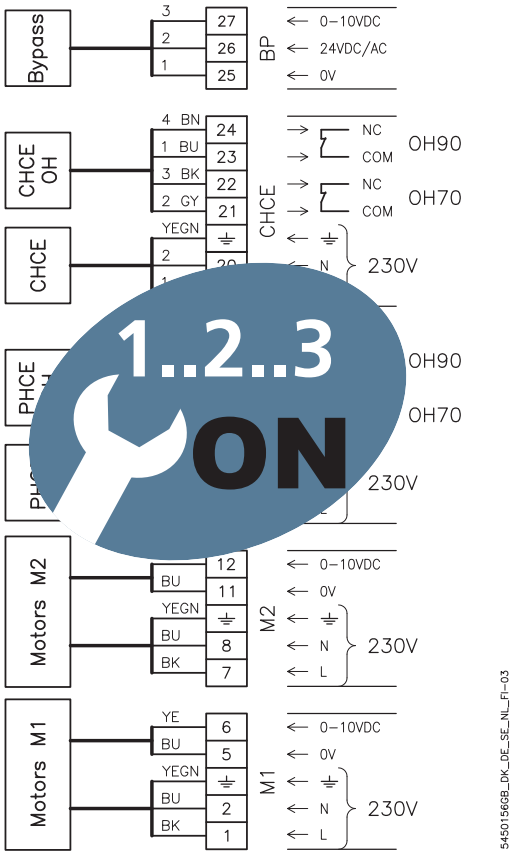
GB

Electrical installation guide

for VEX320CX/330CX/HX for third-party control systems

VEX300 RANGE
COUNTER FLOW HEAT EXCHANGER



Electrical installation.....Chapter 1 + 2

Original instructions

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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:

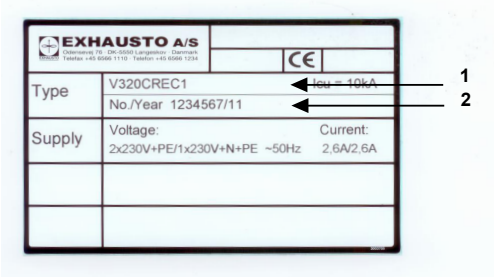
- be lockable or positioned in plain sight in the immediate vicinity of the unit
- disconnect all poles from the supply voltage
- be constructed in accordance with EN 60204-1

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

Information plate

The VEX unit information plate shows:

1. VEX model
2. Production order no.



NB

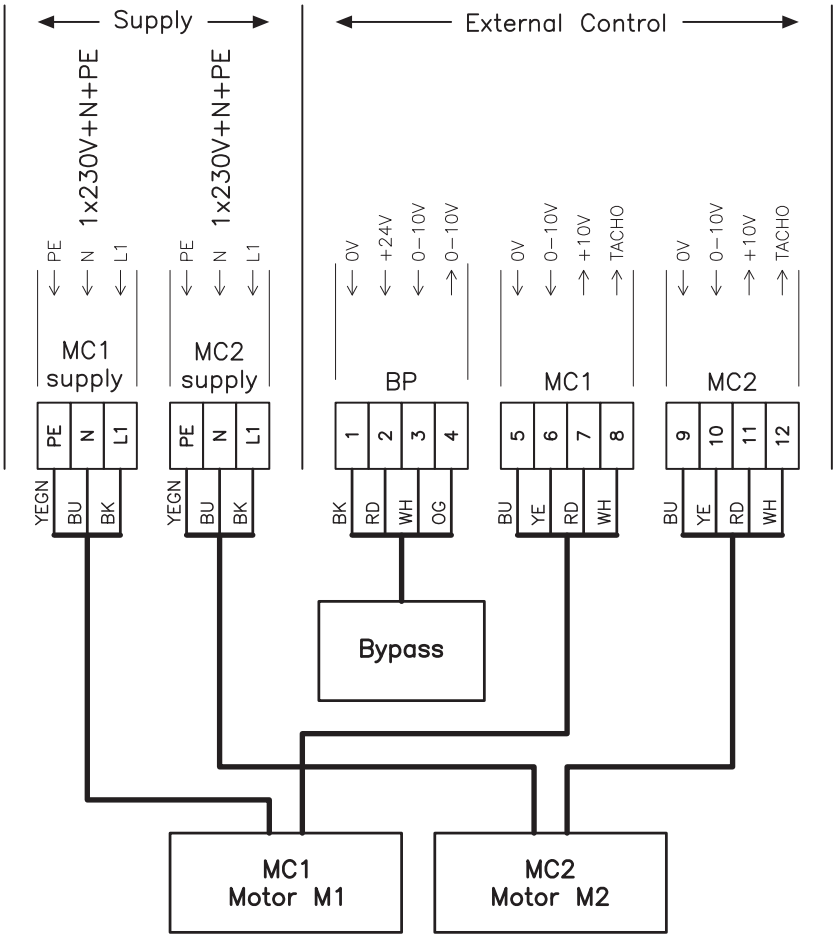
Always have the production number ready when contacting EXHAUSTO A/S.

1. Connection diagram for supply voltage

1.1 Connection diagram for VEX with motor control (MC)

1.1.1 VEX300 with motor size 1

Diagram, 1 x 230 V The diagram below illustrates connection of the supply voltage to the motor control and bypass damper.



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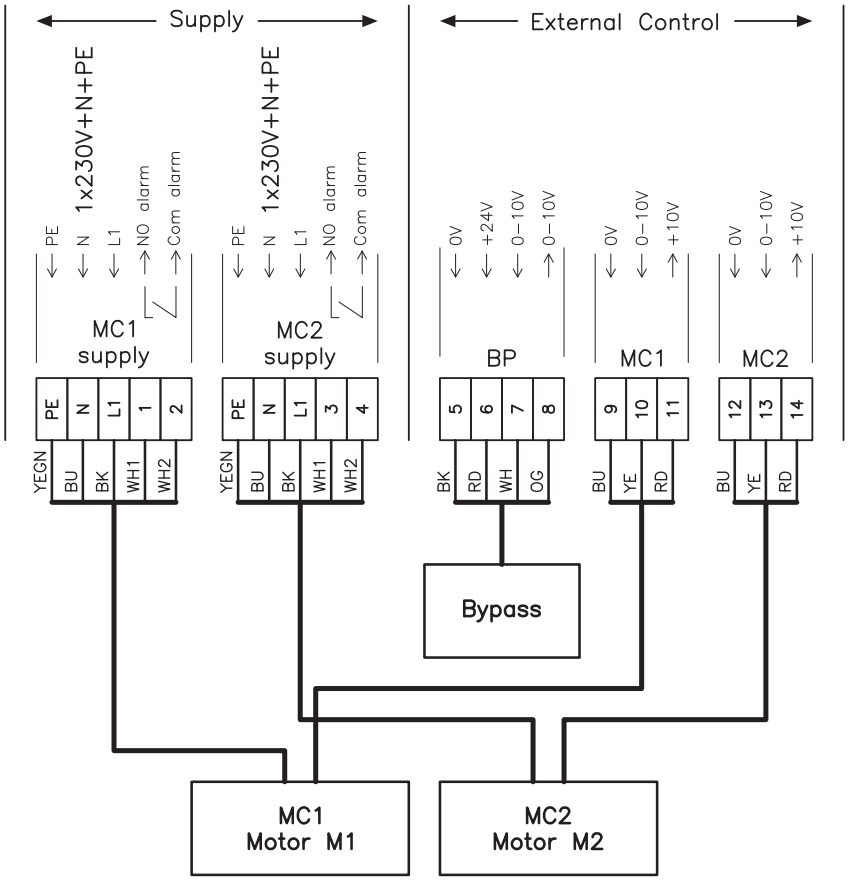
1.1.2 VEX300 with motor size 2

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	Explanation
MC1	Control signal for motor control motor M1 (exhaust/extract air)
MC2	Control signal for motor control motor M2 (supply/outdoor air)
Bypass 1	Control signal for bypass damper 1
MC1 Supply	Power supply to motor control MC1 (exhaust/extract air)
MC2 Supply	Power supply to motor control MC2 (supply/outdoor air)

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

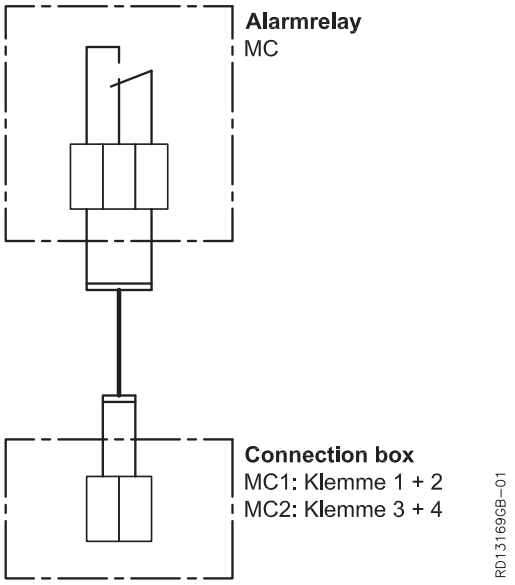
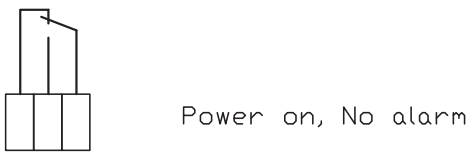
Electrical data

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
VEX320CX-1	1 x 230 V + N + PE	2.6 A	1.3 A	1.3 A
VEX320CX-2	1 x 230 V + N + PE	4.8 A	2.4 A	2.4 A
VEX330CX-1	1 x 230 V + N + PE	2.6 A	1.3 A	1.3 A
VEX330CX-2	1 x 230 V + N + PE	4.8 A	2.4 A	2.4 A
VEX330HX-1	1 x 230 V + N + PE	2,6 A	1,3 A	1,3 A
VEX330HX-2	1 x 230 V + N + PE	4,8 A	2,4 A	2,4 A

NB: Power consumption is not sinusoidal.

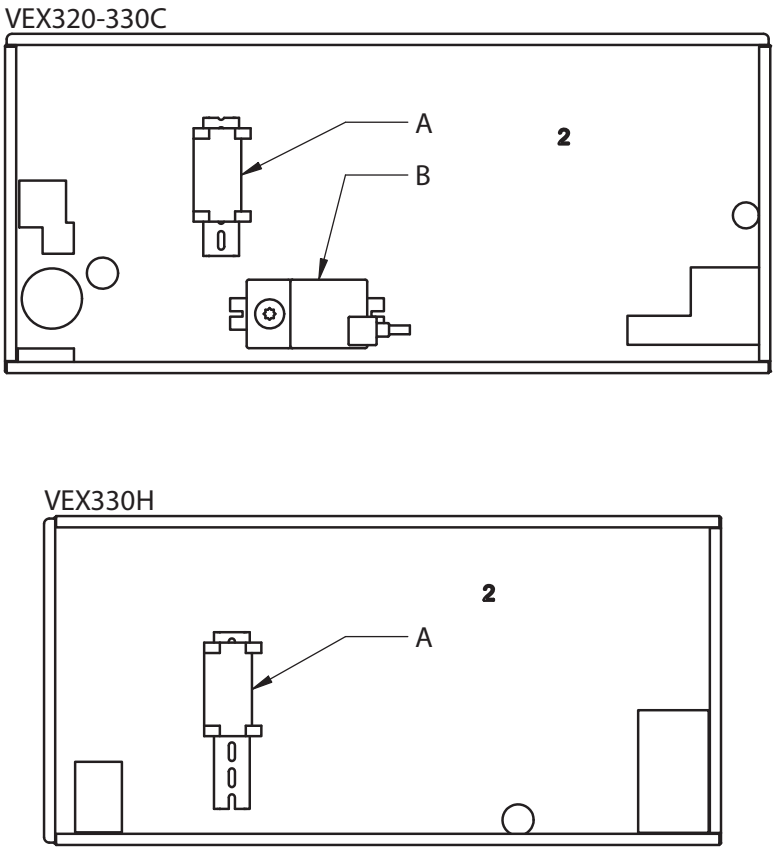
1.1.3 Alarm relay function

	Description	Drawing
Connection	The drawing shows which two terminals from MC are fed to the terminal block in the connection box	
Function	Position of alarm relay in case of power failure etc.	
	Position of alarm relay in case of alarm	
	Position of alarm relay during operation	

2. Installation of the VEX

2.1 Scope of installation

Connection box



The connection box contains the following components	
Position	**Component**
A	Terminal block
B (only VEX300C)	Bypass motor

Possible connections to terminal block (A) in connection box:

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

Bypass damper function

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

If	Then
Bypass damper BP1 is closed	Extract air is directed through the counter flow heat exchanger (100% heat recovery)
Bypass damper BP1 is open	Extract air is directed around the counter flow heat exchanger (no heat recovery)

NB:

- The motor control is preprogrammed 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 for the VEX.

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

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