

PH-0-8LC

Boiler Condensate Pump Installation Instructions



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FEATURES

- Fully automatic operation
- Low noise, ball-bearing motor with thermal protector
- Check valve to prevent back-flow of liquid into the unit
- Overflow safety alarm switch
- Compact size

APPLICATION

The PH-0-8LC condensate pump is designed to automatically remove condensate fluid from an air-conditioner, evaporator coil and/or an oil or gas condensing warm boiler. This pump is made from a tough ABS plastic body to resist corrosion and impact.

SPECIFICATION PH-0-8LC

Model	PH-0-8LC	Height	128 mm
Max Flow	150 lph	Length	185 mm
Max Head	3m	Width	86 mm
Tank Capacity	0.8 litres	Weight	1.0 kg
Volts	230 V / 65 VA	Cable Length	1.5 m
Hz	50 Hz		
Discharge Size	3/8"		
High-level Alarm	Volt Free		

INSTALLATION

1. Carefully unpack the unit, check for damage and make sure that all of the required parts are included. The units are thoroughly tested before packaging to ensure safe delivery and operation. If there is any sign of damage due to shipment, return it to the place of purchase for repair or replacement.
2. Choose a mounting location near the air-conditioner or boiler. The pump must be mounted level and the inlet must be below the lowest drain.

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CONNECTING THE PIPING

1. Run flexible tubing or pipe from the condensate drain on the evaporator pan and/or drain from boiler to the evaporator pan and/or drain from boiler to the inlet hole on the pump. This drain line should have a continuous downward slope to allow gravity flow. Cut the end of the line at an angle so the end does not close off on the bottom of the pump's tank.

Note: If there's an overflow drain from the evaporator pan or from the boiler, it may be necessary to join the overflow and the main drain together before they enter the pump.

2. Connect the discharge line by hand, tighten the cap nut of the check valve in a clockwise direction. A flexible tubing with an internal diameter of 3/8" will be suitable. Extend the discharge line straight up from the pump to the highest point, run the discharge line to a drain with a downward slope.

For best results, the drain should be below or approx. level with the bottom of the pump tank. If it is not possible to slope the line downward, make an inverted "U" trap at the highest point of the discharge line above the pump. If the pumps are used in combination with an external neutralisation box we strongly recommend an additional filter at the pump's intake port.

Note: Although not needed for these pumps, local regulations may require the use of a condensate neutraliser when using this pump with a condensate gas boiler. Consult local authorities for guidelines.

WIRING

Shut off electrical power at the fuse box before making any wiring connections. All wiring must be done according to local and/or applicable national codes.

1. Main power: Connect the power cord to a constant line voltage source, not a fan or other device that may run intermittently.
2. Overflow alarm switch: The pump is equipped with an overflow alarm switch (NO) that switches off the boilers thermostat or air conditioner in the event of pump failure. To handle such high power rates an additional relay must be wired in the alarm circuit because the max power rating of the integrated switch is limited to 24 V / 6VA. In cases where heating or cooling requirements are a necessity, the alarm switch may trigger an optional or acoustic signal emitter.

TESTING

1. With the unit plugged in and the discharge line in place, pour water into the pump reservoir until the unit activates to verify the unit works properly.
2. To test the overflow alarm circuit :
 - Energise the appliance so it runs.
 - Kink the tube coming from the pump discharge, or unplug the power cord, so it cannot pump out.
 - Pour water into the pump reservoir, filling it completely
 - As the water level nears the top of the unit the overflow alarm should activate (e.g. triggering an alarm circuit, if used).
 - Un-kink the tube, or plug the cord in, and allow the pump to empty the tank. As the water level goes down the overflow safety switch will deactivate and the appliance will energise again (or the alarm will reset)

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MAINTENANCE

1. Before attempting to service or remove any component, make sure that the unit is disconnected from the power source.
2. Unfasten the check valve with a wrench. Clean the check valve and verify its operation.
3. Disassemble the cover and water tank from the main plate.
4. Be sure the floats move freely. Clean as necessary.
5. Clean the tank with warm water and mild soap.
6. Check the inlet and outlet piping. Clean as necessary. Be sure there are no kinks in the line that would inhibit flow.
7. After the servicing, assemble the unit by the reverse order.
8. To re-install the check valve, fasten it manually and tighten a half turn further with a wrench. Be careful not to over-tighten as this may distort the o-ring seal under the check valve.
9. In case of a long-term break, remove water from the hose and the water tank.

TROUBLESHOOTING

If the pump does not function properly, refer to the following:

1. Unit does not run:
 - Check the power supply.
 - Check the appliance to see if condensation is actually being generated.
 - Check to make sure the pump float mechanism moves freely and clicks the activation switch when moved up and down.
 - Check the drain line(s) into the pump for obstructions. Note: If these lines are clogged and remain clogged, the appliance may eventually be damaged.
2. Pump makes loud noise when running:
 - Check the tank for debris and clean if necessary. Refer to the maintenance section for cleaning instructions.
3. Unit runs but does not pump liquid out:
 - Check the floats to be sure that they are not stuck in the up position.
 - Check the height of the discharge tubing to be sure it does not exceed the allowed head (see specifications)
 - Check the discharge tube for obstructions and clear if needed.
 - Check the valve for obstructions. Refer to the maintenance section for cleaning instructions.
4. Liquid drains back into pump from discharge line:
 - Check valve may have debris in it. Refer to the maintenance section for cleaning instructions.
 - If the discharge line is plumbed so the highest point is less than 1m above the pump, the check valve may allow liquid to drain out of the line. This is normal and will not damage the pump.
5. Liquid leaks from around the check valve
 - Check the proper fit of the cap nut that holds the discharge tube in place.
 - If the check valve is too tight or too loose it may leak around the O-ring. Check that the valve is hand tight, and then tighten an additional 1/2 turn with a wrench.
 - If the O-ring under the check valve is damaged, replace with a new one or purchase a replacement check valve, which includes an O-ring.

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WARRANTY

This pump offers a 1 year warranty. This warranty covers all parts with material or manufacturing faults. The buyer's only remedy is the replacement or repair of the defective parts. In no case can labour costs and any consequential damage be cited as a basis for a complaint. Any returned units must be complete and must be accompanied by a written list of the defects ascertained.

We are unable to accept any liability in case of nonconforming installation or noncompliance with the specifications or maintenance recommendations.

CONFORMITY



All data contained in these specifications are solely intended to describe the product and do not constitute warranted characteristics in the legal sense. Subject to technical change

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