

TA-ACTM



Actuators

Fail safe modulating actuator for terminal unit valves

TA-ACTM

These control valve actuators use common high strength, glass filled, nylon composite and electric gear motor. Available as normally open or normally closed option, these spring return actuators have proportionally, 4-wire, fail-safe on power disruption capability. The actuator is equipped with a dial type position indicator and a M30x1.5 quick disconnect mounting thumbnut to easily connect to our TA balancing and control valves like TA-COMPACT-P, TA-Modulator and TBV-CM.



Key features

- > **Conforms to CE, UL/CSA and RoHS standards**
- > **Position indicator**
For visibility of stroke position.
- > **Motor jam recovery**
System reverses the motor, backs up and again attempts to move to calculated position.
- > **Maintenance free motor**
Brushless hysteresis that is capable of continuous stall. For greater control accuracy and dependability.

Technical description

Functions:

Proportional control

Fail safe:

Normally open: Fail open

Normally closed: Fail closed

Supply voltage:

24 VAC +10%/-5%

Frequency 50/60 Hz

Power consumption:

Starting ≤ 6.0W

During operation ≤ 7.2W

Control speed:

10 sec/0.177 in, proportional range.

Fixed force:

28 lbf

Temperature:

Max. ambient temperature (in operation): 120°F

Min. ambient temperature (in operation): 40°F

Max. fluid temperature: 194°F

Min. fluid temperature: 32°F

Storage temperature: -13°F to 158°F

Motor type:

Brushless hysteresis

Ingress protection:

IP20 (NEMA I)

Cable:

Cable length: standard 36" wire harness.

Stroke:

Max. 0.177"

Weight:

1.0 lb

Connection to valve:

Retainer nut M30x1.5 of brass.

Compatibility combined valves:

TA-Modulator 1/2" - 3/4"

TBV-CM 1/2" - 1"

TA-COMPACT-P 1/2" - 1 1/4"

Material:

Body: High stress 33% glassfilled Nylon
Mounting ring: Brass

Color:

Grey

Marking:

Label with: IMI TA, article No., technical specification, CE.

Certification CE:

CE: EN50081-1, EN55014, EN6100-3-2, EN61000-3-3.

RoHS: Directive 200295/EC.

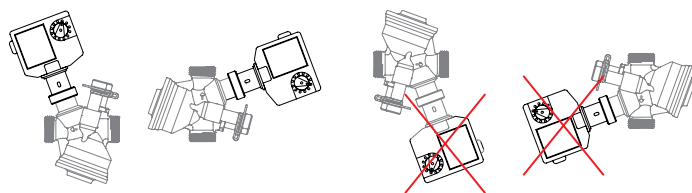
Approvals:

Meets CE, RoHS requirement, low voltage Class 2 as per UL/CSA standards.

Installation

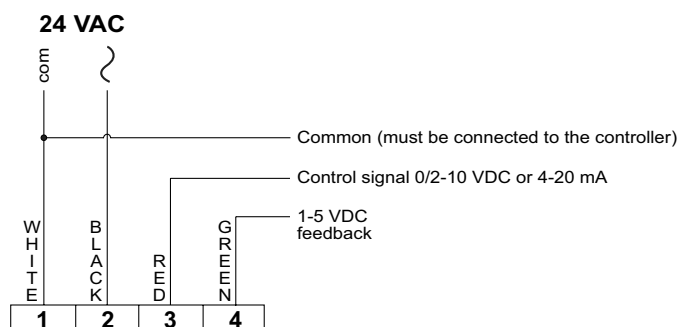
Requirements

The actuator can be installed vertically or horizontally; it cannot be installed upside down. The actuator mounting thumbnut is to be tightened by hand only, using tools may result in over-tightening.



Electrical connection

Electrical connect 24 VAC Class 2 wiring using strain relief. Connect the four wires (polarity is required) to the short leads of the electric motor. Secure the connection with wire maretts and tuck them inside the motor. Snap on the wire connector, press into the opening and it will lock in place.

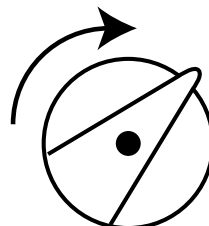


Fail safe

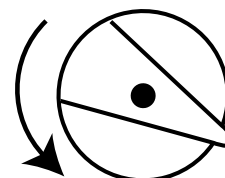
For TA valve bodies that are spring-loaded stem up, the spring returns the valve and actuator to the stem up position when power is lost in fail open type, Normally open actuator, or stem down in fail closed type, Normally closed actuator.

Positon indicator

Normally open type



Normally closed type



Model designation

TA Modulating Actuator Spring Return NO 24 VAC with standard wire harness shown

ACTM300420 1 1 0

Fail safe type

0 = NC
1 = NO

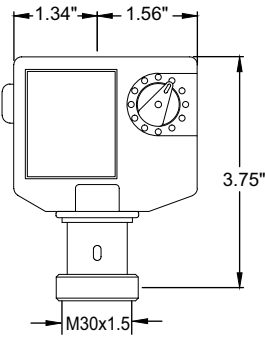
Supply voltage

1 = 24 VAC

Options

0 = No option (standard wire harness)
A = 10-2 VDC
B = 0-10 VDC
C = 10-0 VDC
D = 0-5 VDC
E = 5-0 VDC
F = 5-10 VDC
G = 10-5 VDC
H = 4-20 mA
I = 20-4 mA

Articles



TA-ACTM		
Type	Weight [lb]	Article No ** North America
Modulating actuator	1.0	ACTM300420 YYY*

*) YYY = To be sepcified according to "Model designation".

**) Distributed by Victaulic.

