USE
Device used for internal applications

IMPORTANT
Read this document carefully before installation, follow all the warnings before using the device.
Keep this document with the device for future reference.
Use the device only in the manner described in this document

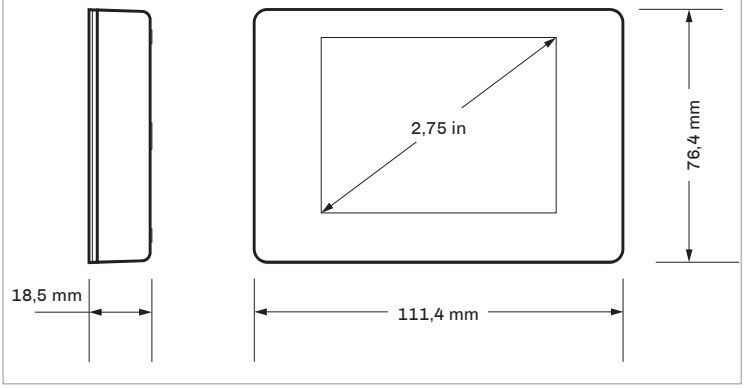
DISPOSAL
The device must be disposed of according to local regulations regarding the collection of electrical and electronic equipment

EPJcolor is a programmable user interface with graphic display, on-board regulation logic and MODBUS master / slave communication.

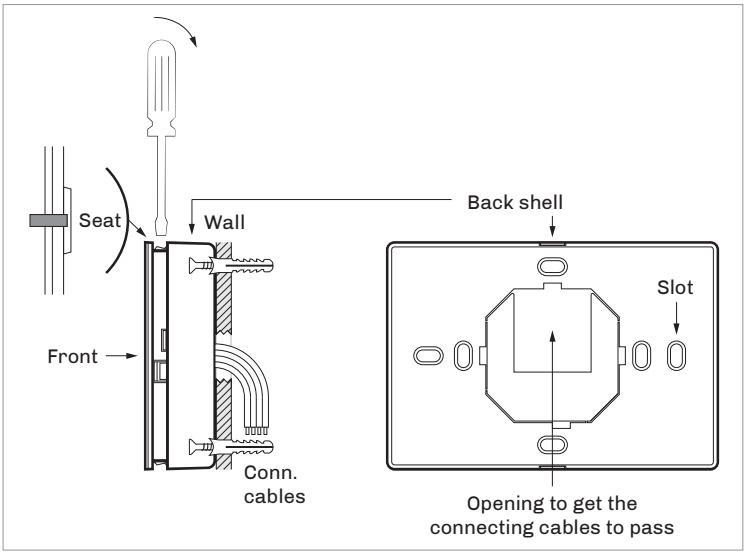
Description

Features
24 VAC / DC - Color touch screen - Wall installation - RS485 - USB - Clock - Alarm buzzer

1.DIMENSIONS



Wall



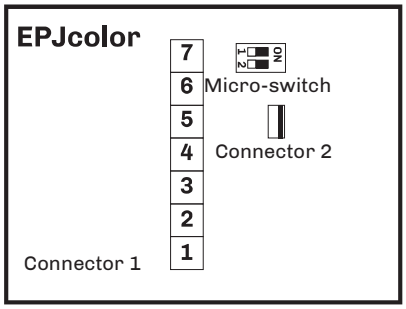
1. Unhook the back shell from the front through a screwdriver and the proper seat.
2. Lean the back shell against the wall in a position suitable to get the connecting cable to pass through the proper opening.
3. Use the slots of the back shell as template to drill 4 holes having a diameter suitable to the bolt. 5.0 mm (3/16 in) diameter bolts are suggested.
4. Insert the bolts in the holes drilled in the wall.
5. Fasten the back shell at the wall with 4 screws. Countersunk head screws are suggested.
6. Make the electrical connection as shown in the section ELECTRICAL CONNECTION without powering up the device.
7. Fasten the front of the device at the back shell.

WARNINGS FOR INSTALLATION
-Ensure that the working conditions are within the limits stated in the TECHNICAL SPECIFICATIONS section
-Do not install the device close to heat sources, equipment with a strong magnetic field, in places subject to direct sunlight, rain, damp, excessive dust, mechanical vibrations or shocks
- In compliance with safety regulations, the device must be installed properly to ensure adequate protection from contact with electrical parts. All protective parts must be fixed in such a way as to need the aid of a tool to remove them.

2.ELECTRICAL CONNECTION

WARNINGS FOR ELECTRICAL CONNECTIONS
-Use cables of an adequate section for the current running through them
- To reduce any electromagnetic interference connect the power cables as far away as possible from the signal cables and connect to a CAN network and RS-485 MODBUS network by using a twisted pair.

Connectors and parts



Connector 1

Number	Description
3	device power supply (24 VAC/12... 30 VDC). If the device is fed by DC power, connect terminal minus
4	device power supply (24 VAC/12... 30 VDC). If the device is fed by DC power, connect terminal plus
5	reference RS-485 MODBUS port (GND)
6	RS-485 port reference - (MODBUS B)
7	RS-485 port reference + (MODBUS A)

Connector 2

Number	Description
	USB port, for programming the device.

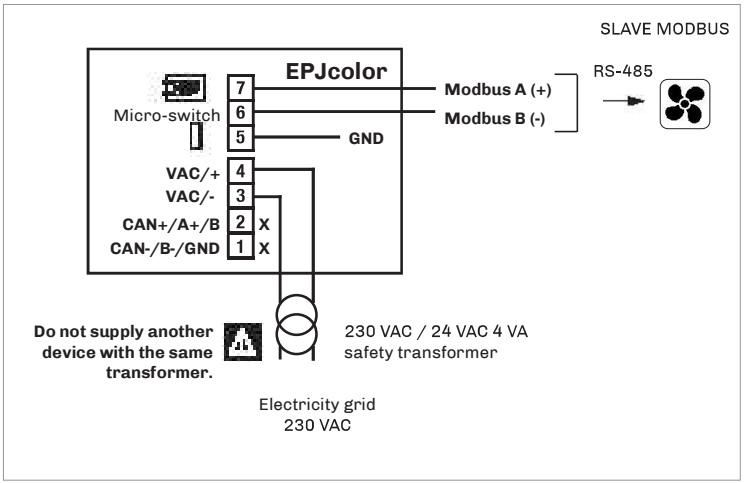
Micro-switch

Number	Description
1	to terminate the RS485 Modbus network

PRECAUTIONS FOR ELECTRICAL CONNECTION

-If using an electrical or pneumatic screwdriver, adjust the tightening torque
-If the device has been moved from a cold to a warm place, the humidity may have caused condensation to form inside. Wait about an hour before switching on the power
-Make sure that the supply voltage, electrical frequency and power are within the set limits. See the section TECHNICAL SPECIFICATIONS
-Disconnect the power supply before doing any type of maintenance
-Do not use the device as safety device

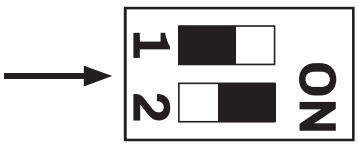
Electrical connection with independent power supply



Insertion of the RS-485 MODBUS port termination resistor

To insert the RS-485 MODBUS port termination resistor:
– Place **micro-switch 1 in position ON**
– Place **micro-switch 2 in position OFF**

The micro-switch is at the back of the device (remove the back shell from the front before).



3.TECHNICAL SPECIFICATIONS

Type	Description
Purpose of the control device	Function controller
Construction of the control device	Built-in electronic device
Container	Black, self-extinguishing
Category of heat and fire resistance	D
Dimensions	111,4 x 76,4 x 18,5 mm
Mounting methods for the control device	wall mounting
Degree of protection provided by the covering	IP30
Connection method	Fixed screw terminal for wires up to 1 mm^2 blocks
Maximum permitted length for connection cables	Power supply: 10 m
	RS-485 MODBUS port: 1,000 m (3,280 ft)
Operating temperature	-10 – 55 °C
Storage temperature	-20 – 70 °C
Operating humidity	Relative humidity without condensate from 5 to 95%
Pollution status of the control device	2
Compliance	- RoHS 2011/65/CE
	- WEEE 2012/19/EU
	- REACH (EC) Regulation N. 1907/2006
	- RED 2014/53/UE
Power supply	24 VAC (±15%), 50/60 Hz (±3 Hz), max. 4 VA not insulated or 12... 30 VDC, max. 2 W not insulated (independent power supply or by a controller)
Earthing methods for the control device	none
Rated impulse-withstand voltage	I
Over-voltage category	330 V
Software class and structure	A
Clock	Incorporated secondary lithium battery
Clock drift	≤ 55 s/month at 25 °C
Clock battery autonomy in the absence of a power supply	6 month
Clock battery charging time	24 h (the battery is charged by the power supply of the device)
Displays	Colour touch-screen TFT graphic display
Alarm buzzer	Built-in
Communications ports	- 1 RS-485 MODBUS port
	- 1 USB port