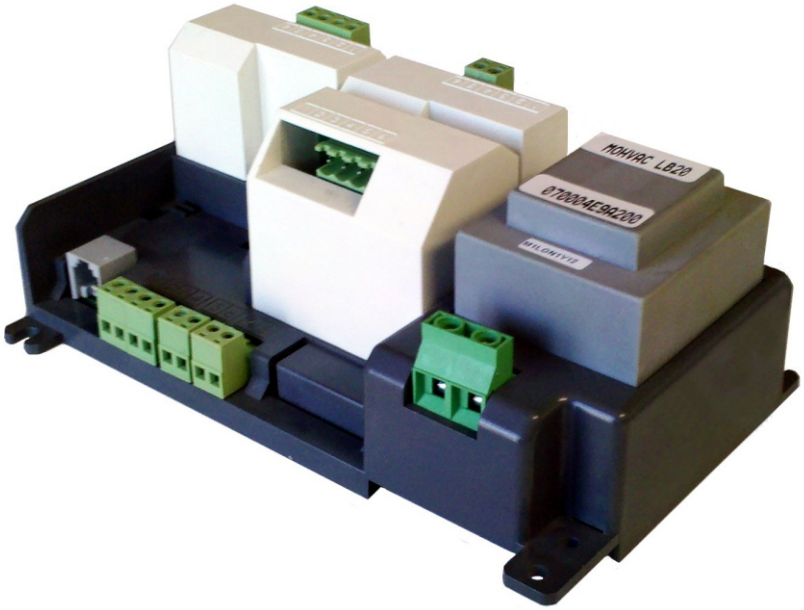
DEMAN

mohvac



Modular HVAC controller

Doc#
M1xQ10

M1-B..0 - Stand-alone
M1LB..0 - LON
M1SB..0 - Local net

A configurable stand-alone or network connected unit for HVAC applications with various selectable output and input modules.

Possible control options include:

Three speed or variable speed fan control.
Single step, three step or variable heating.
On/off or modulating valve control.
0-5V or 0-10V analog out for various controlling functions.
Discrete inputs and 24V out for occupancy sensing.

Other features:

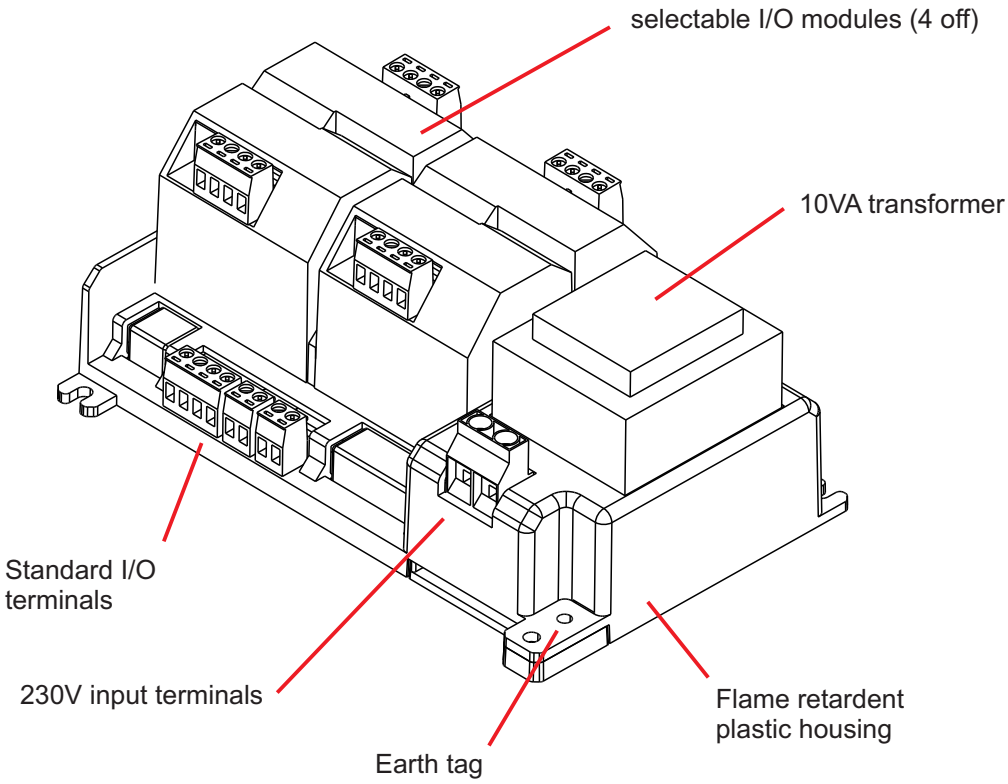
Pre-set temperature set point or use with a MK2A22 wall control unit.
Range of wall units compatible with most standard room fittings.
Configure by specifying 4 off selectable modules.
Input for water temperature, supply air temperature, occupancy or heater interlock.
Plugable screw terminals.
Power supply to unit 230V.

Index

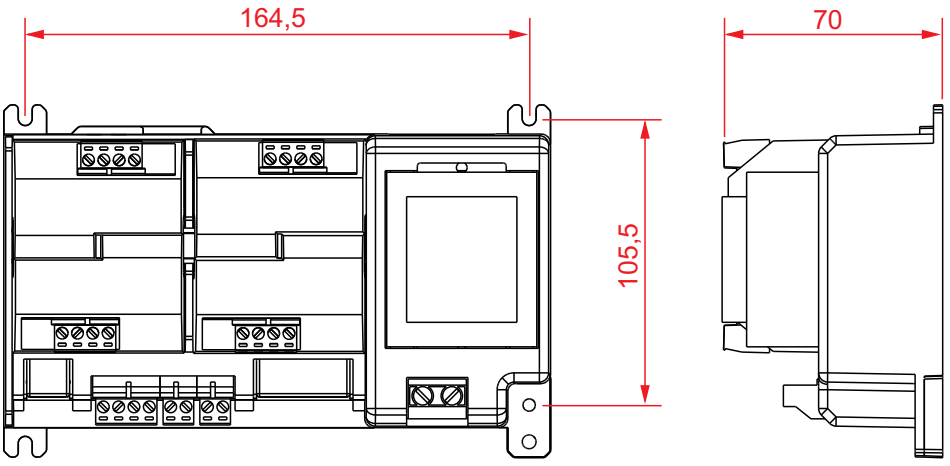
Related documents

M1 range of controllers LON interface	M1LQ20
M1 range of controllers BACnet interface	M1BQ20
LONWORKS® Bus Wiring Guidelines	CAT5-1LQ10
LONWORKS® Network Wiring Aid	LONTKSQ10
Wall Unit (User interface)	MK2Q10

Design

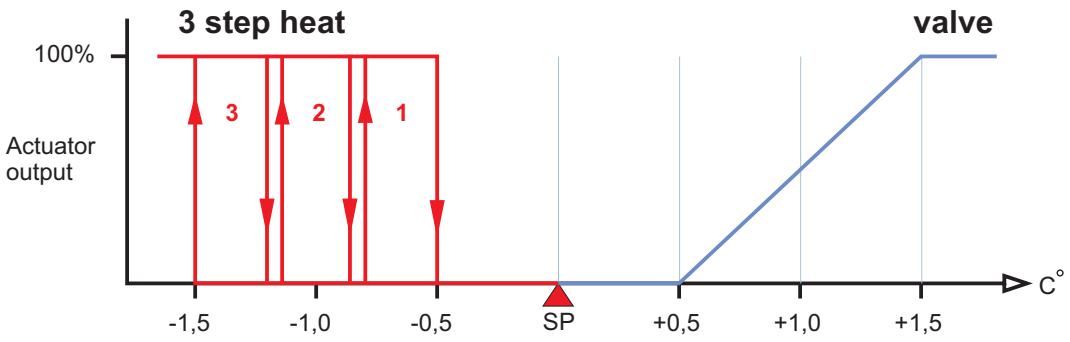


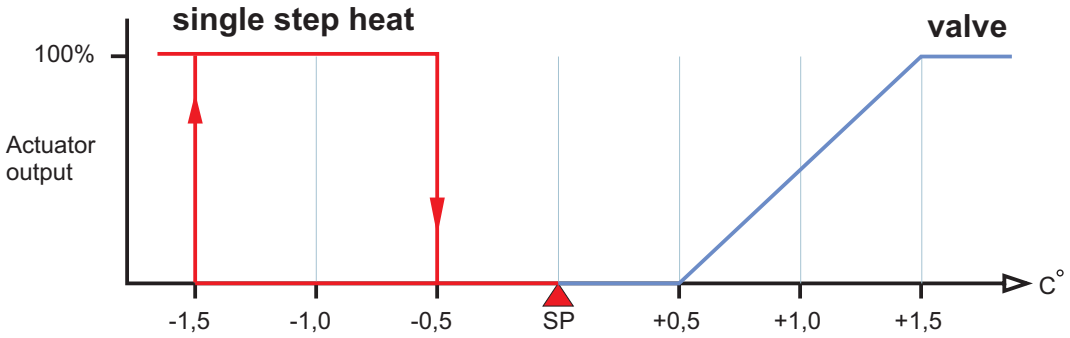
Dimensions



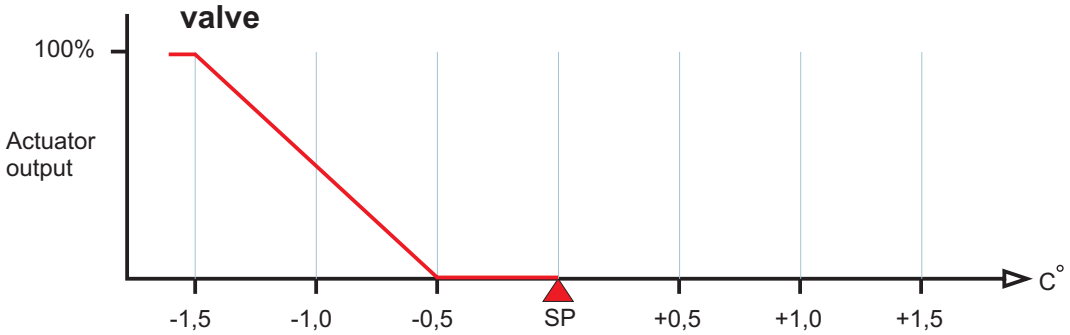
Temperature control examples

Water temp < room temp



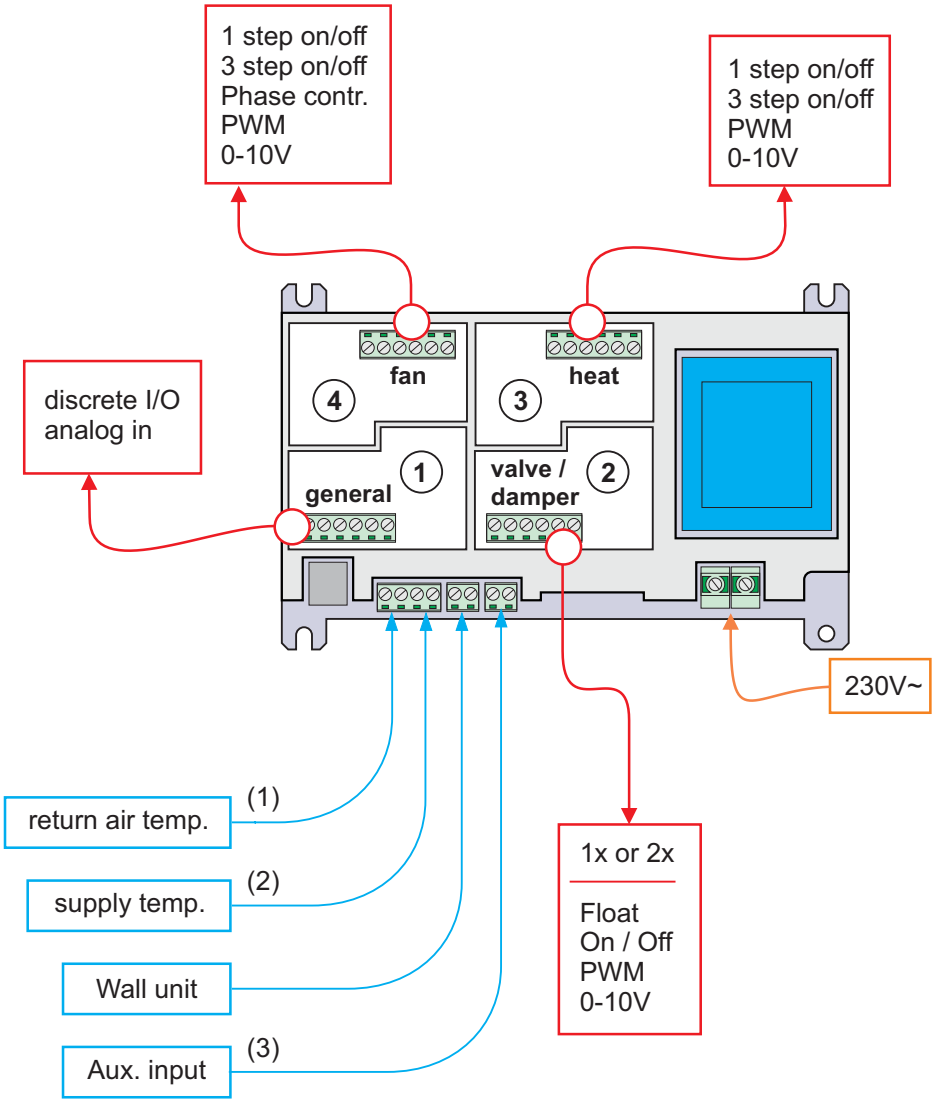


Water temp > room temp



Note: In the above examples the valve control is proportional and the heter is single step or 3 step on/off.

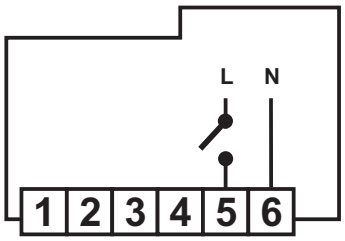
Functional Options



(1) If not presant the room temperature will be measured at the wall unit.
(2) Supply air or supply water temperature. In a BMSystem this input can be used to report back the discharge air temperature.
(3) Heater interlock or occupancy. The discrete I/O module is however usually used for occupancy.

Standard I/O Modules

M1GRS10

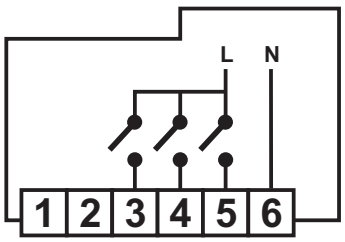


Function: single 230V AC output

Control: heater, fan

230V AC out: 10A max.

M13RS10

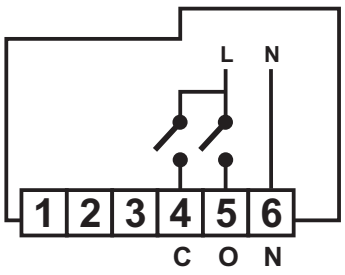


Function: 3step 230V AC output

Control: heater, fan, dampers

230V AC out: 3A per output max.

M1KDS10 / 20

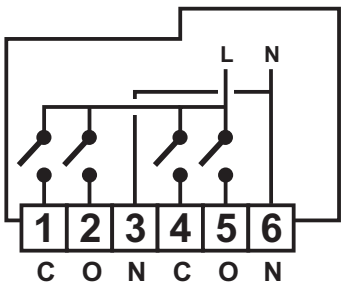


Function: single open/close or floating control. 230V or 24V AC

Control: valve or damper

230V AC out: 0,5A max.
24V AC out: 3VA max.

M1KDS30 / 40

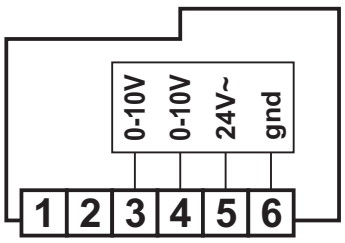


Function: dual open/close or floating control. 230V or 24V AC

Control: valves or dampers

230V AC out: 0,5A max.
24V AC out: 3VA max.

M1AUS10

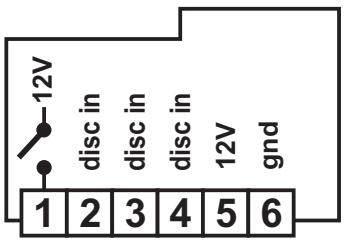


Function: Dual analog out

Control: valve, heater, fan, damper

24V AC supply: 3VA max.

M1DIUS10



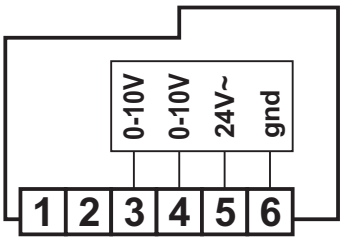
Function: Discrete in out

Control: valve, heater, fan, damper

12V DC supply: 2VA max.

Note: 12V out on term.1 is switched.

M1AIS10



Function: Dual analog input

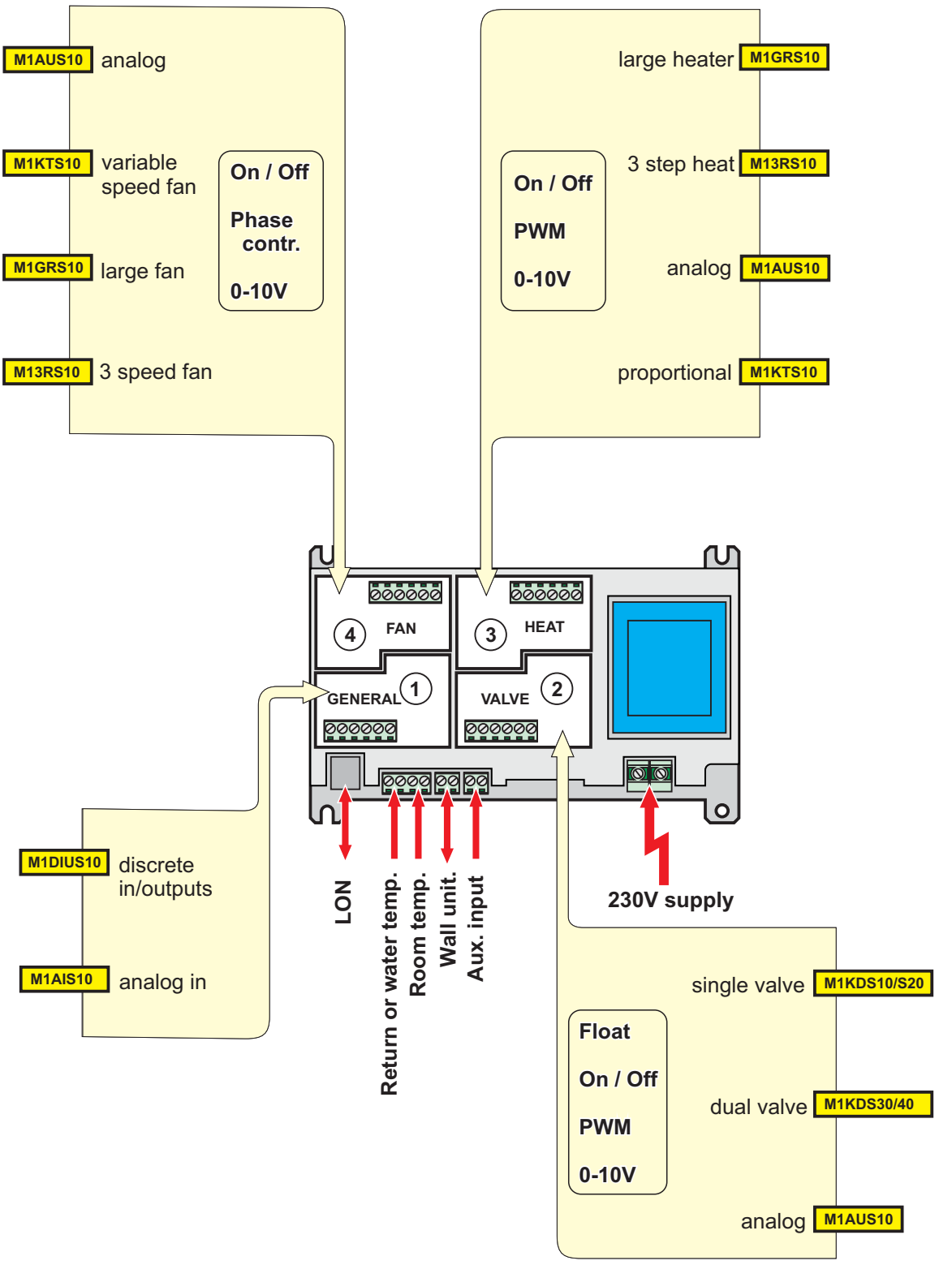
Transducer input: air flow, diff.pressure, humidity, etc.

24V AC supply: 3VA max.

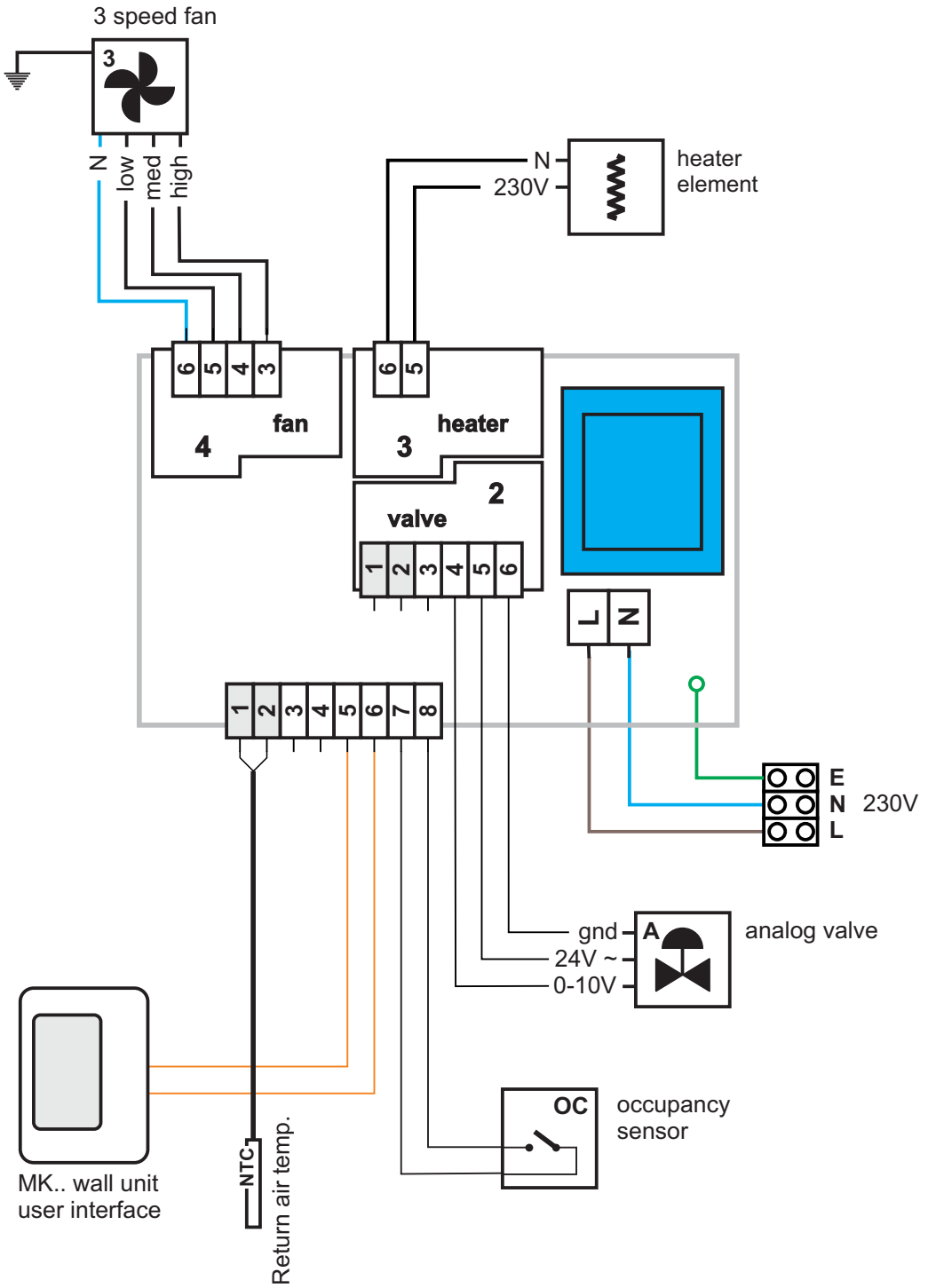
Note:

On all modules power is supplied internally. No external power bus or terminal strip needed

Distribution of standard modules



Wiring example



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