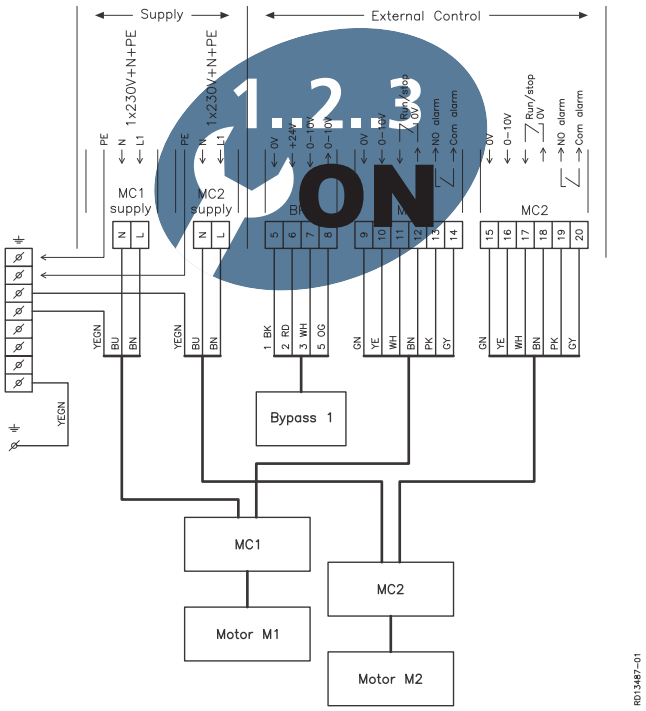
GB

Electrical installation guide

for VEX140CF-X for third-party control systems

VEX100CF 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.

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.

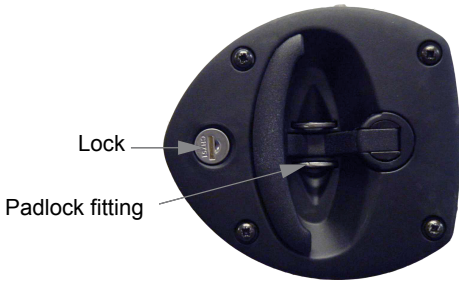
Warnings

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

Lock the air handling unit during operation

The VEX unit must always be locked during operation:

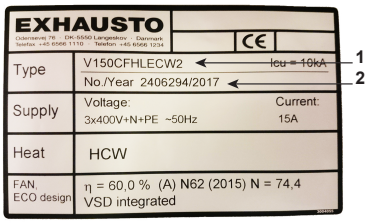
- Use the cylinder lock in the handle. **Remember** to remove the key from the lock.
- Or use a padlock. Use the handle's built-in padlock fixture.



Information plate

The VEX unit rating plate shows:

- VEX unit, type (1)
- production number (2)

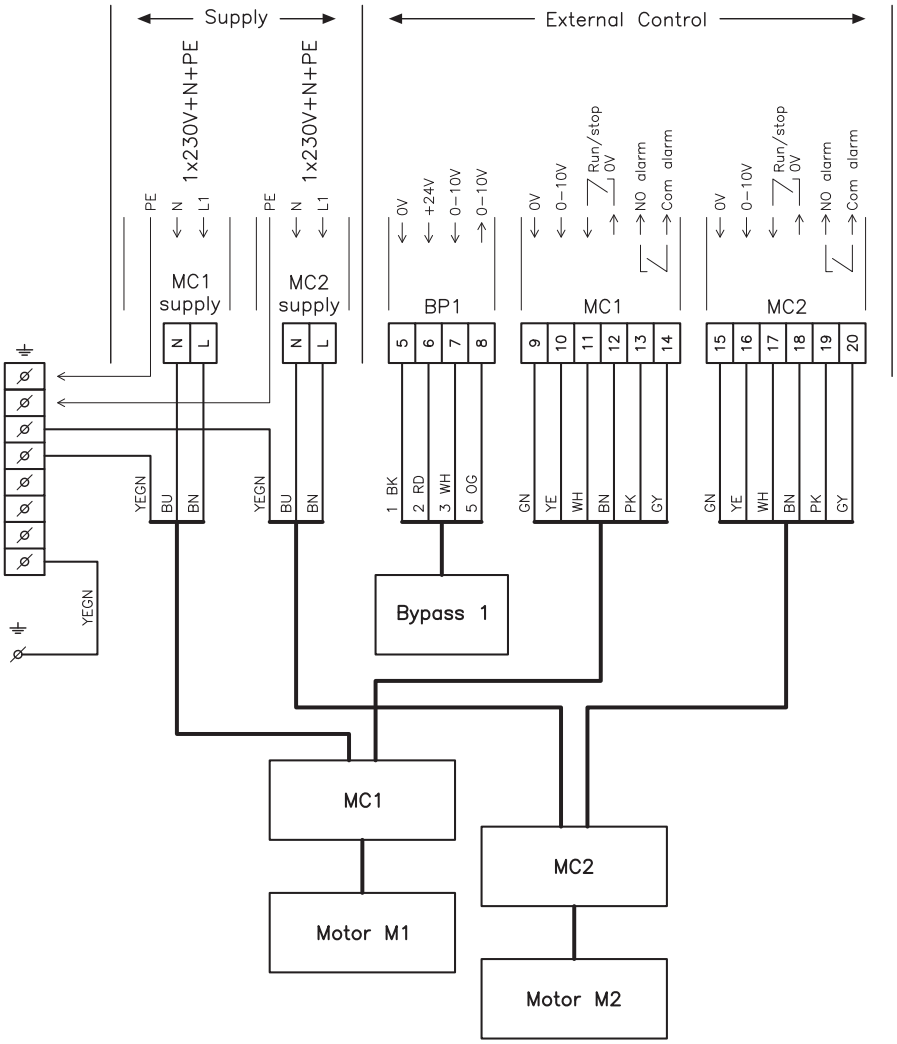


NB: **Always have the production number ready when contacting EXHAUSTO A/S.**

1. Connection of voltage supply

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.



Key to diagram

Designation	Description
MC1	Control signal for motor control M1 (exhaust air/extract air)
MC2	Control signal for motor control M2 (supply air/outdoor air)
BP1	Control signal for bypass damper 1 (supply air/outdoor air)
MC1 Supply	Power supply for motor control MC1 (exhaust air/extract air)
MC2 Supply	Power supply for motor control MC2 (supply air/outdoor air)

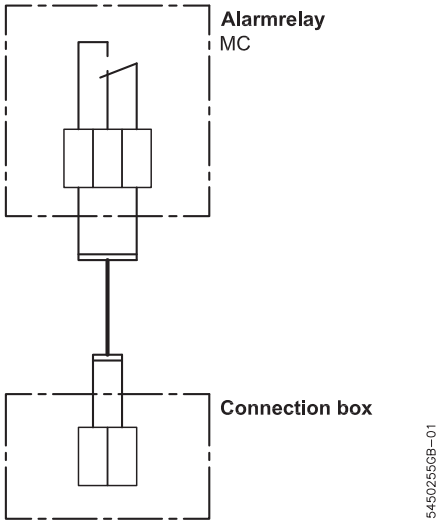
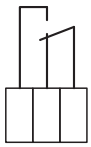
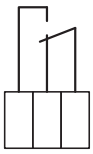
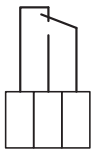
NB Other parts, shown on the front page of the VEX instructions, are supplied by EX-HAUSTO

Electrical data The following table shows the max. phase current.

Type	Supply voltage	Max. Phase current (total)	MC1 phase cur-rent	MC2 phase cur-rent
VEX140	1 x 230 V + N+ PE	10 A	5 A	5 A

NB Power consumption is taken from one phase and is not sinusoidal.

1.1.1 Alarm relay function

	Description	Drawing
Connection	The diagram shows which two terminals from MC are connected to the terminal block in the connection box	 MC: terminal 13-14 and terminal 19-20
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 tasks:

Connection box

Wiring configurations for the terminal board in the connection box:

- Supply voltage to motors and motor control (MC)
- Control signals for motor control (MC) and alarm relay
- Control signal to bypass damper

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.

Bypass damper function

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

Control voltage to BP1	Function
2 V	100% heat recovery. Outdoor air is led through the counterflow heat exchanger.
7.8 V	0% heat recovery. The outdoor air bypasses the counterflow heat exchanger.

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