

TM1N/D

One stage electronic thermostat



TM1N/D is an electronic thermostat for the control of heating or cooling applications.

- One stage, closing relay contact, 16 A, 230 V AC
- * Supply voltage 230 V or 24 V AC
- * Built-in or external setpoint

- Adjustable night setback and hysteresis
- Several TM1N/D can be connected to one sensor
- * Selectable between heating/cooling function

Function

TM1N/D is an electronic thermostat to be used in conjunction with Regin NTC temperature sensors. The thermostat has a changeover relay contact and is able to control *both* heating or cooling functions.

TM1N/D is supplied in standard casing for DIN-rail mounting with all settings accessible on the front.

Supply voltage

The thermostat requires supply voltage of 230 V AC or 24 V AC. See model specifications overleaf.

Sensors

The TM1N/D is intended for a sensor temperature range 0 ... 30°C, but other temperature ranges are available. See leaflet 6-100 in the *main* catalogue for choice of sensors.

TM1N/D has one output available for connection to sensor input on another TM1N/D or TM2-24/D, when several thermostats are controlled by the same sensor.

Setpoint

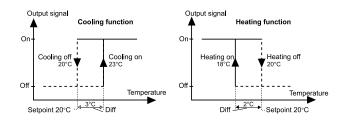
This is set by means of the built-in setpoint knob on the front or with an external setting device. Other scales adapted for other sensor ranges are available.

External setpoint

When using external setpoint TG-R430 or TBI-30, the built-in setpoint knob should be set at 0° thereby eliminating the effect of the built-in setpoint knob. The setpoint knob itself can be removed to avoid the danger of the setting being changed by mistake.

Hysteresis

This is set by means of the knob marked DIFF and is defined as the difference between the relay's on and off points.



Night set-back

Night set-back can be initiated by means of an external time switch. When the time switch closes night set-back of 0...10 K from the setpoint value is obtained. Several TM1N/D can be connected to the same external time switch.

Models

TM1N/D Electronic one-stage thermostat with supply voltage 230 V AC TM1N-24/D Electronic one-stage thermostat with supply voltage 24 V AC

Technical data

General

Supply voltage 230 V AC +/- 15% 50-60 Hz or 24 V AC +/- 15% 50-60Hz

Power consumption Max. 2 VA
Ambient temperature 0 ... 50°C
Storage temperature -40 ... +50°C
Ambient humidity Max. 90%RH

Form of protection IP20

Low Voltage Directive (LVD) standards: This product conforms to the requirements

of the European Low Voltage Directive (LVD) 2006/95/EC through product standards

EN 60730-1 and EN 60730-2-9.

EMC emissions & immunity standards: This product conforms to the requirements of the EMC Directive 2004/108/EC through product standards EN 61000-6-1 and

EN 61000-6-3.

RoHS: This product conforms to the Directive 2011/65/EU of the European

Parliament and of the Council.

Inputs

Sensor For Regin NTC sensors. See leaflet 6-100 for choice of sensor.

Setpoint When using an external setpoint the setpoint device should be connected in series

with the sensor to the sensor input.

Night set-back For potential free closing contact from external time switch.

Outputs

Relay contact One 16 A 230 V AC, closing contact

Sensor signal Output for connecting to another TM1N/D sensor input

Settings

Setpoint 0...30°C, Setpoint
DIFF 0...10 K, Hysteresis
NIGHT SETBACK 0...10 K, Night setback

HEAT-COOL Choice of heating or cooling function

Indications

Supply voltage Red LED

Relay output Red LED comes on when relay is activated

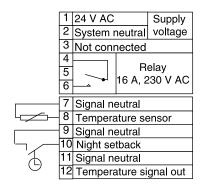
Wiring and dimensions

TM1N/D

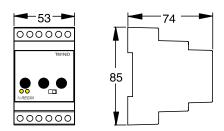
1 230 V AC Supply voltage 3 Not connected 4 Relay 5 A Relay 16 A, 230 V AC 7 Signal neutral 8 Temperature sensor 9 Signal neutral 10 Night setback 11 Signal neutral 12 Temperature signal out

Terminal 2 - neutral and terminal 7, 9, 11 - signal neutral are not connected internally.

TM1N-24/D



Terminal 2 - neutral and terminal 7, 9, 11 - signal neutral are connected internally.



Measurements in mm

