bypass damper BP1 (bottom) is open	Bypass damper BP2 (rear) is closed	Extract air is directed around the counter flow heat exchanger (0% heat recovery)

NB

- The motor control is pre-programmed by EXHAUSTO and has overload protection
- The motor control must have short-circuit protection

For other technical data, see the “Technical data” section in the main instructions of the VEX.

Positioning of electrical components



1. Connection box	2. Motor control

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