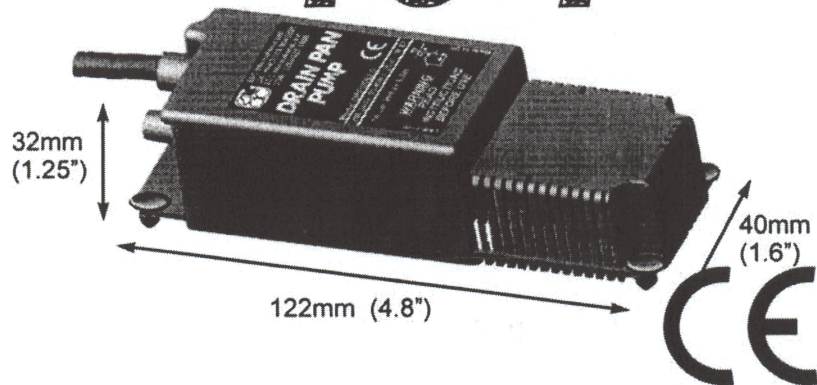


The Drain Pan Pump is a submersible condensate removal pump designed to automatically remove condensate water from refrigerated cases, dehumidifiers, fan coils and air conditioning systems. The pump is intended to be installed within a collection tray inside the equipment. Its electronics are fully encapsulated so is fully protected against temporary submersion during defrost dumps. When mounted in the preferred horizontal position the internal level sensing device is designed to leave minimal water in the tray. Pumping noise is kept minimal by use of four anti vibration mounts. This Drain Pan Pump does not contain a high-level alarm switch. If water spillage can cause damage then a separate high-water-level alarm switch must be fitted to the drain pan.

DRAIN PAN PUMP



SAFETY FIRST

Disconnect ALL power supplies before starting installation or maintenance work.

The pump, interconnecting tubes and cables are to be confined within the equipment away from the user.

The pump must be installed within the confines of the installation.

All wiring and connections are for internal installation only.

There are no user serviceable parts in this pump.

Do not use if the pump or its cable is damaged in any way.

Protect cable and tubing from sharp edges.

WARRANTY

This product is guaranteed for two years to be free from manufacturing defects or faulty materials. If it should fail for either of these reasons within two years from the date of manufacture it will be replaced or repaired free of charge, at the option of EDC International Limited.

EDC International Limited can accept no liability whatsoever for any loss or damage arising from the use of this product, however caused. Before using this product the user should satisfy himself that the product is suitable for use in the intended application, and for the manner in which it is intended that it be used. Note that the warranty on this product is void if it has been blocked by dirt, if any part has been mechanically damaged, or if the supply cable has been cut to less than 0.5-metre long. This product is subject to continuous development and improvement and EDC International Limited reserves the right to alter the specifications or design without prior notice.

EDC International Ltd

24 Horseshoe Park, Pangbourne, Reading,
Berkshire, England
Tel: +44(0)118 9842991. Fax: +44(0)118 9845300

EDC International, Inc.

273 Canal Street, Suite 224, Shelton, CT 06484,
USA
Tel: (203) 9221886. Fax: (203) 9220158

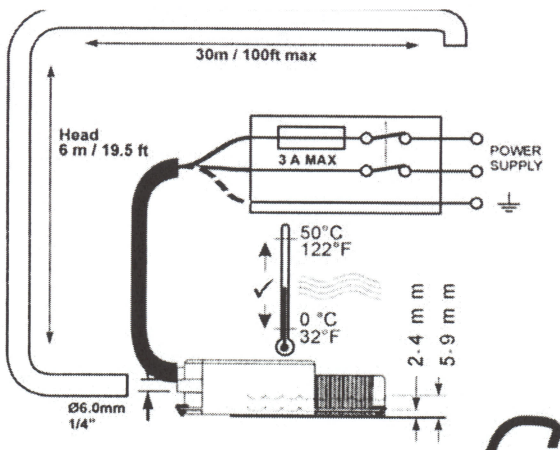


fig 2

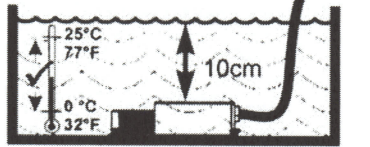


fig 3

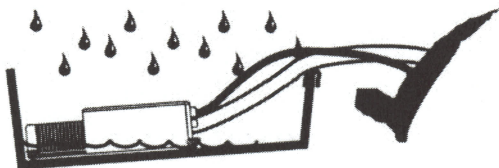


fig 4



fig 5

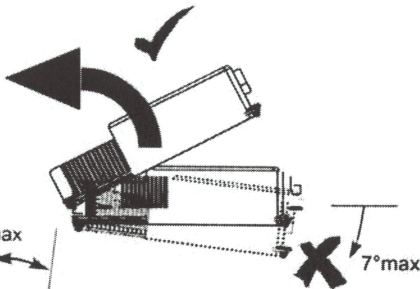


fig 6

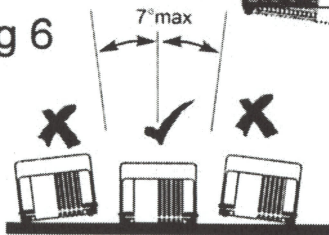


fig 7

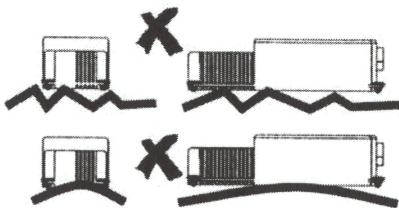
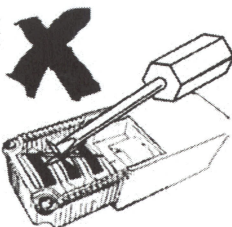


fig 8



Power Supply 208-240V 50/60Hz 30W
 110-120V 50/60Hz 30W
 Protection IP67
 Operating Temperature Air 50°C/122°F
 Water 25°/77°F

Pumping Capacity
 Max 14 Lhr 3.75USgal
 Min (max head+ 30m(100ft) horizontal) 4.5 Lhr 1.2USgal
 Discharge Head 6.0metres/19.5ft
 Max Tube Length 30metres/100ft
 Tubing Size 6.0mm/ 1/4"
 Thermal Protection Fitted. Auto-reset at 50°C 122°F.



Switch On/ Off Level (Horizontal)
 ON 8mm typical, 14mm max
 OFF 2mm typical, 4mm max

CONNECTIONS

EUROPEAN
 BROWN L ~ LIVE PHASE
 BLUE N NEUTRAL
 GREEN/ YEL E ≡ EARTH

USA
 BLACK LIVE PHASE
 WHITE NEUTRAL (PHASE 2 (220V SYSTEM)
 GREEN GROUND CONNECTION

Fuse Required 3A max

INSTALLATION

DISCONNECT ALL POWER SUPPLIES BEFORE INSTALLATION OR SERVICING. READ "SAFETY FIRST"

Position pump in tray with the end of the pump always at the lowest point (fig 3). The pump will vibrate during use, for minimum noise transmission allow the pump to be mounted freely on its feet just away from the collection tray walls. The pump may only be tilted in one direction (fig 5) but this will increase the pumping levels and the water left in the tray.

The pump will fail prematurely if mounted in the twisted position (fig 6).

Lay and secure cable and tubing to prevent pump disruption during use.

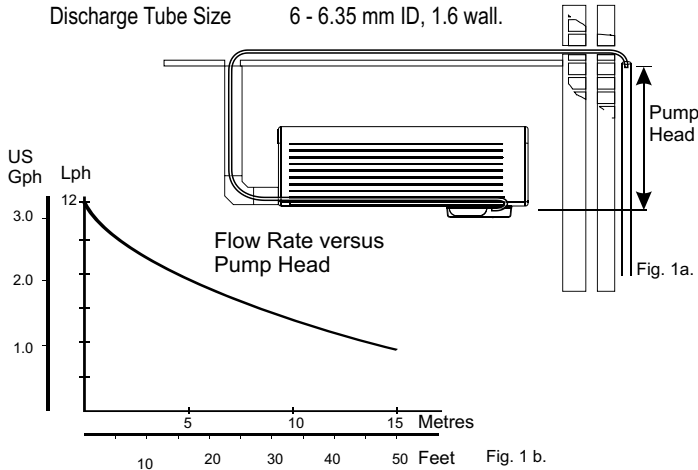
Mount the pump onto a flat base which will not foul the sensing device (fig 7).

Do not touch or clean the sensor device with sharp object or tools (fig 8). If servicing, clean carefully with a soft brush cloth or under a tap.

Condensate Discharge Module

SPECIFICATIONS

Model	LIM.4000.0
Supply Voltage	230 V. 50 Hz. 30 W.
Fuse Required	5 amp max
Relay Switching	250VAC 5AMPS 1250VA.
Contact Isolation	1,500VAC
Thermal Protection	Cut-Out 80°C/ Reset 35 - 65°C
Index Of Protection	IP 30
Ambient Temperature	0°C to 50°C
Max Water Temp	25°C (50°C intermittent)
Max Discharge Head	See Graph
Discharge Tube Size	6 - 6.35 mm ID, 1.6 wall.



ELECTRICAL WIRING

△ REFER TO SAFETY FIRST

Wiring Connections

The installation must comply with all National and Local Regulations for Electrical Safety
 This product must be connected via a 5 Amp fused isolator.
 The Earth/ Ground wire must be connected.

Standard Cable Marking

Wire Colour	Connect - Symbol/Colour
1 GREEN/ YELLOW	EARTH E ≡ GREEN
3 BROWN	LIVE L / ~ RED
4 BLUE	NEUTRAL N BLACK
5 Black	Control Circuit.
6 Black	Control Circuit

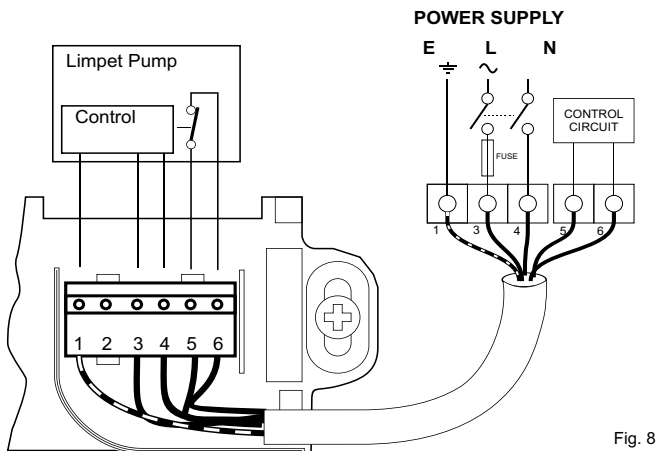


Fig. 8

Alarm Relay

Red Light shows Alarm Condition. Volt Free, Break On Fault connection is rated 5 amps 1250VA. It may be necessary to use a contactor if the air handler supply is to be switched.

Cause for Alarm Condition:-

High water level. Thermal Cut-Out operated. Pump running for excessive periods of time uninterrupted. Power Failure (no light).

Can be wired to:-

Switch Air Handler Off. Switch remote alarm/ indicator. Signal B.M.S. Circuit.

Important!

READ THIS BOOKLET before installation of this product.

△ SAFETY FIRST

Disconnect ALL power supplies before starting installation or maintenance work.

The Limpet Pump is intended to be mounted adjacent to its host equipment as illustrated.

The interconnecting tubes and cables are to be confined within the Air Conditioning unit.

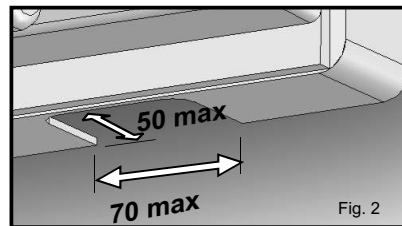
The Condensate Collection Tray is the only removable part and must be refitted before switching on electrical supplies.

The installation of this product is to be carried out by Competent Engineers.

Important

EDC recommends using the relay connections to shut down the air conditioning to limit damage should a fault condition occur.

Retain this booklet as it contains important information for the safe and proper use of this product.



Create Opening and align Bracket as shown.

Fix to flat wall surface.
 Make Electrical Connections.
 See: **Electrical Wiring**

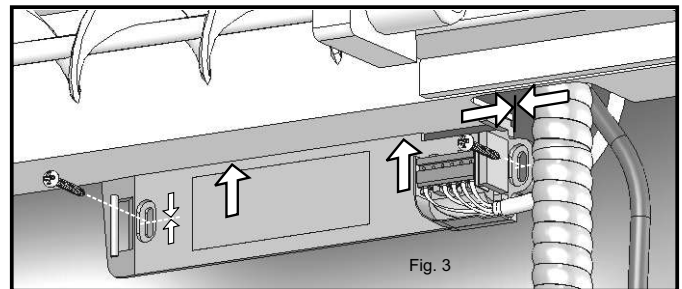


Fig. 3

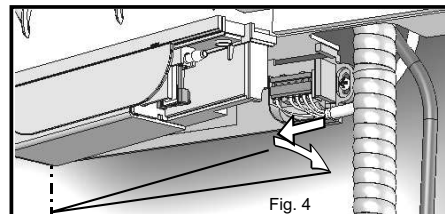


Fig. 4

Clip Pump Module to Bracket.

IMPORTANT!
 Cut Drainhose level with clip on Bracket.

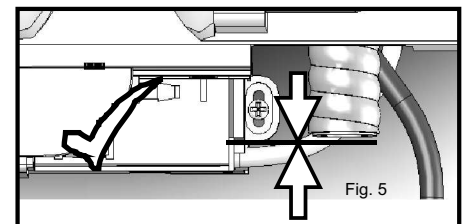


Fig. 5

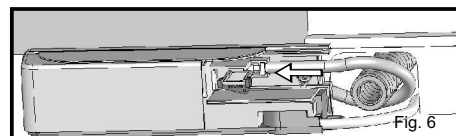


Fig. 6

Arrange Tubes and Cable to avoid interference with tank.

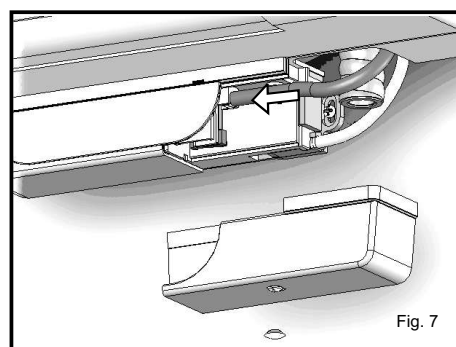


Fig. 7

Fit collection tray and screw into position.

Fit Screw Cap.
 See: **Servicing and Test**

Servicing and Test

1. **Disconnect ALL power supplies before starting installation, or maintenance work.**
2. Remove and retain screw head cap from underside of Pump.
3. While supporting the tray, loosen the captive screw (approx 5 turns) , lower the tray taking care not to spill any of its contents. Fig. 9
4. Remove and rinse the Filter Sponge. Rinse out the tray and shake dry. Refit sponge. Fig. 10-11
5. Clean the sensor pads gently with a soft wet brush. Fig12

If coil cleaning is to be undertaken this is the time to do it. SEE Coil Cleaning

6. Fill Condensate collection tray half full (2cm) with clean tap water.
7. Taking Care not to spill the contents, re fit the tray and secure with the screw.
8. Refit the screw head cover
9. Switch Power Supplies on. The red light should show and the pump will start immediately./ Once the water is removed the light will become green.

Coil Cleaning

Attention! Do not allow the pump to collect or operate with cleaning chemicals in the system.

1. Repeat if necessary 1- 5 above.
2. Collect chemical in a separate container. Fig. 13
3. Follow manufacturers Instructions. Once cleaned flush coil and system through with plenty of clean tap water.
4. Continue with operations 6 - 9 of the service routine.

Trouble Shooting.

No Operation:

Check Limpet Indicator Light

No Light:

Check Electrical Connections, Fuse and Power Supply.

Check Thermal Cut-Out has not operated. Allow to cool down to 40°C.

Red Light:

Check Discharge tube for leaks or blockages.

Check Evaporator Coil is not frosting up, causing excess quantities of defrost water to drain down.

Green Light:

Check Filter. Clean and refit.

Check water path is clear through drain hose.

Check Air Conditioner is Level.

Pump runs noisily or for long periods of time:

Check Discharge tube for leaks or blockages.

Check for signs of siphoning.

Check Filter. Clean and refit.

Check for slime in Collection Tray and on level sensor. Clean as required.

Leaking Water from Limpet Pump:

Check Evaporator Coil is **not** frosting up, causing excess quantities of defrost water to drain down.

Check level mounting

SEE: No Operation- Green Light.

Disconnect Power Supplies!
Tray may contain water

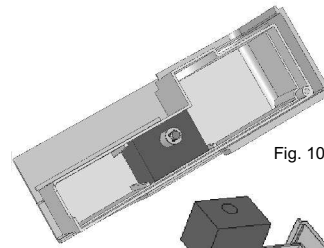


Fig. 10

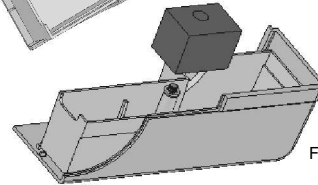


Fig. 11

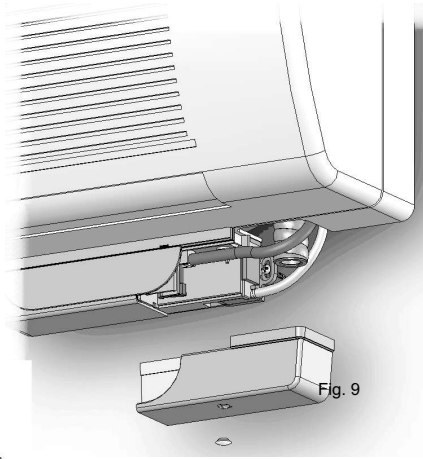


Fig. 9

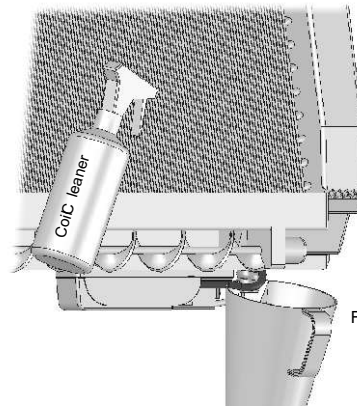


Fig. 13.

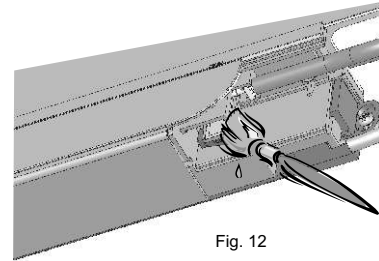
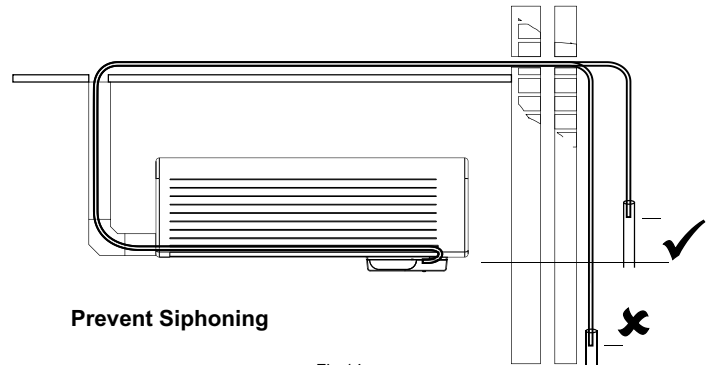


Fig. 12



Prevent Siphoning

Fig.14

Auxiliary Parts:-

ACC.0056.0	Anti- Siphon Valve.
ACC.0059.0	30m Clear PVC Tubing 6mm ID
ACC.0067.0	20mm Fused Terminal Block.
ACC.0068.0	6mm (1/4") Non-Return Valve (ideal for frequent service schedules).
ACC.0069.0	0.5 Litre Wash Bottle (for efficient test and commissioning).
LIM.0071.0	Replacement Filter Element for Collection Tray



EDC International Ltd

24, Horseshoe Park, Pangbourne, Reading. UK. RG8 7JW

Phone: +44 (0)118 9842991

Fax: +44 (0) 118 9845300

EDC International, Inc
273, Canal Street, Suite 224
Shelton, CT6484 U.S.A.
Phone:(203)922 1886
Fax: (203)922 0158

EDC Technologies Asia Pte Ltd
21004 Toa Payoh North #06-08,
Singapore 318995
Phone:+65 252 8030
Fax: +65 252 3682

www.edcinternational.com

WARRANTY

This product is guaranteed for two years to be free from manufacturing defects or faulty materials. If it should fail for either of these reasons within two years from the date of manufacture it will be replaced or repaired free of charge, at the option of EDC International Limited.

EDC International Limited can accept no liability whatsoever for any loss or damage arising from the use of this product, however caused. Before using this product the user should satisfy himself that the product is suitable for use in the intended application, and for the manner in which it is intended that it be used.

This product is subject to continuous development and improvement and EDC International Limited reserves the right to alter the specifications or design without prior notice.