

**Climate
Control**

IMI TA

TA-TRI



Actuators

Motorized 3-point actuator – 45 lbf (200 N)

TA-TRI

The motorized 3-point actuator TA-TRI is a highly reliable and easy to mount for valves for heating and cooling systems. The actuator is equipped with an LED for function displays as well as with a manual override facilitating maintenance and installation.

Key features

Easy to install

Very easy to install with valve adapter system, mount in all position.

Reliable, fast and energy efficient

Very short response time and complete motor control to save energy, low noise and maintenance free.

High enclosure class IP54 (NEMA 3 equivalent)

For secure operations at any installation positions.



Technical description

Functions:

3-point control
On-off control (requires three wires)
Manual override
LED indication
Antitheft function by removable locking latch

Supply voltage:

24 VAC, -10%/+20%, 50-60 Hz
24 VDC, ±20%

Power consumption:

Operation: < 110 mA
Standby: < 10 mA

Input signal:

3-point or on/off control

Characteristics:

Linear

Control speed:

381 s/in (15 s/mm)

Adjusting force:

45 lbf (200 N)

Temperature:

Media temperature: max. 212°F
Operating environment: 32°F – +122°F
(5-95%RH, non-condensing)
Storage environment: -4°F – +158°F
(5-95%RH, non-condensing)

Ingress protection:

IP54 all directions
(according to EN 60529)

Protection class:

III (SELV)

Cable:

3.28 ft, 3x18 AWG (3x0,75 mm²), PVC

Stroke:

0.33 in. (8.5 mm)

Noise level:

Max. 30 dBA

Weight:

0.44 lb

Connection to valve:

Adapter nut M30x1,5

Material:

Cover: Polycarbonate
Housing: Polyamide

Color:

Cover: Transparent
Housing: White RAL 9003

Marking:

IMI TA
Label: CE, UKCA, product name, article No. and technical specification.

Certification CE:

LV-D. 2014/35/EU: EN 60730-1, -2-14.
EMC-D. 2014/30/EU: EN 60730-1, -2-14.
RoHS-D. 2011/65/EU: EN 50581.

Product standard:

EN 60730

Function

The motorized actuator TA-TRI is designed to be mounted on valve bodies and are installed in heating, ventilation, and air conditioning systems in conjunction with corresponding controllers.

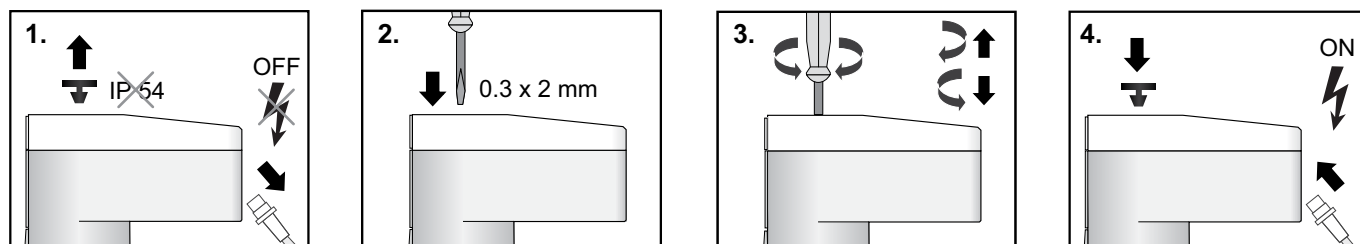
The motor of the 3-point actuator is moved in both directions of rotation via an electrical open or close instruction. As soon as the output voltage of the controller has been interrupted, the actuator stops and retains its travel position at that moment.

In the area of room temperature control, motorized actuators are used, for example, on radiators and convectors, heating manifolds for floor heating systems, ceil cooling systems and radiant heating systems as well as on fan-coil units and induction devices in two and four-wire networks.

Manual override

The manual override allows to bring the actuator stem to the desired position in de-energised status. This facilitates e. g. maintenance and installation.

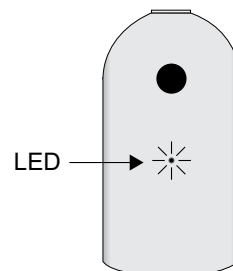
1. Switch off the supply voltage and remove the protective plug.
2. Insert a screwdriver (0.3x2 mm) into the manual override device.
3. Turn to the **clockwise** for **retracting** the actuator stem (open the valve) or **counter-clockwise** for **extending** the actuator stem (closing the valve) to reach the desired position.
4. Install the protective plug and switch on the supply voltage.



LED indication

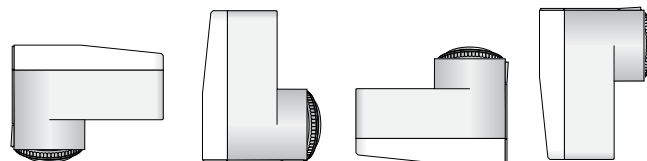
Errors are only displayed if the actuator is supplied with operating voltage.

Status	
Errors	Steady RED
Moving in (retract)	Short pulses GREEN
Moving out (extend)	Short pulses ORANGE
Manual mode or no power supply	Off



Installation

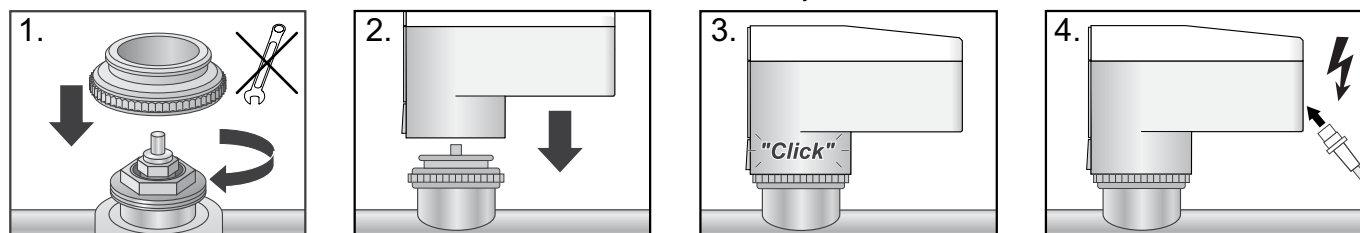
The TA-TRI can be operated in every installation position. (IP 54 according to EN 60529)



ATTENTION!

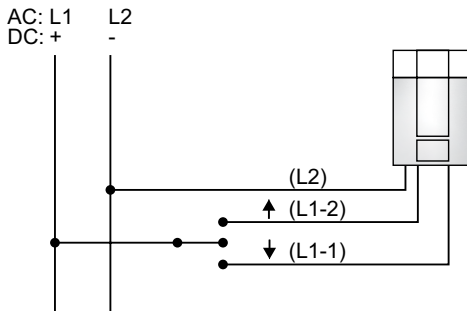
Installation with extended actuator stem leads to actuator damage.

- Only install the actuator with completely retracted stem.
- Retract an extended actuator stem with the manual override, or electrically.



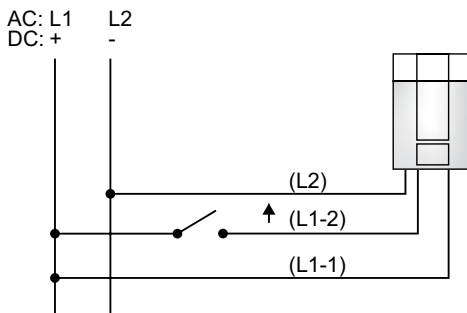
Connection diagram

24 VAC/VDC



Function	Description
Blue (L2)	Common
Voltage to red (L1-2)	The actuator stem retracts until the end position
Voltage to black (L1-1)	The actuator stem extends until the end position
No voltage to red/black	The actuator stem remains in its current position

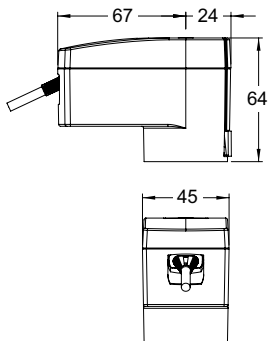
On-off



Function	Description
Blue (L2)	Common
Voltage to red (L1-2)	The actuator stem retracts until the end position
No voltage to red (L1-2)	The actuator stem extends until the end position
Black (L1-1)	Permanent 24 V supply

24 VAC/VDC operating only with safety transformer according to EN 61558-2-6.

Articles



TA-TRI – 24 VAC/VDC

Input signal: 3-point or on/off control

Cable length [m]	Supply voltage	Article No
1	24 VAC/VDC	322041-60005