

80 Series™ Thermostats

Thermostats that fit every customer.

The 80 Series thermostats are the perfect fit for every application with universal, conventional and heat pump models. The standard footprint makes replacements and upgrades easier than ever without leaving visible marks on the wall from the old thermostat.



EASY INSTALLATION

All models are easy to install & set-up with a built-in level and universal back plate for more opportunities for upgrades in the future.



LARGE, BACKLIT DISPLAY

Modern design with a large, easy-to-read screen with a bright backlit display.



ADVANCED FEATURES

Temperature limits and keypad lockout are standard on every model. Select models feature auto changeover, filter change reminders, dual fuel control and selectable programming.



PROVEN PERFORMANCE

Over 75 years of experience along with our $\pm 1^\circ$ temperature accuracy guarantee.

HOW DO YOU BENEFIT?



Contractor Branding

Get the next service call by placing your company information directly on the thermostat. Customize your 80 Series thermostats at ProContractorBranding.com.



Training

Free, self-guided training courses available through Education Central or contact your Territory Manager to set up training at your location or at select wholesalers.



Support

Customer and technical support is available seven days a week at 888-725-9797. 5 year limited warranty for HVAC professionals.



EMERSON. CONSIDER IT SOLVED.™

80 Series™ Thermostats

SPECIFICATIONS

ELECTRICAL RATING

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

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

OPERATING AMBIENT

32°F to +105°F
 (0°C to +41°C)

SETPOINT RANGE

45°F to 99°F (7°C to 37°C)

TERMINAL LOAD

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

OPERATING HUMIDITY

90% non-condensing max

ACCESSORIES

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

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

SHIPPING TEMPERATURE

-20°F to +150°F
 (-29°C to +65°C)

DISPLAY TEMPERATURE RANGE

32°F to +99°F (0°C to 37°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

RC RH C W/E W2 Y Y2 O/B/6 G L

HEAT PUMP: 1F83H-21PR / 1F83H-21NP

R C W2 E Y O/B G L

CONVENTIONAL & HEAT PUMP, SINGLE STAGE: 1F83C-11PR / 1F83C-11NP

RC RH C W Y O/B G

Model	Program Option				Maximum Stages Heat/Cool		Applications			Power Source		Selectable Performance Features				Comfortable 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.	Duel 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	•	•	•	•	•		•	•			•	•	•

R-4461-3



Download the app for product and cross reference information