Thermostats and Controllers



TC100 Series Electro-Mechanical Thermostats



The TC100 Series of fan coil thermostats are optimized for office building, hotel and residential applications. The TC100 Series can be used for 2-pipe or 4-pipe applications. Their simple design makes them suitable for any contemporary building. They are both easy to operate and install.

Features

- Set-point, fan speed and mode control
- Easy to install and maintain
- Green set-point marking indicates ideal range for energy efficiency

Functions

Set-point Adjustment - The set-point adjustment dial allows users to select a desired set-point for the space. The green set-point marking provides the user with the ideal range to optimize energy efficiency. The set-point range can also be limited by locking the set-point range.

Fan Speed - Users can select between High, Medium and Low fan speeds by adjusting the fan speed switch.

Mode Control - Users can switch modes from heating to cooling, or turn the thermostat off by adjusting the mode switch.

Specifications

| 10 kΩ NTC (3950) |
|---|
| ±1.5 °C at 20 °C |
| 5 30 °C |
| 0 45 °C |
| 5 90% RH |
| 230 Vac ±10%, 50/60 Hz |
| 5 A resistive, 2 A inductive |
| IP20 |
| Flame-retardant PC |
| 86 x 86 x 27 mm (3.38 x 3.38 x 1.06 in.) |
| 60 mm (2.36 in.) (Standard) |
| |

| Part number | Description | Application |
|-------------|--|-------------|
| TC103-3A2 | FCU Thermostat for 2-position on/off actuator (2-wire) | 2-pipe |
| TC103-3A2C | FCU Thermostat for 2-position on/off actuator w/fan stop (2-wire) | 2-pipe |
| TC103-3B2 | FCU Thermostat for 2-position on/off actuator (3-wire)* | 2-pipe |
| TC103-3B2C | FCU Thermostat for 2-position on/off actuator w/fan stop (3-wire)* | 2-pipe |
| TC103-3A4 | FCU Thermostat for 2-position on/off actuator (2-wire) 4-pipe | 4-pipe |
| | | |

*Note: 3-wire actuator requires Form C /time-out functionality.



TC300 Series

Digital Thermostats



Features

- Modern appearance
- Large, blue backlit, LCD screen
- Eco button for energy saving
- Button lockout function controls unauthorized operation
- Non-volatile memory (EEPROM) retains user settings during power loss
- Low temperature protection
- Standard 86 x 86 mm box for installation
- Temperature sensors are provided with failure alarm function to facilitate maintenance
- Optional Modbus communication
- Deluxe models include:
- Sleep mode for energy savings
- Occupancy/Card Key input
- Real-time display
- Optional remote temperature sensor

- Optional Infrared remote control

The TC300 Series fan coil thermostats are optimized for office building, hotel and residential applications. The TC300 Series can be used for two-pipe or four-pipe applications. Their simple design makes them suitable for any contemporary building. They are both easy to operate and install.

The TC300 features microprocessor-based control and a large backlit LCD screen. The LCD display modes include operation status (cooling, heating, and ventilation), fan speed, room temperature, and set-point.

Specifications

| Sensing element | 10 kΩ NTC (3950) |
|-----------------------|---|
| Accuracy | ±1 °C |
| Set-point range | 5 35 °C |
| Display range | 0 50 °C (shown in 0.5 °C increments) |
| Operating temperature | 0 45 °C |
| Operating humidity | 5 95% RH (non-condensing) |
| Power requirement | < 1 W |
| Power supply | 85 260 Vac, 50/60 Hz |
| Terminals | Can be connected to 2 x 1.5 mm2 or 1 x 2.5 mm2 conductors |
| Communicating speed | 4800 bps |
| Switch current rating | 5 A resistive, 3 A inductive @ 230 Vac |
| Switch power rating | Max. inrush 1385 VA / 150 W |
| Protection class | IP30 |
| Housing | Flame-retardant PC |
| Dimensions | 88.5 x 86 x 16 mm (3.48 x 3.38 x 0.63 in.) |
| Hole pitch | 60 mm (2.36 in.) (Standard) |
| | |

| Part number | Description | Application | Communication | Real-time |
|---------------|---|-------------|---------------|-----------|
| TC303-3A2L | FCU Thermostat for 2-position on/off actuator (2-wire) | 2-pipe | None | No |
| TC303-3A4L | FCU Thermostat for 2-position on/off actuator (2-wire) | 4-pipe | None | No |
| TC303-3A2LM | FCU Thermostat for 2-position on/off actuator (2-wire) | 2-pipe | Modbus | No |
| TC303-3A4LM | FCU Thermostat for 2-position on/off actuator (2-wire) | 4-pipe | Modbus | No |
| TC303-3A2DLS | Deluxe FCU Thermostat for 2-position on/off actuator (2-wire) | 2-pipe | None | Yes |
| TC303-3A4DLS | Deluxe FCU Thermostat for 2-position on/off actuator (2-wire) | 4-pipe | None | Yes |
| TC303-3A2DLMS | Deluxe FCU Thermostat for 2-position on/off actuator (2-wire) | 2-pipe | Modbus | Yes |
| TC303-3A4DLMS | Deluxe FCU Thermostat for 2-position on/off actuator (2-wire) | 4-pipe | Modbus | Yes |
| TC303-3A2DPMS | Deluxe FCU Thermostat for 0 10 V modulating actuator | 2-pipe | Modbus | Yes |
| TC303-3A4DPMS | Deluxe FCU Thermostat for 0 10 V modulating actuator | 4-pipe | Modbus | Yes |
| IR-300 | TC3xx IR Remote Control | | | |
| RS-03 | 10k NTC Remote Sensor (10 pcs) - 3 m (9.8 ft.) | | | |

TC350 Series

Digital Thermostats



Features

- Modern appearance
- Large, blue backlit, LCD screen
- Eco button for energy saving
- Weekly scheduling application
- Button lockout function controls unauthorized operation
- Non-volatile memory (EEPROM) retains user settings during power loss
- Low temperature protection
- Standard 86 x 86 mm box for installation
- Temperature sensors are provided with failure
- alarm function to facilitate maintenance • Deluxe models include:
 - Occupancy/Card Key input
 - Real-time display
 - Optional remote temperature sensor
 - Optional Infrared remote control

The TC350 Series fan coil thermostats are optimized for office building, hotel and residential applications. The TC350 Series can be used for two-pipe or four-pipe applications. Their simple design makes them suitable for any contemporary building. They are both easy to operate and install.

The TC350 features microprocessor-based control and a large backlit LCD screen. The LCD display modes include operation status (cooling, heating, and ventilation), fan speed, room temperature, and set-point.

Specifications

| Sensing element | 10 kΩ NTC (3950) |
|-----------------------|---|
| Accuracy | ±1 °C |
| Set-point range | 5 35 °C |
| Display range | 0 50 °C (shown in 0.5 °C increments) |
| Operating temperature | 0 45 °C |
| Operating humidity | 5 95% RH (non-condensing) |
| Power requirement | < 1 W |
| Power supply | 85 260 Vac, 50/60 Hz |
| Terminals | Can be connected to 2 x 1.5 mm2 or 1 x 2.5 mm2 conductors |
| Switch current rating | 5 A resistive, 3 A inductive @ 230 Vac |
| Switch power rating | Max. inrush 1385 VA / 150 W |
| Protection class | IP30 |
| Housing | Flame-retardant PC |
| Dimensions | 88.5 x 86 x 16 mm (3.48 X 3.38 X 0.63 in.) |
| Hole pitch | 60 mm (2.36 in.) (Standard) |
| | |

| Part number | Description | Application | Scheduling | Real-time |
|--------------|--|-------------|------------|-----------|
| TC353-3A2L | FCU Thermostat for 2-Position On/Off Actuator (2-Wire) | 2-pipe | Yes | No |
| TC353-3A4L | FCU Thermostat for 2-Position On/Off Actuator (2-Wire) | 4-pipe | Yes | No |
| TC353-3A2DLS | FCU Thermostat for 2-Position On/Off Actuator (2-Wire) | 2-pipe | Yes | Yes |
| TC353-3A4DLS | FCU Thermostat for 2-Position On/Off Actuator (2-Wire) | 4-pipe | Yes | Yes |
| IR-300 | TC3xx IR Remote Control | | | |
| RS-03 | 10k NTC Remote Sensor (10 pcs) - 3 m (9.8 ft.) | | | |

KLR-E/RTR-E/FR-E Series

Room Controllers



KLR-E

This selection of air conditioning controllers offer a variety of features most commonly required for the control of heating and cooling in residential and office applications.

| Part number | Description |
|-----------------|---|
| KLR-E 517 7801 | 0 10 Vdc Outputs + On/Off Heat with LCD |
| KLR-E 517 7805 | 0 10 Vdc Outputs + On/Off Heat & Fan with LCD |
| KLR-E 517 7810 | 0 10 Vdc Outputs + On/Off Heat + Fan Speed with LCD |
| KLR-E 525 52 HP | On/Off Outputs with Power Indicator + Fan Speed |
| KLR-E 525 52 4P | On/Off Outputs with Mode Indicators + Fan Speed |
| KLR-E 525 55 | 0 10 Vdc Outputs |
| KLR-E 525 56 | 0 10 Vdc Outputs + Fan Speed |
| KLR-E 527 23 | On/Off Outputs + Fan Speed with LCD |
| KLR-E 527 24 | On/Off Outputs + Fan Speed + Mode Select with LCD |
| KLR-E 7009 | On/Off Outputs + Fan Speed |
| KLR-E 7010 | On/Off Outputs + Fan Speed + Mode Select |
| KLR-E 7011 | On/Off Outputs + Fan Speed |
| KLR-E 7012 | On/Off Outputs + Fan Speed + Mode Select |
| KLR-E 7026 | On/Off Output + Fan Speed |
| KLR-E 7038 | On/Off Outputs + Fan Speed + Mode Select |
| KLR-E 7202 | On/Off Outputs without Indicators |
| KLR-E 7203 | On/Off Outputs + Fan Speed without Indicators |
| KLR-E 7204 | On/Off Outputs + Fan Speed with Indicators |
| KLR-E 7611 | On/Off Output + On/Off |
| | |





RTR-E

These electronic room controllers offer a basic form of on/off heat or heat/cool control within a 75 x 75 mm enclosure.

| Description |
|---|
| On/Off output with set-point, indicator and On/Off switch |
| On/Off output with set-point only |
| On/Off output with set-point and On/Off switch |
| Change-over output without indicator |
| |

FR-E

An electronic temperature controller with remote temperature sensor suitable for electric floor heating systems.

| Part number | Description |
|-------------|---|
| FR-E 525 31 | Floor Heating Controller with Remote Sensor |

Accessories

For mounting controllers to nearly all conduit boxes used internationally.

| Part number | Description |
|-------------|------------------------------------|
| ARA 1.7 E | KLR-E Series Plastic Adaptor Frame |
| ARA 1 E | RTR-E Series Plastic Adaptor Frame |