

TRT 317, 327: Electronic room thermostat for heating and heating/cooling

How energy efficiency is improved

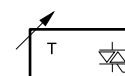
Individual, optimised energy use through precise adherence to setpoints

Features

- Electronic room thermostat for 24 V or 230 V for heating or heating/cooling
- Silent-switching Triac output on 24 V types
- Easy to wire up
- NTC sensor
- With input for lowering the room temperature
- With input for heating/cooling changeover (TRT 327)
- With cooling lock function on versions for heating/cooling
- Modern design with ergonomic setpoint adjuster
- With restriction of temperature setting range
- Electrical connection in baseplate with screw terminals
- With automatic frost protection facility at 8 °C and valve protection function



TRT3**F21*



Technical data

Power supply		
Power supply		24 V~ / 230 V~
Power consumption		< 0.3 W in idle state
Fuse		In housing: 230 V = T2AH 24 V = T1A
Parameters		
Number of actuators		AXT211/201: 230 V, max. 6 pcs. parallel 24 V, max. 4 pcs. parallel
Setting range		10...28 °C
Switching difference		±0.5 K
Set-back		2 K
Measuring element		NTC
Ambient conditions		
Ambient temperature		0...50 °C
Ambient humidity		5...80% rh, no condensation
Construction		
Housing		Cover: White (RAL 9016) Lower section: Signal white (RAL 9003)
Housing material		Thermoplastic PC + ABS
Fitting		Wall, recessed junction box
Inputs/outputs		
Switching element		230 V, relay 24 V, Triac
Switch rating		230 V, 1.8 A
ECO input		230 V, voltage detection 230 V 24 V, voltage detection 24 V
Heating/cooling		230 V, voltage detection 230 V 24 V, voltage detection 24 V
Connection terminals / cable		
Connection terminals		Screw terminals 0.22mm ² to 1.5mm ²
Switching difference		±0.5 K
Cord grip		External



Standards and directives

	Type of protection	IP20 (EN 60529)
	Protection class 24 V	III (EN 60730)
	Protection class 230 V	II (EN 60730)
CE conformity according to	EMC Directive 2014/30/EU	EN 61000-6-1, EN 61000-6-3
	Low-Voltage Directive 2014/35/EU	EN 60730-1, EN 60730-2-9

Overview of types

Type	Description	Voltage	Weight
TRT317F210	Heating, lowering, frost protection function	230 V~, ± 10 %, 50 Hz	90 g
TRT317F212	Heating, lowering, frost protection function	24 V~, ± 20 %, 50 Hz	90 g
TRT327F210	Heating/cooling, lowering, frost protection and valve protection function, cooling lock	230 V~, ± 10 %, 50 Hz	135 g
TRT327F212	Heating/cooling, lowering, frost protection and valve protection function, cooling lock	24 V~, ± 10 %, 50 Hz	135 g

Accessories

Type	Description
AXT2**	Thermal actuators (see product data sheet)

Description of operation

For individual unitary control (2-point) in residential and business spaces with relay output on 230 V versions for up to 6 thermal actuators and Triac output on 24 V for up to 4 thermal actuators. The room temperature is measured by a temperature sensor and compared with the current setpoint. Depending on the control offset, the heating or cooling in the room is increased or reduced. If there is a heat or cooling requirement, the thermal actuator is activated. These room thermostats are suitable for NC thermal actuators.

Decrease

In reduced mode, the defined temperature is decreased by 2 K. The room thermostat detects a voltage supplied by the electrical distributor or an external timer.

Heating/cooling

The room thermostat is switched between heating and cooling via an external signal (voltage detection). There is no dead zone between heating and cooling.

Cooling lock

A cooling lock is always possible by installing a jumper between two terminals. The cooling lock prevents the thermostat from switching to cooling mode in combination with the FXV 3*** electrical distributor.

Valve protection facility

The valve protection facility is activated at 14-day intervals for 6 minutes if no temperature regulation has taken place (output open). The actuator is activated and opens the valve.

Frost protection facility

The integrated frost protection facility is fixed at 6°C and prevents pipes from freezing during periods with no regulation.

Intended use

This product is only suitable for the purpose intended by the manufacturer, as described in the "Description of operation" section.

All related product documents must also be adhered to. Modifying or converting the product is not admissible.

Engineering and fitting notes

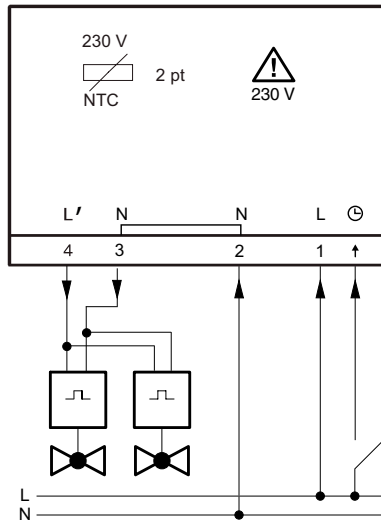
Place of installation approx. 1.5 m above the floor on an interior wall. The location must be protected from direct sunlight and other heat sources, e.g. televisions, lamps or radiators, and also from draughts.

Disposal

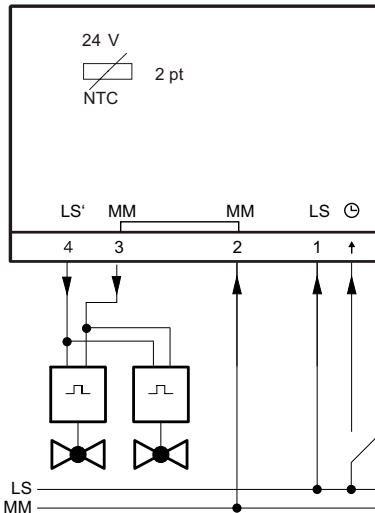
The local, currently valid laws must be observed when disposing of the device.
 You will find more information on the materials and substances in the Declaration on materials and the environment for this product.

Connection diagram

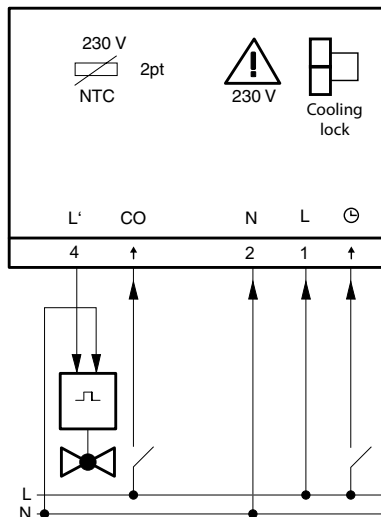
TRT317F210, 230V



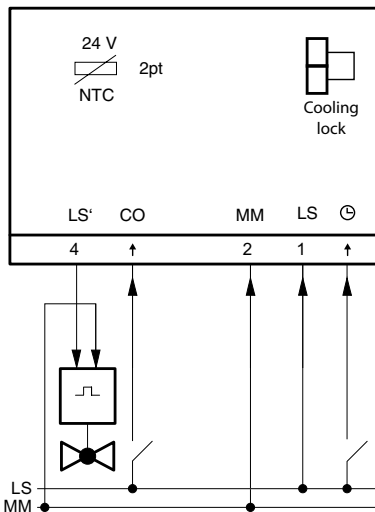
TRT317F212, 24V



TRT327F210, 230V



TRT327F212, 24V



Dimension drawing

