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Electric Actuator EA80 and EA80R



Application

The electric Actuator EA80(R) is the compact drive for small TICOVAL-Ball Valves up to max. DN 32 / 1¼". In order to achieve an optimal price / performance ratio, different versions are available:

- **230V AC**, switching time 45 sec.
9 Nm, up to DN 25, without aux. switch
- **230V / 24V AC**, switching time 60 sec.
13 Nm, up to DN 32, with aux. switch
- **24V DC**, switching time 15 sec.
9 Nm, up to DN 25, without aux. switch

Quality features

- compact size, light weight
- easy mounting on the Ball Valve due to pre-mounted bridge
- suitable for ambient temperature -10°C to +50°C (avoid condensation inside Actuator)
- can be mounted on Valve in every 90°-position
- sufficient power reserves available to overcome a breakaway torque of the Ball Valve after long standstills
- provides waterhammer free operation of Ball Valve
- maintenance-free
- manual turning possible by hand lever (e.g. in case of power failure)
- running angle 90° (standard) and angular position of auxiliary switch preset at factory, other running angle (e.g. 180°) on request
- with optical position indicator
- electric double insulation makes protective earthing unnecessary
- different versions such as 230V AC, 24V AC and DC, with or without built-in relay, with or without auxiliary switch (potential-free), etc.

Function

Standard execution is **EA80R with integrated relay for 2-point control (on/off)**. It is controlled by a single-pole contact (e.g. thermostat, switch). Depending upon the position of the contact the Ball Valve moves forth or back to the end position, the relay effects the switchover of direction. **Intermediate positions are not possible**. Rotating direction is selectable by internal switch.

The version **EA80 without relay for 3-point control** is controlled by separate wires for the direction clockwise and counterclockwise. Without power, the Actuator remains in the current position, **intermediate positions are possible**.

Product range electric Actuator EA80(R)

type	torque	power supply	equipment	time for 90°	order code
EA80R	9 nm	230V AC / 50Hz	with relay, no auxiliary switch	45 sec.	750.8000.400
EA80		230V AC / 50Hz	without relay no auxiliary switch		750.7000.400
EA80R	13 nm	230V AC / 50Hz	with relay, 1 auxiliary switch	60 sec.	750.8000.607
EA80		230V AC / 50Hz	without relay, 1 auxiliary switch		750.7000.607
EA80R	13 nm	24V AC / 50Hz	with relay, 1 auxiliary switch	60 sec.	750.6000.607
EA80		24V AC / 50Hz	without relay, 1 auxiliary switch		750.9000.607
EA80R	9 nm	24V DC / 50Hz	with relay, no auxiliary switch	15 sec.	750.6000.VDC

Customized versions possible (protection class IP65, switching angle 180°, etc.)

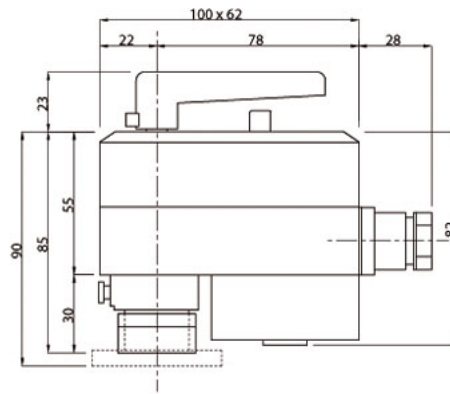
Technical data

Power supply / switching time 90° / torque:

- 230V AC / 45 sec. / 9 nm
- 230V AC / 60 sec. / 13 nm
- 24V AC / 60 sec. / 13 nm
- 24V DC / 15 sec. / 9 nm

Running angle	90° (standard)
Power consumption	3,8 VA
Auxiliary switches, adjustable (potential-free)	1 integrated (only 13 nm versions), 10/2 A, 250 VAC <small>EN 61058-1</small>
Protection class	II double insulat. IP42
Ambient temperature	-10°C to +50°C, avoid condensation
Weight	520 g
Handlever	included
Maintenance	maintenance-free
Options	Customized versions possible (protection class IP65, switching angle 180°, etc.)
CE-conformity	CEE 89/336-73/23-93/68

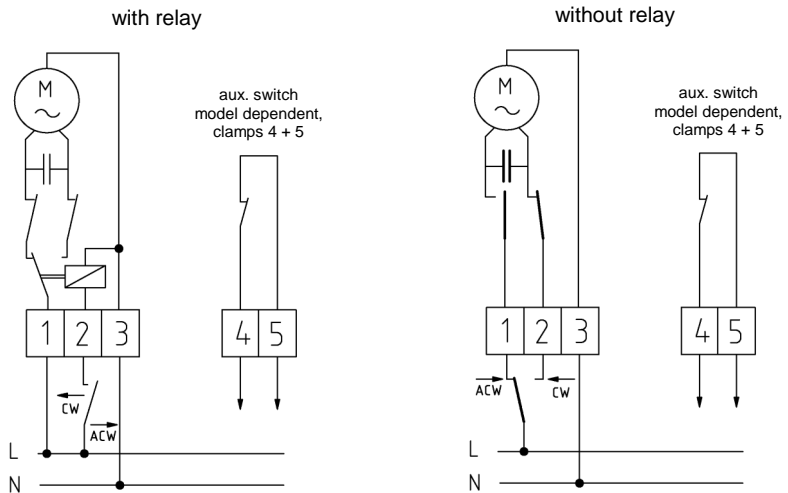
Dimensions



Materials

Housing	plastic
Cover	plastic
Cable gland	Polyamid
Gears	steel
Joint to Valve	galvanized steel
Handlever	plastic

Wiring diagram



CW = rotation clockwise
ACW = rotation anticlockwise

Assembly / Safety notes

Mounting of Actuator to Valve is very easy: pre-mount bridge with two M8 screws (included), then put on Actuator and fix with screw to bridge. Mounting is possible in every 90° position.

Installation positions: upright standing to horizontal (based on stem of Valve).

For ensuring the proper functioning, make sure that both Actuator and Valve are correctly set when assembling (direction of rotation / position of ball / direction of flow) according to the installation instructions.

In case of power loss, gears can be disengaged by push button on Actuator for manual operation with handlever.

The installation must be carried out by authorized personnel, according to current laws and regulations.

Combinations Actuators / Valves

use for TICOVAL-Ball Valves with dimensions:									
Actuator	DN15 - 1/2"	DN20 - 3/4"	DN25 - 1"	DN32 - 1 1/4"	DN40 - 1 1/2"	DN50 - 2"	DN65 - 2 1/2"	DN80 - 3"	DN100 - 4"
EA80(R) - 9 Nm	✓	✓	✓						
EA80(R) - 13 Nm	✓	✓	✓	✓					

For larger dimensions of TICOVAL-Ball Valves and TICOFly-Butterfly Valves use Actuator EA100® or EA500(R) (see separate data sheets)