

EM9

Actuator for Valves with Rotating Stem



Product Description

EM9 is an electronic actuator for motorising valves type VTRE and TRV with rotating valve stem.

EM9 operates on 24 V and is controlled by selectable 0...10 Vdc, 2...10 Vdc, 0...20 mA or 4...20 mA control signal.

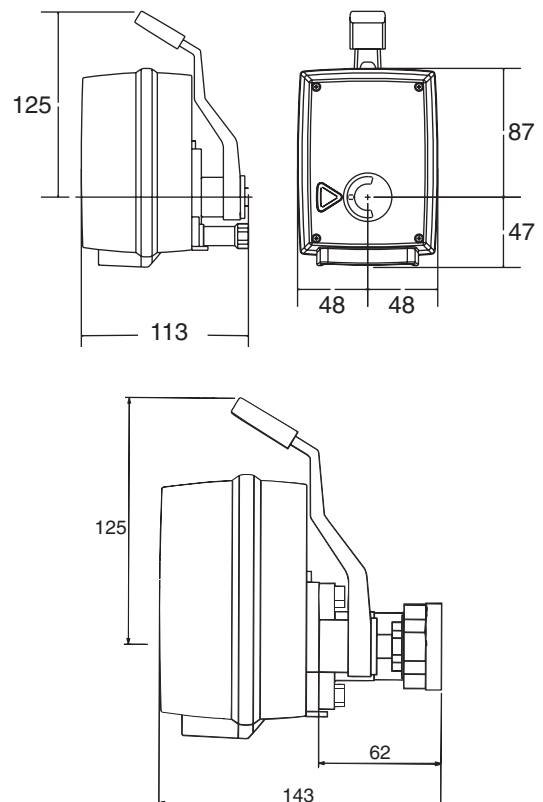
Specifications

Item numbers	
EM9/90°	860 1100 000
EM9/180°	860- 1110 000
Supply voltage	24 Vac, ±10%, 50...60 Hz
Power consumption	3 VA
Duty cycle	10%
Torque	15 N-m
Control signal (selectable)	0...10 V/2...10 Vdc 0...20/4...20 mA dc
Running time	
Working range 90° (selectable)	60/90/120 s
Working range 180° (selectable)	120/180/240 s
Operating temperature	-15 °C...55 °C
Enclosure Rating	IP54
Main Construction Materials	
Enclosure	Reinforced plastic PA66
Colour	Black/red
Weight	0.8 kg
Factory Settings	
Control input signal	0...10 V
Running time	
EM9/90	60 sec.
EM9/180	120 sec.
Control signal reaction	Normal
Position	Mid-position

Features

- Programmable running time
- Reversible motor, gear train and an electronic circuit board in a plastic housing.
- All bearings are permanent lubrication type.
- Manual operation.
- Models for rotation of 90 degrees or 180 degrees.
- Position indication via pointer on the front cover.
- Control signal reaction can be programmed normal or inverted.
- Selectable jumpers are used to program running time, control signal type and reaction.

Dimensions mm



Function

EM9 is controlled by a voltage or current input so that a certain level always corresponds to a position of the actuator:

90 degrees working range	60, 90 or 120 sec.
180 degrees working range	120, 180, or 240 sec.

Mounting Kits

The EM9 for 90 degrees working range is delivered with details for motorising valves type VTRE.

- To use EM9 on valves type TRV, separately available mounting kits are necessary:

Butterfly valve TRV	Item Number 860 0991 000
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- For the use of EM9 on valves with 180 working range Type VTRA/STMG additionally available mounting kits is necessary:

Mounting kit for Rotating disc type valve VTRA/STMG	Item Number 860 0990 000
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Note that for valves with working range 180 the EM9/180 with working range 180 must be selected.

Wiring

Terminals	
AC	24 V, 50...60 Hz
G0	System reference
Signal	Control signal

The actuator has two knockouts for cable inlets PG11

- AC
- G0
- Signal

Installation

Installation is carried out according to instructions shipped with the actuator. The actuator may be mounted beside or above the valve. Mounting below the valve should be avoided.

Maintenance

Electric motor and gearbox are of permanent lubrication type and ensure a maintenance free actuator for normal operation.