



Condensate Pump

Installation and
Safety Instructions



CP-22
CP-22-230
CP-22LP
CP-22LP-230

**CP-22
CP-22LP
CP-22T
CP-22LPT**

**CP-22-230
CP-22LP-230
CP-22T-230
CP-22LPT-230**

Rated Voltage

120 Volts / 60 Hz

220 Volts / 60 Hz
(208-230)

Rated Current Draw

1.9 Amps

1.0 Amps

Input Type

USA 3-prong plug

NEMA 6-15 plug

Head Height

22 ft. maximum

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Flow Rate at Zero Head

1.6 GPM

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Temperature Rating

- Continuous duty 140F°
- Max inlet temperature 160F°
- Not suitable for contact with steam or gases that exceed 160F°

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Product Dimensions (LxWxH)

11.8" x 5.9" x 6.7"
(4.9"H low profile)

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(4.9"H low profile)

Product Weight

5 lbs.
(4.7 lbs. low profile)

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Inlet Height from Base

4.4" (1.75" low profile)

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Included Accessories

- Instruction Sheet
- Zing plated Steel Hang Tabs
- Plug Protector
- 4' Remote Shutoff Leads with Insulated Terminals
- Polyethylene Inlet Covers (3)

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Wiring Color References

Black - Live/Hot
White - Neutral
Green - Ground

Brown - Live/Hot
Blue - Neutral
Green/Yellow - Ground

All installations must conform to NEC requirements

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Limited Warranty

All pumps manufactured by or for DiversiTech Corporation (the Company) and sold by the Company under the DiversiTech brand are warranted to be free of defects in workmanship and materials for a period of 24 months from date of sale from the distributor to the contractor. The Company will credit, repair or replace, at its option, any Pump if deemed defective within this time period. All products returned to the Company must include a return authorization issued by the Company. The returned product should be suitably packaged and shipped prepaid from the point of shipment to the point designated in the Company's return authorization.

This warranty is a limited warranty and shall be in lieu of any other warranties, expressed or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. There are no other warranties that extend beyond the description of the face hereof. The liability of the Company arising out of its supply of said products, or their use shall not in any case exceed the cost of correcting defects in the products as set forth above. The Company shall not be liable for any costs or damage incurred by its customers in the removal or replacement of defective products from units in which the products have been assembled. In no event shall the company be liable for loss of profits, indirect, consequential, or incidental damages.

SAFETY WARNING

FOLLOW ALL SAFETY INFORMATION TO REDUCE POTENTIAL ELECTRICAL SHOCK.
DISCONNECT POWER BEFORE SERVICING UNIT. PUMP MUST BE PROPERLY GROUNDED.

NEVER USE THE PUMP TO MOVE FLAMMABLE LIQUIDS.

NEVER USE THE PUMP IN AN EXPLOSIVE GAS ENVIRONMENT,
OR WHERE GAS FUMES OR VAPOR MAY BE PRESENT.

ALWAYS DISCONNECT THE POWER PRIOR TO MOVING,
ADJUSTING OR SERVICING THE PUMP OR ATTACHED SYSTEMS.

General Information

Thank you for the purchase of this DiversiTech condensate pump. This pump is designed to automatically remove the condensate water that collects from appliances such as air conditioners, high-efficiency furnaces and de-humidifiers.

The pump has a built-in tank that collects the water from the appliance. When the water collected reaches sufficient level inside the pump tank, the pump switches on and pumps the water to a remote location for disposal. When the tank is sufficiently empty the pump automatically switches off.

The pump is capable of lifting water to its rated height and is equipped with a check valve that prevents water from flowing back into the tank when the pump shuts off.

The pump is outfitted with lights that show the status of power available, motor running and high water (alarm) conditions.

The pump is also equipped with a switch that activates when the water in the tank reaches an overflow condition. The overflow safety switch may be connected to turn off the appliance if the high water condition occurs.

Pump should be stored indoors.
The chosen location should be clean and dry.



Unpacking

Carefully open the carton to avoid damage to the pump. Do not use a knife or other sharp object that may scratch the pump's cover. After opening the carton, look for damage. If damage is found file a claim with the freight carrier.

CAUTION: Be sure to remove the cardboard insert. It is used to protect the float during shipment. Failure to remove the insert will cause the pump to run continuously (only in LP model pumps).

Power Source

Supply voltage and frequency must match what is shown on the pump nameplate. Source voltages lower than the rated supply can reduce performance and cause the pump to overheat.

Pump Installation

The pump must be level and should be placed on a solid surface or floor. The pump has rubber feet to reduce noise and keep it in place during operation.

Do not use this pump in the presence of spraying or standing water, it may cause a shock. This pump is not suitable for use in Class I or Class II locations (explosive gas or dust).

Do not cover the pump air vents. The pump is air cooled. Do not cover the vent holes located on the top or sides of the pump housing. The pump may be operated continuously as long as the air vents are not covered.

Mounting

The condensate pump is equipped with metal mounting tabs which allow the tank to be screwed to a wall or equipment side panel. The screw-to-screw distance is 8". When mounting into drywall or concrete walls the screws must have anchors which provide the necessary support in the wall material.

The pump top is reversible. It may be turned around to allow easy access to the pump outlet or power connection as may be required by the particular installation.

Inlets

4 inlet holes are located in the top deck of the pump. Flexible vinyl tubing or PVC may be connected to any of the pump inlets. Pop out covers are provided to cover unused inlets. Be sure to cover the unused holes to prevent the pump from collecting debris or insects.

Tubing installed into the inlet holes must be straight. The tubing must not bend inward where it will interfere with the pump or float mechanism.

When using rigid tubing such as PVC, be sure to cut the end at an angle. This will allow the condensate water to drain freely and keep the tubing end from being blocked by the tank bottom.

It may be desirable to use a "P" or "U" trap between the AC unit and the condensate pump to provide a liquid barrier to air flow from the air conditioner. These types of "traps" always contain some water which blocks the flow of air from the AC unit which is wasteful and can cause other problems such as accelerated algae growth.

Outlets and Tubing Connections

The pump is equipped with a combination barb-type fitting and check valve. The fitting allows the connection of 3/8" flexible vinyl tubing such as DiversiTech "CVT" clear vinyl. Attach the tubing by pressing it over the barb fitting and secure with a screw type hose clamp.

Route the tubing up and away from the pump; avoid compressing or kinking the tubing. The tube route should be the shortest possible distance from the pump to the building exterior or other drain location. For best results the distance that the water must go UP should be shorter than the distance that it goes DOWN. With the longer DOWN tubing, the length will help siphon the condensate from the tank, speeding the pump out time.

Pump Electrical Connections

Connect the pump power to a properly grounded outlet capable of providing power that exceeds the requirements listed on the pump nameplate. Avoid the use of extension cords wherever possible. The pump must be operated by a continuous source of power and must not be connected to switched outlets or other power supplies that may be inadvertently or automatically turned off.

All aspects of the installation must conform to requirements of the NEC, and any applicable local codes.

Safety Switch

The pump safety switch should be used on 24V Class II control circuits only. The pump safety switch connections are available on standard ¼" quick connect terminals located on the top cover.

Two wires with pre-crimped connectors may be plugged onto the COMMON and RUN terminals and wired into the 24 Volt thermostat circuit to shut off A/C systems should an overflow condition occur. The Safety Switch operates with or without power provided to the pump.



Pump Operation

Apply power by plugging in the pump. Check for green LED indication the power is available. Test float and safety switch by manually filling the tank or manually operating the float. (see disassembly below)

Test Safety Switch operation (if used) to be sure that the A/C system shuts down and the red ALARM LED lights when the pump has reached an overflow condition.

Leak Check: Operate the pump by filling tank to trigger operation. Pump RUN will be indicated by the yellow RUN LED.

Homeowner Instruction: Instruct the homeowner about the pump's general operation and to look for the ALARM LED if they think that there is system trouble.

Pump Maintenance and Disassembly

Always disconnect power before performing maintenance. Pump and deck may be removed from the tank by pushing tabs located on the tank sides away from the deck while lifting on the pump cover.

Periodically inspect the Pump tank to assure it is free of accumulated dirt or sludge. Do not use solvent cleaners. Clean Tank with soap and warm water only. The check valve may be removed for cleaning or replacement by unscrewing with a 9/16 wrench. (illustration)

Clean inlet and outlet piping. Tubing may be cleared of slime or debris instantly with a Wagner brand Gallo Gun tool and Swoosh cartridges.

Reassemble system and check for correct operation.

