

## **QUICK MANUAL FOR USE AND INSTALLATION**

SMART-FLEX Sp. z o.o. Mielczarskiego 21/23 42-202 Częstochowa

# **element**air

E - MARK II

The Quick Manual will guide you through a quick installation of the product, but in no case could it replace the full operating manual. A complete operating manual is available on our website www.xvent.cz and available for download using a QR code.

Use the smart device (mobile phone, tablet, etc.) equipped with this technology to read the QR code.



The regulator may only be installed and connected by a trained person with the appropriate authorization to connect electrical equipment and with suitable tools and means.





### **Description of the regulator**

The regulator is used to continuously control the speed of the EC fan. The fan speed may also be controlled by an integrated room thermostat, depending on the temperature of the area. The fan speed control and thermostat control is implemented as continuous adjustment on the front panel of the regulator. For information on the operation of the connected equipment, a signal diode is located between the (turning) control elements. Furthermore, the regulator is equipped with a 1~230VAC phase contact 1~230VAC and a 12VDC lowpotential contact. The regulator is designed for wall installation. The maximum recommended distance of the regulator from the controlled EC-motor is 100 m at conductor cross-section of 1 mm<sup>2</sup>. Longer or shorter distances are possible depending on the selected conductor crosssection and the resulting real voltage loss calculation. Controller can be switched between heating mode and screening mode.

- Heating fluent fan speed based on required temperature. Once the door switch is disconnected, the fan operates at maximum speeds.
- Screening minimum fan speeds based on required temperature. Once the door switch is disconnected, fan speeds is possible to control

### Description of controls and connecting terminals

*Indicator diode* – indicates operation of the entire regulator. If the diode is lit, the regulator is on. If the regulator is not lit, the regulator is switched off.



Continuous fan speed regulator allows continuous fan speed adjustment in any position from minimum to maximum speed as required by the user. The "OFF" position allows the entire regulator to be switched off. The "OFF" position does not ensure isolation of the controlled equipment from the supply voltage; isolation needs to be ensured separately on the supply side.

Room thermostat - allows the adjustment of the required temperature in the range of 5 to 35°C. Based on the difference between the ambient temperature and the required temperature, the connected equipment is switched off or on. It is also it possible to deactivate the room thermostat by switching to the "OFF" end position.

### Control voltage terminals from the EC

fan 0-10VDC (+); GND (-). Regulator control range 2-10VDC. Contact load capacity: max 2mA Recommended cross-section of conductors: from 0.5 mm2 to 1.5

### Clamp for regulator control by means of magnetic potential-free contact logic of NC (opening) contact

Contact load capacity: 12VDC / 10 mA Recommended cross-section of conductors: from 0.5 mm2 to 1.5 mm2.

#### Jumper

Desc.: switching the modes of fan control.

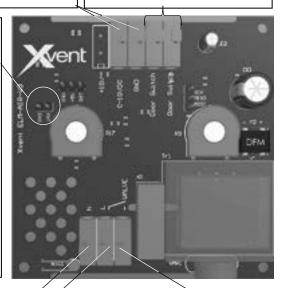
- heating mode jumper is plug in. (Factory setting)



- Screening mode jumper is removed



Regulator power supply terminals 1~230VAC 50/60Hz Max. regulator current capacity: 230 VAC / 5A Recommended cross-section of conductors: 1.5mm<sup>2</sup>



Terminal for exchanger fixture servo control The contact only interrupts/controls the phase conductor, which is connected to the supply phase of regulator. The neutral conductor is connected directly from the power supply. *Maximum current capacity:* 230 VAC / 5A (resistive load)

- Current

#### **Technical parameters**

- 1~230VAC 50/60Hz - Input voltage
- Temperature adjustment range 5-35°C
- Protection class IP20
- Dimensions 85 x 85 x 30mm

5A

- Weight 0.16Kg

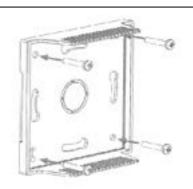
Verze 001 (12.12.2021) Stránka 1 z 2 D-502-0202



### POSITIONING AND INSTALLATION OF THE ELEMENTAIR CONTROLLER



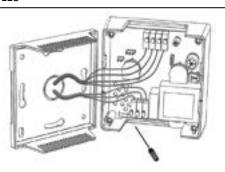
INSTALLATION ON A SUB-PLASTER OR SURFACE-MOUNTED ELECTRICAL JUNCTION BOX



DISASSEMBLY OF THE CONTROLLER FRONT COVER



CONNECTING POWER SUPPLY AND CONTROL CABLES



COMPLETING THE CONTROL PANEL AFTER CONNECTING (COMPARE THE CABLES TO AVOID DAMAGE)

