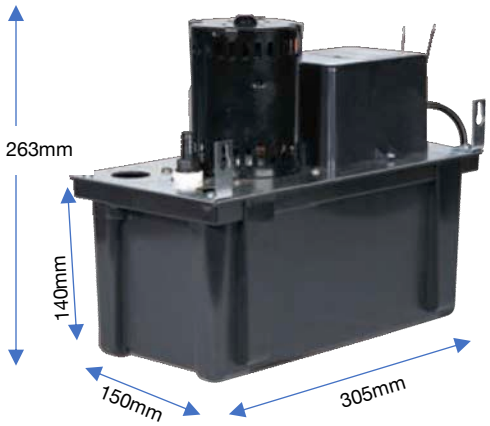
VCL-24S ‘Gravity Fed’ Condensate Pump

For removal of condensate from air conditioners, condensing boilers, refrigerated display cabinets, and dehumidifiers

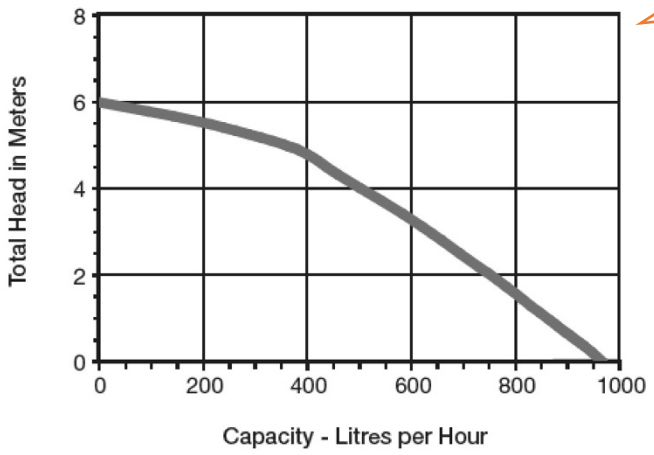
- Fully automatic: start, stop, safety switch
- Operating point: 4 m: 480 l/h
- Check valve outlet: 9.5 mm, for 10 mm I.D. tubing
- 3.8 litre tank capacity
- Thermally protected motor
- IP 20
- Large reservoir and high capacity output for large scale applications
- 1/15 HP motor
- Galvanized steel tank cover
- ABS tank, volute and switch cover
- Stainless steel shaft
- Snap-action switch
- Use ONLY 10mm I.D. reinforced or Thick Wall Tube
- A Check Valve is already screwed in.. so no siphoning back
- Height: 263mm Length: 305mm Width: 150mm



Capacity:	900 LPH @ Zero Lift
Shut Off:	5.9m
Liquid Temp:	50°C
Discharge:	10mm
Electrical:	230V, 50Hz, 1 amps, 150 watts
Operation:	Automatic
MODEL	**553137**

MADE TOUGH FOR OUR HUMID CONDITIONS
4 LITRE PAN

Performance Curve VCL-24S 230V, 50Hz 553137



THESE LITTLE GIANT ‘PAN’ PUMPS HAVE AN ENVIABLE REPUTATION…
“THEY WILL LAST FOR YEARS”

Little GIANT

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Model • Modèle • Modelo

VCL-14ULS
VCL-24UL
VCL-24ULS
VCL-24S

EN INTRODUCTION

Your Little Giant condensate pump is designed as an automatic condensate removal pump for water dripping off an air conditioner evaporative coil. The pump is controlled by a float/switch mechanism which turns the pump on when approximately 3-1/2" of water collects in the tank, and automatically switches off when the tank drains to approximately 2".

Read these instructions carefully. Failure to follow these instructions voids all warranty, and could result in bodily harm or property damage. All wiring and plumbing must be permanent, and comply with local codes. Shut off electrical power at the fuse box before servicing the pump.

The 1978 National Electrical Code, Article 680-14(a) requires ground fault circuit interrupter (GFCI) be installed in the branch circuit supplying fountain equipment, ponds, etc. See your local electrical supply dealer for various brands of GFCI devices.

SAFETY GUIDELINES

⚠WARNING⚠

Do not use to pump flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc. Do not use in explosive atmospheres. Pump should be used with liquids compatible with pump component materials. Do not handle the pump with wet hands or when standing on a 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 properly grounded grounding type receptacle. In any installations where property damage and/or personal injury might result from an inoperative or leaking pump due to power outages, 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.

INSTALLATION

1. Before installing pump, allow air conditioner to cycle several times, collecting condensate in a separate container to help flush any residual oils that may remain in the system.
2. Carefully unpack the pump. Remove the cover assembly from the tank and remove all packing from around floats. Check each float assembly for free movement. Place cover assembly on tank.
3. Mount the pump. There are two vertical mounting surfaces (Fig. 1) on one side of the tank to mount on side of air conditioning unit, or nearby wall. Mounting holes can be drilled in this surface, but should not exceed one inch from the top of the tank to prevent possible spillage of water.

ELECTRICAL CONNECTIONS

⚠WARNING⚠

1. Shut off electrical power at fuse box before making any connections. All wiring must comply with local codes.
2. Line voltage-connect the power cord to line voltage specified on motor and nameplate. Power cord must be connected to a constant source of power (not a fan or other device that runs intermittently). If power cord does not have a plug, wiring is as follows: green (or green/yellow)–ground. Black (or brown)–line. White (or blue).
3. Safety Switch-the safety overflow switch should be connected to a Class II low voltage circuit. Typical hook-up of 'NC' circuits would be: N.O. When water rises, circuit opens to turn off heating or cooling equipment. N.C. When water rises, circuit closes to activate a bell or alarm.
4. If fused type plug is used on 230v units, a 3.0 amp fuse is recommended.

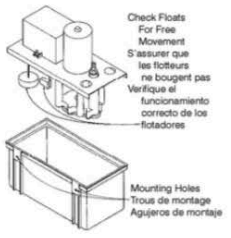

Fig. 1

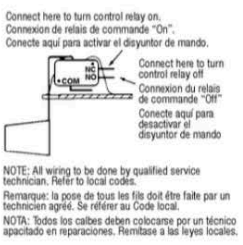

Fig. 2

PIPING

1. Run flexible tubing or pipe from evaporator drain into pump inlet. Be sure inlet piping is sloped downward to allow gravity flow (Fig 3).
2. The outlet piping should be flexible tubing or pipe (3/8" I.D. maximum to prevent excessive flow back to unit). From condensate unit, extend discharge piping straight up as high as necessary. Do not extend this line above the head/GPH of the particular model being installed. From this high point, slope discharge line down slightly to a point above drain area; then turn down and extend to a point below or approximately level with the bottom of the condensate unit. This will give a siphoning effect which will improve efficiency of the condensate unit and will, in most cases, eliminate the need for a check valve. If it is not possible to slope discharge line down, make an inverted "U" trap directly above the pump at the highest point.

SERVICE INSTRUCTIONS

⚠WARNING⚠

1. Disconnect the pump from the power source.
2. Oil the motor (Fig. 4) at the start of each air conditioning season. Use SAE number 10 or 20 non-detergent oil. Do not over oil.
3. Be sure the floats move freely. Clean as necessary.
4. Remove the volute and check for obstructions. Clean as necessary.
5. Clean the tank with warm water and mild soap.
6. Check inlet and outlet piping. Clean as necessary. Be sure there are no kinks in the line that would inhibit flow.

TESTING

1. Turn on power.
2. Remove motor/tank cover assembly and hold level.
3. Test motor switch by raising motor switch float with finger (Figure 5). Motor should turn on just before circlip on stem contacts stem guide.
4. Test safety switch by raising safety switch float with finger. Safety switch should activate before float contacts cover.
5. Replace motor/tank cover assembly on tank.

This pump is suitable for gas furnace condensate applications. Use caution to ensure acidity of condensate does not fall below the average pH of 3.4 (to prevent localized pocket of acid that acts like a battery causing pitting) by routinely cleaning or flushing tank with fresh water.

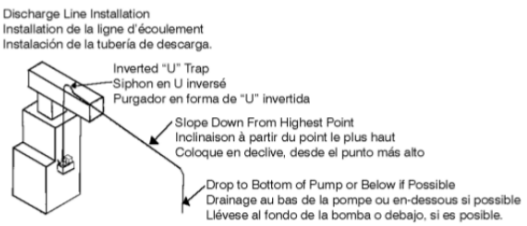

Fig. 3

ITEM	PART NO.	DESCRIPTION	553201 VCL-24ULS	553101 VCL-14ULS	553216 VCL-24ULS	553206 VCL-24UL	553211 VCL-24ULS	553137 VCL-24S
1	153120	Cover, switch	1	1	1	1	1	1
2	154713	Safety switch assy.	1	1	1	--	1	--
2	154721	Safety switch assy.	--	--	--	--	--	1
3	951992	Lead wire assy.	1	1	1	--	1	1
4	153300	Adaptor, tubing	1	1	1	1	1	--
4	154708	Check valve, 1/4" hose	--	--	--	--	--	1
4	154715	Check valve, 3/8" hose	--	--	--	--	--	1
5	924018	O-ring	1	1	1	1	1	1
6	902434	Screw	10	10	10	10	10	10
7	153220	Cover, tank	1	1	1	1	1	1
8	153100	Volute/stand	1	1	1	1	1	1
9	153131	Impeller	1	--	1	1	1	1
9	153132	Impeller	--	1	--	--	--	--
10	924038	O-ring	1	1	1	1	1	1
11	153110	Cover, volute	1	1	1	1	1	1
12	153502	Tank	1	1	1	1	1	1
13	901424	Screw	2	2	2	2	2	2
14	921059	Washer, lock	2	2	2	2	2	2
15	153537	Switch, float assy.	1	1	1	1	1	--
15	153546	Switch, float assy.	--	--	--	--	--	1
16	153210	Bracket, strain relief	1	1	1	1	1	1
17	921001	Washer, lock	2	2	2	2	2	2
18	950897	Strain relief	1	1	1	--	1	1
18	950997	Strain relief	1	1	1	1	1	--
19	902421	Screw	1	1	1	1	1	1
20	902436	Screw	10	10	10	9	10	10

Table 1

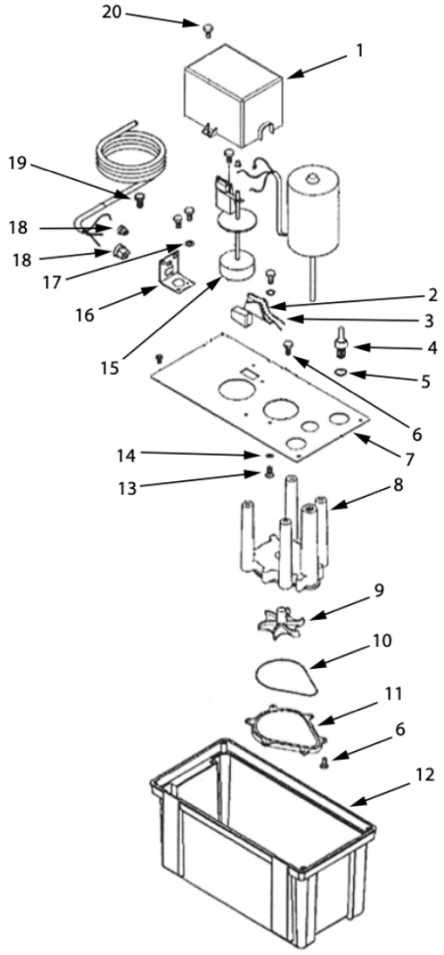

Fig. 6