

WHITE-RODGERS CLASSIC 80 SERIES THERMOSTATS

White
Rodgers.



1F85-277



1F80-361



1F86-344



CLASSIC 80 SERIES UNIVERSAL / STAGING - SINGLE STAGE THERMOSTATS

Residential and Light Commercial – Single Stage, Multi-Stage and Heat Pump Applications. Classic 80 Series Thermostats are Packed with Premium Features. No Other Thermostat Series Offers More Value for the Money.

FEATURES

- Choice of battery powered, dual power or hardwired models.
- Fossil fuel or electric heat compatible.
- Large LCD with backlight.
- Permanent program retention during power loss.
- Configuration menu allows keypad selection of options.
- Selectable Celsius or Fahrenheit temperature display.
- Selectable Energy Management Recovery (1F85-277 / 1F80-361 / 1F87-361 / 1F82-261).

SPECIFICATIONS

Electrical Rating Single Stage:

Dual Power or Battery Power Model mV to 30 VAC, NEC Class II, 50 / 60 Hz or DC
Input-Hardwire Model 20 to 30 VAC

Electrical Rating Staging 20 to 30 VAC, NEC Class II

Terminal Load 1.0 A per terminal,
1.5A maximum all terminals combined

Setpoint Range 45 to 90°F (7 to 32°C)

Rated Differential (Single Stage) Heat 0.6° or 1.5°F
Cool 1.2°F

Rated Differential (Multi-Stage) Heat 0.6° or 1.5°F
Cool 1.2°F

Rated Differential (Heat Pump) Heat & Cool 0.75° or 1.2°F

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

Operating Humidity 90% non-condensing max.

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

Dimensions Thermostat 3⁷/₈" H x 6" W x 1³/₁₆" D

PARTS AND ACCESSORIES See end of this section for additional parts and accessories

- F61-2500 — Wallplate 4⁵/₈" H x 7⁵/₈" W for all 1F80's (except Blue)
Includes adapter plate for mounting to horizontal or vertical junction box
- Thermostat Guards — see pages 24-25

UNIVERSAL STAGING/HEAT PUMP THERMOSTATS – WHITE-RODGERS CLASSIC 80 SERIES THERMOSTATS

Single Stage	Multi-Stage	Heat Pump	Programs		Model	Applications				Thermostat Power Source*	Selectable Performance Features						Comfort and Convenience Features			Terminals		
			Stages Heat/Cool by System	Program Options		Periods Per Day Options	Model Number	Gas / Oil / Electric	3 Wire Zone Valve		Millivolt Compatible	Humidity Control (H)-Humidity / (D)-Dehumidify	Auto Changeover	Programmable Fan	Energy Mgt. Recovery	Keypad Lockout (T)-Total / (P)-Partial	Set-Point Temperature Limits Adjustable Max/Min	Indoor Remote Sensors Max. Number + Thermostat Average and/or Weighted	Outdoor Remote Sensor		Display Size Square inches	Lighted Display
1/1	2/2	3/2	7, 5+1+1, Ø	4, 2, Ø	1F85-277 Universal	✓		✓		B, H	✓		✓	T	✓			2.2	✓***		P	R, C, G, E/W1, W2, Y1, Y2, O, B, L
		2/1	5+1+1	4	1F82-261 Heat Pump	◆				H			✓					1.8	✓***		P	R, C, Y, W2, G, O/B, L, E
		2/1	Ø	Ø	1F89-211 Heat Pump	◆				H								1.8	✓***		P	R, C, Y, W2, G, O/B, L, E

SINGLE STAGE THERMOSTATS – WHITE-RODGERS CLASSIC 80 SERIES THERMOSTATS

Single Stage	Multi-Stage	Heat Pump	Programs		Model	Applications				Thermostat Power Source*	Selectable Performance Features						Comfort and Convenience Features			Terminals		
			Stages Heat/Cool by System	Program Options		Periods Per Day Options	Model Number	Gas / Oil / Electric	3 Wire Zone Valve		Millivolt Compatible	Humidity Control (H)-Humidity / (D)-Dehumidify	Auto Changeover	Programmable Fan	Energy Mgt. Recovery	Keypad Lockout (T)-Total / (P)-Partial	Set-Point Temperature Limits Adjustable Max/Min	Indoor Remote Sensors Max. Number + Thermostat Average and/or Weighted	Outdoor Remote Sensor		Display Size Square inches	Lighted Display
1/1		1/1	7-day	4	1F87-361	✓		✓		B, H			✓					2.2	✓		P	RC, RH, C, W, Y, G, O, B
1/1		1/1	5+1+1	4	1F80-361	✓		✓		B, H			✓					2.2	✓		P	RC, RH, C, W, Y, G, O, B
1/1		1/1	Ø	Ø	1F86-344	✓		✓		B, H								2.2	✓		P	RC, RH, C, W, Y, G, O, B

* H = Hardwired (Requires Common)
B, H = Battery Powered or Hardwired
B = Battery Powered

◆ Heat Pump for Stage 1, and Gas / Oil / Electric for 2nd Stage / Emergency
*** Optional Continuous Display Light w/ Hardwire connection



TECHNICAL HELP

1F80-224, -240, -241, -361 /
1F86-241, -344 / 1F87-361.. Wiring Diagrams/Configuration See page 157
1F82-261 / 1F89-211 Wiring Diagrams/Configuration See page 158
1F83-277 /
1F85-275 / 1F85-277 Wiring Diagrams/Configuration See page 159