



RTAN

Thermal actuator

Thermal actuator with position indicator for control of valves in heating or cooling systems. The actuator can be used to control radiator circuits, solar heating systems, heating or cooling coils, floor heating etc. To be combined with the VTTV/VTTR/VTTB range of valves.

- ✓ Protection class IP40 (IP44 when vertically mounted)
- ✓ Stroke 2.5 mm
- ✓ Noiseless and maintenance-free
- ✓ Modern and compact design
- ✓ For M30 × 1.5
- ✓ 24 V AC and 230 V AC
- ✓ On/Off and 0...10 V

Function

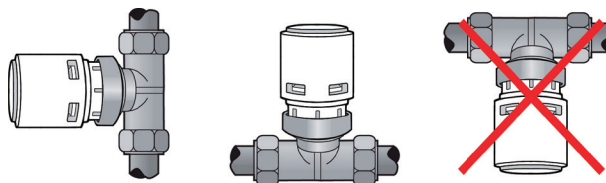
The actuator uses a wax element and a compression spring. It is equipped with a position indicator.

When the supply voltage is switched on the wax element is heated, causing the built-in piston to move. The force generated by the movement is transferred to the valve stem, opening and closing the valve. The valve is opened* when the actuator stem extends outwards from the actuator. When the power is cut and the hold time has elapsed, the wax element cools and the valve is closed* by the return spring and the inward movement of the actuator stem. The compression spring keeps the valve normally closed (NC).

* This applies to valves that open when the stem is pushed down and close upwards with the spring against port A.

Installation

Mount the actuator onto the thread of the valve body and tighten the metal ring. The actuator may only be mounted when it is cold, i.e. not powered up. The actuator can be mounted vertically or horizontally. It may not be mounted upside down.



Technical data

Stroke	2.5 mm
Ambient temperature	0...50 °C
Ambient humidity	10...90 % RH (non-condensing)
Storage temperature	-20...+70 °C
Storage humidity	< 95 % RH (non-condensing)
Connection	M30 x 1.5 metal ring
Weight	200 g
Protection class	IP40 (IP44 when vertically mounted)
Default position	NC (Normally closed)

Models

Article	Supply voltage	Control signal	Force	Power consumption	Stroke time
RTAN-24	24 V AC ± 10 %, 50/60 Hz	On/Off	100 N	3.0 VA	4.5 min
RTAN-230	230 V AC ± 10 %, 50/60 Hz	On/Off	100 N	3.0 VA	3.5 min
RTAN-24A	24 V AC ± 10 %, 50/60 Hz	0...10 V DC	100 N	3.5 VA	4.5 min
RTAN140-24	24 V AC ± 10 %, 50/60 Hz	On/Off	140 N	3.0 VA	4.5 min
RTAN140-230	230 V AC ± 10 %, 50/60 Hz	On/Off	140 N	3.0 VA	3.5 min
RTAN140-24A	24 V AC ± 10 %, 50/60 Hz	0...10 V DC	140 N	3.5 VA	3.5 min

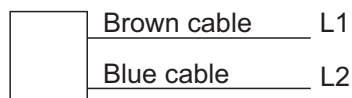
CE

Low Voltage Directive (LVD) standards: This product conforms to the requirements of the European Low Voltage Directive (LVD) 2014/35/EU through product standards EN 60730-1 and EN 60730-2-14.

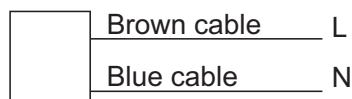
EMC emissions & immunity standards: This product conforms to the requirements of the EMC Directive 2014/30/EU through the product standards EN 60730-1 and EN 60730-2-14.

RoHS: This product conforms to the Directive 2011/65/EU of the European Parliament and of the Council.

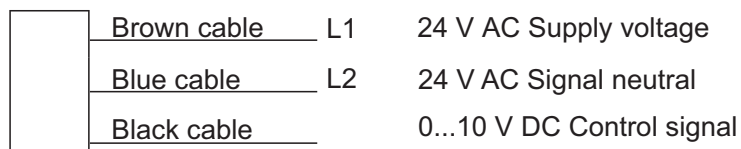
Wiring



On/off models 24 V AC

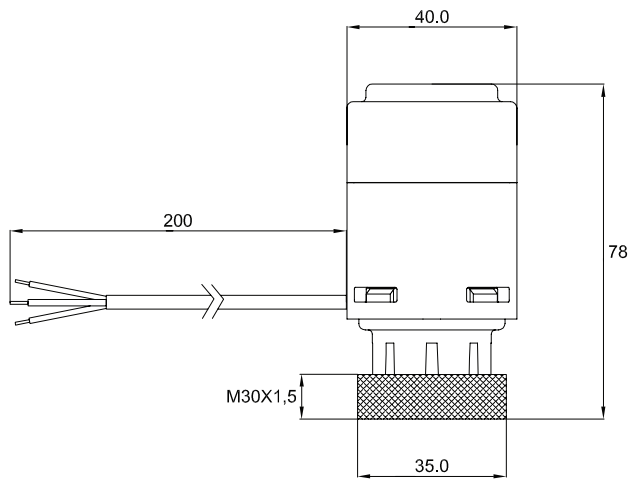


On/off models 230 V AC

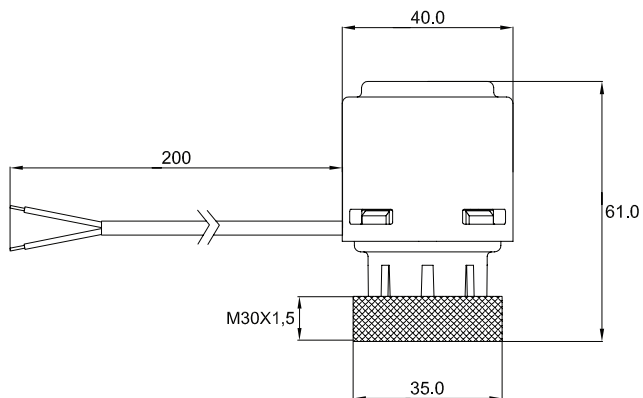


0...10 V models

Dimensions



0...10 V models



On/off models

Measurements in mm unless otherwise specified.

Product documentation

Document	Description
Instruction RTAN...	Instruction for installation of RTAN...
Product sheet VTTV/VTTR/VTTB	Product sheet for VTTV/VTTR/VTTB

The documentation can be downloaded from www.regincontrols.com.