

# 80 Series™ Thermostats

Universal • Heat Pump • Conventional Applications — Programmable and Non-Programmable Models

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## The Clear Choice in Professional Thermostats

8 Models Cover Universal, Heat Pump and Conventional Applications

### Large Display

Bright Backlight  
High Contrast Screen

### Selectable Programming

Choice of 7 Day, 5+1+1 Day or Off  
Standard on all programmable models

### Dual Fuel Control

No outdoor sensor required  
Standard on all staging models

### Advanced Features

Auto Changeover on Universal models  
Keypad Lockout  
Temperature Limits

### Easy to Install

Built-in level indicator  
Simple set up menu  
Terminal block connections on subbase

Loaded with features!

1F85U-42PR

## Providing clarity in selection, installation and programming

Cut through the confusion with a new line of professional thermostats from White-Rodgers. As a complement to the Sensi Wi-Fi programmable thermostat, the Emerson 80 Series thermostats feature a slim profile and a modern design. The large, high contrast, bright backlit thermostat screen makes it easy to read in low-light situations.

White-Rodgers™



**EMERSON**  
Climate Technologies

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## Specifications

### Electrical Rating

Battery Power: mV to 30 VAC  
 Hardwire: 20 to 30 VAC  
 NEC Class II, 50/60 Hz

### Setpoint Range

45°F to 99°F (7°C to 37°C)

### Accessories

Wallplate: F61-2663 (6-3/4" x 4-1/2")  
 Thermostat Guard: F29-0198

### Display Temperature Range

32°F to +99°F (0°C to 37°C)

### Rated Differentials (@ 6°F / Hr)

	Fast	Med	Slow
Heat (Conventional Gas/Oil/Elect):	0.5°F	0.75°F	1.9°F
Cool (Central Air):	0.9°F	1.2°F	1.7°F
Heat Pump (Heat and Cool):	0.9°F	1.2°F	1.7°F
Heat Pump (Aux):	0.5°F	0.75°F	1.9°F

### Terminal Load

Staging Models: 1.5 A per terminal  
 2.5 A per maximum all terminals combined

Single Stage Models: 1.0 A per terminal  
 1.5 A per maximum all terminals combined

### Operating Ambient

32°F to +105°F  
 (0°C to +41°C)

### Operating Humidity

90% non-condensing max

### Shipping Temperature

-20°F to +150°F  
 (-29°C to +65°C)

### Thermostat Dimensions

3-3/4"H x 6"W x 1-1/8"D

## Terminal Designations

Universal: 1F85U-42PR / 1F85U-42NP / 1F85U-22PR / 1F85U-22NP



Heat Pump: 1F83H-21PR / 1F83H-21NP



Conventional & Heat Pump, Single Stage: 1F83C-11PR / 1F83C-11NP



Model	Program Options				Maximum Stages Heat / Cool		Applications			Power Source		Selectable Performance Features				Comfort and Convenience Features			
	7 Day	5+1+1 Day	Non-Programmable	Program Periods per Day	Conventional	Heat Pump	Gas / Oil / Electric	3 Wire Zone Valve	Millivolt Compatible	Battery	Hardwired (24V)	Auto Changeover	EMR / Early Start Program	Temperature Setpoint Limits Adjustable Max./Min.	Dual Fuel Control (L)-Logic/(O)-Outdoor Sensor	Filter Change Reminder	Keypad Lockout	Continuous Backlight w/Common Wire	Permanent Memory
1F85U-42PR	7	5+1+1	0	4,2,0	2/2	4/2	✓	✓	✓	✓	✓	✓	✓	✓	L	✓	✓	✓	✓
1F85U-42NP			0	0	2/2	4/2	✓	✓	✓	✓	✓	✓		✓	L		✓	✓	✓
1F85U-22PR	7	5+1+1	0	4,2,0	2/2	2/1	✓	✓	✓	✓	✓	✓	✓	✓	L	✓	✓	✓	✓
1F85U-22NP			0	0	2/2	2/1	✓	✓	✓	✓	✓	✓		✓	L		✓	✓	✓
1F83H-21PR	7	5+1+1	0	4,0		2/1	✓			✓	✓		✓	✓	L	✓	✓	✓	✓
1F83H-21NP			0	0		2/1	✓			✓	✓			✓	L		✓	✓	✓
1F83C-11PR	7	5+1+1	0	4,0	1/1	1/1	✓		✓	✓	✓		✓			✓	✓	✓	✓
1F83C-11NP			0	0	1/1	1/1	✓		✓	✓	✓			✓			✓	✓	✓



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