Honeywell

R7184 Interrupted Electronic Oil Primary





The new R7184 features interrupted ignition and valve-on delay with selectable blower-off delay timings on selected models.

FEATURES

- Compatible with hydronic and forced air applications.
- Patented cad cell resistance readout.
- Available in 15- and 30-second lockout times.
- Safe start check.
- Status indicator light monitors burner flame status and system lockout.
- Uses proven flame detection and monitoring systems.
- Optional valve-on delay, blower-off delay models.
 15 second or selectable 0 or 15 second valve-on delay.
 - Zero time or selectable 0-, 2-, 4-, 6-minute blower-off delay.
 - Oil valve control.
 - Compatible with power venters without integral timers.

- Oil-resistant plastic cover for electronics.
- Mounts on standard 4 in. by 4 in. junction box, directly on main burner or inside appliance cabinet.
- UL Component Recognition.
- CUL Component Recognition.



SPECIFICATIONS

R7184

Models:

Table 1 lists the major features of the R7184 models.

Model	Valve-On Delay (sec)	Blower-Off Delay (min)	Alarm Contacts	Thermostat Terminals T-T
R7184A	No	No	No	Yes
R7184B	Yes	No	No	jumpered
R7184P	Yes	Selectable	No	Yes
R7184U	Selectable	Selectable	Yes	Yes

Table 1 R7184 Models

Timing

Valve-on Delay: 0 or 15 seconds.

Blower-off Delay: 0, 2, 4, or 6 minutes, field-selectable using DIP switch positions 1 and 2.

NOTE: For universal R7184U model, valve-on delay and blower-off delay timings can be enabled or disabled (values are zero) in the field using DIP switch position 3. See installation instructions, form 69-1233.

Electrical Ratings:

Inputs:

Voltage: 102 to 132 Vac, 120 Vac nominal. Current: 50 mA plus burner motor, valve and ignitor loads. Frequency: 60 Hz.

Outputs:

Relay Contacts:

- Burner: 120 Vac, 10 full load amperes (FLA), 60 locked rotor amperes (LRA).
- NOTE: Reduce burner motor FLA by ignitor load. For example, the ignitor listed below draws a maximum of 3A (120 Vac, 360 VA). Reduce the burner motor FLA to 7A.

Valve: 120 Vac, 1A. Ignitor: 120 Vac, 360 VA. Alarm: 30 Vac, 2A. Thermostat Current Available: 100 mA.

Environmental Ratings:

Operating Ambient Temperature:

- -40°F (-40°C) to +150°F (+66°C).
- Shipping Temperature: -20°F (-29°C) to +150°F (+66°C). Humidity: 90% relative humidity at 95°F (35°C) noncondensing.

Approvals:

Underwriters Laboratories Inc. Component Recognized. Canadian Underwriters Laboratories Inc. Component Recognized.

OPERATION

The R7184 is a microprocessor-based control. The LED offers diagnostic information for lockout, recycling and patented cad cell status. There is a manual reset button to exit the lockout state and enter the idle state.

TYPICAL CONNECTIONS

Fig. 1 through 4 show typical R7184 connections.

NOTE: When installing the R7184 with a line voltage thermostat, connect the line voltage thermostat in series with the limit controller.



LEGEND: 🔗 SCREW TERMINAL 🗦 ≻ 1/4 IN. QUICK CONNECT TERMINAL

POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.

2 OPTIONAL FEATURE ON SELECT MODELS.

M16297

Fig. 1. Typical connection for line voltage thermostat and R7184B,P,U for valve-on delay/blower-off delay oil burner system.



OPTIONAL FEATURE ON SELECT MODELS.

M16298

Fig. 2. Typical connection for line voltage thermostat and R7184A for oil burner system.



LEGEND: 🖉 SCREW TERMINAL 🗧 🗲 🕨 1/4 IN. QUICK CONNECT TERMINAL

A POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.

DOPTIONAL FEATURE ON SELECT MODELS.

M16299

Fig. 3. Typical connection for 24 Vac thermostat and R7184A for oil burner system.



LEGEND: 🖉 SCREW TERMINAL 🛛 🗲 🗲 1/4 IN. QUICK CONNECT TERMINAL

A POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.

OPTIONAL FEATURE ON SELECT MODELS.

M16300

Fig. 4. Typical connection for 24 Vac thermostat and R7184B,P,U for valve-on delay/blower-off delay oil burner system.

Honeywell

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