

REVERSIBLE LINEAR ACTUATOR FOR VVZ VALVES

CLV ... Eng.



- Power supply : 230 V~ or 24 V~ ; IP 42 protection
- Three-wire electric control
- Direct mounting on valve with self-adjusting run



1. APPLICATION

CLV ... actuator is designed to operate, with linear movement, VVZ ... seat valves used in heating and air-conditioning plants with fluid temperature of 1...120 °C.

2. OPERATION

CLV ... can be controlled by an On-Off or modulating device (thermostat, remote switch, manual switch, modulating controller). The three-wire electric signal (common - opens - closes) powers a small reversible synchronous electric motor with double coils, the rotary movement of which is converted into linear movement by a cam which permits a maximum run of 5.5 mm.

The run is limited by two microswitches, operated automatically by means of springs when the valve plug strikes one of the seats. This system ensures that the actuator is always able to exert, on the valve spindle, its nominal force, thereby permitting the mounting without the need to calibrate the run.

3. MODELS

Code	Power supply V~ (VA)	Run mm.	Speed s/mm	Run time s/5.5mm	Force Nm	Valves (up to DN) VVZ
CLV 158	230 (7)	5.5	24	130	200	20 (3/4")
CLV 154	24 (1)	5.5	24	130	200	20 (3/4")
CLV 078	230 (7)	5.5	12	65	200	20 (3/4")
CLV 074	24 (1)	5.5	12	65	200	20 (3/4")

5. TECHNICAL DATA

Power supply :		Time for 5.5 mm run :	
- CLV ..8	230 V~ ±10%	- CLV 15..	130 s
- CLV ..4	24 V~ ±10%	- CLV 07..	65 s
Frequency	50...60 Hz	Force	200 Nm
Consumption		Valve fluid temperature	1...120 °C
- CLV ..8	7 VA	Ambient temperature :	
- CLV ..4	1 VA	- operating	0...55 °C
Maximum run	5.5 mm	- storage and transport	- 40...70 °C
		Protection	IP 42
		Weight	0.35 kg

6. MOUNTING

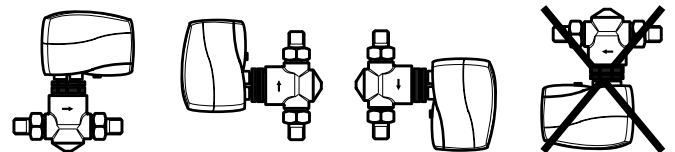
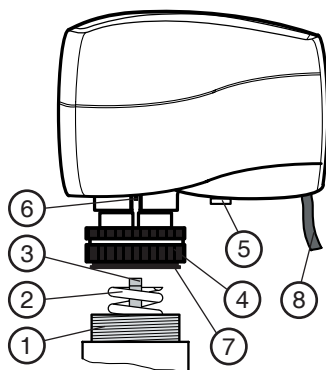
Remove the protective cover (7) of the small piston.

Fit the actuator ring nut coupling (4) on the valve threading (1).

Tighten up the ring nut as far as it will go.

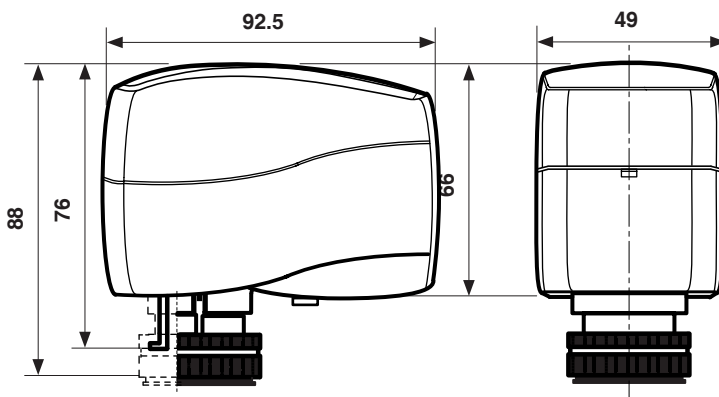
Make the electrical connections in accordance with the wiring diagram and in compliance with the safety regulations in force.

Do not mount the actuator below the valve

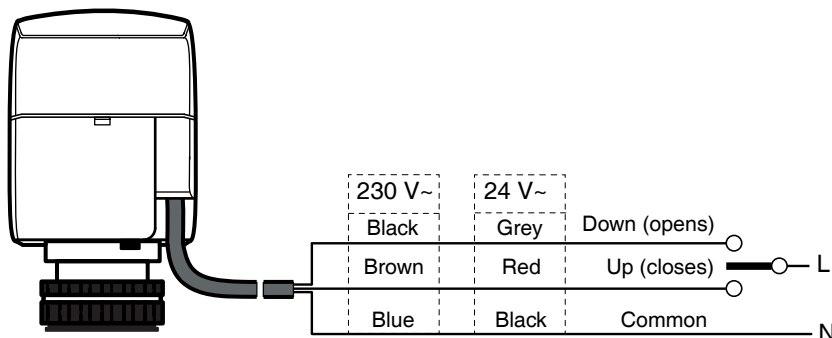


- 1 - Valve threading for coupling to actuator
- 2 - Valve spring-return
- 3 - Valve spindle
- 4 - Actuator ring nut for coupling with valve
- 5 - Manual release button
- 6 - Actuator position indicator
- 7 - Small piston protective plug
- 8 - Connecting cable and plug

4. OVERALL DIMENSIONS

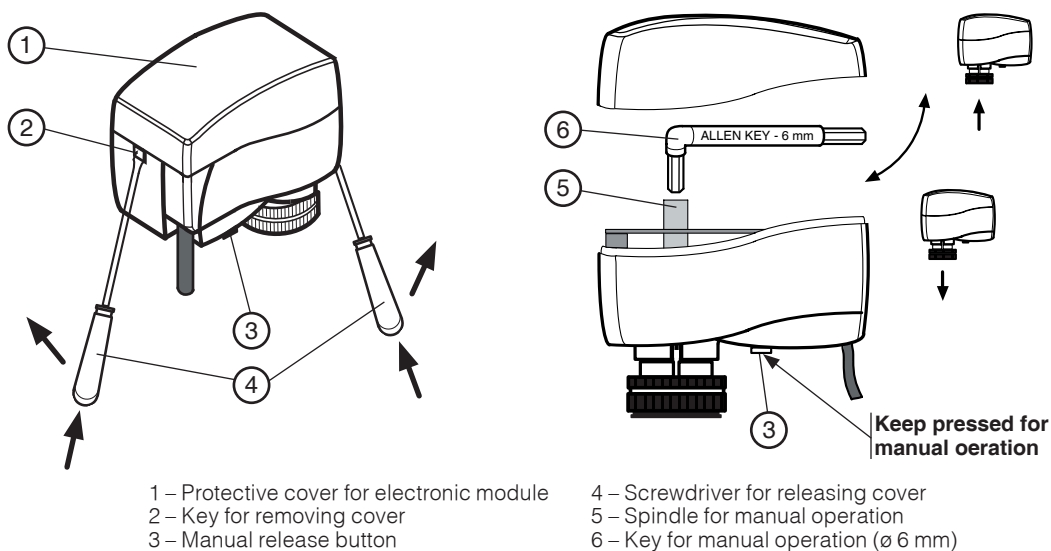


7. WIRING DIAGRAM



8. MANUAL OPERATION

To carry out this operation first to remove the protective cover (1) of the electronic module. Then insert in the hole provided (2) the flat surface of a screwdriver (4) and lever this in the direction shown by the arrows (first on one side and then on the other). Insert an Allen key (ø 6 mm), (6); in the small spindle (5) press the button (3) and, keeping it pressed, rotate the key in the direction shown by the arrows. At the conclusion of these operations, release the button (3), extract the key (6) and replace the cover by pressing it on its base, checking that it fits into the tabs provided.



- 1 – Protective cover for electronic module
- 2 – Key for removing cover
- 3 – Manual release button
- 4 – Screwdriver for releasing cover
- 5 – Spindle for manual operation
- 6 – Key for manual operation (ø 6 mm)

Amendment to data sheet

Date	Revisione No.	Page	Section	Details of amendment
21.01.03 LB	-	All	General	Layout data sheet
22.03.05 MZ	-	-	-	Unspecified
21.09.07 MC	01	1 - 2	General	Pages & illustrations (modified model); speed, run time, description manual operation and colour of connecting cables
08.10.07 MC	02	1 - 2	General	Modified diagrams



Head Office & Sales
 Via San G.B. De La Salle, 4/a Tel. +39 022722121
 20132 - Milano Fax +39 022593645
 Orders Fax +39 0227221239
 Reg. Off. Central & Southern
 Via S. Longanesi, 14 Tel. +39 065573330
 00146 - Roma Fax +39 065566517
 Shipping
 Via Gen. Treboldi, 190/192 Tel. +39 0364773200
 25048 - Edolo (BS) Tel. +39 0364773202
 E-mail: info@coster.eu Web: www.coster.eu



D33236

