

#### 1F83H-21NP (Non-Programmable) Installation and Operating Instructions 80 Series Heat Pump Thermostat Battery Powered or Hardwired with Common



Optional Accessory: Wall Cover-up Plate F61-2663, 6 3/4" W x 4 1/2" H

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Thermostat Applications	Maximum Stages Heat /Cool
Single Stage Compressor, Heat Pump Systems (air source or geothermal) – 1 Stage Aux/Emergency Heat	2/1

MERCURY NOTICE: This product does not contain mercury. However, this product may replace a product that contains mercury. Mercury and products containing mercury must not be discarded in household trash. Refer to www.thermostat-recycle.org for information on disposing of products containing mercury.

# SPECIFICATIONS

Electrical Rating:			
Battery Power	20 to 30 VAC, NEC Class II, 50/60 Hz		
Input-Hardwire	20 to 30 VAC, NEC Class II, 50/60 Hz		
Terminal Load	1.5 A per terminal, 2.5A maximum all terminals combined		
Setpoint Range	45° to 99° F (7° to 37° C)		
Rated Differentials (@ 6°F/ Hr):			
Heat Pump (Heat)	0.9°F 1.2°F 1.7°F		
Heat Pump (Cool)	0.9°F 1.2°F 1.7°F		
Auxiliary Heat	0.5°F 0.75°F 1.9°F		
Operating Ambient	32°F to +105°F (0° to +41°C)		
Display Temperature Range			
Operating Humidity	90% non-condensing maximum		
Shipping Temperature Range	20°F to + 150°F (-29° to +65°C)		
Thermostat Dimensions	3-3/4" H x 6" W x 1-1/8" D		

emersonthermostats.com white-rodgers.com PART NO. 37-7569 1504

# THERMOSTAT INSTALLATION

## WIRING

Refer to equipment manufacturer's instructions for specific system wirin wiring, see INSTALLER MENU for proper thermostat configuration. Wir for typical systems and describe the thermostat terminal functions.

Terminal Designations Terminal	Function
R	Power (24V)
O/B	Changeover Terminal-Energized for Heat Pump or Damper Syste
Y	Heat and Cool Mode 1st Stage C
G Fan Relay	
E* Auxiliary only Heat Mod	e (Emergency Heat)
C	Common wire for 24V (optional
L	Heat Pump malfunction / Diagn (input signal requires common)
W2* Heat Mode – 2nd stage	

\*Cut W2/E jumper when separate heat sources are used for W2 and E.

IMPORTANT: For Dual Fuel Heat Pump applications, be sure to turn on the Duel Fuel L (found in the Installer's Menu)



Leveling Thermos Leveling is for appe will not affect there



- Do not exceed the specification ratings.
- All wiring must conform to local and national electrical codes and ordi
  This control is a precision instrument, and should be handled carefully distorting components could cause the control to malfunction.



Higher voltage will damage control and could cause shock or fire hazard. Do not short out terminals on gas valve or primary control to test. Short or incorrect wiring will burn out thermostat and could cause personal injury and/or property damage.



To prevent electrical sho damage, disconnect elect at main fuse or circuir installation is