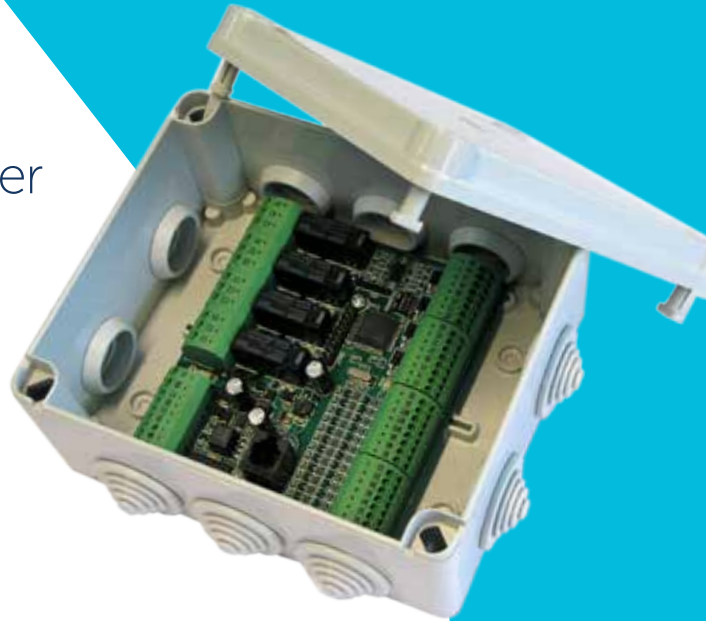




## FX-MULTI-24

Freely programmable field controller

- 12 universal inputs
- 4 digital outputs
- 4 TRIAC outputs
- 4 analogue outputs
- 100% freely programmable
- Detachable connectors
- Simultaneously Modbus master and slave on 2 physically separate ports



### Program, connect, measure and control

The multi24 is a controller that can be used for numerous applications, such as hotel rooms, district heating or small ventilation systems.

The module's CPU runs its code independently, enabling swift and accurate reactions to changing measurements. Programmed using the international standard IEC 61131-3, the multi24 can be used as a stand-alone controller, or the module can be connected via Modbus RTU to a building management system to receive settings and commands, or send out alarms or other data. The internal Flash memory of the module makes sure all data is saved even during power or communication interruptions.

The controller can also simultaneously act as Modbus master for intelligent local sensors or terminals, like the Fidelix Modbus multiDisplay.

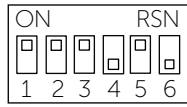
Additionally, the multi24 can be equipped with an enocean transceiver to connect wireless sensors and actuators.

### Technical features

Size (with DIN-rail clamps):	122mm x 108mm (x 65mm height)
Operating voltage:	24VDC / 16-26VAC
Operating temperature:	0 to +50°C
Supported input:	digital or analogue (0(2)-10V, resistive, ...)
Analogue output voltage:	0-10 VDC
TRIAC outputs:	PWM maximum 1A
Output relays:	230 VAC / 6A max
Enclosure (optional, without DIN-rail clamps):	IP55, non-flammable polystyrene, IEC 695-2-1

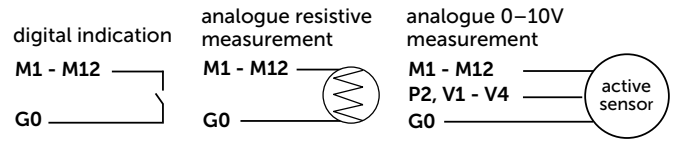
**Modbus address:** The address is set by changing the position of dip-switches 1-6. Each dip-switch represents a binary value: dip-switch 1 = 32, dip-switch 2 = 16, dip-switch 3 = 8, dip-switch 4 = 4, dip-switch 5 = 2, dip-switch 6 = 1.

**Example:** To set the Modbus address of the module to 21, set dip-switches 2, 4 and 6 to ON, and dip-switches 1, 3 and 5 to OFF. (dip-switch 2 = 16, dip-switch 4 = 4, dip-switch 6 = 1.  $16+4+1 = 21$ )



**Modbus speed on the slave connectors:** The multi24 communicates at speeds from 9600 to 57600 bps, and will detect the speed of the bus automatically. If the multi24 is the last module in the Modbus loop, the loop must be closed by connecting a 120 Ω resistor between the A and the B side of the RS-485 loop (MA and MB).

**Measurements:** The type of measurement (digital or analogue, voltage or resistance) is set in the software. All input types but voltage measurement put 3.33 V on the measurement inlets. Connections are done following the following schematics:



**Output:** There are 4 0-10V analogue outputs, and 4 TRIAC outputs on the Multi-24. The minimum and maximum values for the analogue outputs can be set in the software. Connections are done following the following schematics:

