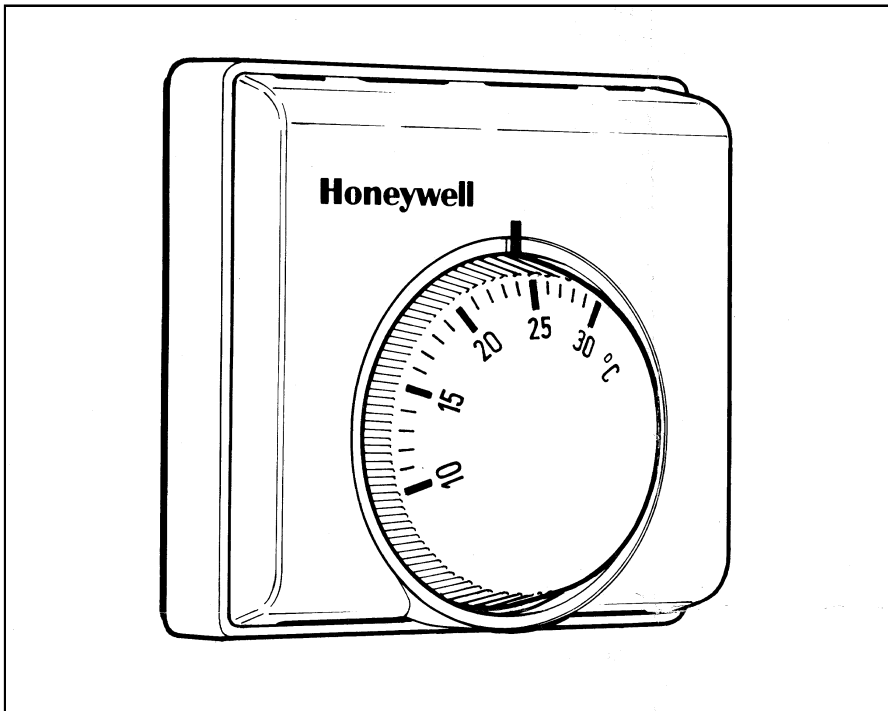


## T8360

### 24 VOLT ROOM THERMOSTAT

#### PRODUCT SPECIFICATION SHEET



The T8360 low voltage room thermostat has S.P.S.T. On/Off output for control of oil or gas boilers, zone valves, warm air or hydronic central heating systems with low voltage control circuits.

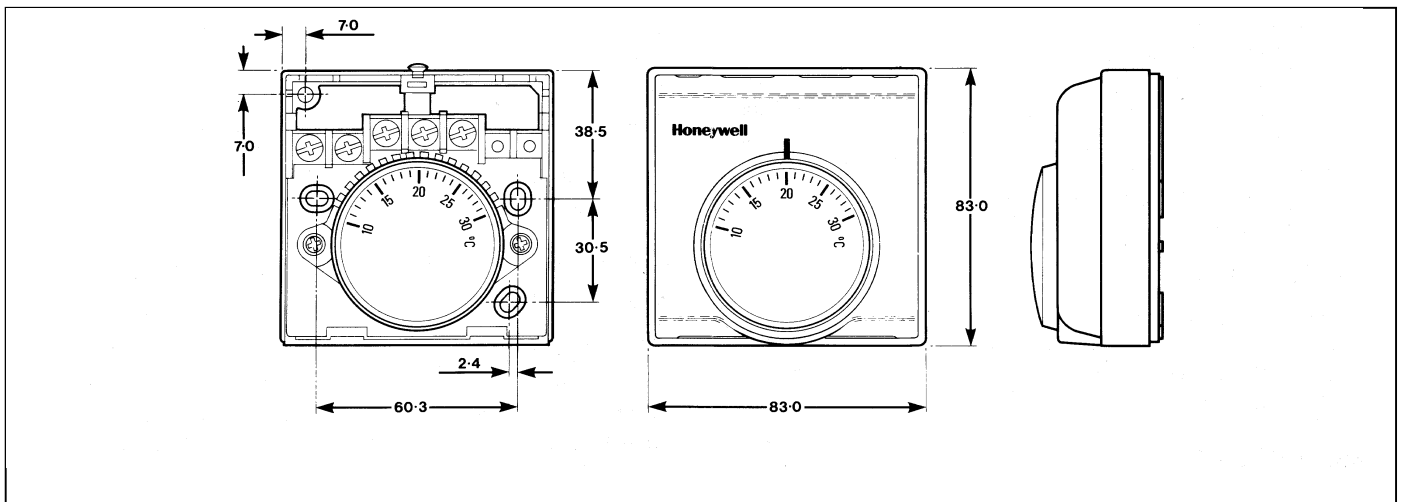
#### FEATURES

- Dual diaphragm sensing element ensures close temperature control for all loads and applications
- Attractive modern styling makes this thermostat ideal for locating in the living space
- Series heat anticipator allows 2-wire connection for operation at current range 90 to 130mA
- Mounts directly onto wall or conduit box
- Easy-to-wire terminals with built-in conductor clamps to ensure wiring is retained securely
- Double insulated. No earth wire required for operation.
- Optional extras available are:
  - range stops F42006646-001
  - tamperproof cover F42007110-001 (opaque) or F42007110-002 (transparent)
  - additional wallplate for special mounting requirements F42007789-001

## SPECIFICATIONS

Switch type	: T8360 S.P.S.T. (Heating)
Electrical ratings	: 24Vac, +10%, -15% 50...60Hz : Gold-plated contacts, 127 mA maximum at 24 Vac : Optimum rating 110 mA (+15%, -20%), anticipator connected : Possible rating 10 - 500 mA , anticipator not connected
Anticipator	: In series with load, value 18 ohms
Temperature setting range	: 10 to 30°C
Terminals	: Terminals sized to accept up to 2 x single or multi-stranded wires from 1.0 mm <sup>2</sup> to 2.5 mm <sup>2</sup> Each terminal has a conductor clamp for securing the wiring conductor and is suitable for both blade and cross-head screwdrivers.
Performance	: Maximum differential 1.0°C at 20°C at heat ramps of 3°C per hour, with anticipator connected. : Typical differential 0.5°C.
Switch life	: Greater than 100,000 operations (all loads) for main switch.
Environmental requirements	: Operating temperature range 0 to 40°C Shipping and storage range -20 to 50°C Humidity range 0 to 90% R.H. (non-condensing)
Approvals	: CE mark, complying with standards EN60730-1 (1995), EN55014-1 (1997), EN55014-2 (1996). Product must be wired as shown for CE compliance.
Ordering Specification	: T8360A1000

## DIMENSIONS



## INSTALLATION

### IMPORTANT

1. The installer must be a trained service engineer
2. Disconnect the power supply before beginning installation

### Location

A T8360 room thermostat is the temperature control element in your heating system and must be located in a position with good air circulation at average temperature - on an inside wall about 1.5 m above the floor.

Do not position the thermostat in draughts, near hot or cold air from water pipes or radiant heat from the sun or appliances.

### Mounting the thermostat

The T8360 can be mounted directly on the wall or on a conduit box (see Fig. 2). Mounting screws are provided for both alternatives.

An additional wall-plate is available for special mounting requirements.

### Wiring the thermostat

The standard wiring access is via a hole in the base of the thermostat, near the top edge. There are also 4 breakouts on the cover (2 on top and 2 on the sides) for surface wiring requirements.

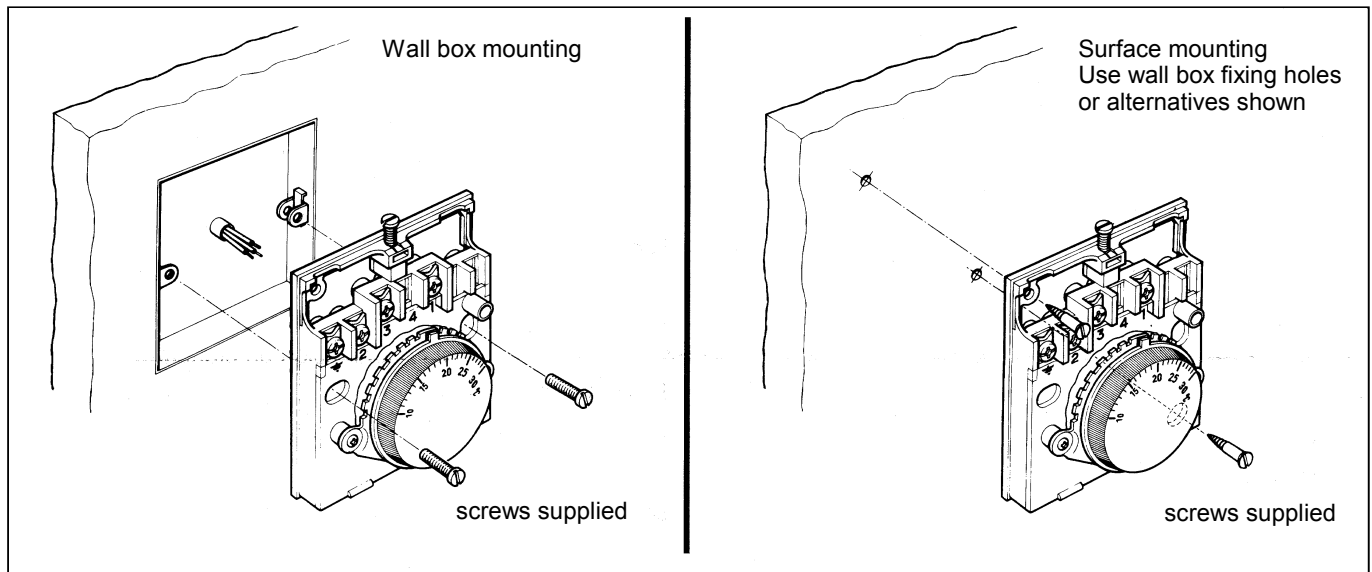


Fig.2 Mounting the Thermostat

## OPERATION

### Sensing Element

The thermostat sensing element comprises two circular, flexible metal plates welded together at the rims encapsulating a small quantity of gas in liquid form, whose pressure changes greatly in response to small variations in temperature. In effect, this dual diaphragm forms a 'bellows' which expands/contracts in sympathy with the ambient temperature changes - this movement serving to operate a snap acting switch rated to control the heating or cooling circuit.

### Series Heat Anticipator

It is recommended that the series heat anticipator is used for systems with a high heating ramp rate. This will overcome the overshoot and undershoot problems often found in this type of installation. The 18ohm anticipator is in series with the load, ensuring a 2-wire connection only is required. However, this is suitable only for loads in the range 90 to 130mA.

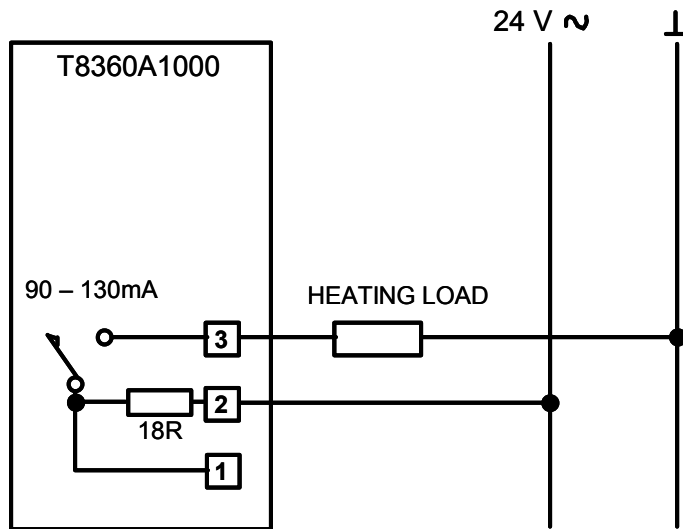
For loads outwith the range 90 to 130mA, the 24Vac input should be connected via terminal 1, so as to bypass the series anticipator. If this is done, loads from 10 to 500mA can be switched.

### Disposal of Thermostat

The thermostat contains no user serviceable parts. Please ensure product disposal is in a safe and environmentally friendly manner, in compliance with local regulations. Do **not** dispose of in a fire.

## WIRING

### SERIES ANTICIPATOR : LOADS 90 – 130mA



### NO ANTICIPATOR : LOADS 10 – 500mA

