

Terminal Valve Actuators

Features



- No tools required for mounting
- Low noise operation
- Maintenance free during life time
- Force switch-off at stem down position preventing overload of actuator and valve

Specification

Power supply:	
VT-AMV130-24	24Vac (+10, -15%)
VT-AMV130-230	230Vac
VT-AME130-24	24Vac (+10, -15%)
Frequency	50/60Hz
Power consumption:	
VT-AMV130-24	1VA
VT-AMV130-230	8VA
VT-AME130-24	1.3VA
Close of force	20N
Stroke	5.5mm
Speed	24 s/mm
Ambient temperature	0 to 55°C
Media temperature	120°C max.
Storage temperature	-40 to +70°C
Protection	IP42
Cable length	1.5m
Country of origin	Slovenia

Product Codes

VT-AMV130-24

Fan coil 24Vac Raise/lower (3-point) actuator

VT-AMV130-230

Fan coil 230Vac Raise/lower (3-point) actuator

VT-AME130-24

Fan coil 24Vac Modulating actuator

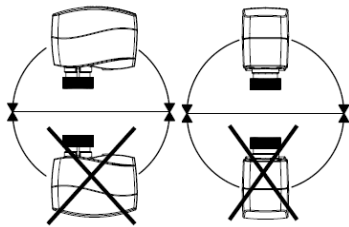
Technical Overview

The VT-AMx range of actuators are used with the VT-VZ range of terminal valves. They provide a cost effective solution for the control of hot and chilled water for fan coil units, small re-heaters and re-coolers in temperature control systems.

Installation

The actuator should be mounted with the valve stem in either horizontal position or pointing upwards.

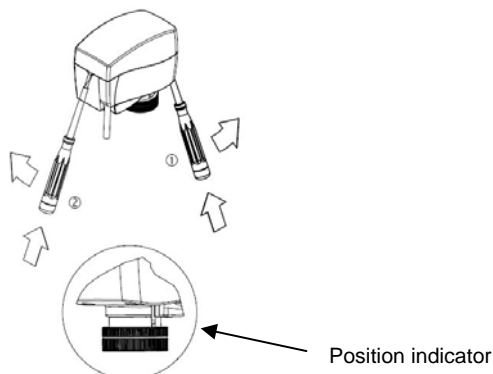
The actuator is fixed to the valve body by means of a mounting ring which requires no tools for mounting. The ring should be tightened by hand.



Important: It is strongly recommended that the mechanical installation is completed before the electrical installation. Each actuator is supplied with the connecting cable for the controller.

The factory setting of the spindle is the fully stem up position, making an easier mechanical connection of the actuator on the valve.

1. Check the valve's neck. The actuator should be in stem up position (factory setting). Ensure that the actuator is mounted securely on valve body.
2. Energise the actuator according to the wiring diagram.
3. The direction of stem movement can be observed on the position indicator.



Connections

VT-AMV130-24:

Grey Stem down
Black Common
Red Stem up

VT-AMV130-230:

Black Stem down
Blue Common
Brown Stem up

VT-AME130-24:

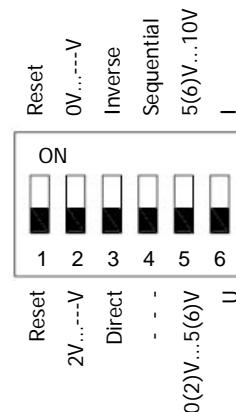
Red 24V
Grey 0-10Vdc signal
Black Common

Dip Switch Settings

(VT-AME130-24 only)

The actuator has a function selection DIP switch under the removable cover.

The switch provides the following functions:



SW1: Reset

Changing this switch position will cause the actuator to go through a self stroking cycle.

SW2: 0/2 - Input signal range selector

If set to OFF position, the input signal is in the range from 2 V ... 10V (voltage input) or from 4mA ... 20mA (current input). If set to ON position, the input signal is in the range from 0V ... 10V (voltage input) or from 0mA ... 20mA (current input).

SW3: D/I - Direct or inverse acting selector

If set to OFF position, the actuator is direct acting (stem lowers as voltage increases). If the actuator is set to ON position, the actuator is inverse acting (stem raises as voltage increases).

Dip Switch Settings (continued)

SW4:---/Seq - Normal or sequential mode selector:

If set to OFF position, the actuator is working in the range (2)..10V or 0(4)..20mA. If set to ON position, the actuator is working in a sequential range; 0(2)..5 (6)V or 0(4)..10 (12) mA), or (5(6)..10V) or (10(12)..20mA).

SW5: 0 ... 5 V/5 ... 10 V - Input signal range in sequential mode:

If set to OFF position, the actuator is working in sequential range 0(2)..5 (6)V or 0(4)..10 (12)mA. If set to ON position, the actuator is working in sequential range; 5(6)..10V or 10 (12)..20mA.

SW6: U/I - Input signal type selector

If set to OFF position, voltage input is selected. If set to ON position, current input is selected.

Manual Override



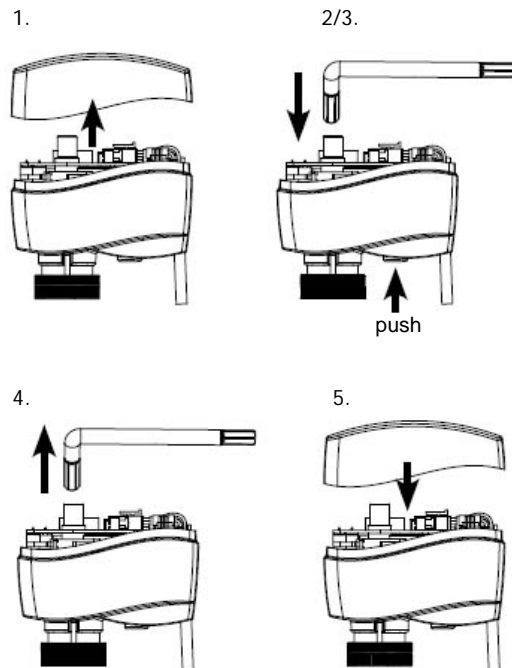
Do not manually operate whilst under power

1. Remove the cover.
2. Insert the Allen key 6 into the spindle.
3. Press and hold the button (on the bottom side of the actuator) during manual override.
4. Pull out the tool.
5. Place cover back on the actuator.
6. A "click" sound after energizing the actuator means that the gear wheel has jumped into normal position.

Note (VT-AME130-24 only):

If manual override has been used, then Y signal is not correct until the actuator reaches it's end position. If this is not accepted, reset the actuator.

Manual Override



Dimensions

