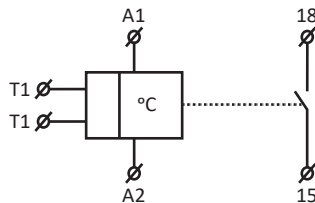# Thermtec-SL60/SL45

## Thermostats

These single thermostats are for temperature monitoring and regulation in control panels, heating systems, cooling systems, liquids, radiators, motors, devices, open spaces, etc. The Thermtec-SL60 has a temperature range of 0°C to 60°C and the Thermtec-SL45 has a temperature range of -15°C to 45°C.

- Built-in sensor short-circuit or disconnection warning
- Possibility to set the heating or cooling function via DIP switch
- Adjustable hysteresis (sensitivity), set by potentiometer in range 0.5°C to 5°C
- Compatible external temperature sensor with 3 metre cable also available (**Thermtec-SensorPVC**)
- Supply 24Vac/dc - 240Vac/dc, not galvanically separated
- Output contact: 1 x NO / SPST 16A / 250V AC1
- Red LED indicates the status of output. Green LED indicates energisation of the device
- 1-module, DIN-Rail mounting

## Thermtec-SL60/SL45 Technical Specification

|  | Thermtec-SL60 | Thermtec-SL45 |
|---|---|---|
| Function | Single Thermostat | |
| Supply Terminals | A1 - A2 | |
| Voltage Range | 24Vac/dc - 240Vac/dc (AC 50 - 60Hz), Galvanically Unseparated | |
| Power Input | Max. 2VA / 1W | |
| Max. Dissipated Power (Un + Terminals) | 2.5W | |
| Supply Voltage Tolerance | -15%, +10% | |
| Measuring Terminals | T1 - T1 | |
| Temperature Range | 0°C to 60°C | -15°C to 45°C |
| Hysteresis | Ajustable in range 0.5°C to 5°C | |
| Sensor | External, Thermistor NTC | |
| Sensor Fault Indication | Flashing Red LED | |
| Setting Accuracy (Mechanical) | 5% | |
| Switching Difference | 0.5°C | |
| Temperature Dependance | < 0.1% / °C | |
| Changeover Contacts | 1 x NO / SPST (AgSnO$_2$) | |

## Thermtec-SL60/SL45 Ordering Scheme

| Thermtec | SL60 |
|---|---|

**Temperature Range:**
**SL60** = 0°C to 60°C
**SL45** = -15°C to 45°C

## Thermtec-SL60/SL45 Technical Specification

| | |
|---|---|
| Rated Current | 16A / AC1, 10A / 24V DC |
| Breaking Capacity | 4000VA / AC1, 300W / DC |
| Switching Voltage | 250Vac / 24Vdc |
| Output Indication | Red LED |
| Mechanical Life | 15,000,000 Cycles |
| Electrical Life (AC1) | 35,000 Cycles |
| Operating Temperature | -20°C to 55°C |
| Storage Temperature | -30°C to 70°C |
| Electrical Strength | 2.5kV (Supply Output) |
| Operating Position | Any |
| Mounting | DIN-Rail EN 60715 |
| Protection Degree | IP40 from Front Panel / IP10 Terminals |
| Overvoltage Category | III |
| Pollution Degree | 2 |
| Max. Cable Size (mm²) | Solid Wire max. 2x 2.5 or 1x 4 (AWG 12) / Stranded Wire with Ferrule max. 1x 2.5 or 2x 1.5 (AWG 12) |
| Dimensions | 90 x 17.6 x 64mm |
| Weight | 64g |
| Standards | EN 60255-1, EN 60255-26, EN 60255-27, IEC 60730-2-9 |

## Thermtec-SL60/SL45 Function
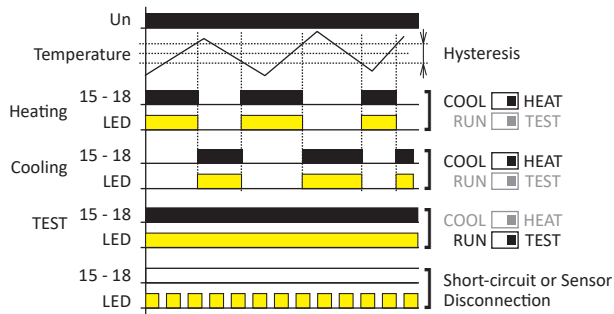


The relay functions as a thermostat using a single external sensor to monitor temperature. The relay can be installed in a control panel with the external sensor run to the required space, object, or liquid to be monitored. The power supply is not galvanically separated from the sensor. The sensor is double insulated and comes in a standard 3 metre length (if using **Thermtec-SensorPVC**). This can be extended by the user to a maximum of 12 metres. The relay features built in indication of sensor short-circuit or disconnection, shown by a red flashing LED. Thanks to adjustable hysteresis it is possible to adjust the sensitivity of the switching points. When installing it is necessary to allow for the temperature gradient between the sensor's outer insulation and internal thermostat.