

## L4081A,B and L6081A,C Multiple Aquastat® Controllers

### PRODUCT DATA



### APPLICATION

The L4081 and L6081 Aquastat® Controllers provide boiler water regulation in gas- or oil-fired hydronic heating systems.

### FEATURES

- An immersion type liquid-filled sensing element actuates two snap switches.
- One switch operates as a high limit control.
- The other switch operates as a low limit and/or circulator control, depending on the model.
- Controller may be mounted in any positioning and needs no leveling.
- Separate, easy-to-read, calibrated dial and setpoint adjustments for each switch.
- Differential adjustment on low limit or circulator switch.
- All adjustments accessible inside front cover.
- Push-in terminals for quick connecting.
- Single sensing element for easy installation.
- Two spst snap switches (one spst and one spdt in L6081A,C) act independently at respective temperature settings.

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# SPECIFICATIONS

**IMPORTANT**

*The specifications given in this publication do not include normal manufacturing tolerances. Therefore, this unit may not exactly match the listed specifications. Also, this product is tested and calibrated under closely controlled conditions, and some minor differences in performance can be expected if those conditions are changed.*

**TRADELINE® Models**

TRADELINE® models are selected and packaged to provide ease of stocking, ease of handling, and maximum replacement value. TRADELINE model specifications are the same as those of standard models, except as noted below.

**TRADELINE Model Available:** L6081A Multiple Aquastat Controller.

**Additional Features:** TRADELINE pack with cross reference label and special instruction sheet, tube of heat-conductive compound and setting stops.

**Standard Models**

Refer to Table 1 for model specifications.

**Ranges:**

High Limit: 130°F (55°C) to 240°F (116°C). Stops burner if boiler temperature exceeds setpoint.  
 Low Limit: 110°F (44°C) to 220°F (105°C). Controls burner during thermostat off periods to maintain boiler water temperature.  
 Circulator: 110°F (44°C) to 220°F (105°C). Permits circulator operation only if boiler water temperature exceeds low limit setting.

**Table 1. Model Specifications.**

Model Number	Insertion Type <sup>a</sup>	High Temperature Side		Low Temperature Side	
		Switching	Action on Temperature Rise to Setpoint	Switching	Action on Temperature Rise to Setpoint
L4081A	Well	Spst High Limit	Breaks	Spst Low Limit	Breaks
L4081B				Spst Circulator	Makes
L6081A				Spdt Low Limit/Circulator	Breaks R-B Makes R-W
L6081C <sup>b</sup>					

<sup>a</sup>Some models are shipped less well; if well is needed, refer to form 68-0040 for ordering information.

<sup>b</sup>Device is less case and cover.

**Scale Markings:**

For Fahrenheit models:  
 High Limit: 160, 180, 200, 220°F.  
 Low Limit or Circulator: 120, 140, 160, 180, 200°F  
 For Celsius models:  
 High Limit: 55, 65, 75, 85, 95°C.  
 Low Limit or Circulator: 45, 55, 65, 75, 85, 95°C.

**Differentials:**

High Limit: 10°F (6°C) nominal.  
 Low Limit or Circulator:  
 L6081A,C: 10 to 25°F (6° to 14°C) adjustable.  
 L4081A,B: 10°F (6°C) nominal or 10° to 25°F (6° to 14°C) adjustable.

**Maximum Pressure Rating:**

Well mounted: 200 psi (1380 kPa).  
 Direct Immersion: 100 psi (690 kPa).  
 Maximum Ambient Temperature:  
 At switches: 150°F (66°C).  
 At sensing element: 265°F (130°C).

**Jumper:**

The 128975 Push-in Field Addable Jumper (included) can be inserted in the slot between R-R terminals to simplify wiring. (Insert with formed legs up in slot labeled jumper. Be sure to insert fully to positive stop.)

**Mounting Dimensions:** See Fig. 1 and 2.

# ORDERING INFORMATION

When purchasing replacement and modernization products from your TRADELINE® wholesaler or distributor, refer to the TRADELINE® Catalog or price sheets for complete ordering number.

If you have additional questions, need further information, or would like to comment on our products or services, please write or phone:

1. Your local Home and Building Control Sales Office (check white pages of your phone directory).
2. Home and Building Control Customer Relations  
 Honeywell, 1885 Douglas Drive North  
 Minneapolis, Minnesota 55422-4386

In Canada—Honeywell Limited/Honeywell Limitée, 35 Dynamic Drive, Scarborough, Ontario M1V 4Z9.

International Sales and Service Offices in all principal cities of the world. Manufacturing in Australia, Canada, Finland, France, Germany, Japan, Mexico, Netherlands, Spain, Taiwan, United Kingdom, U.S.A.

**Approvals:**  
 Underwriters Laboratories Inc. Listed (L4081A,B and L6081A): File No. MP466, guide No. MBPR. Component Recognized (L6081C): File No. MP466, Guide No. MPBR2.

Canadian Standards Association Component Recognized (L4081A,B and L6081A):  
 File No. LR1620, Guide No. 400-E-0.

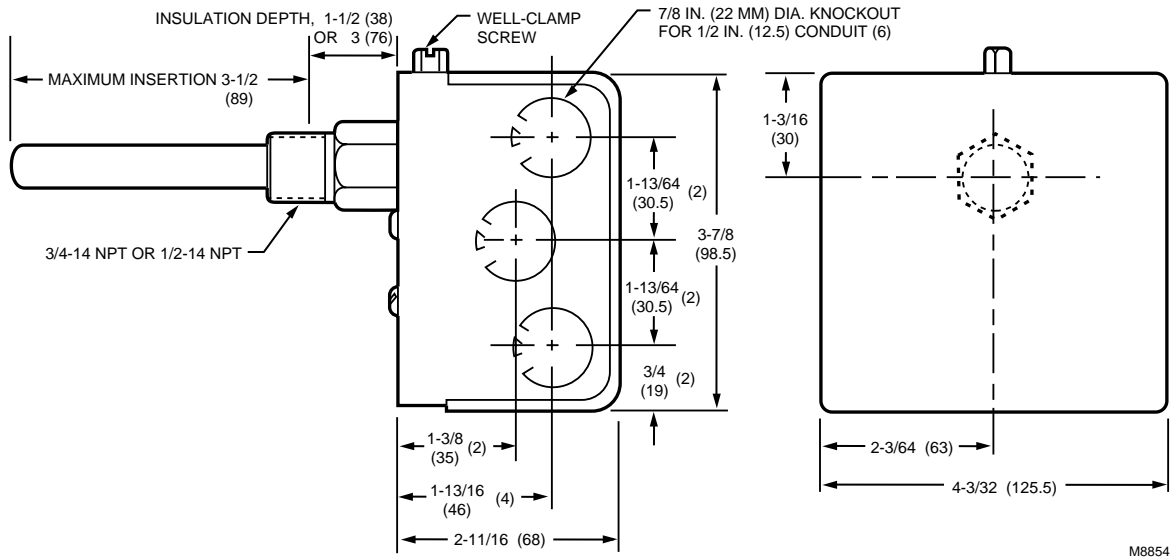


Fig. 1. L4081A,B and L6081A mounting dimensions in in. (mm).

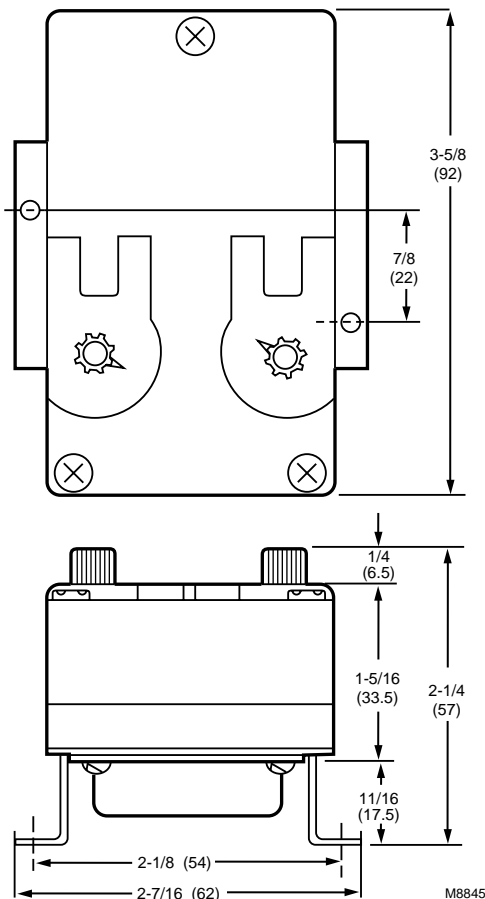


Fig. 2. L6081C mounting dimensions in in. (mm).

**Electrical Ratings:** See Table 2.

**Table 2. Electrical Ratings (Amperes).**

	120 Vac	240 Vac
Full Load	8.0	5.1
Locked Rotor	48.0	30.6
Millivoltage	0.25A at 1/4 to 12 Vdc.	

Plus ignition transformer load of 360 VA. Maximum connected load 2000 VA.

**Well Spud Length:** 1-1/2 in. (38 mm). Longer spud for 3 in. (76 mm) of insulation available.

**Spud Thread Size:**  
 3/4-14 NPT standard.  
 1/2-14 NPT available.

**Optional Specifications:**  
 Plastic coating on immersion well to minimize electrolytic deterioration (on some with well models).  
 Celsius scale on L4081A.

**Accessories (ordered separately):**  
 126580 Setting Stop. Used to prevent turning setting knob beyond a predetermined point.  
 124904 Well Adapter. Use to convert mounting on some competitive wells to fit L4081/L6081. See form 68-0040.