



MTIC

Mechanical capillary thermostat

MTIC is a series of high quality electro-mechanical thermostats for use in cooling, heating and ventilation systems.

- ✓ Wide setpoint range
- ✓ Adjustable or fixed hysteresis
- ✓ 2-step design available
- ✓ Breaking capacity 15 A at 230 V AC
- ✓ Protection class IP65

Function

The MTIC electro-mechanical thermostats are constructed around a fluid-filled capillary tube and sensor housing that transfers the changes in temperature to a micro-switch with SPDT contacts. The micro-switch is capable of breaking up to 15 A at 230 V AC.

It comes in a 1-step or 2-step model.

Features

Hysteresis

1-step models are available featuring either fixed or adjustable hysteresis.

2-step models have fixed hysteresis.

Step differential

In the 2-step thermostats, the step differential can be adjusted 2...5 K.

Setpoint adjustment

The thermostat is available with a setpoint adjustment knob on the outside or under the cover.

Technical data

Sensor element	Liquid-filled copper bulb
Bulb dimensions	Ø 9.5 (Ø 8 for range 50...120°C)
Capillary length	1.5 m
Contacts	Dust-tight microswitches with SPDT contacts (heat/cool)
Switch capacity	15 (8) A, 24...250 V AC
Ambient temperature	-35...+65°C
Ambient humidity	10...90 % RH (non-condensing)
Protection class	IP65
Isolation class	1
Weight	400 g
Storage temperature	-40...+70°C
Storage humidity	up to 95% RH

Material

Housing	Bayblend® base, ABS cover
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Models

Article	Temperature range	Steps	Hysteresis	Step diff. max.	Max. bulb temp	Suitable immersion well	Hidden setpoint
MTIC30S	-30...+30°C	1	2...20 K		60°C	DR-01/02	-
MTIC30SH	-30...+30°C	1	2...20 K		60°C	DR-01/02	X
MTIC30-2	-30...+30°C	2	1 K	2...5 K	60°C	DR-01/02	-
MTIC30	-30...+30°C	1	1K		60°C	DR-01/02	-
MTIC30R	-30...+30°C	1	Manual min. reset		60°C	DR-01/02	-
MTIC90S	20...90°C	1	2...20 K		100°C	DR-01/02	-
MTIC90SH	20...90°C	1	2...20 K		100°C	DR-01/02	X
MTIC90	20...90°C	1	1K		100°C	DR-01/02	-
MTIC90R	20...90°C	1	Manual max. reset		100°C	DR-01/02	-
MTIC120S	50...120°C	1	2...20 K		150°C	DR-16/17	-

CE

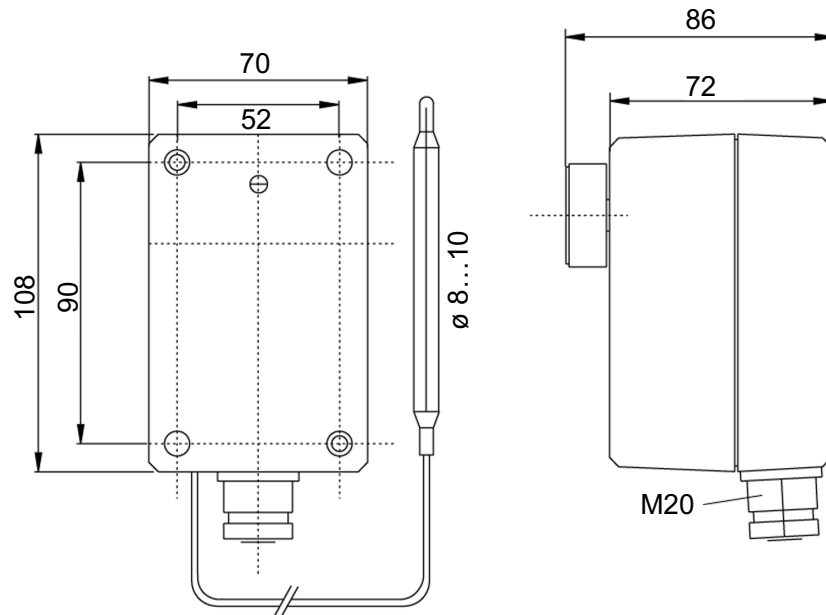
Low Voltage Directive (LVD) standards: This product conforms to the requirements of the European Low Voltage Directive (LVD) 2014/35/EU through product standard EN 60335-1.

RoHS: This product conforms to the Directive 2011/65/EU of the European Parliament and of the Council through standard EN 50581:2012.

Accessories

Article	Description
DR-01	Brass immersion well 120 mm, Øexternal 11mm, Øinternal 10mm, connection R 1/2"
DR-02	Stainless steel EN 10088-3:1.4301 immersion well 120 mm, Øexternal 12mm, Øinternal 10mm, connection R 1/2"
DR-16	Brass immersion well 120 mm, Øexternal 10mm, Øinternal 8,5mm, connection R 1/2"
DR-17	Stainless steel EN 10088-3:1.4301 immersion well 120 mm, Øexternal 10mm, Øinternal 8,5mm, connection R 1/2"

Dimensions



Measurements in mm.

Wiring

1-step models

Heating

Connect to the red and blue terminal. The contact will open when the temperature rises.

Cooling

Connect to the red and white terminal. The contact will open when the temperature drops.

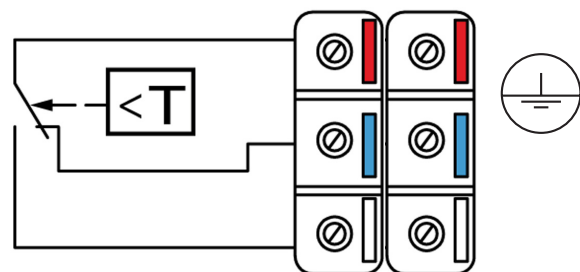
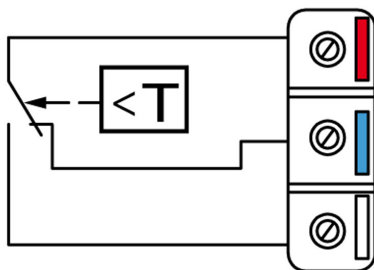
2-step models

Heating

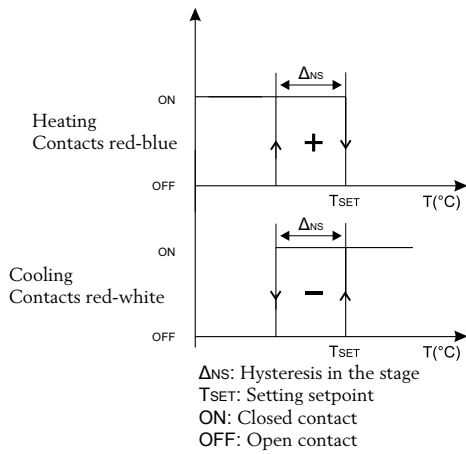
Connect to the red and blue terminal. The contact will open when the temperature rises. The step 2 contact will open first followed by the step 1 contact.

Cooling

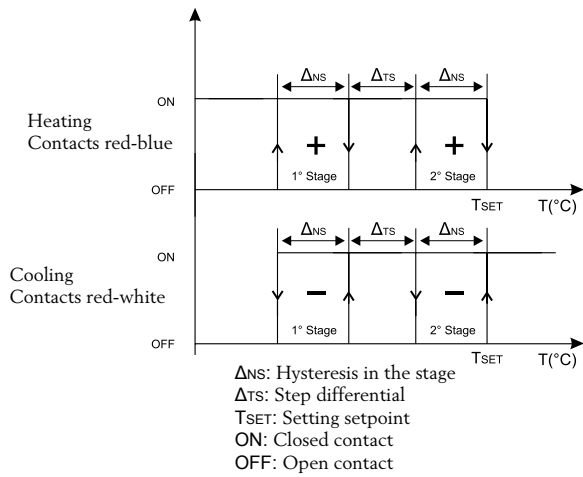
Connect to the red and white terminal. The contact will open when the temperature drops. The step 2 contact will open first when the temperature drops, followed by the step 1 contact.



Logic activation single-stage model



Logic activation two-stage model



Product documentation

Document	Description
MTIC instruction	Instruction for installation of MTIC

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