Honeywell

L4079A, B, W PressureTrol® Limit Control

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OPERATING INSTRUCTIONS

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1 SAFETY

1.1 Please read and keep in a safe place

Please read through these instructions carefully before installing or operating. Following the installation, pass the instructions on to the operator. This unit must be installed and commissioned in accordance with the regulations and standards in force. These instructions can also be found at www. docuthek.com.

1.2 Explanation of symbols

- **1**, **2**, **3**, **a**, **b**, **c** = Action
- \rightarrow = Instruction

1.3 Liability

We will not be held liable for damage resulting from non-observance of the instructions and non-compliant use.

1.4 Safety instructions

Information that is relevant for safety is indicated in the instructions as follows:

Indicates potentially fatal situations.

Indicates possible danger to life and limb.

A CAUTION

Indicates possible material damage.

All interventions may only be carried out by qualified gas technicians. Electrical interventions may only be carried out by qualified electricians.

1.5 Conversion, spare parts

All technical changes are prohibited. Only use OEM spare parts.

2 APPLICATION

The L4079 A, B and W PressureTrol, Limit controls are high pressure limit switches that break electrical circuits when pressure rises to a preset value. The L4079 A and B can be used with steam, air, noncombustible gases, and fluids noncorrosive to the sensing element.

The L4079 W is for use on oil burner systems.

3 CHECKING THE USAGE

Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.

This function is only guaranteed when used within the specified limits – see page 2 (5 Technical

data). Any other use is considered as non-compliant.

3.1 Part designations



- 1 Scaleplate
- 2 Pressure setting indicator
- 3 Pressure adjusting screw
- 4 Manual reset button

4 FEATURES

- L4079 A has two ganged spst switches; breaks two circuits (may be both sides of the power supply) simultaneously.
- L4079 B has one spst switch.
- L4079 W 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.

5 TECHNICAL DATA

Electrical ratings

120 V AC: 9.8 A for full load; 58.8 A for locked rotor. 240 V AC: 4.9 A for full load; 29.4 A for locked rotor.

Pressure ratings

Model number	Range			
	psi	kPa		
L4079A ¹⁾ , L4079B ²⁾	2–15	15–100		
L4079A ¹⁾ , L4079B ²⁾	5–50	35–350		
L4079A ¹⁾ , L4079B ²⁾	10–150	70–1035		
L4079B1066 ²⁾	20–300	140–2070		
L4079W1000 ²⁾	10–50	70–1035		

Model number	Max. diaphragm pressure		Differentials	
	psi	kPa	psi	kPa
L4079A ¹⁾ , L4079B ²⁾	25	170	3	20.7
L4079A ¹⁾ , L4079B ²⁾	85	590	10	68.9
L4079A ¹⁾ , L4079B ²⁾	225	1550	30	206.8
L4079B1066 ²⁾	350	2410	60	413.7
L4079W1000 ²⁾	225	1550	30	206.8

Ratings apply to each of two separate circuits.
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.

5.1 Dimensions



6 ACCESSORIES

50024585-001 Brass steam trap 14026 Steel steam trap

7 INSTALLATION

7.1 Installation position

- → 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.
- → For mounting dimensions, see Technical data, page 3 (5.1 Dimensions).
- → A steam trap must always be connected between the controller and the boiler. The steam trap prevents boiler scale and corrosive vapors from attacking the diaphragm.



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Pressure gauge mounting

- **1** 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.
- 2 Mount the PressureTrol unit and pressure gauge on the side of the tee by means of nipples and elbows.

Remote mounting

3 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

- **4** 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.
- **5** After installation is complete, check out the product operation as provided in these instructions.

8 WIRING

🛆 WARNING

Electrical shock hazard.

Can cause serious injury, death or equipment.

- Disconnect power supply before beginning wiring. More than one power supply disconnect may be required.
- All wiring must comply with applicable local electrical codes, ordinances and regulations.
- → For the wiring, see Schematics and wiring.
- L4079A breaks both sides of power supply.
- L4079B and W breaks hot side only.
- → Provide disconnect means and overload protection as required.

Schematics and wiring



9 ADJUSTMENT

- **1** To set the control, turn the pressure adjusting screw 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.



10 MANUAL RESETTING

When the circuits have broken automatically, they must be manually reset.

- 1 After the pressure returns to setpoint, minus the differential, manually reset by firmly depressing the manual reset button(s) and releasing.
- → Differentials, see Technical data, page 3 (5.1 Dimensions).



- → 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.

11 CHECKOUT

After the control has been installed and wired, test as described below.

- 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 until the pressure setting indicator on the front of the case corresponds to the boiler pressure gauge reading. See page 4 (9 Adjustment).
- → 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.
- **4** Use a separate, calibrated pressure gauge to verify that the final pressure setpoint is within 5% of the desired value.

12 CERTIFICATION

12.1 UL-listed



Underwriters Laboratories Inc. listed: File No. MP466, Guide No. MBPR.

12.2 CSA approved



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

13 DISPOSAL

Devices with electronic components:

WEEE Directive 2012/19/EU – Waste Electrical and Electronic Equipment Directive

At the end of the product life (number of operating cycles reached), dispose of the packaging and product in a corresponding recycling centre. Do not dispose of the unit with the usual domestic refuse. Do not burn the product.

On request, old units may be returned carriage paid to the manufacturer in accordance with the relevant waste legislation requirements.

FOR MORE INFORMATION

The Honeywell Thermal Solutions family of products includes Honeywell Combustion Safety, Eclipse, Exothermics, Hauck, Kromschröder and Maxon. To learn more about our products, visit ThermalSolutions.honeywell.com or contact your Honeywell Sales Engineer.

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