

# ELECTRIC ROTARY ACTUATOR

## MV 120/360

for 3-way and 4-way rotary mixing valves and ventilation flaps



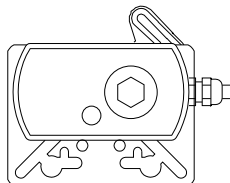
# FIRST<sup>®</sup>

### INSTRUCTIONS FOR MONTAGE AND USE

Assembly should be carried out by qualified person

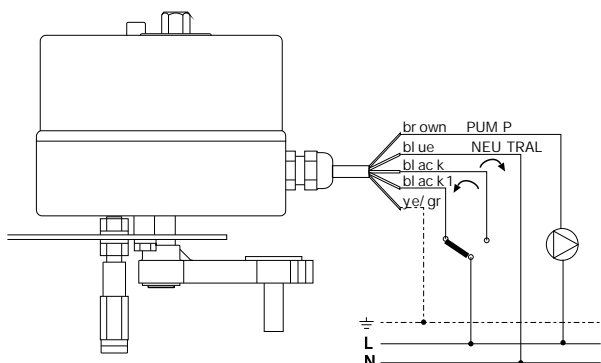
#### WARNING

Actuator is supplied with handle in position as it is shown on drawing. Before put into operation check that handle moves in desired area, if not press and rotate the button to position MAN and rotate lever for 180°.

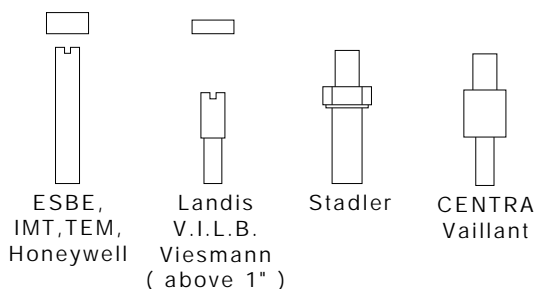


Before first start and before each heating season, operate the valve manually with a lever for several times in order to avoid overload of the actuator.

#### ASSEMBLY



#### ENCLOSED BOLTS AND DISTANCE RINGS



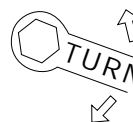
#### MANUAL OPERATING



1. To release actuator turn slightly axle with a spanner Nr.13



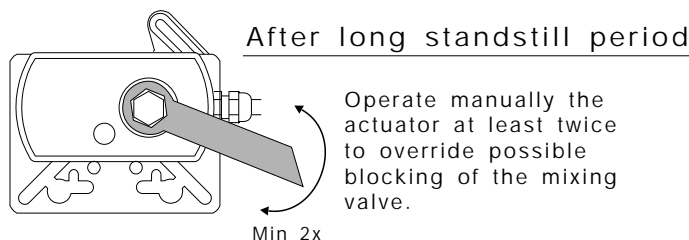
2. Push and rotate the button to position MAN



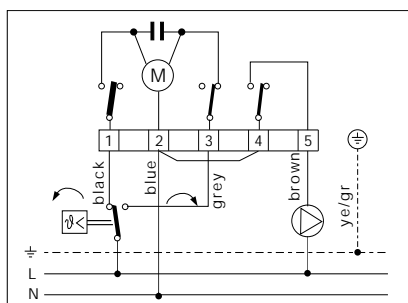
3. Turn the axle of actuator with the spanner Nr.13 to required position



4. Release the button and turn it to position AUTO



#### TECHNICAL DATA



Power connection	230 V, 50Hz
Consumption	3,5 W max
Rotation time	105s or 210s
Rotation angle	preset to 90°, possible from 15° to 340°
Micro switch capacity	5(1)A, 250 VAC
Electric motor insulation class	IP 54
Ambient temperature	0 ... 50°C
Medium temperature	0 ... 130°C max
Output torque	25 Nm

Perform connection according to this short instructions.

- ON-OFF CONTROL : controlling the actuator with room thermostat or chronoterm
- 3 POINT POSITIONING : possible with OTC controllers in hydronic system to supply require hot and mixed water

C13-4606-Mv120360a-grey

## PRESSETING THE CURVES

**WARNING :**  
**BEFORE EVERY OPENING DISCONNECT THE ACTUATOR FROM LINE VOLTAGE !**

Curves are factory pre set to enable rotation of actuator for 90°. In case of different desired rotation angle you can set the rotation angle from 15 up to 340°. Presetting of curves should be done by a qualified person !

1. Turn the actuator into base position by electricity.
2. With screwdriver remove the indicator of valve position
3. Open the cover of actuator
4. Remove the knob above curves
5. Manual preset the curves :
  - With curve signed on drawing below with 1, starting position of mixing valve.
  - With curve number 2 preset end position of mixing valve
  - The curve signed on drawing with 3, act third micro switch, which in most of application turn on and off the pump.

It is advisable to preset third curve to deactivate micro switch before curve for start position deactivate micro switch for basic position.

After setting the curves fit the cover.

**NOTE:** Those position are valid by factory electrical wiring. When you electrically change the rotation, while signal for open is feed to terminal 1 and for close on terminal 3, the meaning of curves are opposite. Take care in this case for appropriate setting of curve 3 for pump switch!

