



## DESCRIPTION

# VAOF5

Thermoelectrical actuator 230V ON/OFF-PWM N.C. (Normally Closed) complete of adaptor VA64 to be installed on:

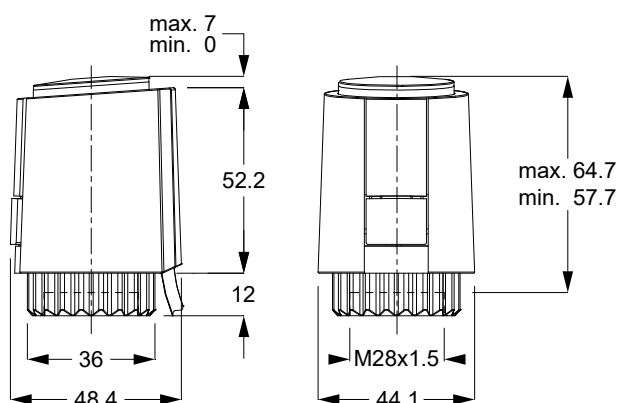
- Pressure Independent Control Valve

|                     |                     |                     |
|---------------------|---------------------|---------------------|
| VA93VL ½" x 150 l/h | VA93L ½" x 450 l/h  | VA93H ½" x 850 l/h  |
|                     | VA93L ¾" x 1000 l/h | VA93H ¾" x 1850 l/h |

- Hydraulic kit VA813L ¾" x 1000 l/h

|                      |                      |                      |
|----------------------|----------------------|----------------------|
| VA813VL ½" x 150 l/h | VA813L ½" x 450 l/h  | VA813H ½" x 850 l/h  |
|                      | VA813L ¾" x 1000 l/h | VA813H ¾" x 1850 l/h |

## DIMENSIONS



Dimensions in mm

## TECHNICAL DATA/ FEATURES

|                         |                         |                         |                                  |
|-------------------------|-------------------------|-------------------------|----------------------------------|
| Type                    | ON/OFF-PWM - N.C.       | Storage temperature     | -25° / + 60 °C                   |
| Operating voltage       | 230Vac ± 10% - 50/60 Hz | Ambient temperature     | 0° / + 60 °C                     |
| Max. Inrush current     | <550 mA – 100 ms max    | Type of protection      | IP54 / II                        |
| Stroke (actuator level) | 4 mm                    | Weight                  | 100 g                            |
| Operating Power         | 1 W                     | Color                   | grey RAL7035                     |
| Opening/Closing time    | ~3,5 min.               | Connecting cable type   | H03VV - 2 x 0.75 mm <sup>2</sup> |
| Actuating force         | 100 N ± 5 %             | Connecting cable length | 1 m                              |
| Fluid temperature       | 0 / + 100°C             | Surge protection        | 2.5kV (EN 60730-1)               |
|                         |                         | Adaptor included        | VA64                             |

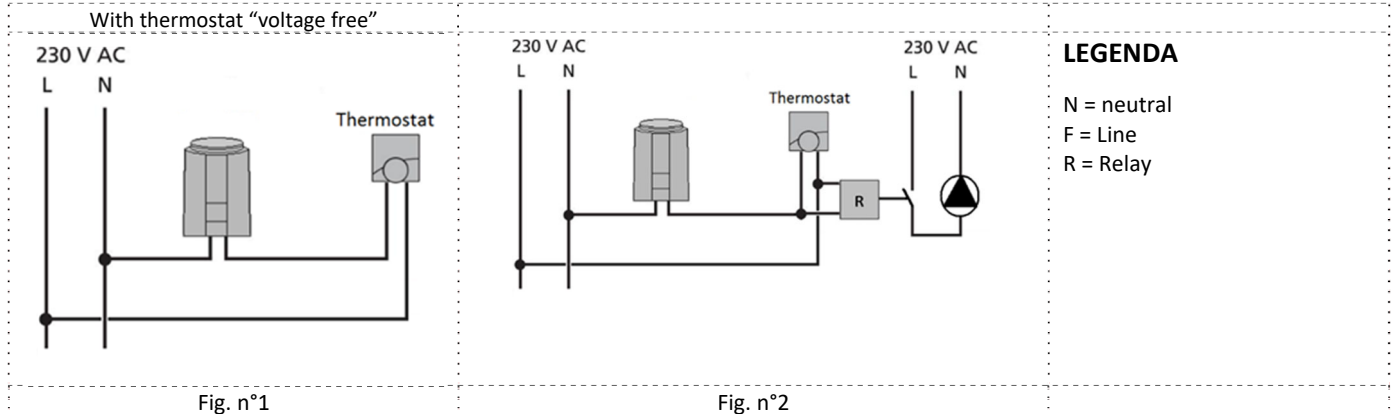
The actuators VAOF5 are a 230V thermoelectric valve drive suitable to control the flow on the heating and/or cooling installation in function of the room temperature value. If the installer needs a supplementary control (i.e. pump control) in function of the actuator state (Open/close) is recommended to adopt relay (look the specify paragraph dedicated to the wiring diagrams – Figure n°2).

The actuators VAOF5 are N.C. so, if is on the de-energized state, will be close from the hydraulically point of view; the actuator VAOF5 could be connected to “voltage free” room thermostat. To have more details regarding the wiring connection look the specific paragraph.

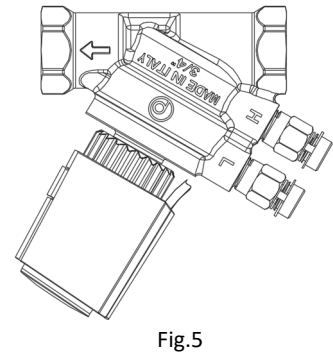
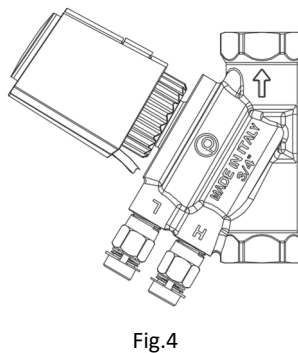
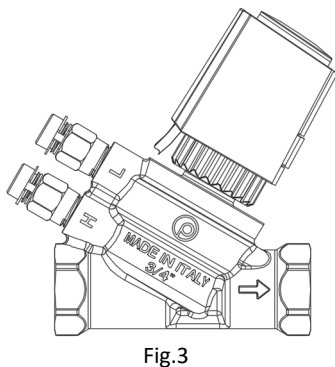
## APPROVALS



## WIRING DIAGRAMS



## INSTALLATION NOTES



Vertical (Fig.3) or Horizontal (Fig.4) installation are recommended. An upside down (Fig.5) installation may reduce product life through special circumstances (i.e. contaminated water).

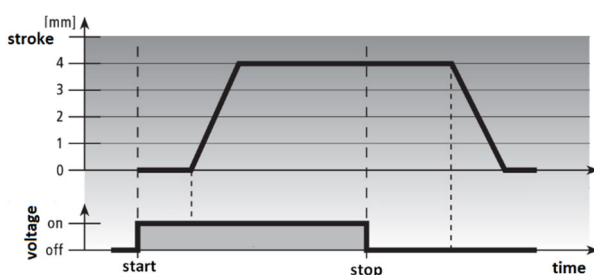
## FIRST OPEN FUNCTION

The actuators VAOF5 are Normally Close (N.C.), so on the de-energized state, they will be close from the hydraulically point of view. Nevertheless the installation onto the "valve" is simple thanks to the "First Open Function": the actuator is delivered partially open.

Applying the operating voltage for more than 6 minutes the "First-Open function" will unlock.

It's recommended to apply the actuator only after that all the hydraulic installations phases are fully completed.

## CHARACTERISTIC CURVE



On this diagram is represented the characteristic line for the actuators VAOF5 230V ON/OFF-PWM N.C. (Normally Close).