



1F85U-42PR

80 SERIES™ THERMOSTATS

Emerson 80 Series thermostats are the perfect fit for every application.

FEATURES

- Large display, bright backlight, high contrast screen
- Easy to install with built-in level, simple set-up menu and separate subbase
- Selectable programming, choice of 7 Day, 5+1+1 Day or Off is standard on all programmable models, auto changeover on all universal models
- Dual fuel control, no outdoor sensor required, standard on all staging models
- Keypad lockout and adjustable heat/cool temperature limits

PARTS AND ACCESSORIES

DESCRIPTION	MODEL NUMBER	ITEM NUMBER
Thermostat Guard Clear Plastic	F29-0198	F29-0198
Locking Thermostat Guard - Metal, Solid Base	F29-0220	F29-0220
Wallplate 6.75"W X 4.5"H	F61-2663	F61-2663

SPECIFICATIONS

Electrical Rating Hardwire 20-30 VAC, NEC Class II 50/60Hz
 Electrical Rating Battery Power mV to 30 VAC
 Terminal Load 1.5 Amps per terminal, 2.5 Amps maximum (all terminals combined)
 Set-point Range 45 to 99°F (7 to 37°C)
 Heat Differential (Conventional / Gas / Oil / Elec) Fast 0.5°F, Med. 0.75°, Slow 1.9°F
 Cool Differential (Central Air) Fast 0.9°F, Med. 1.2°, Slow 1.7°F
 Heat Pump Differential (Heat and Cool) Fast 0.9°F, Med. 1.2°, Slow 1.7°F
 Aux. Heat Differential Fast 0.5°F, Med. 0.75°, Slow 1.9°F
 Operating Humidity 0%-90% RH non-condensing max.
 Dimensions 5.58"W X 3.75"H X 1.13"D
 Storage Temperature Range -40 to 150°F (-29 to 65°C)

MODEL NUMBER NOMENCLATURE - Example: 1F85U-42PR

SERIES	SYSTEM TYPE	DASH	MAX STAGES HEAT/COOL	PROGRAMMABILITY/SPECIAL FEATURES
1F85	U	—	42	PR
1F83 = Thermostat Series 1F85 = Thermostat Series	U = Universal Thermostat For Single Stage, Multi-Stage Or Heat Pump Systems H = Heat Pump Thermostat for Systems With Or Without Aux. Heat C = Conventional Thermostat (Gas / Oil / Electric) or Single Stage Heat Pump (No Aux.)	Character Separator	42 = 4 Heat / 2 Cool 22 = 2 Heat / 2 Cool 21 = 2 Heat / 1 Cool 11 = 1 Heat / 1 Cool	PR = Programmable NP = Non-Programmable WF = Wi-Fi Thermostat

UNIVERSAL STAGING / HEAT PUMP THERMOSTATS – 80 SERIES THERMOSTATS

PROGRAMS		STAGES BY SYSTEM			SYSTEM TYPE	MODEL NUMBER	ITEM NUMBER	APPLICATIONS						POWER SOURCE	SELECTABLE PERFORMANCE FEATURES							AVAILABLE CONNECTIONS	
Program Options	Periods Per Day Options	Single Stage Heat / Cool	Multi-Stage Heat / Cool	Heat Pump Heat / Cool	Universal / Single Stage / Multi-Stage / Heat Pump¹			Gas / Oil / Electric	3 Wire Zone Valve	Millivolt Compatible	Economizer	Humidity Control	Dual Fuel Heat Pump Control Logic (L) Outdoor Sensor (O)	Remote Sensor Options Indoor (I)Outdoor (O)	Battery (B) Hardwire / Common (H) Power Sharing (PS)	Auto Changeover	Programmable Fan (PF) Comfort Circulating Fan (CC)	Filter Change Reminder	Energy Mgt. Recovery / Early Start	Total Keypad Lockout (T) Partial Keypad Lockout (P)	Set-Point Temperature Limits Adjustable Max/Min	Display Size, Backlight with Key Press (K) Continuous Backlight with Common (C)	TERMINALS
7, 5+1+1, NP	4, 2, Ø	1/1	2/2	4/2	Univrsl.	1F85U-42PR	1F85U-42PR	√	√	√	—	—	L	—	B, H	√	—	√	√	T	√	5.0" K,C	RC, RH, C, W/E, W2, Y, Y2, O/B/6, G, L
7, 5+1+1, NP	4, 2, Ø	1/1	2/2	2/1	Univrsl.	1F85U-22PR	1F85U-22PR	√	√	√	—	—	L	—	B, H	√	—	√	√	T	√	5.0" K,C	RC, RH, C, W/E, W2, Y, Y2, O/B/6, G, L
7, 5+1+1, NP	4, Ø	—	—	2/1	Heat Pump	1F83H-21PR	1F83H-21PR	√	—	—	—	—	L	—	B, H	—	—	√	√	T	√	4.5" K,C	R, C, W2, E, Y, O/B, G, L
NP	Ø	1/1	2/2	4/2	Univrsl.	1F85U-42NP	1F85U-42NP	√	√	√	—	—	L	—	B, H	√	—	—	—	T	√	5.0" K,C	RC, RH, C, W/E, W2, Y, Y2, O/B/6, G, L
NP	Ø	1/1	2/2	2/1	Univrsl.	1F85U-22NP	1F85U-22NP	√	√	√	—	—	L	—	B, H	√	—	—	—	T	√	5.0" K,C	RC, RH, C, W/E, W2, Y, Y2, O/B/6, G, L
NP	Ø	—	—	2/1	Heat Pump	1F83H-21NP	1F83H-21NP	√	—	—	—	—	L	—	B, H	—	—	—	—	T	√	4.5" K,C	R, C, W2, E, Y, O/B, G, L
7, 5+1+1, NP	4, Ø	1/1	—	1/1	Single Stage	1F83C-11PR	1F83C-11PR	√	—	√	—	—	—	—	B, H	—	—	√	√	T	√	4.5" K,C	RC, RH, C, W, Y, O/B, G
NP	Ø	1/1	—	1/1	Single Stage	1F83C-11NP	1F83C-11NP	√	—	√	—	—	—	—	B, H	—	—	—	—	T	√	4.5" K,C	RC, RH, C, W, Y, O/B, G

¹ Universal thermostats provide the flexibility to control Single Stage, Multi-Stage, or Heat Pump systems.