Honeywell

TFM228/ 428 Series
LCD DIGITAL ON/OFF THERMOSTAT

Features

- RS485 interface in Modbus RTU slave mode available.
- New attractive modern styling design makes the thermostat harmonized with any interior decoration.
- All in one design, easier to install or service. FUZZY logic design, easier to operate.
- Easy-to-see LCD screen. 3-Speed Fan Controls.
- Heat/Cool mode adjustable. ℃ or ℉ selectable.
- High voltage input (90~264Vac) to suit all regions
- Separate terminals for remote sensor and key card. Ability to display temperature sensor failure for easier troubleshooting.
- Suitable for use with Honeywell all series ON/ OFF control valves.

Application

The new TFM228/ 428 series LCD thermostats are designed for ON/ OFF control valve, and fan in 2/ 4-pipe application.

The thermostat operates an ON/ OFF control valve to provide control at the desired setpoint temperature.

Fan-coil thermostat models are available with constant fan operation, and have a three-speed switch comes with low, medium and high settings.

The TFM428KNM/U is available in Modbus RTU protocol & TFM428KNB/U is available in BACnet protocol and can be easily integrated into building automation system.

The TFM228NNFH/U is model without 3 speed fan contact, which commonly use for simple ON/ OFF control in certain application.
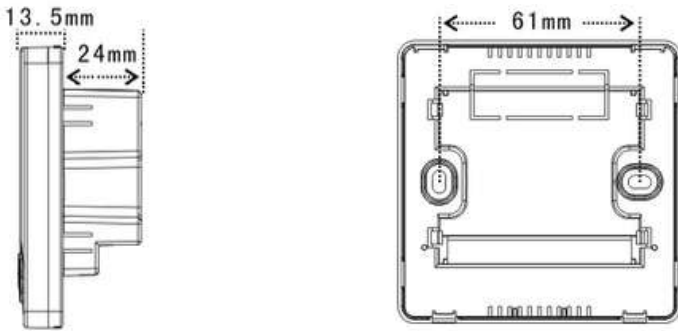
Specifications

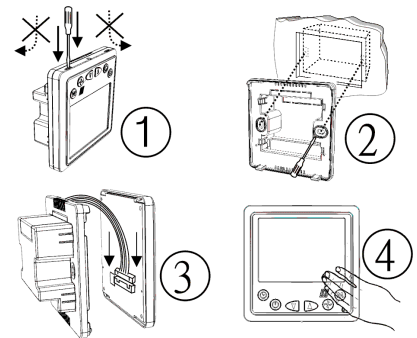|	
Power Rating:	90~264Vac / 50~60Hz
Setpoint ranges:	5 ~ 45℃ (or 41 ~ 113°F, step 1℃/°F)
Display ranges:	0 ~ 60.0℃ (step 0.1 ℃)
Accuracy:	±0.5℃ (at 25℃) ±1℃ (at 21℃)
Control:	ON/ OFF SPST
Output:	SPST for control valves
Electrical Rating:	For Fan Current 5(2)A 5A: When the load of the thermostat is resistance 2A: When the load of the thermostat is inductance
Remote temperature sensor:	NTC 10k
Auto Cycle Time:	Greater than 100,000 cycles (all loads)
Manual Cycle Time:	Greater than 10,000 operations for all manually operating switches.
Mounting:	86x86 mm junction box (hole pitch 60mm) or a 85x85mm junction box. Mounting screws supplied.
Wiring:	4 or 7 screw –in terminals per unit, capable of accepting 18~26AWG wires per terminal.
Environmental requirements:	Operating temperature range 5 to 45℃. Shipping and storage temperature range -20 to 55℃. Humidity range 5 to 95% RH, non-condensing at 26℃.

Table 1. Model Selection Guide

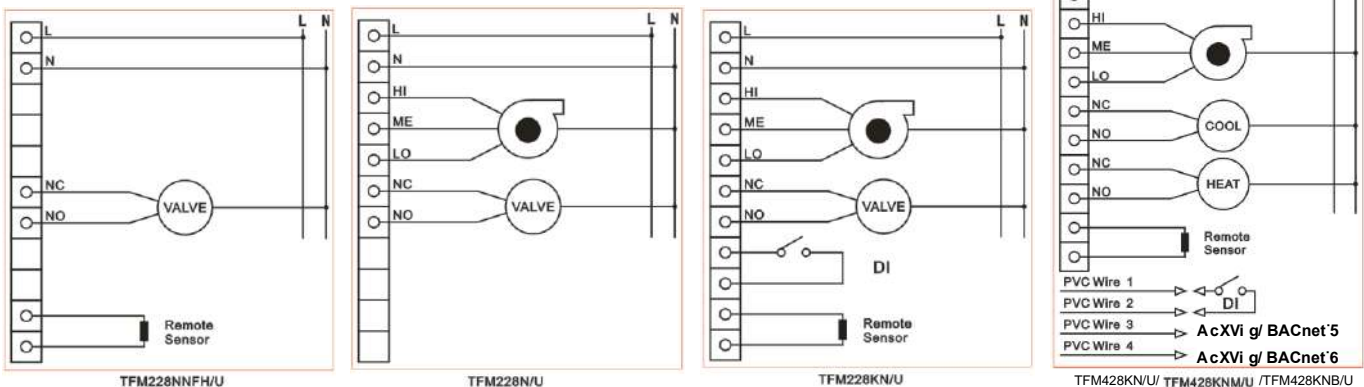| OS#	Application	Mounting	Switches		Supply Voltage
			ON/ OFF SPST	3-Speed Fan	Vac±10%, 50/60Hz
TFM228NNFH/U	ON/ OFF output, 2 pipes, remote sensor terminal, high accuracy thermostat. (without 3-speed fan output)	86 Box	Yes	NIL	90-240Vac
TFM228N/U	ON/ OFF, 2 pipes with 3 fan speeds, high accuracy thermostat	86 Box	Yes	Yes	90-240Vac
TFM228KN/U TFM428KN/U	ON/ OFF, 2 pipes/ 4 pipes with 3 fan speeds, with occupancy mode, remote sensor terminal, high accuracy thermostat	86 Box	Yes	Yes	90-240Vac
TFM428KNM/U	ON/ OFF, 4 pipes, Modbus with 3 fan speeds, with occupancy mode, remote sensor terminal, high accuracy thermostat	86 Box	Yes	Yes	90-240Vac
TFM428KNB/U	ON/ OFF, 4 pipes, BACnet with 3 fan speeds, with occupancy mode, remote sensor terminal, high accuracy thermostat	86 Box	Yes	Yes	90-240Vac

Dimensions (in mm)

Installations

Wiring

TFM228NNFH/U

TFM228N/U

TFM228KN/U

TFM428KN/U/ TFM428KNM/U /TFM428KNB/U

***TFM428KN/U will not have the modbus & BACnet terminals

Honeywell Building Technologies
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