

# DIGITAL PROGRAMMABLE THERMOSTAT

# **SMART** 2000



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The SmartSense<sup>®</sup> SMART 2000 Digital Programmable Thermostat is a versatile, feature rich control for optimum commercial and residential comfort. Easy-to-use and install, this thermostat works with many sensors and module options.

This installer friendly thermostat is designed for many heating and cooling applications. These applications include heat pump systems, auxiliary and emergency heating, gas and oil systems with add-on cooling. Features include multiple heating and cooling stages for optimal control, and single or three fan speeds depending on equipment needs.

The SMART 2000 is manufactured with default settings to reduce installation time. These settings include temperature scale (F or C), clock scale (12 or 24 hours), high and low balance points, DIP switch settings, and more. All settings are changed easily. Distributed by Uni-Line<sup>®</sup>, SmartSense thermostats are Simply The SMART Choice<sup>™</sup>.

### **Features and Benefits**

- 3 Heat / 2 Cool
- Single or three fan speeds
- Replaces almost all 24V AC thermostats
- Wi-Fi and remote sensor options
- Auto season changeover
- Selectable programmable or manual mode
- 7 Day Programmable four events
- Heat/Cool or heat pump (O/B) logic
- Add-on and emergency heat control
- High and low balance points
- Keyboard and/or temperature lockout
- Programmable occupancy sensor inputs
- Adaptive recovery (optimized start)
- Smart fan logic for commercial control
- PIN protected menus (installer PIN)
- Outside air temperature display
- 24V AC powered with memory back-up
- Volt free (clean contact) relays

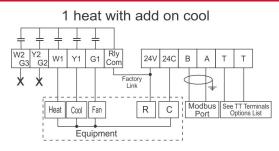




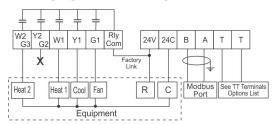
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# SMAR 200

#### WIRING DIAGRAMS



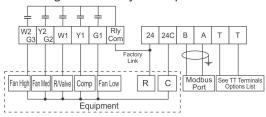
#### 2 stage gas heat 1 stage add on cool



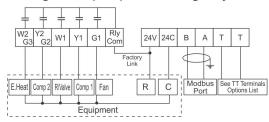
#### **SWITCH FUNCTIONS**

Switch	Off	On
Sw1 – Fan Speed	1 Speed Fan (2 Heat/2 Cool)	3 speed Fan (1 Heat/1 Cool)
Sw2 – Equipment Type	Heat/Cool	Heat Pump (O/B terminals)
Sw3 – Stages	1 Stage	2 Stages
Sw4 – Reversing Valve		
If Sw2 = ON – Heat Pump	Energize in cool (O)	Energize in heat (B)
Sw4 – Fan mode		
If Sw2= OFF – Heat/Cool	Fan Control by Heater (HG)	Fan Control by Thermostat (HE)
Sw5 – Anti-Cycle Timer	Off	4 Minutes
Sw6 – Operation	Manual Thermostat	Programmable Thermostat
Sw7 – Minimum Run	2 Minutes	6 Minutes
Sw8 – Program Type		
If Sw6 = ON – Programmable	Commercial Program	Residential Program
Sw8 – Setpoints		
If Sw6 = OFF – Manual	Single Setpoint	Two Setpoints

#### 1 stage reverse cycle 3 speed fan



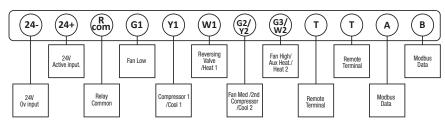
#### 2 stage heat pump with emergency heat



#### **SPECIFICATIONS**

Power	24V AC +/- 15% 50/60 Hz
Relay Outputs	5 Relays - Fan Low/Med/Hi/Heat/Cool
Backlight	Blue
Backlight Life	3,000 hours to half brightness
Operating Temperature	32°F to 122°F (0°C to 50°C)
Operating RH	0 - 95% (Noncondensing)
Relay Voltage	24V AC @ 1 Amp Max
Communications	Modbus
Size	4.5" x 4" x 1" (113mm x 103mm x 23mm)

#### **TERMINAL DESIGNATIONS**



# -LINE

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For Technical Service Telephone 1.800.445.8299 TechnicalService@robertshaw.com SmartSense<sup>®</sup>, Simply the SMART Choice<sup>™</sup>, Uni-Line<sup>®</sup> and Robertshaw<sup>®</sup> are trademarks of Robertshaw, its subsidiaries and/or affiliated companies. All other brands mentioned may be the trademarks of their respective owners.

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