MAGNUM ETI-1551

Thermostat for MAGNUM Outdoor systems

ETI is a series of compact ON/OFF thermostats for industrial applications, primarily ON/OFF control of a single electric heating element in floor, ceiling and radiant heating systems.

ETI thermostats are also ideal for pipe frost protection and for ON/OFF control of pumps and compressors. Furthermore, the integrated changeover relay allows ETI to be used as a cooling thermostat.

Despite their compact design, ETI thermostats are capable of handling electrical loads of up to 10A or 2200W, allowing several loads to be controlled without the necessity of installing large electrical panels. As the thermostats are also extremely robust, little or no maintenance is required.

Functions:

Adjustable temperature differential

The temperature differential around the setpoint can be adjusted to ensure a suitable ON/OFF switching frequency in relation to heating/cooling effects and sensor reaction to temperature changes. When the temperature is lower than the setpoint minus half the temperature differential, the thermostat registers a need for heating and the potentialfree relay cuts in. When the temperature is higher than the setpoint plus half the temperature differential, the relay cuts out, switching off the heating.

Visual status indication

ETI thermostats have a built-in red LED which lights up when the relay is activated. This saves time on fault finding when heating is absent.

Compact design

ETI thermostats are designed for DIN-rail mounting and are only 36 mm wide. It should therefore be easy to find room for them in most electrical panels and space is saved in the panel in comparison with conventional thermostats.

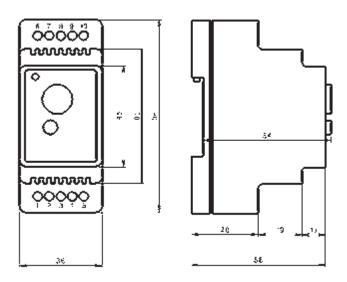
Sensor programme

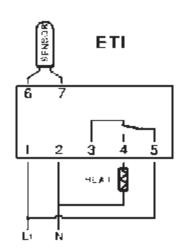
MAGNUM offers a wide range of sensors in various designs suitable for use with ETI thermostats, including floor sensors, immersion sensors, machinery and equipment sensors, outdoor sensors, room sensors, duct sensors, pipe sensors and wall sensors. For further information on sensors, see ETF data sheet.



Specifications	
Supply voltage	230V AC ±10%, 50-60 Hz
Sensor input	NTC
Relay output	SPCO 10A, 250V AC
Setpoint adjustment	-10°C / +50°C
Temperature differential	0,3°C - 6°C
Ambient temperature	0°C / +50°C
Power consumption	3VA
Max. fuse rating	10A, Type g
Housing	IP20
Weight	170 g
Dimensions	36 x 58 x 86 mm (H/W/D)







Technical details

ETI-1551 Thermostat installation

ETI thermostats are designed to be mounted on a DIN rail inside an enclosure with a suitable rating. A wall-mounting enclosure is available as an accessory.

Cable connection

The sensor cable may be extended up to 100 m. The sensor cable must be kept separate from mains-carrying cables as disruptive voltages may be induced. The sensor cable need not be screened, but the use of screened cable increases ETI resistance to interference, which is particularly important in industrial installations. The screen must be connected by a bracket to an earthed metal backplate or direct to an earth terminal.

Room sensors

Room sensors should be positioned on the wall in such a way as to allow free air circulation around them. They must also be positioned so as to prevent them being affected by direct heat sources (e.g. the sun), draughts from doors and windows, or outside temperature (i.e. do not mount on outer wall).

Floor sensors

Floor sensors should be installed in standard conduit embedded in the floor between heating cables, preferably as close to the floor surface as possible.