HWP Series

Condensate Lift-Pump Kit

Ducted Water Cooled Packaged Air Conditioners

Installation Instructions

GENERAL

The HWP Series Condensate Lift-Pump has been designed to remove condensate from the unit in tight installations where a well sloped drain line (minimum 1 in 50 gradient) is not immediately feasible.

These instructions cover single compressor systems; for twin compressor systems refer to **temperzone** for wiring details.

COMPONENTS

1. Condensate Lift-Pump
2. Self-adhesive insulation
3. Two self-tapping screws
4. Plastic hose and securing pipe clamp
5. Drain pipe plug (x2)

Check that all items of the kitset are supplied and that no damage has occurred to the items.

Fig. 1 Condensate Lift-Pump

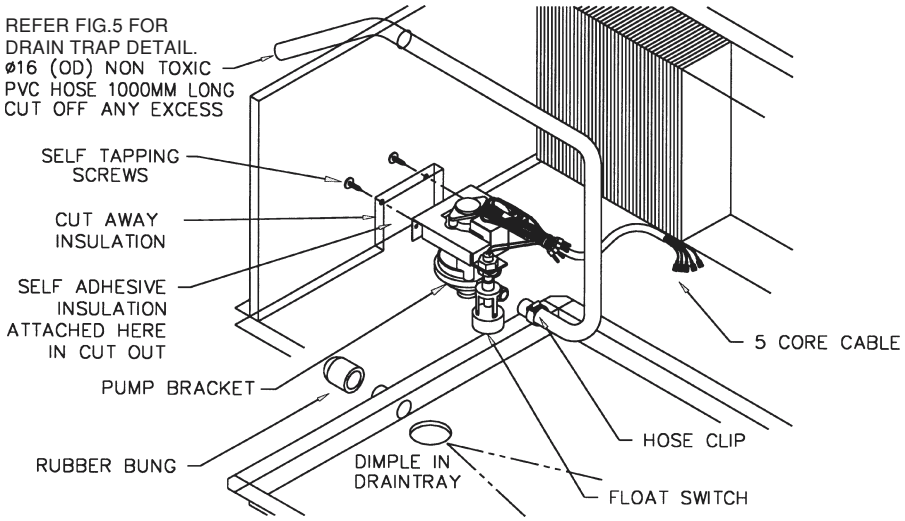
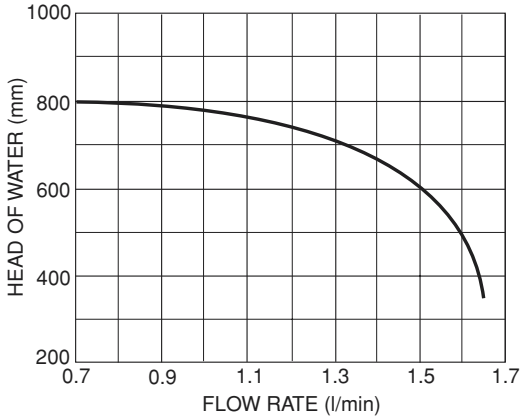


Fig. 2 Flow Rate of Condensate Pump

Lower Heads of Water give better performance.
Beware, loose debris in the drain tray could clog the pump intake, reducing performance.



INSTALLATION

1. Remove the drain tray from the base of the air conditioner.
2. Cut away a minimum amount of fibre-glass insulation where indicated in Fig.1.
3. Re-insulate exposed area with self-adhesive insulation supplied.
4. Attach pump brackets,as shown, with the two self tapping screws supplied.
5. Remove insulation from inside 19 dia. hole located immmediately above pump.
6. Pass one end of the plastic hose supplied through the 19 dia. hole from inside the unit.
7. Attach other end of plastic hose to pump's discharge nozzle and secure using clamp supplied.
8. Adjust hose to ensure NO contact with sharp edges and clear of heater elements (if fitted).
9. To maximise pump efficiency keep hose length as short as possible. Cut off any excess length of hose. Refer also Fig.2.
10. Check the height position of the pump as per Figure 3 and adjust mounting holes if necessary.
11. Route pre-wired five core cable to electrical box and connect to terminals as per appropriate wiring diagram, see overleaf.
12. Ensure five core cable is kept clear of sharp edges, the drain tray and heater elements (if fitted).
13. Ensure drain tray is clean before refitting to unit. **Note**: Dimple and drain outlet on drain tray must be directly under pump, as indicated in Fig.3.
14. Seal off 19 or 25 mm dia. drain stub on drain tray with the appropriate plug supplied and silicone type sealant.
15. Connect plastic hose to client's drain system.

CONDENSATE DRAIN

The drain line must be maintained at least 19 mm ID along its full length. A vent pipe is recommended for drain pipes longer than 4 m (refer figure 5). Check drain by pouring water into the drain tray and ensuring that it clears.

HWP 95–440 models require a 'U' trap in the drain line.

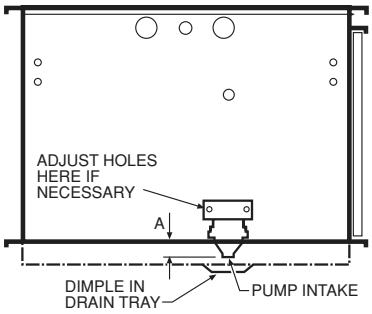
HWP 33–78 models do not require trapping, but may require venting.

OPERATION

The Condensate Lift-Pump is wired to run when the compressor is operating. A float switch is included for safety. If the pump fails or blockage occurs, then the float switch will turn off the compressor, thus preventing flooding.

Fig. 3 Pump Height Position

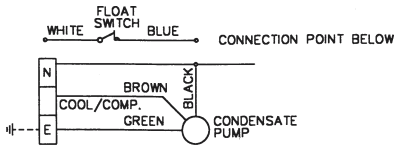
On installation, check dimension 'A' (shown below) prior to fitting the drain tray. Adjust mounting holes if necessary for the dimensions given below.



HWP Model	Dim. A (mm)
33, 41, 49, 78	23.5
95, 120, 140, 175	32.5
210, 235	27.5
300, 360, 440	44.5

Fig. 4 Condensate Lift-Pump Wiring

Note: These diagrams to be read in conjunction with the appropriate HWP unit's wiring diagram.



COMMON ALL UNITS

Diagram shows control section to insert float switch connection points.

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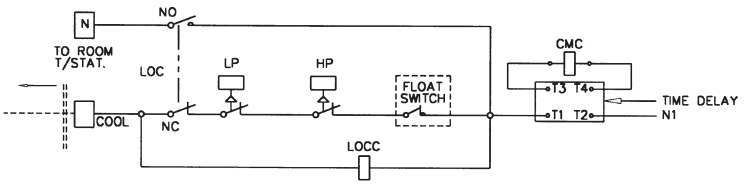
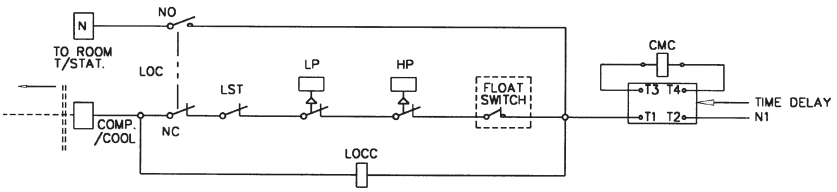
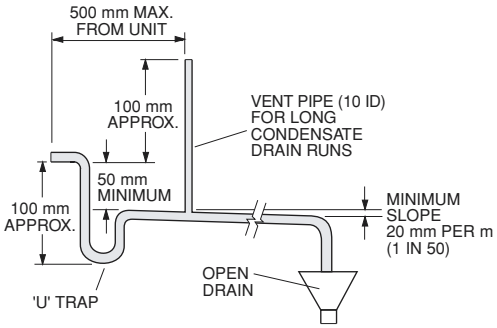


COOLING / ELECTRIC HEAT ONLY UNITS



REVERSE CYCLE UNITS

Fig. 5 Condensate Drain



Note: HWP 33–78 models do not require trapping, but do require the vent pipe.

NOTE

The manufacturer reserves the right to make changes in specifications at any time without notice or obligation.

This pamphlet replaces the previous issue no. 2135 dated 07/02.
Fig.4 Common Wiring colours.