Operating and Maintenance Instructions

Hot Water Condensate Pumps

DESCRIPTION

The Puma Hot Water Condensate Pumps (HWCP) are manufactured from 18 SWG bright annealed stainless steel. The units are fitted with ¼ turn 'Quick Release' fasteners in the lids of both tank and motor compartments.

The standard unit is supplied with end discharge outlet with top discharge being available on request. The pump motor is of the regenerative type that will purge itself of air/water once initially primed following the start up/commissioning instructions.

All models are fitted with a high water level alarm switch. The switch is rated at 240 V ac 1.1 Amp. The switch is fitted to break contact on water level rise. In this format the switch may be connected directly to the humidifier water supply solenoid valve to shut down in the event of high water level.

INSTALLATION

The HWCP shall be located on a horizontal platform or floor with the drain pipework from the humidifier and condensate tray connected through the holes in the lid of the sump tank. The discharge pipework shall be run in 15mm copper tube and be free from all sharp bends and protected from freezing.

Non return valves must not be fitted unnecessarily, the discharge pipework must have a free drain back to the pump. 'Dog Leg' sections of pipe must be avoided. Please refer to sales leaflet for maximum discharge pipework length.

Please see the attached recommended installation diagram for guidance on pipework installation.

The system may be fitted with check valves or traps to prevent siphoning occurring only where drain pipework eventually falls to a level lower that the unit.

To minimise evaporation from the sump tank, the lid, seals and grommets must be in place at all times during normal operation.

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FAULT FINDING

Before checking any part of the HWCP, please ensure that the unit has been isolated as moving parts and electrical supply can cause injury.

HWCP NOT RUNNING

- Check unit is connected correctly as the wiring diagram supplied.
- Check the mains supply
- Check the fuse, (located on the front of the pump case), for correct rating and continuity. Do **not** replace with larger rated fuse than stated.

MOTOR RUNNING BUT NOT PUMPING WATER

- System could have airlock which prevents usual operation (see installation diagram). System will require purging as per commissioning instructions.

HWCP CONTINUOUSLY RUNS

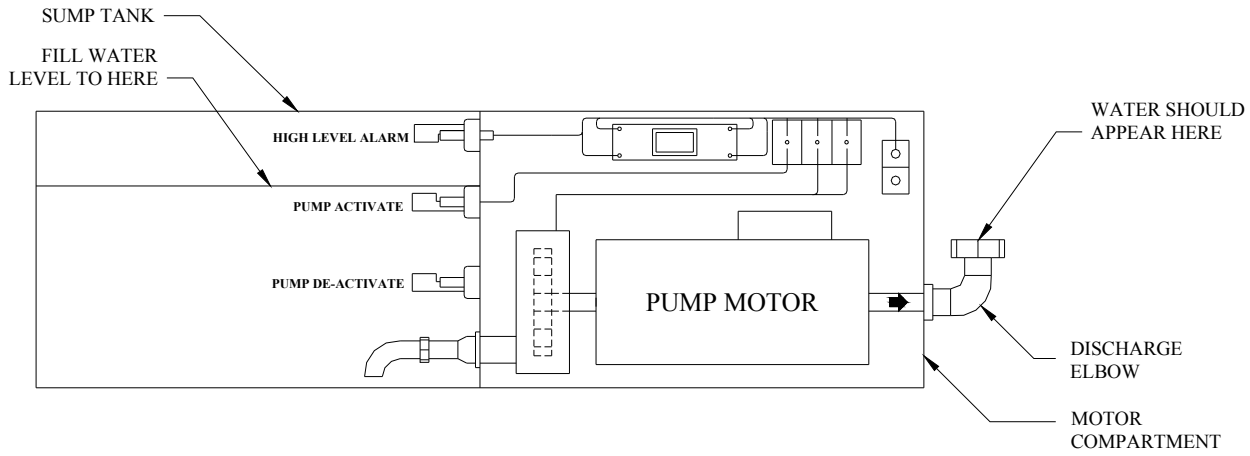
- Check float switches & relay for correct operation.
- Check pipework follows guidelines set in recommended installation diagrams supplied with unit. If the discharge pipework is longer than recommended, the HWCP sump will fill up and activate the 'Pump Start' float switch. If the humidifier flush down occurs at the same time, then flooding could occur.

HWCP FITTED WITH NON RETURN VALVE

- If a Non Return Valve has been installed on the system, it is highly likely that it will become defective due to foreign bodies and scale deposits. This may cause the valve to malfunction and draw airlocks into the pump system.

  We do not recommend the fitting of Non Return Valves without consultation with the Company's Technical Director. Warranty will be void if Non Return Valves are fitted without permission.

PURGING THE SYSTEM



If an airlock has occurred, the system will require purging before normal operation can continue. To purge system:

1. Isolate the electrical supply
2. Remove motor compartment and sump tank lids and discharge pipe
3. Fill sump tank with water so that the first two float switches are raised and water can be seen in the discharge connection
4. Connect the discharge pipe
5. Connect electrical supply to the unit and switch on. The motor will run and proceed to empty the sump tank. Ensure the bottom float switch stops the pump motor
6. The head of water in the discharge pipe will return to the sump tank, this is normal! If the discharge pipe work exceeds 25 meters consult our technical office or our HWCP brochure
7. Finally, replace the motor compartment and sump tank lids

If the problem persists, contact Puma Products Ltd for technical assistance.
On contacting us a detailed description or faxed diagram of the installation will greatly help us resolve the problem.
No replacement pumps will be sent out until we are satisfied that all the above have been met.
Check the Puma warranty Statement for terms and conditions.

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