Intake & Discharge Definitions for Condensate Removable Pumps

INTAKE CONNECTION STYLE

The connection style of the intake port where the condensate enters the pump.

Open—Has an open port into the tank where tubing can be inserted, but no additional seal or gripping mechanism holds the tubing.

Barbed—Is a port with raised ridges, or barbs, that grips the tubing and holds it in place.

Screened Submersible—For in-pan pumps that are submersed in a pan that collects condensate through a screened area in the bottom of the pump. The screen prevents debris from entering the pump.

DISCHARGE CONNECTION STYLE

The connection style of the discharge port where the fluid exits the pump.

Barbed—A port with raised ridges, or barbs, that grips the tubing and holds it in place.

MNPT—US standard for Male National Pipe Taper threads that identifies the connection as a tapered external thread that forms a seal when tightened.

FNPT—US standard for Female National Pipe Taper threads that identifies the connection as a tapered internal thread that forms a seal when tightened.

Condensate Removal Pumps

Little GIANT HARTELL an Accudyne Industries brand

Pumps evacuate liquid formed by condensation from the heating or cooling system when gravity drainage is not possible. Furnaces, air conditioners, and boilers are often installed in a location lower than the drainage system, such as a basement. The pump performance is based on the amount of liquid, in gallons per minute (gpm), that the pump can lift in vertical feet from the liquid sitting in the tank (feet of head).

Standard pumps have a built-in tank to collect the condensate. The pump's tank capacity varies in the amount of condensate (gallons) the tank can hold.

Plenum-rated pumps meet building codes that require all cables installed in an air-filled space, or plenum, to have fire and smoke inhibiting qualities. Plenum-rated cable has an outer jacket that prevents the spread of flame and limits the release of harmful smoke. They are required in buildings such as hospitals, offices, and schools that use the ceiling cavity to supply, return, and exhaust air from the occupied area.

In-pan pumps are designed to sit in a drainage pan and pump out collected condensate. They do not have a built-in tank. These pumps are partially submersible and have a mechanical float switch that starts and stops the pump depending on the condensate level in the pan.

Mini-split pumps are designed to collect condensate generated by wall-mounted air conditioners. These compact pumps have a small reservoir and tubing that fit inside the air conditioner housing. A mechanical float switch triggers the pump to activate and empty the reservoir outside of the building.

Check valves automatically close so that the flow of condensate can only go one way, preventing backflow into the pump's tank. They mount to the discharge outlet of a condensate removal pump and connect to a drainage tube.

In-line & In-pan switches protect condensate systems from overflow by shutting down the equipment when a blockage is detected. They are installed in-line at the drain pan outlet. These switches can be used in combination with a condensate removal pump, or independently. 3XY17 has 6-ft. leads and 18 AWG wire. 4NY29 has 6-ft. leads and 24 AWG wire.

Standard
2P350

Plenum Rated
48PX18

In-Pan
2GZG4

Min-Split
787YX6

Check Valve
4RL38

In-Line Switch
4NY29

Horsepower	Nameplate Voltage	Amps	Maximum Flow Rate @ 10 Feet of Head	Maximum Flow Rate @ 15 Feet of Head	Maximum Flow Rate @ 20 Feet of Head	Maximum Feet of Head	Intake Connection	Discharge Connection	Overall Height	Overall Width	Overall Length	Brand	Mfr. Model	Item No.
Standard Condensate Removal Pumps														
½ gal Tank Capacity														
1/50 hp	115V AC	1 A	0.4 gpm	0 gpm	—	15 ft	1 ⅛ in Open	⅜ in Barbed	7"	5"	11"	Little Giant	554914	**2P350**
1/30 hp	115V AC	1.5 A	0.9 gpm	0.5 gpm	0 gpm	21 ft	1 ⅛ in Open	⅜ in Barbed	6.5"	4.8"	10.2"	Little Giant	554550	**3EUD7**
1/30 hp	115V AC	1.5 A	1 gpm	0.7 gpm	0.2 gpm	21 ft	1 ⅛ in Open	⅜ in Barbed	6.5"	4.8"	10.2"	Little Giant	554530	**3EUD4**
1/30 hp	115V AC	1.5 A	1 gpm	0.7 gpm	0.2 gpm	21 ft	1 ⅛ in Open	⅜ in Barbed	6.8"	5.1"	10.3"	Little Giant	554542	**3EUD6**
1/30 hp	230V AC	0.5 A	0.8 gpm	0.4 gpm	—	17 ft	1 ⅛ in Open	⅜ in Barbed	7"	5"	11"	Little Giant	554445	**4RL07**
1/30 hp	230V AC	0.6 A	0.9 gpm	0.5 gpm	—	19 ft	1 ⅛ in Open	⅜ in Barbed	6.5"	4.8"	10.2"	Little Giant	554531	**3EUD5**
⅓ hp	115V AC	1.5 A	0.8 gpm	0.4 gpm	0 gpm	20 ft	1 ⅛ in Open	⅜ in Barbed	7"	5"	11"	Little Giant	554425	**2P351**
1 gal Tank Capacity														
1/50 hp	115V AC	1 A	2.1 gpm	2.1 gpm	—	14 ft	1 ⅛ in Open	⅜ in Barbed	9.46"	6"	12.1"	Little Giant	553101	**3P731**
1/18 hp	115V AC	2.5 A	3.3 gpm	2.5 gpm	1.7 gpm	24 ft	1 ⅛ in Open	⅜ in Barbed	10.4"	6"	12.11"	Little Giant	553201	**3P732**
1/18 hp	230V AC	1.2 A	3.5 gpm	2.9 gpm	1.7 gpm	24 ft	1 ⅛ in Open	⅜ in Barbed	10.4"	6"	12.11"	Little Giant	553211	**4RL05**
⅛ hp	230V AC	0.8 A	6.9 gpm	6.3 gpm	—	45 ft	1 ⅛ in Open	⅜ in Barbed	10.5"	6"	12"	Little Giant	553240	**2P096**
⅛ hp	230V AC	1 A	6.9 gpm	6.3 gpm	5.5 gpm	45 ft	1 ⅛ in Open	⅜ in Barbed	10.85"	6"	12.11"	Little Giant	553245	**4RL06**
Plenum Rated Condensate Removal Pumps														
¼ gal Tank Capacity														
1/30 hp	115V AC	1.4 A	0.7 gpm	0.4 gpm	—	18 ft	1 ¾ in Barbed	⅜ in Barbed	4.75"	5.5"	10"	Hartell	KL-1DG-115	**48PX21**
1/30 hp	230V AC	0.55 A	0.7 gpm	0.4 gpm	—	18 ft	1 ¾ in Barbed	⅜ in Barbed	4.75"	5.5"	10"	Hartell	KL-1DG-230	**48PX22**
1/30 hp	277V AC	0.53 A	0.7 gpm	0.4 gpm	—	18 ft	1 ¾ in Barbed	⅜ in Barbed	4.75"	5.5"	10"	Hartell	KL-1DG-277	**48PX23**
1 gal Tank Capacity														
1/10 hp	115/230V AC	1.7/3.5 A	2.7 gpm	1.9 gpm	0 gpm	20 ft	1 ¼ in Open	⅜ in FNPT	10"	6"	9"	Hartell	A2X-1965	**48PX14**
1/10 hp	115V AC	3.1 A	5.4 gpm	4.7 gpm	3.8 gpm	30 ft	¾ in Barbed	⅜ in Barbed	10.5"	6"	12"	Hartell	A3X-115	**48PX15**
½ hp	115V AC	6 A	8.9 gpm	8.5 gpm	8.1 gpm	60 ft	¾ in Barbed	½ in Barbed	10.5"	6"	12"	Hartell	A5X-115	**48PX18**
½ hp	208-230V AC	1.1 A	5.4 gpm	4.7 gpm	3.8 gpm	30 ft	¾ in Barbed	½ in Barbed	10.5"	6"	12"	Hartell	A3X-230	**48PX16**
½ hp	208-230V AC	3.3 A	8.9 gpm	8.5 gpm	8.1 gpm	60 ft	¾ in Barbed	½ in Barbed	10.5"	6"	12"	Hartell	A5X-230	**48PX19**
½ hp	277V AC	1 A	5.4 gpm	4.7 gpm	3.8 gpm	30 ft	¾ in Barbed	½ in Barbed	10.5"	6"	12"	Hartell	A3X-277	**48PX17**
½ hp	380/460V AC	1.1 A	8.9 gpm	8.5 gpm	8.1 gpm	60 ft	¾ in Barbed	½ in Barbed	10.5"	6"	12"	Hartell	A5X-460	**48PX20**
In-Pan Condensate Removal Pumps														
0 gal Tank Capacity														
1/150 hp	115V AC	1.1 A	0 gpm	0 gpm	—	10 ft	Screened Submersible	¼ in MNPT	4.31"	3.75"	7.44"	Little Giant	550521	**2GZG4**
1/150 hp	230V AC	0.6 A	0 gpm	—	—	10 ft	Screened Submersible	¼ in Barbed	4.38"	6.13"	3.38"	Little Giant	550532	**61DT03**
1 gal Tank Capacity														
1/12 hp	115V AC	3.5 A	4.2 gpm	3.3 gpm	1.9 gpm	26 ft	Screened Submersible	½ in MNPT	6.5"	6"	12.03"	Little Giant	551320	**2GZG2**
Mini-Split Condensate Removal Pumps														
Tank Capacity														
—	100/230V AC	0.014 A	2.4 gph	2.1 gph	0 gph	20 ft	¼ in Barbed	¼ in Barbed	2.52"	10.43"	6.88"	Hartell	HAR-8	**787YX6**
—	100/230V AC	0.014 A	4.2 gph	3.7 gph	0 gph	20 ft	¼ in Barbed	¼ in Barbed	2.52"	10.43"	6.88"	Hartell	HAR-15	**787YX7**
1/100 gal Tank Capacity														
1/50 hp	110/240V AC	0.18 A	1.5 gph	1.1 gph	1.1 gph	33 ft	3/16 in Open	¼ in Barbed	2.4"	1.8"	4.1"	Little Giant	553507	**787VM0**

Mfr. Model	Compatible with Series	Compatible Inside Diameter (ID)	Compatible Outside Diameter (OD)	Connec. Type	Compatible with Brand	Body Material	Brand	Item No.
Check Valves for Condensate Removal Pumps								
599061	1-ABS	¼ in	¼ in	MNPT	Little Giant	Nylon	Little Giant	**4RL37**
599064	VCL-45ULS	⅜ in	⅜ in	Compression	Little Giant	Brass	Little Giant	**4RL38**
599069	VCC, VCL 14/24, VCMA	¼ in	⅜ in	MNPT	Little Giant	Nylon	Little Giant	**4RL39**

Mfr. Model	Compatible with Series	Compatible with Alarm Type	Brand	Item No.
In-line Switches for Condensate				
599125	ACS-4	Audio, Visual	Little Giant	**4NY29**
In-Pan Switches for Condensate				
599930	ACS-3	Audio, Visual	Little Giant	**3XY17**