

# Wireless Heat Pump Thermostat Kit KRF-B-KIT with Backup Line Voltage Electric Heat Control





- Kit includes KRFTP-B RF 24V RF Thermostat. KRFLR-120/240 20A RF heating relay, & KRFR-24V 24V RF heat pump relay
- Wireless Two-way RF communication 915 MHz 24V Heat pump control (heating & cooling) with Touch Screen display.
- 7-day programmable schedule
- Modes: Auto/Cool/Fan Only/Off/Heat with Auto Emergency Heat/ Manual Emergency Heat
- Boost Emergency Heat Stage (Electric) Time Variable: 5 minutes & 30 minutes

- Range:44°F to 90°F (7°C to 32°C) Accuracy: ± 1°F Meets State Energy Code Requirements: Prevents emergency electric heat from activating unless heat pump fails to maintain
- setpoint within a designated timeframe. Optimal start/stop
- Keypad lockout
- Maximum cooling & heat temperature limits 44°F to 90°F
- Optional RF sensors to limit operation
- based on room activity or outdoor air conditions.
- 2 Year Limited Warranty

# The Most Flexible Dual Energy Source Heat Pump Thermost Ever,

Designed for applications with electric emergency heat. Introducing the most flexible dual energy source 24V heat pump thermostat ever, designed for applications with electric backup & emergency line voltage electric heat. Introducing the most flexible dual energy source 24V heat pump thermostat ever, designed for applications with electric backup & emergency line voltage electric heat. Introducing the most flexible dual energy source 24V heat pump thermostat ever, designed for applications with electric backup & emergency line voltage electric heat. Designed for applications with electric backup & emergency.

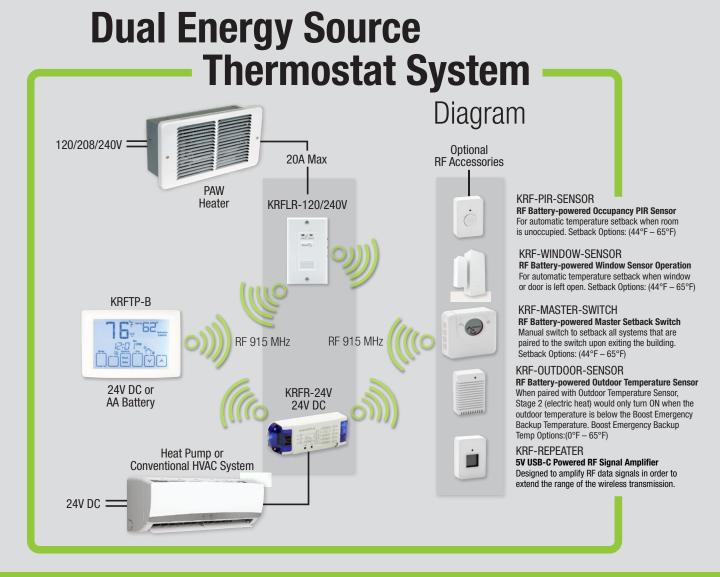
#### **Ordering Information**

MODEL	UPC	DESCRIPTION
KRF-B-KIT	70133	RF Thermostat Kit, w/ KRFTP-B Programmable BP Thermostat, KRFLR-120/240V Heat Relay & KRFR-24V Heat Pump Relay
Optional Accessories		
MODEL	UPC	DESCRIPTION
KRF-PIR-SENSOR	70152	PIR Sensor, Battery Powered, For KRFTP Thermostat
KRF-OUTDOOR-SENSOR	70153	Outdoor Temperature Sensor, Battery Powered, For KRFTP Thermostat
KRF-REPEATER	70154	RF Repeater, USB Powered, For KRFTP Thermostat
KRF-WINDOW-SENSOR	70155	Window/Door Sensor, Battery Powered, For KRFTP Thermostat
KRF-MASTERSWITCH	70156	Master Switch, Battery Powered, For KRFTP Thermostat



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with Backup Line Voltage Electric Heat Control



## **Engineering Specifications**

#### **KRFTP-B Programmable Thermostat Specifications:**

Supply Voltage: 24V, 50-60Hz Rating: 0.5A Wireless Operation: Rf Connect Button Working Frequency: 915.055 MHz Heat Pump Control: (Heating and Cooling).

Touch Screen: Touch Sensitive

**Temperature Display Range:** 0°F to 95°F (-17°C to 35°C) **Temperature Control Range:** 44°F to 90°F (07° C to 32°C)

**Display Accuracy:** ± 1°F

**Optimal Start/Stop:** Optimal Start ensures that the set temperature is reached at the scheduled time, while Optimal Stop shuts down the system early upon PROG

transition to achieve energy savings.

Deadband: Adjustable 4 to 6 Degrees. (Default 5)

Differential: adjustable from 0.5°F to 2.0°F (Default 1°F)

2nd Stage Offset: adjustable from 2°F to 5°F (Default 3°F)

Boost Emergency Heat Stage (Electric) Time Variable:

5 minutes - 30 minutes range. (default 15 min)

**Heat Schedule Options:** 5+2 / 5+1+1/ 7-Day (Default: 5+2)

#### **KRFR-24V Heat Pump Relay Specifications:**

Power Supply Type: 24VAC

Rating: 24VAC/2A

Wireless Connect: Rf Connect Button

Two-way Communication **Working Frequency:** 915 MHz

**Working Distance:** 30 Meters (98.5 feet)

**Dimension:** 120\*40\*28 mm

#### **KRFLR-120/240V Electric Heat Relay Specifications:**

**Power Supply:** 120-240VAC /50-60Hz

Power Consumption: 25VA
Relay Contact Rating: 240Vac/20A
Wireless Operation: Rf Connect Button
Working Frequency: 915.055 MHz
Working Distance: 30 Meters

Approvals: cULus



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### **Available Heating/Cooling Modes**

#### **Heat with Automatic Boost Emergency Backup Mode:**

Emergency electric heat will automatically kick in if the set point temperature is not reached within the Boost Emergency Heat Stage (Electric) Time Variable. 5 minutes and 30 minutes (default 15 min).

#### **Manual Emergency Electric Heat Only Mode:**

When activated, only the electric heat will run and the PTAC is disabled. The thermostat continues to control the room temperature with electric heat only.

#### **Cooling Mode:**

Electric heating relay is locked out when the thermostat is set to cooling mode.

#### Fan Only Mode:

Electric heating relay is locked out when the thermostat is set to fan only mode.

#### **KRFTP-B**

RF 7-Day 24V Programmable Thermostat



#### KRFR-24V

Heat Pump Relay





KRFLR-120/240 Electric Heat Relay

#### **Available Optional Accessories**



### **RF Battery-powered Occupancy PIR Sensor**

For automatic temperature setback when room is unoccupied. Setback Options: (44°F – 65°F) (Model: KRF-PIR-SENSOR)



#### **RF Battery-powered Outdoor Temperature Sensor**

When paired with Outdoor Temperature Sensor, Stage 2 (electric heat) would only turn ON when the outdoor temperature is below the Boost Emergency BackupTemperature. Boost Emergency Backup Temp Options: (0°F-65°F) (Model: KRF-OUTDOOR-SENSOR)



#### RF Battery-powered Window/Door Sensor Operation

For automatic temperature setback when window or door is left open. Setback Options: (44°F – 65°F) (Model: KRF-WINDOW-SENSOR)



#### **RF Battery-powered Master Setback Switch**

Manual switch to setback all systems that are paired to the switch upon exitingthe building. Setback Options: (44°F - 65°F) (Model: KRF-MASTER-SWITCH)



#### RF 5V USB-C Powered RF Signal Amplifier.

Designed to amplify RF data signals in order to extend the range of the wireless transmission. (Model: KRF-REPEATER)