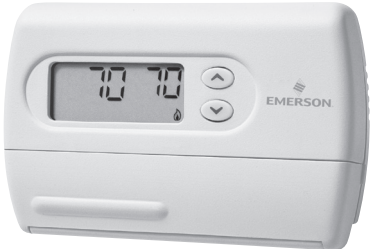


**1F85-277****1F80-361****1F86-344**

## CLASSIC 80 SERIES UNIVERSAL / HEAT PUMP AND SINGLE STAGE THERMOSTATS

Residential and Light Commercial – Single Stage, Multi-Stage and Heat Pump Applications. Classic 80 Series Thermostats are Packed with Premium Features

### 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,  
1.5 A 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 . . . . . 3<sup>7</sup>/<sub>8</sub>"H x 6"W x 1<sup>3</sup>/<sub>16</sub>"D

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

- F61-2500 — Wallplate 4<sup>5</sup>/<sub>8</sub>"H x 7<sup>5</sup>/<sub>8</sub>"W for all 1F80's (except Blue)  
Includes adapter plate for mounting to horizontal or vertical junction box
- Thermostat Guards — see pages 34–35

UNIVERSAL STAGING/HEAT PUMP THERMOSTATS – 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	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 ∅	4, 2, ∅	1F85-277 Universal	✓		✓		B, H	✓		✓	T	✓			2.2	✓***	P	R, C, E/W1, W2, Y1, Y2, O/B, G, L
		2/1	5+1+1	4	1F82-261 Heat Pump	+				H			✓					1.8	✓***	P	R, C, W2, E, Y, O/B, G, L
		2/1	∅	∅	1F89-211 Heat Pump	+				H								1.8	✓***	P	R, C, W2, E, Y, O/B, G, L

SINGLE STAGE THERMOSTATS – 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	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,O, B, G
1/1		1/1	5+1+1	4	1F80-361	✓		✓		B, H			✓					2.2	✓	P	RC,RH, C, W, Y,O, B, G
1/1		1/1	∅	∅	1F86-344	✓		✓		B, H								2.2	✓	P	RC,RH, C, W, Y,O, B, G

\* 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 159
- 1F82-261 / 1F89-211 .....Wiring Diagrams/Configuration..... See page 160
- 1F85-277 .....Wiring Diagrams/Configuration..... See page 161