

# UNIVERSAL PROGRAMMABLE NETWORK THERMOSTAT



for 1 & 2 Compressor Applications

## RP32-NX Conventional (Gas/Electric) / Heat Pump / Oil

(using XBUS Protocol)

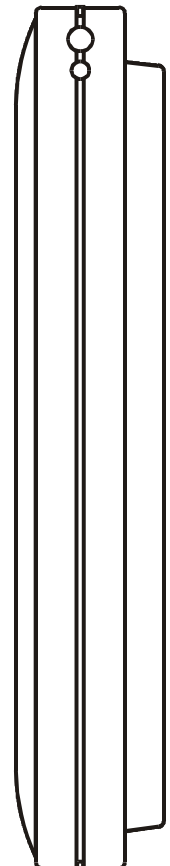
### GENERAL DESCRIPTION

The RP32-NX communicating thermostats are designed for new or replacement commercial or residential conventional applications. With integrated logic for both conventional and heat pump applications, the thermostats will control up to three (3) stages of heating and two (2) stages of cooling. The state-of-the-art thermostat includes an easy-to-read vertical LCD that displays complete operating status. Built-in scheduling allows up to four (4) independent schedules every day of the week, plus vacation scheduling and temporary override options. NetworkThermostat's XBUS protocol is embedded, allowing various connection options using Net/X™ communicating backplates and protocol converters. The RP32-NX is the perfect thermostat for any application where remote sensors are not required. (If remote sensing is needed, see the UP32-NX thermostat)



### Standard Features

- Complete control and status via any of NetworkThermostat's interfaces
  - XBUS (use NT-UPC Converter, sold separately), or
  - Wired Ethernet (use BP-IP Ethernet Backplate, sold separately), or
  - WiFi (use WBM-WiFi Backplate, sold separately), or
  - StrongMesh™ (use WBM-2 Backplate, sold separately)
- For an RP32-NX with an integrated WiFi backplate, order RP32-WIFI
- Selectable Celsius or Fahrenheit temperature display
- Automatic changeover from heat-to-cool and cool-to-heat
- Fan selector for automatic or continuous fan operation; programmable recirculation fan
- Vacation button for extended override with a selectable length and return time
- Resume button for canceling override and vacation functions
- Commercial lockout with programmable temporary override time and temp adjustment
- 3 LED lights; 1 for E-Heat indication and 2 for status indication with switchable LCD icons
- 2°F (1°C) minimum Heat/Cool separation
- Up to 4 independent schedules per day, programmable via communications
- Smart Schedule Recovery™ allows system to achieve desired setpoint at the beginning of the schedule
- Random Restart on power up randomly staggers restart of HVAC system after a power outage to minimize peak in-rush current for a facility
- Efficient Equipment Restart™ randomizes equipment starts to minimize multiple units turning on simultaneously when there are several RP32-NX thermostats at the location\*
- No battery required
- Lockable access cover



Note : Specifications subject to change without notice. \*Patent Filed Technology

# SPECIFICATIONS

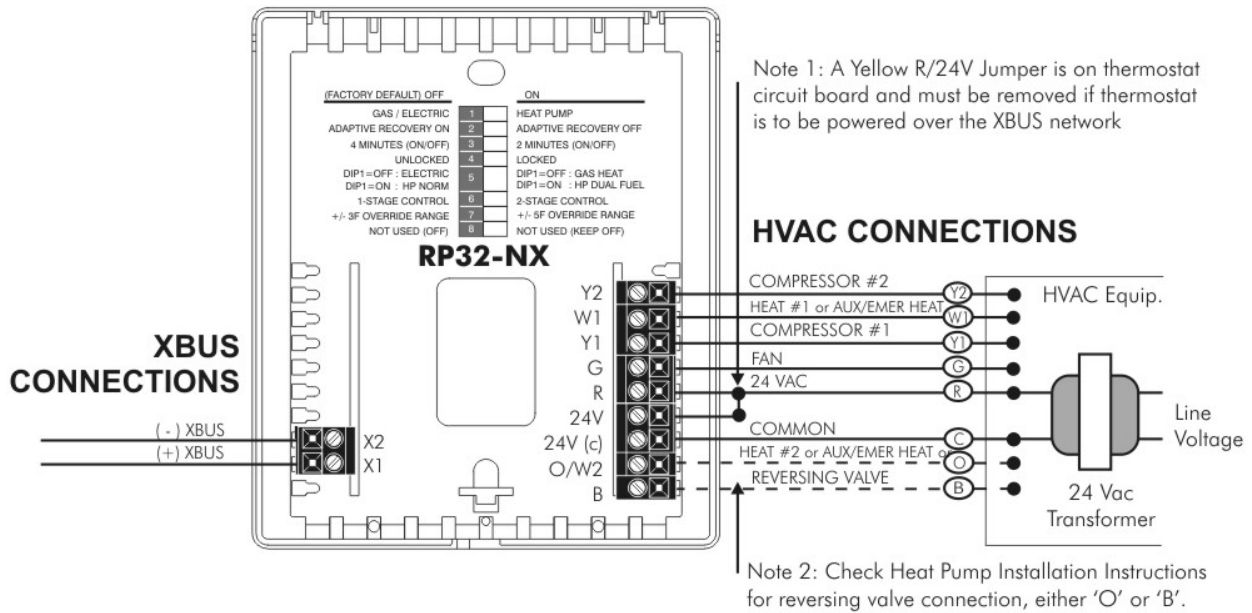
Rated Voltage : 20 to 30Vac, DC 24 nominal  
 Rated A.C. Current : 0.05 to 0.75 Amp continuous per output, surges to 3 Amps max.  
 Rated D.C. Current : 0.0 to 0.75 Amp continuous per output, surges to 3 Amps max.  
 Control Range : Heating : 38 to 88°F in 1° steps (6 to 30°C in 1° steps)  
 Cooling : 60 to 108°F in 1° steps (16 to 40°C in 1° steps)

## Thermostat

Measurement Range : 28 to 124°F or 0 to 48°C  
 Control Accuracy : +/- 1°F @ 68°F (0.5°C @ 20°C)  
 Minimum Deadband : (between heating and cooling) 2°F or 1°C  
 Dimensions : 4.5" H x 4" W x 7/8" D (114mm x 102mm x 22mm)  
 Equipment Terminations : R-switching volt., W1-heat stage 1 or aux/emerg heat, Y1-compressor stage 1, G-fan, LED1-light, LED2-light  
 O/W2- heat stage 2 or reversing valve in cooling mode  
 B-reversing valve heating mode  
 Y2-compressor stage 2

Power Terminations : 24V - power, 24V(c) - power common

Communication Terminations : XBUS : X1 - comm(+), X2 - comm(-)



## OUTPUT TERMINAL FUNCTIONS

**X2** Communications bus input/output (-)  
**X1** Communications bus input/output (+)

**Y2** Energizes compressor for second stage cooling, or for heat pumps, either second stage heating or cooling  
**W1** Energizes heater for first stage heating, or for heat pumps, aux/emerg heat  
**Y1** Energizes compressor for first stage cooling, or for heat pumps, either first stage heating or cooling  
**G** Energizes fan circuit with a call for heating or cooling  
**R** Independent Switching Voltage from HVAC equip  
**24V** 24Vac  
**24V(c)** 24Vac Common  
**O/W2** Energizes heater for second stage heating, or for heat pumps, energizes the reversing valve in cooling mode  
**B** Energizes the reversing valve in heating mode