

REVERSIBLE LINEAR ACTUATOR FOR VM2 - VB2 VALVES WITH SPRING RETURN CLOSURE



CER Eng.

- Power supply: 24 - 230 V~ ; IP 54 protection
- Three-wire electric control with spring closure
- Maximum run: 10 mm. Times run: 15 s/mm - 3 s/mm
- Direct installation on valve without calibration
- Manual operation



1. APPLICATION

CER actuator is designed to operate, with reversible linear movement and with spring closure, seat valves of the balanced pressure type VM2 - VB 2 up to DN 50 used for control in plants with hot or superheated water up to a maximum of 150 °C.

2. OPERATION

CER can be controlled by an On-Off device (thermostat, teleswitch, manual switch) or by a modulating controller. The three-wire electric signal (Common - Opens - Closes) powers a small synchronous reversible electric motor with double coils the rotary movement of which is converted into linear movement by an eccentric mechanism which allows a maximum run of 10 mm; in the event of a power failure the motor independently closes the valve. The run is limited by two microswitches which are operated automatically, by means of springs, when the valve plug strikes against one of its seats. This system ensures that the motor is always able to exert, on the the valve spindle, its nominal force, thereby permitting installation without the need to calibrate the runs. A handwheel on the facia of the actuator allows this to be operated manually.

3. MODELS

Code	Power supply V~ (VA)	Run mm.	Time s/mm.	Time s/10 mm.	Force Nm	Valves (up to DN) VM2 – VB2
CER 158	230 (7)	10	15	150	450	50
CER 154	24 (7)	10	15	150	450	50
CER 038	230 (12)	10	3	30	450	50
CER 034	24 (12)	10	3	30	450	50

4. ACCESSORIES

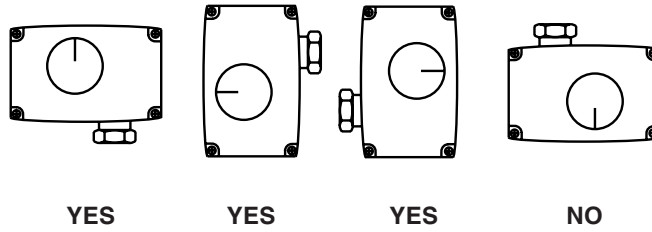
Code	Description
FCR 002	Two SPDT auxiliary microswitches

5. TECHNICAL DATA

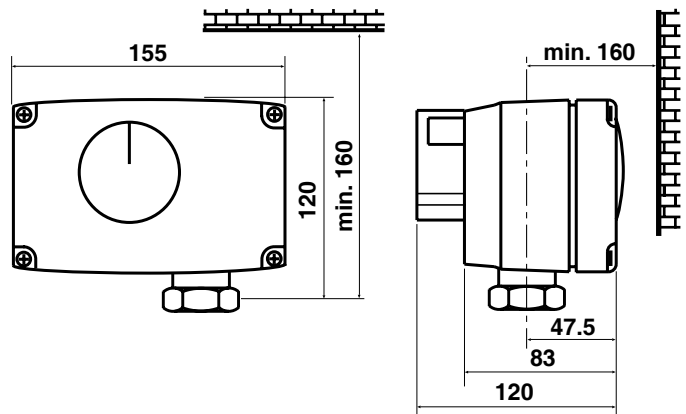
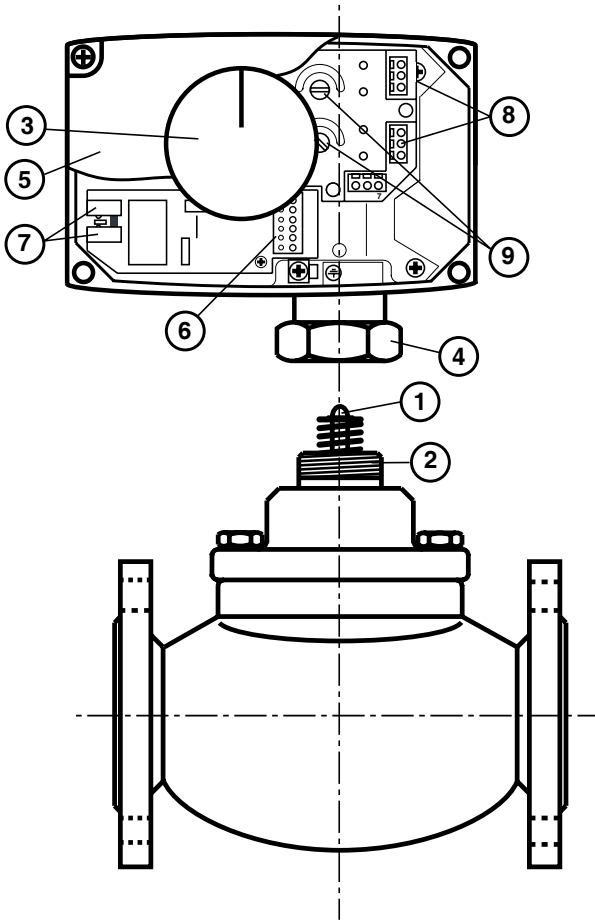
Power supply:	230 V~ ±10%	Force :	450 Nm
- CER ..8	24 V~ ±10%	- CER 15.	450 Nm
- CER ..4	50 ... 60 Hz	- CER 03.	6 (2) A
Frequency		Capacity end-of-run contacts	5 ... 150 °C
Consumption :		Valve fluid temperature	
- CER 15.	7 VA	Ambient temperature :	
	12 VA	- operation	0 ... 55 °C
- CER 03.	10 mm.	- storage and transport	- 40 ... 70 °C
Maximum run		Protection	IP 54
Times for 10 mm. run :		Weight	1.45 kg
- CER 15.	150 s		
- CER 03.	30 s		

6. INSTALLATION

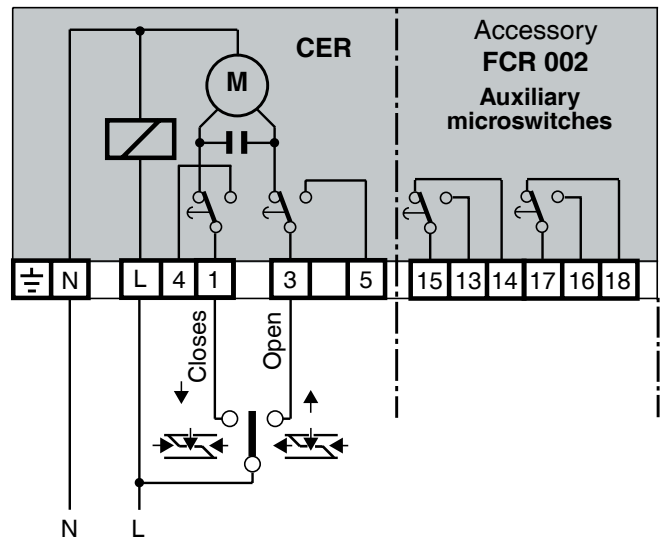
- Couple the actuator and the valve.
- Screw on and tighten up the valve locking nut (6.4).
- Carry out the electric wiring in strict observance of the wiring diagram (fig. 8) and of the safety regulations in force.



7. OVERALL DIMENSIONS



8. WIRING DIAGRAM



- 1 – Valve spindle
- 2 – Actuator locking thread
- 3 – Manual operation handwheel
- 4 – Valve locking nut
- 5 – Protective cover
- 6 – Terminal block
- 7 – End-of-run microswitches
- 8 – Auxiliary connections terminal block
- 9 – Adjustment operation microauxiliaries

Amendment to data sheet

Date	Revision No.	Page	Section	Amendment description	Firmware version	Software version
17.06.08 MC	01	2	8. WIRING DIAGRAM	Update wiring diagram		



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