THERMOSTATS & CONTROLLERS

RESIDENTIAL AND LIGHT COMMERCIAL THERMOSTATS
1F80 SERIES

DESCRIPTION

The **1F80 Series** thermostats come with a wide variety of options. These versatile thermostats can be used for residential and light commercial applications with both programmable and non-programmable options. There are also choices of displays including the White Rodgers Blue™ digital display as well as the classic green display. With universal, multi-stage, single stage, and heat pump options the right choice is easy to find in this family of thermostats.

NEW!

White Rodgers™

1F80-0471

1F80-0261

FEATURES

- **2" or 4" Blue™ or 2" Green digital display**
- **Choice of battery, system or dual power models**
- **Fossil fuel or electric heat compatible**
- **Permanent Program retention during power loss on select models**
- **Configuration menu allows keypad selection of options**
- **Selectable Celsius or Fahrenheit temperature display**
- **Air filter change indicator option on select models**
- **Keypad lockout and setpoint temperature limit options on select models**

1F86-344

SPECIFICATIONS

Supply Voltage	0 to 30 VAC, 50/60 Hz or DC 0.05 to 1.5 Amps (load per terminal) 1.5 Amps maximum load (all terminals combined)
Contact Rating	
1F80-0261	1.5A max (all terminals combined)
1F80-0471, 1F82-0261	0.05A to 1.5A per terminal
1F83-0471	2.5A max (all terminals combined)
1F86-444	1.0A per terminal, 1.5A max (all terminals combined)
Accuracy	±1°F
Setpoint Temperature Range	45° to 90°F (7° to 32°C)
Rated Differential	0.4° to 1.7°F
Standard Systems	Gas, oil, electric, heat pump, millivolt systems, 2- or 3-wire hydronic zone valve Thermal Specifications (dependent on model selected)
Control Type	Low Voltage
Operating Ambient Temperature	32° to 105°F (0° to 40°C)
Operating Humidity Range	90% non-condensing maximum

Programmable Type	Periods per day
Schedule Options	24 hour, 5-1-1, 7 day
Display Type	
4"	Blue LCD
2"	Blue LCD
2"	Green LCD (1F86-344 only)
Enclosure Rating	NEMA 1, ABS Plastic
Dimensions	
1F86-344	6.1"W x 3.8"H x 1.1"D (15.5 x 9.7 x 2.8 cm)
1F80-0471, 1F86-0471	4.4"W x 3.4"H x 1.2"D (11.2 x 8.6 x 3.04 cm)
1F82-0261, 1F80-0261, 1F80-0224, 1F86-0244	4.8"W x 3.8"H x 1.5"D (12.2 x 9.7 x 3.8 cm)
1F85-0422, 1F83-0471, 1F83-0422, 1F85-0477	5.1"W x 3.9"H x 1.2"D (12.9 x 9.9 x 3.05 cm)
Weight	0.75 lb (0.34 Kg) to 1.01 lb (0.45 Kg) approximate average
Warranty	5 year

NEW!

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1F80 SERIES

WIRING

TERMINAL DESIGNATIONS - Terminal Block Wire Connection

1F80-0224, 1F80-0261, 1F82-0261   (R) (C) (W2) (W) (Y) (O/B) (G) (L)

1F80-0471, 1F86-0471   (RC) (RH) (C) (W) (Y) (G) (O/B)

1F85-0477, 1F85-0422, 1F83-0471, 1F83-0422   (RC) (RH) (C) (G) (W/E) (W2) (Y) (Y2) (O/B) (6) (L)

1F86-344   (RC) (RH) (C) (W) (Y) (O) (B) (G)

TERMINAL DESIGNATION*	DESCRIPTION
RC	24 volt (hot) for cooling
RH	24 volt (hot) for heating
C	24 volt common (optional)
W/E	Heat mode 1st stage
W2	Heat mode 2nd stage (no output on single stage)
Y	Cool mode 1st stage
Y2	Cool mode 2nd stage (no output on single stage)
O/B	**O** is energized constantly in cool mode; **B** is energized constantly in heat, off, or emergency mode
O	Energized in cool mode
B	Energized in heat or off mode
L	Diagnostic indicator or system malfunction switch input
G	Blower fan energized on call for cool (and heat if configured for electric heat)
6	Power closed connection for SPDT 3-wire zone valve
* Not all terminals are functional on every thermostat.	

ORDERING INFORMATION

MODEL	STAGES OF HEAT/COOL (H/C) BY SYSTEM			POWER SUPPLY SOURCE	PROGRAMMABLE OPTIONS		DISPLAY
	SINGLE STAGE	MULTI-STAGE	HEAT PUMP		PROGRAM DAY OPTIONS	PERIODS PER DAY	
1F80-0224	1H/1C	NA	1H/1C	Battery or Hardwired*	24 Hour	4	2" Backlit Blue LCD
1F80-0261	1H/1C	NA	1H/1C	Battery or Hardwired*	5 + 1 + 1	4	2" Backlit Blue LCD
1F82-0261	2H/1C	NA	2H/1C	Battery or Hardwired*	5 + 1 + 1	4	2" Backlit Blue LCD
1F86-0244	NA	NA	1H/1C	Battery or Hardwired*	Non-Programmable	0	2" Backlit Blue LCD
1F80-0471	1H/1C	NA	1H/1C	Battery or Hardwired*	5 + 1 +1, 5 + 2, 0	4,0	4" Backlit Blue LCD
1F85-0422	1H/1C	2H/2C	2H/1C	Battery or Hardwired*	5 + 1 + 1, 5 + 2, 0	4,0	4" Backlit Blue LCD
1F85-0477	1H/1C	2H/2C	3H/2C	Battery or Hardwired*	7, 5 + 1 + 1, 5 + 2, 1	4,0	4" Backlit Blue LCD
1F86-0471	1H/1C	NA	1H/1C	Battery or Hardwired*	Non-Programmable	0	4" Backlit Blue LCD
1F83-0422	1H/1C	2H/2C	2H/1C	Battery or Hardwired*	Non-Programmable	0	4" Backlit Blue LCD
1F83-0471	1H/1C	2H/2C	3H/2C	Battery or Hardwired*	Non-Programmable	0	4" Backlit Blue LCD
1F86-344	1H/1C	NA	1H/1C	Battery or Hardwired*	Non-Programmable	0	2" Backlit Classic Green LCD
*Hardwired thermostats require a common							

RELATED PRODUCTS
ATK63   Thermostat guard (6.9"H x 4.7"W x 1.75"D - inside dim.)
F29-0198   Thermostat guard (8.125"H x 4.375"W x 3.375"D - inside dim.)