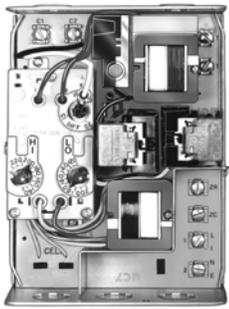


Single and Multi-Function Aquastat® Controllers

R8182 Combination Protectorelay® and Hydronic Heating Controllers



Vertical or Horizontal Mount

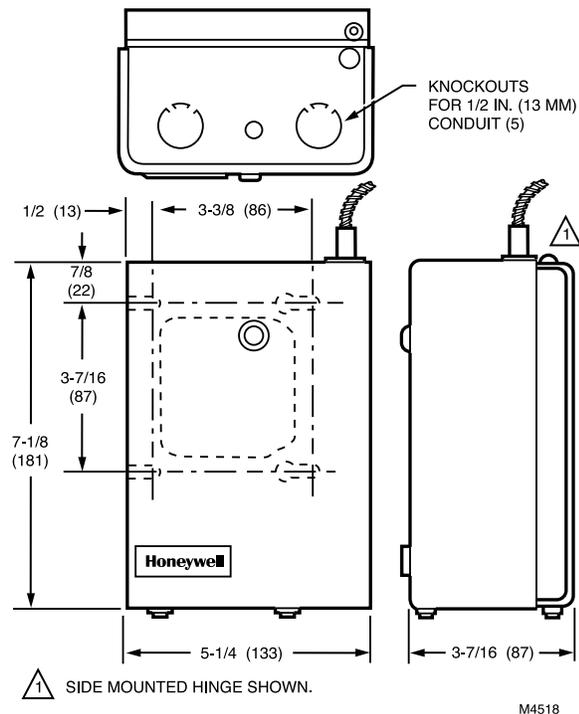
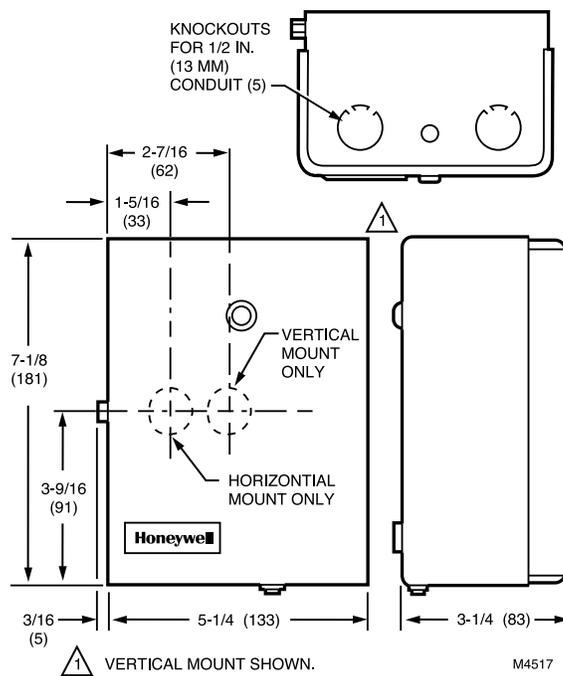


Junction Box Mount

Immersion type Aquastat® controller and oil burner primary control provides high limit and low limit/circulator control for oil-fired hydronic heating systems.

- Use in intermittent ignition applications.
- Capable of zone control with zone valves.
- Circulator zone control with ZC and ZR terminals on R8182D,E,H,J. Flame failure during the running cycle results in a 45 second attempt to restart.
- If unsuccessful, safety shutoff occurs, requiring manual reset before burner can be restarted.
- R8182D,E,F mount directly on burner; R8182H,J mount on 4 x 4 in. junction box and include 5 ft (1.5 m) armored capillary with remote sensor.
- C554A Cadmium Sulfide Flame Detector and a 24 Vac thermostat required.

Dimensions in inches (millimeters)



Dimensions, Approximate: 7 1/8 in. high x 5 1/4 in. wide x 3 7/16 in. deep (181 mm high x 133 mm wide x 87 mm deep.)

Anticipator Setting: 0.2 A

Electrical Ratings (ignition): 360 VA

Electrical Ratings (burner AFL): 4.4 A @ 120 Vac

Electrical Ratings (burner ALR): 26.4A @ 120 Vac

Maximum Power Consumption: 9 W

Voltage: 120 Vac

Frequency: 60 Hz

Timing Safety Switch: 45 sec

Maximum Ambient Temperature: 250 F at element (121 C at element)

Operating Range, High Limit: 130 F to 240 F (54 C to 116 C)

Operating Range, Low Limit: 110 F to 220 F (43 C to 104 C)

Maximum Operating Pressure: 200 psi on immersion well; 100 psi direct immersion. (1378 kPa on immersion well; 90 kPa direct immersion.)

Operating Humidity Range (% RH): 0 to 95% RH, non-condensing

Approvals:

Canadian Standards Association: Certified: File No. LR95329-1

Underwriters Laboratories Inc. UL Listed: File No. listed: MP268, Vol. 3,4 (R8182D,E,F), Vol. 37 (R8182H,J), Sec. 1.

Single and Multi-Function Aquastat Controllers

	Product Number	Application	Differential Temperature	Insulation Depth		Mounting	Includes
			(F)	(inch)	(mm)		
*	R8182D1079	Use in an intermittent ignition application	High limit: 10 F fixed; Low limit/circulator: 10 F to 25 F adj.	1 1/2 in.	38 mm	Vertical	Auxiliary ZC and ZR terminals may be used to provide circulator zone control through an R845A Switching Relay. Heat-conductive compound and vertical case.
*	R8182D1111	Use in an intermittent ignition application	High limit: 10 F fixed; Low limit/circulator: 10 F to 25 F adj.	1 1/2 in.	38 mm	Horizontal	Auxiliary ZC and ZR terminals may be used to provide circulator zone control through an R845A Switching Relay. Heat-conductive compound and vertical case.
*	R8182H1070	Use in an intermittent ignition application	High limit: 10 F fixed; Low limit/circulator: 10 F to 25 F adj.	1 1/2 in.	38 mm	Junction box mount	Auxiliary ZC and ZR terminals may be used to provide circulator zone control through an R845A Switching Relay. Heat-conductive compound and horizontal case.

* TRADELINE models • SUPER TRADELINE models

Aquastat Part

Product Number	Description	Used With
4074EUS	Bag Assembly containing Quick Connect to Screw Terminal for L8124 or L8148	L8148L8124

Single and Multifunction Aquastat Parts

Product Number	Type	Description	Bulb Diameter	Lead Length	Leadwire Ending	Leadwire Temperature	Picture
			(inch)	(inch)			
112721	Clip	Clip, 1/2 inch well	—	—	—	—	
120650	—	Heat Conductive Grease	—	—	—	—	
198799Z	Sensor	Outdoor or Supply sensor with 42 in. lead for AQ475, AQ675 or AQ775	3/8 in.	42 in.	Strip & Retain	125 C	
32004955-003	Sensor	Sensor Assembly	—	—	—	—	