400-Series
UHC-TST412MDMS

Lighted Touchscreen

The Contour of Comfort

Ruud has set a new industry benchmark for Home Comfort with the 400-Series blue touchscreen thermostat, specially designed to work with Ruud *Ultra Series®* modulating gas furnaces. Plus, it's designed to be easy-to-view, easy-to-understand and easy-to-operate with simple on-screen programming.

Features & Benefits

- Bright, 12 sq. inch touchscreen display
- Keypad lockout option
- Hardwired
- Easy, menu-driven programming
- Audio prompting to ensure program change confirmation
- Intuitive red/blue temperature keys
- Call for service prompt
- Humidification and dehumidification control

Warranty

5 years from date of purchase (contact the Ruud Parts Distribution Center for more information).

5 YEAR Limited Warranty

Dimensions
5.9"W [150 mm] x 4.6"H [117 mm] x 1.2"D [30 mm]

Thermal Specifications
Setpoint Temperature Range: 45° to 99°F (7° to 32°C)

Rated Differential: Heat 0.6°F; Cool 1.2°F

Operating Ambient Temperature: 32° to 105°F (0° to 41°C)

Operating Humidity Range: 90% non-condensing maximum

Shipping Temperature Range: -4° to 150°F (-20° to 65°C)

Electrical Specifications
Rating
Battery Power: mV to 30 VAC, NEC Class II, 50/60 Hz or D.C.

Input-Hardwire: 20 to 30 VAC

1.0 Amp (load per terminal)

1.5 Amps maximum load (all terminals combined)

Standard Systems
Single-stage gas, oil, electric

Single-stage heat pump

Multi-Stage gas, oil, electric

Multi-Stage heat pump

Programming
Universal – installer selectable system applications

Universal – choice of 7 day, 5/1/1 day programmable or non-programmable (installer selectable)

4 times and 4 temperature settings per program (2 setbacks) heat and cool, or selectable - 2 time and 2 temperature settings (1 setback)

Energy savings up to 33%

Patented pre-programmed schedule simplifies time and temperature programming

Display
Large 12-square-inch touchscreen display - largest in the industry

Blue, lighted display for easier low-light viewing

Larger, easy-to-read character size

Extra-large touch keys for easy operation

Clean, uncluttered touchscreen display provides easier navigation

Performance
Selectable Energy Management Recovery

Meets ENERGY STAR® specifications

Meets California Building Code, Title 24

Fast (FA) or slow (SL) heating cycle anticipation

Easy-to-wire terminal block

Compressor lockout protection

Millivolt compatible

Electric heat option

Comfort & Convenience
Humidification and dehumidification control
Dehumidification Rh range 40-90%
Humidification Rh range 5-50%

Intuitive menu-driven set-up, programming and operation, with audio prompt to confirm touchscreen entries

Permanent program retention during power loss

Indefinite setpoint Hold or 4-hour temporary temperature override

Temporary temperature override - can be set from 15 minutes for Temporary adjustments up to 7 days for Vacation override

Auto heat/cool changeover option – automatically switches between heating and cooling programs

Heating and cooling, heating only or cooling only configuration (installer selectable)

Setpoint temperature "limited range" capable

Enhanced (variable) touchscreen security prevents tampering

Call for Service prompt

Furnace filter change reminder

Humidifier change pad reminder
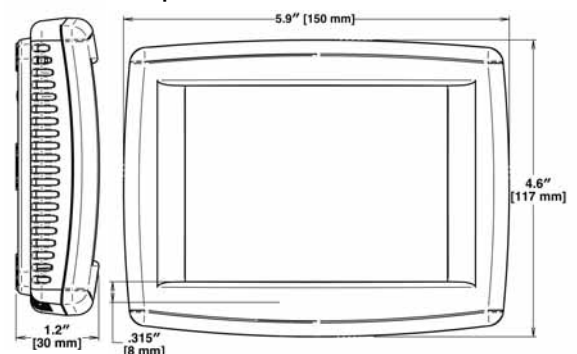
Maintains room temperature to within +/- 1°

Room temperature display can be recalibrated up to +/-4°

Terminal Designations

B **Y2** **Y** **G** **Rc** **Rh** **C** **DHM** **HM** **W/E** **V** **+** **−** **S** **L**

Profile **Footprint**

5.9" [150 mm]

4.6" [117 mm]

1.2" [30 mm]

.315" [8 mm]

Thermostat System Matchups

RUUD HEAT PUMP / MODULATING FURNACE

| SYSTEM | | | | THERMOSTAT SOLUTIONS | |
| Heat Pump | Modulating Furnace | Stages | | Thermostat Model | Description |
		Heat	Cool		
UPNE UPPB UPPL UPNL UPPC	UGFD UGGD UGJD	Modulating	1	UHC-TST412MDMS	Programmable Mod/GE/DF

RUUD HEAT PUMP 2-STAGE / MODULATING FURNACE

| SYSTEM | | | | THERMOSTAT SOLUTIONS | |
| Heat Pump | Modulating Furnace | Stages | | Thermostat Model | Description |
		Heat	Cool		
UPRL	UGFD UGGD UGJD	Mod	2	UHC-TST412MDMS	Programmable Mod/GE/DF

RUUD CONDENSER 1-STAGE / MODULATING FURNACE

| SYSTEM | | | | THERMOSTAT SOLUTIONS | |
| Condenser 1-Stg. | Modulating Furnace | Stages | | Thermostat Model | Description |
		Heat	Cool		
UAND UAPC UAPL UARA UANL UAKB	UGFD UGGD UGJD	Modulating	1	UHC-TST412MDMS	Programmable Mod/GE/DF

RUUD CONDENSER 2-STAGE / MODULATING FURNACE

| SYSTEM | | | | THERMOSTAT SOLUTIONS | |
| Condenser 2-Stg. | Modulating Furnace | Stages | | Thermostat Model | Description |
		Heat	Cool		
UARL UASL	UGFD UGGD UGJD	Modulating	2	UHC-TST412MDMS	Programmable Mod/GE/DF