



# X5-CFA

- Full Color Touchscreen
- Standard (Gas/Electric) up to 2H/2C
- Heat Pump (Standard or Dual Fuel) up to 3H/2C
- Humidity Sensing
- Drop-In Replacement for US32-CFA
- Up to 11 Sensors via Advanced Sensor Bus
- Integrated NetX<sup>™</sup> XBus Communications

## **GENERAL DESCRIPTION:**

# **Complete Stand-Alone Solution**

The X5-CFA is a communicating setback color touchscreen thermostat designed for new or replacement commercial applications. Our integrated logic for both conventional and heat pump applications may be configured for up to three (3) stages of heating and two (2) stages of cooling with an advanced remote sensor bus. The X5-CFA is a direct replacement for the US32-CFA thermostat.

The X5-CFA is designed to operate as a stand-alone unit or be controlled using any NetX<sup>™</sup> network controller and the NetX<sup>™</sup> PCConnect Command Center software. For maximum security, the X5-CFA may be controlled and operate behind your firewall. For ultimate control over energy usage, the X5-CFA offers a digital lockout that permits limited temperature overrides. The advanced remote sensor bus allows up to 6 indoor remote sensors, humidity sensor, outdoor sensor, and up to 3 auxiliary sensors for needs such as supply air, return air, water temperature, walk-in freezers and refrigerators, and any other temperature monitoring desired.

#### STANDARD FEATURES:

### **Energy Savings**

- Efficient Equipment Restart™ randomizes equipment starts to minimize multiple units turning on simultaneously when there are multiple NetX thermostats at the location
- Random Restart on power up staggers restart of HVAC system after a power outage to minimize peak in-rush current

#### Monitoring

- 11 Remote Sensors: up to 6 indoor, 1 humidity, 1 outdoor, and up to 3 auxiliary sensors for monitoring items such as supply air, return air, walk-in refrigerators and freezers, etc.
- 2 Digital Inputs for Fault Conditions, including Condensate and Equipment Faults

#### Connectivity

- PCConnect™ Software for Local Internal Network and Port Forwarded Access
- Integrated NetX™ API

#### **Facility Management**

- Commercial Lockout with Programmable Temporary Override
  Time and Temperature Range Adjustment
- 2 Occupied (Day-Cool & Day-Heat) and 2 Unoccupied (Night-Cool & Night-Heat) Setpoints

#### General

- Color Selectable Touchscreen Display with White Case
- Modes: Heat, Cool, Auto, and Off
- Integrated Humidity Sensor



# SPECIFICATIONS:

Rated Voltage: 20V to 30VAC, 24VAC nominal

Rated A.C. / D.C. Current: 0.05 to 0.75 AC / 0.0 to 0.75 DC Amp continuous, per output, surges to 3 Amps maximum

Temperature Control Range: Heating: 38°F to 88°F (4°C to 31°C) in 1° steps Cooling: 60°F to 108°F (16°C to 42°C) in 1° steps

Thermostat Sensing Range: 32°F to 118°F (0°C to 48°C) Control Accuracy: ±1°F @ 68°F (±0.5°C @ 20°C)

Minimum Deadband: 2°F (1°C)

**Dimensions:** 5.1"H x 4.7"W x 1.15"D (130mm x 119mm x 29mm)

**Equipment Terminations:** R - 24V switching voltage, W1 - Heat1 or Aux/Emer Heat, G - Fan, Y1 - Compressor1, Y2 - Compressor2, O/W2 - Heat2 or Rev. Valve in Cooling, B - Rev. Valve in Heating

Power Terminations: 24V - remote power (not used), 24V(c) - power common (from HVAC equipment)

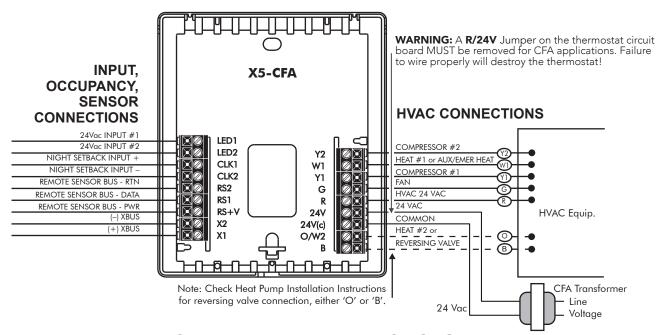
Input Terminations: LED1 (Filter Icon Selectable), LED2 (Fault Icon Selectable)

Occupancy Terminations: CLK1 (+), CLK2 (-)

Remote Sensor Terminations: RS+V - Power, RS2 - Return, RS1 - Data

Communications Terminations: X1 - Xbus (+), X2 - Xbus (-)

#### **WIRING DIAGRAMS:**



#### **OUTPUT TERMINAL FUNCTIONS**

- **LED1** 24Vac Input #1 for Filter or other Alert
- LED2 24Vac Input #2 for Condensate, Fault or other Alert
- CLK1 Dry contact closure input for setback
- CLK2 Dry contact closure input for setback
- RS2 Remote Sensor Bus (Power Return)
- RS1 Remote Sensor Bus (Data)
- RS+V Remote Sensor Bus (Power)
  - **X2** Communications bus ( )
  - X1 Communications bus (+)

- 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, auxiliary/emergency 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 Connect to CFA Transformer
- 24V(c) 24Vac Common Connect to CFA Transformer
- 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

