

TC350 Series

0-10 VDC Output Proportional Fan Coil Thermostats

Features

- Aesthetic styling
- High quality NTC thermistor sensor
- Remote sensor capability
- System "OFF" position breaks all circuits
- All slide switches for ease of operation
- Easy to wire to numbered terminals
- On-site calibration not required

General

The TC350 Series proportional fan coil thermostats are available in 3 basic models to provide 0-10 VDC proportional outputs for controlling zone valves in fan coil units and heat pumps for industrial, commercial and residential installations.

The TC350 Series proportional fan coil thermostats are designed for HVAC control applications incorporating on-off or cool-off-heat system control, 3-speed fan and manual cooling/heating changeover for 2-pipe systems, depending on the model selected.

Remote temperature sensor is available for all models as standard feature.

Mounting

The TC350 Series proportional fan coil thermostats can be surface mounted or secured to a standard European 75x75x35 mm electrical box. Two mounting screws are



included.

Ordering Instruction
To order, specify complete product model number.

Specifications

Model Numbers	TC351	On-Off, 3-speed fan, single output, cooling Only or heating only, for 2-pipe system
	TC352	Cool-Off-Heat, 3-speed fan, single output, manual cooling/heating changeover, for 2-pipe System
Power Requirements	100 to 240 V 50/60 Hz, $\pm 10\%$	
Control Output	0-10 VDC, minimum 10 k Ω load impedance	
Temperature Set Point Range	0-30°C linear	
Proportional Band	Fixed at 5 K	
Sensing Element	NTC Thermistor, 10 k Ω @25°C	
Fan Output	Continuous, selectable at High, Medium or Low speed	
Body Material	Self-extinguishing, molded ABS	
Finish	Off White color	
Electrical Ratings of Switches	3 A resistive, 2 A inductive, 250 V 50/60 Hz	
Ambient / Storage Temperature Limits	0 to 50 °C / -30 to 50 °C, 10% to 90% RH non-condensing	
Wire Connections	Non-removable terminal blocks, wire Size 1 mm ² or 18 AWG solid copper recommended	
Accessories	See Figure 1: Accessories and Options	
Agency Approval	CE Mark compliant to EMC and Low Voltage Directives pending	
Shipping Weight	0.24 kg (0.53 lb)	
Dimensions	See Fig. 2: Dimensions in mm	

The performance specifications above are nominal and subject to tolerances and application variables of generally acceptable industry standards. The manufacturer shall not be liable for damages resulting from misapplication or misuse of its products.

Figure 1: Accessories and Options

Description	Part No.
Probe-type temperature sensor	TE10-1
Duct-mount temperature sensor	TE10-2
Wire Leads with Plug for Remote Sensor	RSL
With system "on" LED indicator	TC35xL

Figure 2: Dimensions in mm

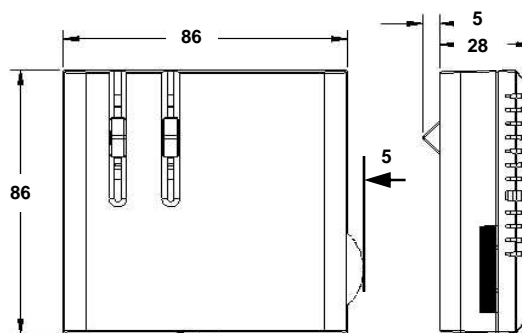


Figure 3: Wiring Diagrams

Wiring Notes

1. Terminals G and N must be isolated or otherwise components in the electronic circuit will be damaged.
2. 22 or 24 AWG twisted shielded pair double-insulated cable is recommended as remote sensor wiring and its length must not exceed 50 m.
3. Do not bundle and run power wiring and remote sensor wiring in the same conduit.
4. Run the remote sensor wiring away from any electric motors or power wiring. Failure to do so may result in poor thermostat performance due to electrical noise.

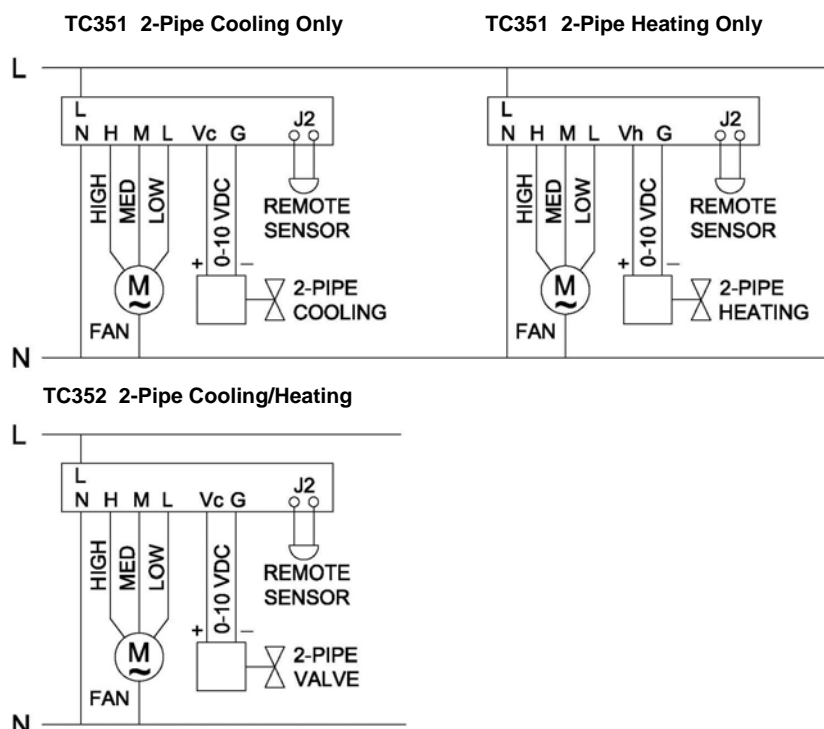
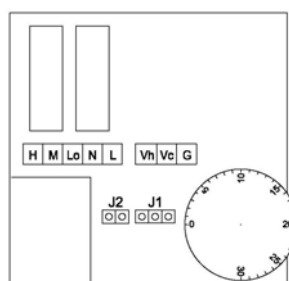


Figure 4: Jumper Settings and Remote Sensor Connector



When remote sensor is connected to connector J2 by means of wire leads RSL, insert jumper J1 to two left pins. Factory setting of J1 is at two right pins for built-in sensor.

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