

## Description

The electrothermic actuators **22CX Series** are ON/OFF devices used for automatic actuation of the valves on thermostatic adaptable valves, fan coil valves, manifolds. The electrothermic actuators are available in the following versions:

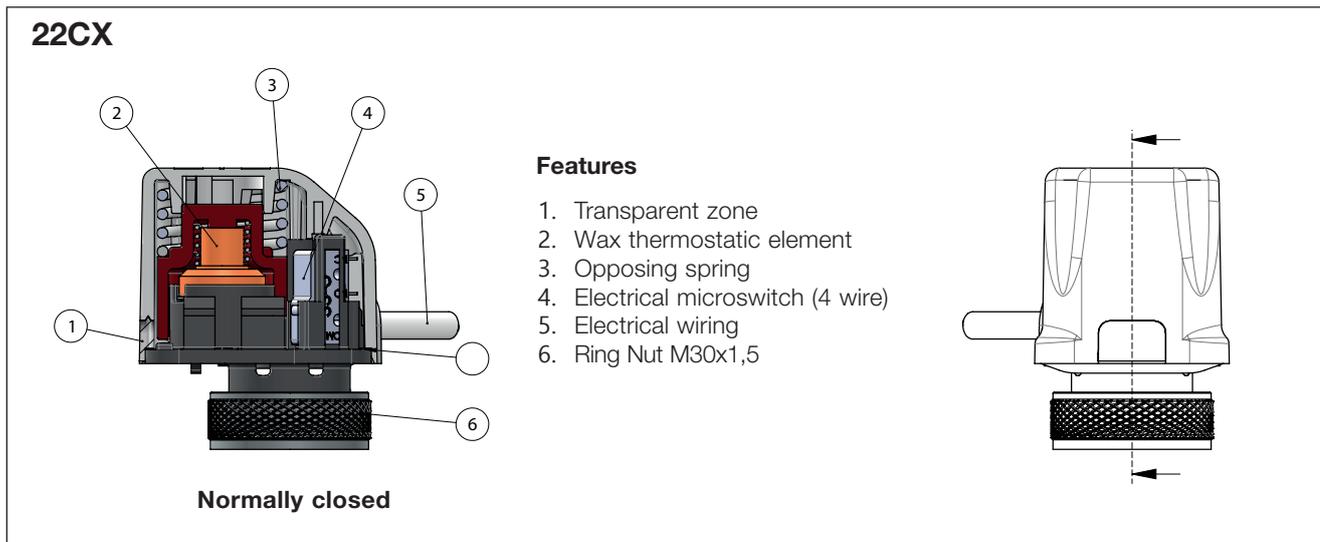
- NO (normally open), NC (normally closed)
- 2-wire or 4-wire (with auxiliary microswitch), both easy to fix on the valve body with a M30x1,5 threaded ring nut.



### 22CX

Electrothermic actuator compact design with on/off action compatible with thermostatic adaptable valves, fan coil valves, manifolds. Cap made of flame retardant plastic. Nickel-plated brass threaded ring nut M30x1.5. Normally Close (NC) and Normally Open (NO). Stroke: 3,5 mm. Nominal closing force: 100N (NC) – 80N (NO). Operating temperature range 0-50°C. 4 poles cable version complete of auxiliary microswitch (NO4 – NC4). Auxiliary microswitch not energized, inductive load: maximum 700 mA. IP54. **Approved TÜV.**

Type	Part no.	Power supply	Weight [g]
22CX230NC2	61992623	230V	150
22CX230NC4	61992624	230V	200



Technical features	
	<b>22CX</b>
Action	ON/OFF
Type of movement	Linear
Power supply	230 V a.c. (+10%÷-15%)
Frequency	50 ÷ 60 Hz
Power consumption (continuous duty)	1,8 W (230V)
Initial opening time (NC) or closing time (NO) (230V) (Power on) 230V.	75 s.
Final opening time (NC) or closing time (NO) (Power on) 230V.	3 min.
Actuator stroke	max 3,5mm
Auxiliary microswitch not energized (4-pole model)	max 700 (3A) mA - 250 V a.c.
Protection class	IP54 to EN60529
Electrical Protection class	Class II
Pollution rating	Grade 2
Nominal closing force (power OFF)	110 N (±10%) (NC) 80N (±10%) (NO)
Operating temperature range	0÷50°C
Storage temperature limiti	-25÷60°C
Flid temperature limit	110°C
Plastic cover	Polyamide +30F.V. flame retardant RAL 9016
Electrical cable	2-pole x 0,75mm <sup>2</sup> 1m length*4-pole x 0,75 mm <sup>2</sup> 1 m length*
Valve connenction	Threaded ring nut M30x1,5

\* Special cable length on request

Reliability of the electrothermic actuators **22CX Series** is guaranteed due to 100% testing of the production.

## Application

The electrothermic actuators **22CX Series** are used for ON/OFF control of the heat emission of terminal control units in heating and air conditioning systems, through an electric signal transmitted by a thermostat.

The use of electrothermic actuators instead of pure thermostatic actuators allows remote control. The room thermostat or control component controlling the system can be positioned in the most suitable point of each room to provide regulation and wired back to the electrothermic control head.

## Operation

Operation of the electrothermic actuators **22CX Series** is powered by on a wax thermostatic element assem-bled into in the actuators and activated by a PTC thermistor against a signal sent by a room thermostat or timing thermostat. When the thermostatic element expands, it supplies the thrust required for the movement of the valve. The 4-wire version is provided with an auxiliary contact for additional features (metering, control of pump, fan or other equipment). The actuator has a transparent zone that allows for checking the status of the actuator.

**Red** = valve closed - **Black** = valve open.

## Mounting

To install the actuators follow these steps:

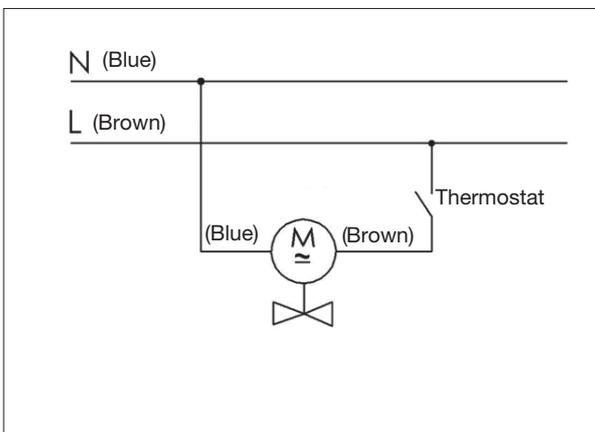
1. remove the protective cap, if present, or handwheel from the valve (or manifold outlet)
2. screw-in the actuator ring nut by hand on the threaded part of the valve body and lock it
3. connect the wires to the power supply

**Warning 22CX Series.** IP54 is installed in any position respect to the valve body.

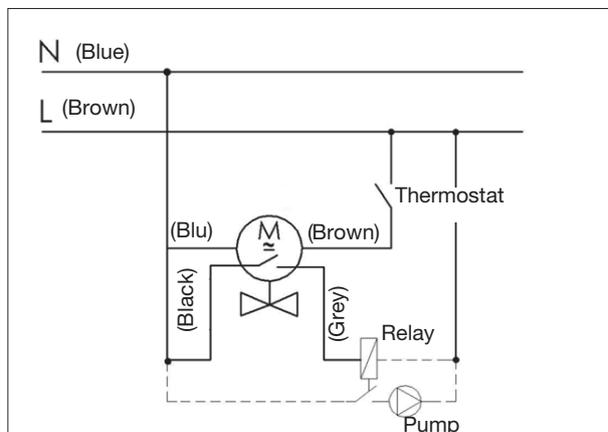


## Electrical wire connections

**22CX 2-wires**



**22CX 4-wires**



## Maintenance

Do not remove the cable. Opening the **22CX Series** actuator will cause irreparable damage to the device. Faulty actuators must be replaced as complete sets.