

L4079A,B,W PressureTrol® Limit Control

PRODUCT DATA



FEATURES

- L4079A has two ganged spst switches; breaks two circuits (may be both sides of the power supply) simultaneously.
- L4079B has one spst switch.
- L4079W is the same as L4079B but has seals for oil applications.
- MICRO SWITCH® snap-acting switches are visible through transparent cover.
- Switches open automatically but must be reset manually.
- Trip-free reset mechanisms do not permit the limiting role of the PressureTrol® Control to be defeated by jamming the reset lever.
- Control does not need leveling.
- The L4079 is unaffected by moderate vibration.

APPLICATION

The L4079A,B, and W PressureTrol® Limit Controls are high pressure limit switches that break electrical circuits when pressure rises to a preset value.

The L4079A and B can be used with steam, air, noncombustible gases, and fluids noncorrosive to the sensing element.

L4079W is for use on oil burner systems.

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SPECIFICATIONS

Models: See Table 1.

Pressure Ratings: See Table 1.

Electrical Ratings:

120 Vac: 9.8 Amps for full load; 58.8 Amps for locked rotor
 240 Vac: 4.9 Amps for full load; 29.4 Amps for locked rotor

Table 1. Pressure Ratings.

| Model Number | Range | | Maximum Diaphragm Pressure | | Differentials | |
|---|-----------|-------------|----------------------------|------|---------------|-------|
| | psi | kPa | psi | kPa | psi | kPa |
| L4079A ^a and L4079B ^b | 2 to 15 | 15 to 100 | 25 | 170 | 3 | 20.7 |
| | 5 to 50 | 35 to 350 | 85 | 590 | 10 | 68.9 |
| | 10 to 150 | 70 to 1035 | 225 | 1550 | 30 | 206.8 |
| L4079B1066 ^b | 20 to 300 | 140 to 2070 | 350 | 2410 | 60 | 413.7 |
| L4079W1000 ^b | 10 to 150 | 70 to 1035 | 225 | 1550 | 30 | 206.8 |

^a Ratings apply to each of two separate circuits.

^b One circuit only.

Switching Action:

L4079A—Snap-switch. Breaks two circuits automatically on pressure rise. Each circuit must be manually reset.

L4079B,W—Snap-switch. Breaks one circuit automatically on pressure rise. Circuit must be manually reset.

Adjustment means: External adjustment screw. Scale is calibrated in psi and kPa.

Maximum Ambient Temperature: 150°F (66°C).

Mounting Means:

Pipe fitting—1/4-18 NPT. Connection on diaphragm assembly.

These devices may be either boiler mounted directly to a boiler fitting, or may be surface mounted, such as on a wall, by using the knockouts in the case.

Approvals:

Underwriters Laboratories Inc. (UL) Listed: File No. MP466, Guide No. MBPR.

Canadian Standards Association (CSA): File No. LR95329, Certificate No. 1720340

Accessories:

50024585-001 Brass Steam Trap.

14026 Steel Steam Trap.

33312B Knurled adjustment knob.

Dimensions: See Fig. 1.

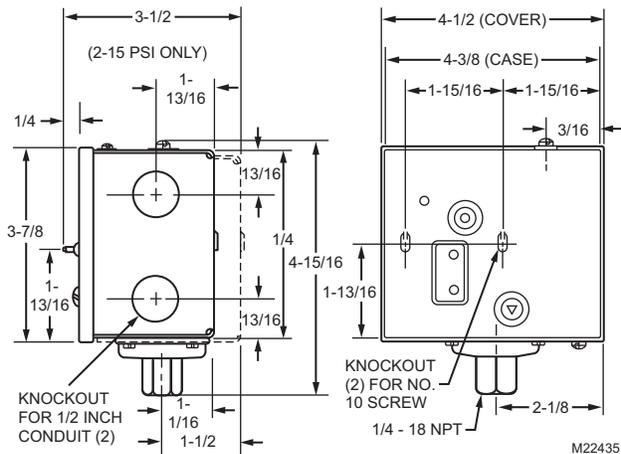


Fig. 1. L4079A,B,W PressureTrol® Limit Control dimensions in inches.

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 Honeywell Environmental and Combustion Controls Sales Office (check white pages of your phone directory).
2. Honeywell Customer Care
1885 Douglas Drive North
Minneapolis, Minnesota 55422-4386
3. <http://customer.honeywell.com> or <http://customer.honeywell.ca>

International Sales and Service Offices in all principal cities of the world. Manufacturing in Belgium, Canada, China, Czech Republic, Germany, Hungary, Italy, Mexico, Netherlands, United Kingdom, and United States.

INSTALLATION

When Installing This Product...

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check on the ratings given in the instructions and marked on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced service technician.
4. After installation is complete, check out the product operation as provided in these instructions.

Location

PressureTrol® Limit Controllers must be mounted above the water line in steam boilers. They can be mounted alongside the pressure gauge, at a remote location, in a fitting provided by the boiler manufacturer, or in special mountings on low-water cutoffs.

Mounting

See Fig. 1 for mounting dimensions.

A steam trap must always be connected between the PressureTrol® unit and the boiler. The steam trap prevents boiler scale and corrosive vapors from attacking the diaphragm.

Pressure Gauge Mounting

To mount the limit control beside a pressure gauge, remove the gauge and install in its place a steam trap with a tee on top. Mount the PressureTrol® unit and pressure gauge on the side of the tee by means of nipples and elbows.

Remote Mounting

If excessive vibration seems likely to affect the operation of the control, it may be located remotely, as long as all piping is suitable and properly pitched to drain all condensation back to the boiler.

Boiler Mounting

If it is not convenient to mount the control adjacent to the pressure gauge, install a steam trap at a location on the boiler recommended by the boiler manufacturer and screw the unit directly to the steam trap.

WIRING



WARNING

Electrical Shock Hazard.
Can cause severe injury, death or property damage.
 Disconnect the power supply before beginning wiring.
 More than one power supply disconnect may be required.

All wiring must comply with local codes and ordinances. See Fig. 2 for internal schematics and wiring.

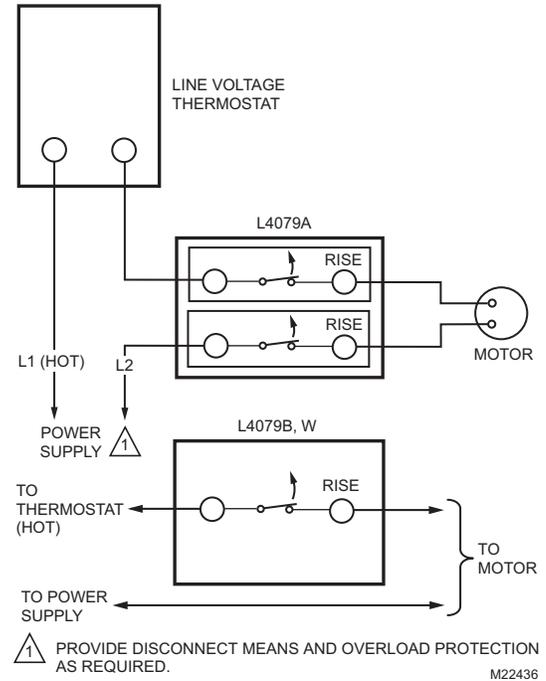


Fig. 2. Schematics and wiring. L4079A breaks both sides of power supply; L4079B,W breaks hot side only.

Setting

To set the control, turn the pressure adjusting screw (see Fig. 3) until the pressure setting indicator on the front of the case is in line with the required control pressure setpoint. The indicator setting is the point at which the switch breaks contact.

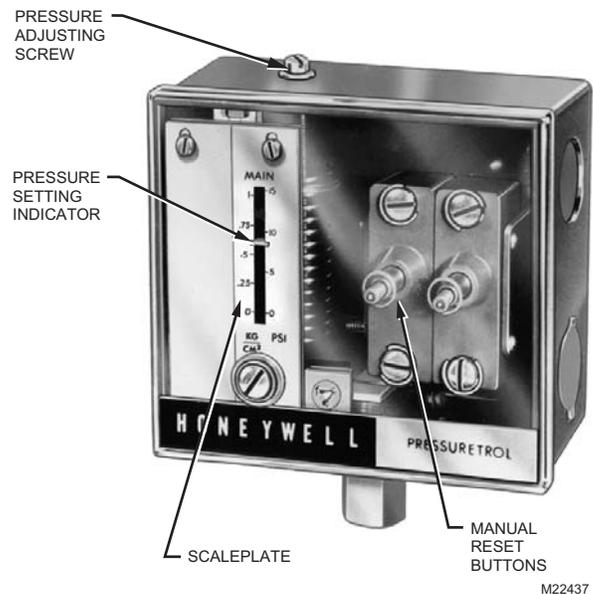


Fig. 3. Controls and indicators on L4079A. L4079B,W is the same except for having only one reset button.

Manual Resetting

When the circuits have broken automatically, they must be manually reset. After the pressure returns to setpoint, minus the differential (shown in Table I), manually reset by firmly depressing the manual reset button(s) and releasing.

NOTES:

- The circuit is not complete until the reset button is released.
- The trip-free manual reset mechanism prevents the limit controller from operating as an automatic controller (self-resetting) even if the manual reset button has been tied down.

CHECKOUT

After the control has been installed and wired, test as follows:

1. Note the boiler pressure by checking the boiler pressure gauge (boiler pressure should be near the middle of the PressureTrol® pressure scale to perform this test properly).
2. Rotate the PressureTrol® pressure adjusting screw (see Fig. 3) until the pressure setting indicator on the front of the case corresponds to the boiler pressure gauge reading.

NOTE: The limit control should break the control circuit(s) when the boiler pressure gauge reading equals or slightly exceeds the PressureTrol® pressure setting.

3. If the limit control is operating properly, manually reset it and adjust the pressure adjusting screw until the pressure setting indicator is in line with the required limit setpoint.

Automation and Control Solutions

Honeywell International Inc.
1985 Douglas Drive North
Golden Valley, MN 55422
customer.honeywell.com

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