PH-20-STA

2L BOILER CONDENSATE TANK PUMP

INSTRUCTION MANUAL

DiversiTech International Ltd.
Glaisdale Drive East, NG8 4LY
Nottingham United Kingdom
Email sales@diversitech.com
Phone +44(0)115 900 5858

INTRODUCTION

Your Boiler Condensate Pump is designed as an automatic condensate removal pump for pumping away room temperature condensate from domestic and light commercial condensing boilers. The pump is controlled by a float/switch mechanism which turns the pump on to discharge the water when approximately 30mm of condensate collects in a tank. The pump automatically switches off when the tank drains to approximately 9mm.

The Boiler Condensate Pump you have purchased is a high quality product that has been engineered to give you long and trouble-free service.

This pump is carefully packaged, inspected and tested to ensure safe operation and delivery. When you receive the pump, examine it carefully to determine there are no broken or damaged parts that may have occurred during shipment. If damage has occurred, please contact your supplier. They will assist you in replacement or repair, if required.

READ INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO INSTALL, OPERATE OR SERVICE THE BOILER CONDENSATE PUMP. KNOW THE PUMP APPLICATION, LIMITATIONS AND POTENTIAL HAZARDS. PROTECT YOURSELF AND OTHERS BY OBSERVING ALL SAFETY INFORMATION. FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE! RETAIN INSTRUCTIONS FOR FUTURE REFERENCE. INSTALLATION AND CONNECTIONS ARE TO BE MADE BY A QUALIFIED PERSON.

SAFETY GUIDELINES

Do not use to pump flammable or explosive fluids such as petrol, fuel oil, kerosene, etc. do not use in explosive atmospheres. pump should be used with liquids compatible with pump component materials.

Do not handle pump with wet hands or when standing on wet or damp surface, or in water. this pump is supplied with a grounding conductor and/or grounding type attachment plug. to reduce the risk of electrical shock, be certain that it is connected to a permanent earth.

For installations where property damage and/or personal injury might result from an inoperative or leaking pump due to power cuts, discharge line blockage, or any other reason, a backup system(s) and/or alarm should be used.

Support pump and piping when assembling and when installed. failure to do so may cause piping to break, pump to fail, motor bearing failures, etc.

The pump is designed to take boiler condensate and water up to 90° c. boiler pressure relief can be over 100° c in these conditions we recommend using the boiler condensate code 802079.

FOR FURTHER INSTALLATION ADVICE PLEASE CALL THE TECHNICAL SUPPORT HELPLINE ON 0115 900 5858.

INSTALLATION

1. Mounting the pump: The tank has two slots provided to mount the unit on a vertical surface such as an adjacent wall. The slots are located on the ends of the tank (Fig 1). Pump must be level and the inlet must be below the boiler drain point.
2. The pump should not be installed in a manner that will subject it to splashing or spraying.
3. The pump can be mounted in a Left Hand or Right Hand orientation allowing for cabling to the left or right (Fig 2 & 3).

Figure 1

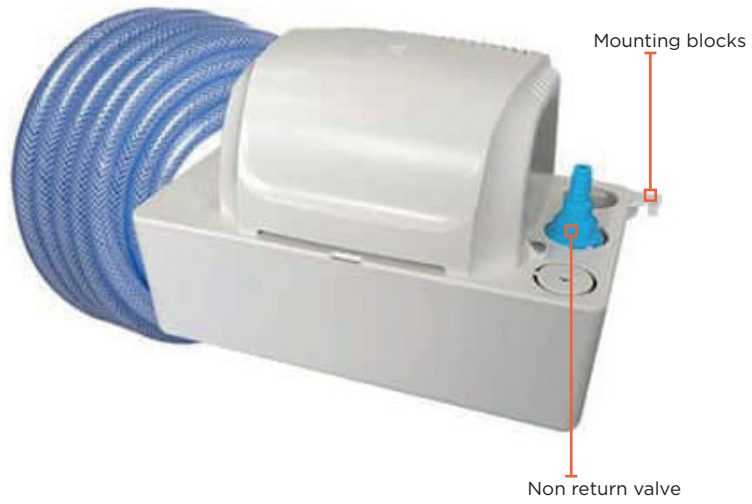

Figure 2

Left hand orientation
(wiring to right outlet, and hose to left)

Figure 3

Right hand orientation
(wiring to left outlet, and hose to right)

WATER DRAIN CONNECTIONS

Inlet water connections

1. Position pump beneath boiler condensate drain so that condensate flows into the pump inlet freely (use any of the three openings provided).
2. The pump will accept up to three drain lines, although care should be used to make certain that total inflow does not exceed outflow of pump. If more drains into the pump than the rated output of the pump, tank may overflow.
3. Keep plugs in unused pump inlet openings to prevent debris from falling into the pump tank.

Outlet water connections

1. Connect the supplied 3/8" I.D. tubing to the non return valve (Fig 1). For best results, secure tubing with clamps (not provided) but do not pinch collapse or otherwise restrict the tubing.
2. The pump is supplied with an adaptor which can be connected to standard 22mm pipe or with associated adaptors (not supplied) to 32mm and 40mm pipe.
3. Tubing should rise vertically but not exceed the maximum shut off head (pumping height) of 5.5 metres above the pump.
4. At highest point angle tubing horizontally and create a downward slope to the drainage point. Do not sharply bend or twist the tubing in a way that might result in collapse or restriction of the tubing. Creating a downward slope will allow the condensate to drain by gravity and keep tubing empty.
5. If it is not possible to create a downward slope, try to create an inverted "U" trap directly above the pump at the highest point.
6. If routing in loft, basement or other area where the condensate hose could be exposed to freezing conditions, hose should be insulated or changed for pre insulated version.

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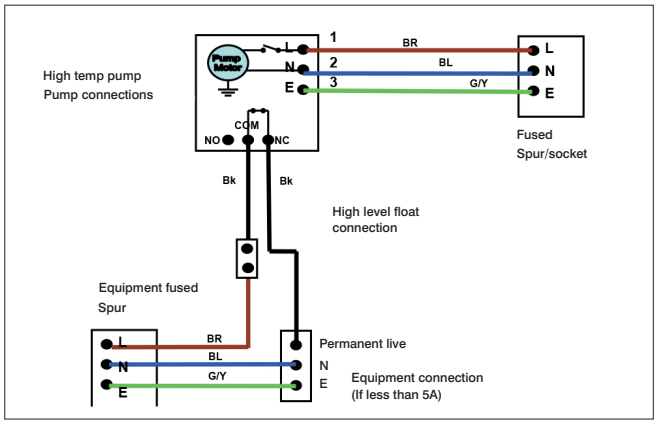
ELECTRICAL CONNECTIONS

1. Shut off electrical power at fuse box before making any connections. All wiring must comply with local codes.
2. Line voltage: Connect pump to voltage specified on label located on pump. Wiring is as follows (right).
3. If fused plug is used, a 3.0 amp fuse is recommended.
4. High level float switch connection options. The pump is fitted with a secondary float which will trigger a micro switch just before the pump starts to over spill. This switch can be used to either switch off the boiler or signal an external alarm (visual or audible alarms are available as option extras). The following diagrams show how the high level float switch can be connected. (Fig 4 and Fig 5).

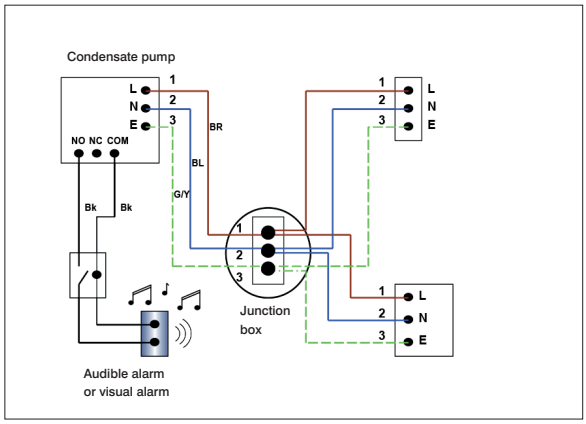
Live - Brown
Neutral - Blue
Earth - Yellow/Green

Figure 4



Boiler connection to the high-level safety switch

Figure 5

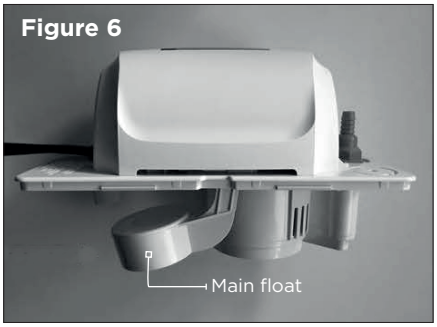


Audible alarm (sold separately) connection to the high-level safety switch

COMMISSIONING & MAINTENANCE

1. Before servicing the pump, disconnect the electric power at the fuse box.
2. Upon commissioning, check for debris in the drain pan. Remove any material that might block the drain line or drain into the pump tank.
3. It is recommended that the pump be checked every six to twelve months for proper operation. Most important is to check for debris blocking the pump discharge adapter/check valve. Check for proper free movement of pump float (Fig 6).
4. Clean the holding tank and float with warm water and mild soap. Rinse completely when finished.
5. Check the inlet and outlet piping. Clean as necessary. Be sure there are no kinks in the outlet line that would inhibit or restrict flow.

Figure 6



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TESTING

1. Turn on power
2. Lift the motor/tank cover assembly off the tank and hold level.
3. Test motor switch by raising main float with finger (Fig 6). Motor should turn on just before float contacts underside of cover.
4. Replace motor/tank cover assembly on tank. This pump is designed for use with condensing boilers. Caution must be taken to ensure acidity of condensate does not increase below the average pH of 3.4 (to prevent localised pockets of acid that acts like a battery causing pitting) by routinely cleaning or flushing tank with fresh water.

UK DECLARATION OF CONFORMITY

We, Diversitech International declare under our sole responsibility that the products PR-20-STA, to which the declaration below relates, are in conformity with the Council Directives listed below on the harmonisation of the laws of the EU member states.

Please note that it is prohibited to put this pump into service before the machine in which it is incorporated has been declared to conform with the provisions of Machinery Directive 2006/42/EC, and with the EMC Directive 2014/30/EU.

Low Voltage 2014/35/EU EMC 2014/30/EU

EN 60335-1: 2012

EN 60335-2-41: 2003

RoHA 2015/863/EU

Paul Greengrass 21/5/21
Business Development Director

Diversitech International Ltd.
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