Chillers & Titanium Heat Exchangers

Aqua Logic Commercial Split *Mult-Temp*® Series Water Heat Pumps 7.5 & 10 Ton



7.5 &10 Ton Outdoor unit



7.5 & 10 Ton Indoor Heat Exchnger

Aqua Logic, Inc.
2806 Gray Fox Rd. Monroe, NC 28110
www.AquaLogicInc.com Ph: 704.744.1391

aquaLOGIC
Aquatic Design
Manufacturing & Integration

7.5 & 10 Tons
HP-Split Series

Heat Pump for saltwater and chlorine treated pools

Standard Features

- U.L. Listed, and EPA Compliant, R-454b Low GWP eco-friendly refrigeration complies with latest codes.
- Single refrigeration circuit with separate and independent thermostat controls and safeties
- Air cooled, high ambient, vertical discharge, condensers for 125°F ambient
- Suitable for outdoor installation
- Weather proof electrical panel with single point power connection to distribution block
- Outdoor condensing unit with indoor heat exchanger package (requires a line set to be provided and installed by a refrigeration contractor to connect the two units together).
- 24 vac control circuit with component sequenced terminal strip for easy troubleshooting
- Single stage of compressor control with digital temperature controller
- Titanium tube / PVC heat exchanger for saltwater and chlorine pools.
- Stainless steel externally equalized thermal expansion valve with filter drier and sight glass
- DXVHP Heat exchanger is constructed from sch 40 PVC with 2" NPS water in/outlet connections.
- Water flow safety switch locks out compressors on low flow to evaporator
- 304 Stainless steel heat exchanger stand.
- Factory charged with nitrogen for shipping.
- Warranty: One (1) years limited parts, five (5) years limited compressor warranty

Options & Accessories

- Low ambient fan control for operation down to 0°F.
- 316 Stainless steel stand and heat exchanger hardware.

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General Data

HP-6, 7.5 tons and HP-9, 10-ton Condensing units

			7.5 Tons	10 Tons
			Single Compressor	**Dual Manifolded Compressor**
Cooling Performance - Gross Cooling Capacity				
Matched Water Evaporator			HX-65-DXVHP	HX-121-DXVHP
Rated Water Flow Range (GPM)			60-80	60-80
Gross Cooling/Heating Capacity - BTUH			99,000	129,000
Net Cooling/Heating Capacity BTUH			97,000	125,000
Efficiency				
Matched Water Evaporator (EER)			11.5	11.5
System (IEER)			14.8	14.8
System kW			8.3	10.3
Compressor				
Type[a]			Scroll 2S	Manifolded Scrolls 1S
No./Tons/Min Stage%/Total Stages			1 / 6.9/ 67[c] / 2	2 / 4.3 / 50[d] / 2
System Data				
No. Refrigerant Circuits[d]			1	1
Suction Line Connection (in.) OD[d]			1 3/8	1 3/8
Liquid Line Connection (in.) OD[d]			1/2	1/2
Outdoor Coil				
Type			MCHE	MCHE
Tube Size OD/Coil Width MCHE (in.)			0.8	0.8
Face Area (sq ft)			18.5	23.8
Rows/FPI (Fins per inch)			1/23	1/23
Outdoor Fan				
Type			Propeller	Propeller
No. Used/Diameter (in.)			1/26	1/28
Drive Type/No. Speeds			Direct/1	Direct/1
CFM			5,700	8,800
No. Motor/HP			1/0.5	1/1
Motor RPM			1,100	1,125
Refrigerant Charge (Field Supplied)				
lbs of R-454B			8.7	11.1
Shipping Dimensions				
HxWxD (in.)			45” x 45.25” x 39”	45” x 55” x 42”

Notes:

1. All condensing units are tested in accordance with AHRI Standard 365.
2. 7.5-10 ton units are AHRI Certified to AHRI Standard 340-360 (I-P). Rating conditions are 95°F outdoor air temperature, 80°F entering dry bulb, 67°F entering wet bulb with 25ft of interconnecting refrigerant piping with minimum external static. pressure as determined by rating standard.

[a] 1-stage compressor = 1S, 2-stage compressor = 2S.
[b] 1st stage is compressor 1. 2nd stage is compressor 1 and 2.
[c] All compressors stage to 66% for first stage, then 100% for second stage.
[d] For line lengths greater than 25ft, refer to refrigerant piping applications manual for line sizing and line length.

Electrical Data

Cooling Condenser

Electrical characteristics — compressor and condenser fan motors — 60 Hz

Tons	Unit Model Number	Compressor Motors						Condenser Fan Motor				
		Volts	Phase	Compressor 1 Amps		Compressor 2 Amps		No.	Volts	Phase	Amps	
				RLA	LRA	RLA	LRA				FLA (Ea.)	LRA (Ea.)
7.5	HP-6-SPLIT	208-230	3	27.1	179	N/A	N/A	1	208-230	3	2.3	8.4
	HP-6-460-SPLIT	460	3	11.3	95	N/A	N/A	1	460	3	1.1	4.2
10	HP-7-SPLIT	208-230	3	16.5	156	16.5	156	1	208-230	3	4.3	19.4
	HP-7-460-SPLT	460	3	8.1	69	8.1	69	1	460	3	2.2	10.1

Note: Electrical characteristics reflect nameplate values and are calculated in accordance with cULus specifications.

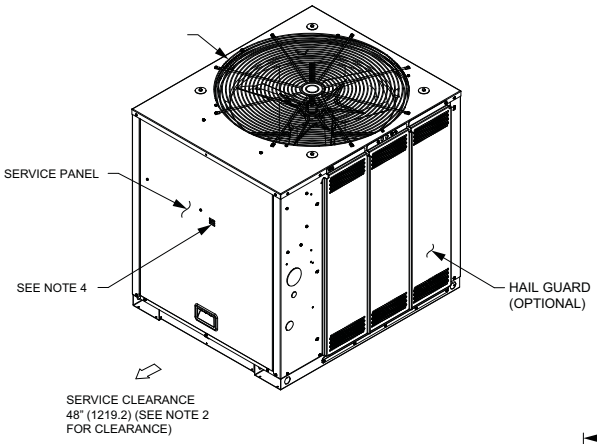
Unit wiring — condensing units — 60 Hz

Tons	Unit Model Number	Volts	Minimum Circuit Ampacity	Maximum Fuse or Circuit Breaker Size
7.5	HP-6-SPLIT	187-253	35	45
	HP-6-460-SPLIT	414-506	18	20
10	HP-7-SPLIT	187-253	42	50
	HP-7-460-SPLIT	414-506	20	25

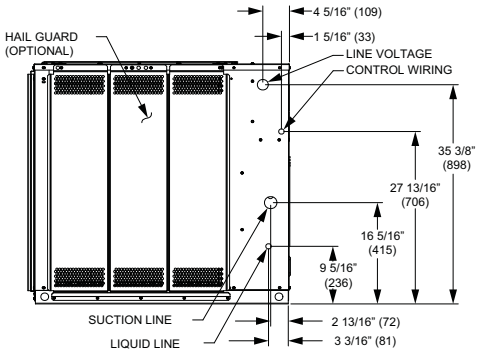
Dimensional Data

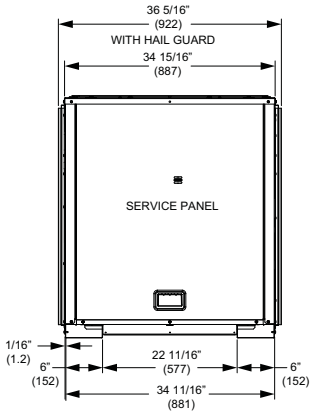
Cooling Condenser

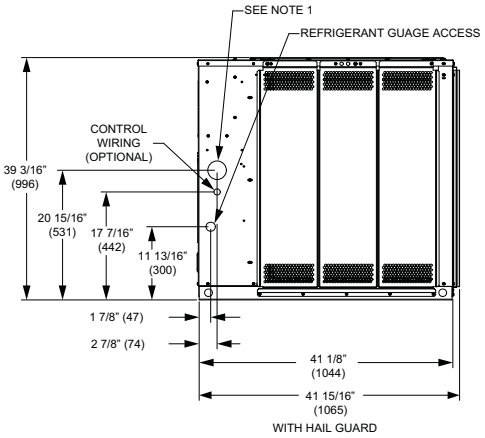
7.5 ton condensing, single compressor – in (mm) SEE NOTE 3

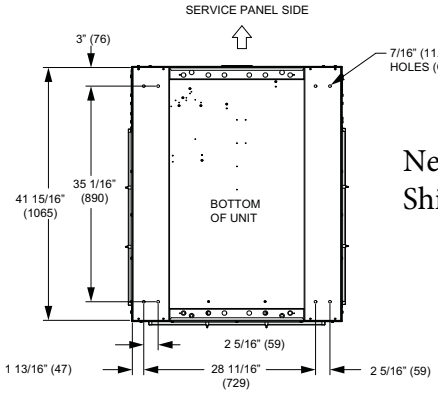


NOTES:
1. ACCESS OPENING IS FOR FIELD INSTALLED BAYLOAM ACCESSORY.
2. MINIMUM CLEARANCE FOR PROPER OPERATION IS 36" (914.4) FROM WALLS, SHRUBBERY, PRIVACY FENCES ETC. MINIMUM CLEARANCE BETWEEN ADJACENT UNITS IS 72" (1828.8). RECOMMENDED SERVICE CLEARANCE 48" (1219.2)
3. TOP DISCHARGE AREA SHOULD BE UNRESTRICTED FOR 100" (2540) MINIMUM. UNIT SHOULD BE PLACED SO ROOF RUN-OFF WATER OR FALLING SNOW FROM ROOF DOES NOT POUR/FALL DIRECTLY ON UNIT
4. OUTDOOR AIR TEMPERATURE SENSOR OPENING (DO NOT BLOCK OPENING)





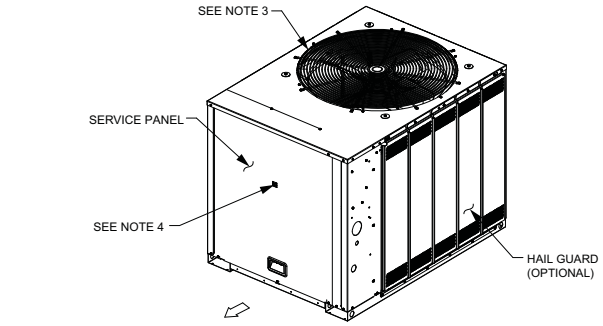




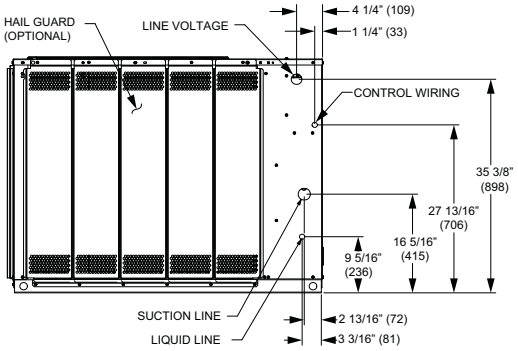
Net Max (lbs): 315
Shipping Max (lbs): 375

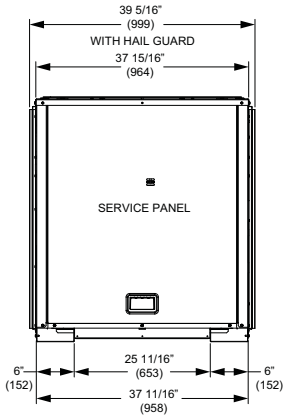
Dimensional Data

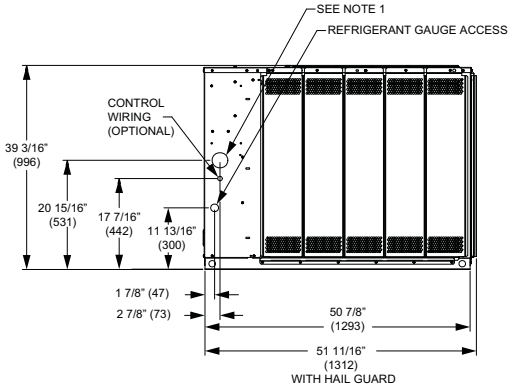
10 ton condensing, manifolded compressor – in (mm)

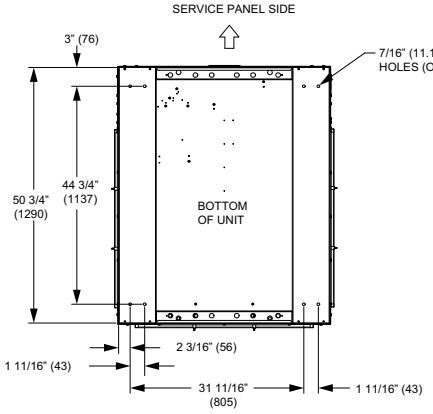


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3. TOP DISCHARGE AREA SHOULD BE UNRESTRICTED FOR 100" (2540) MINIMUM. UNIT SHOULD BE PLACED SO ROOF RUN-OFF WATER OR FALLING SNOW FROM ROOF DOES NOT POUR/FALL DIRECTLY ON UNIT
4. OUTDOOR AIR TEMPERATURE SENSOR OPENING (DO NOT BLOCK OPENING)





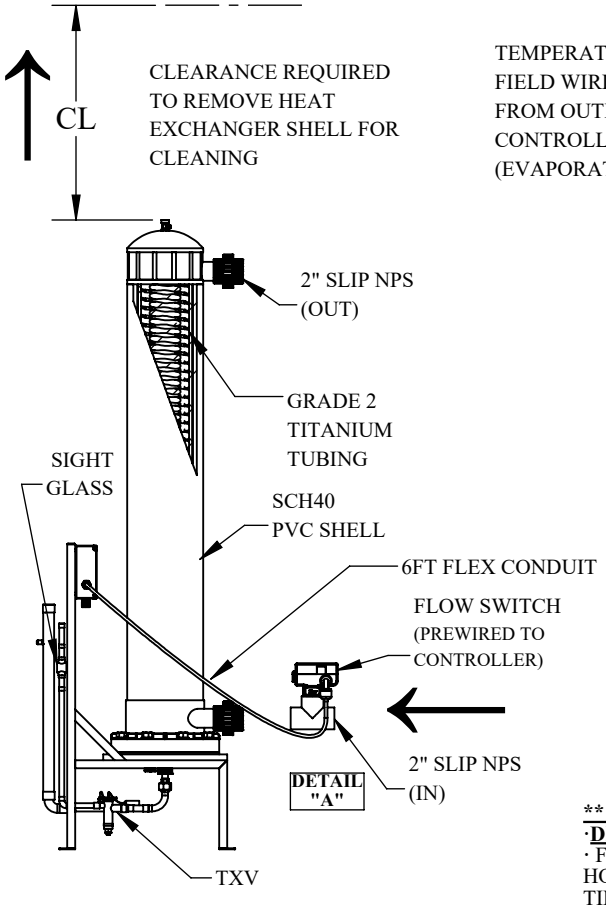




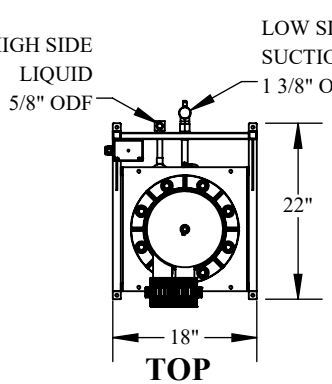
Net Max (lbs): 435
Shipping Max (lbs): 475

HX-65-DXVHP 7.5-TON & HX-121-DXVHP 10-TON HEAT EXCHANGERS SPECIFICATION SHEET

FOR INDOOR FRESH AND SALT WATER APPLICATIONS

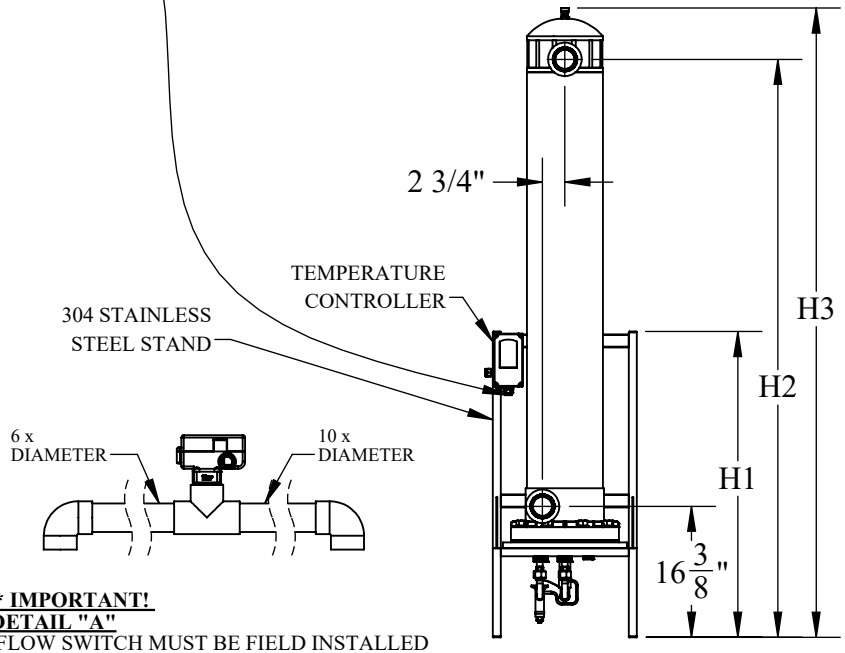


LEFT



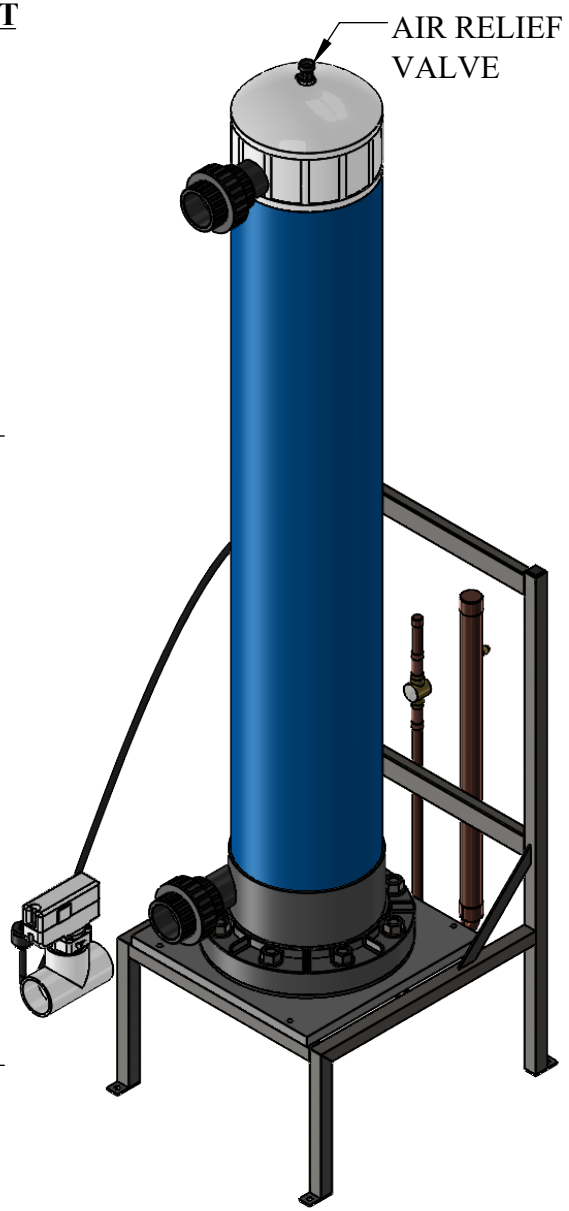
TOP

TEMPERATURE CONTROL WIRE
FIELD WIRING: INSTALL 24VAC 18/3 AWG WIRE FROM OUTDOOR CONDENSING UNIT TO THE CONTROLLER ON INDOOR HEAT EXCHANGER (EVAPORATOR).



FRONT

**** IMPORTANT!**
·DETAIL "A"
· FLOW SWITCH MUST BE FIELD INSTALLED HORIZONTALLY WITH NO LESS THAN 10 TIMES THE DIAMETER OF STRAIGHT PIPE ON THE INLET SIDE AND NO LESS THAN 6 TIMES THE DIAMETER ON THE OUTLET SIDE.



HEAT EXCHANGER SPECIFICATIONS							
MODEL NO.	NOMINAL TONS	NOMINAL BTUH / KW	WATER FLOW RATE (GPM)	H1	H2	H3	CL
HX-65-DXVHP	7.5	90,000 / 26.3	60 / 80	38 1/4"	56 3/4"	63"	48"
HX-121-DXVHP	10	120,000 / 35	60 / 80	38 1/4"	72 1/4"	78 3/4"	62"

OPTIONS:
· SCH 80 PVC MATERIAL SHELL CONSTRUCTION.
· 316 STAINLESS STEEL STAND & HARDWARE.

***NOTE:**
*NOMINAL BTUH CAN VARY, CONSULT AQUA LOGIC FOR ACCURATE SIZING FOR SPECIFIC APPLICATION.
· BTUH RATING IS BASED ON USE OF R-454B REFRIGERANT.
· FOR WATER TEMPERATURE 55°F AND BELOW WATER FLOW RATE MUST BE CLOSE TO THE MAXIMUM.
· FIELD WIRING: INSTALL 24V 18/3 AWG WIRE BETWEEN CONDENSER AND HEAT EXCHANGER.
· ALL DIMENSIONS ARE A APPROXIMATE AND MAY CHANGE AT ANY TIME.

aquaLOGIC
Chillers & Titanium Heat Exchangers
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DRAWING #	SHEET TITLE	
	SPEC SHEET	

DESCRIPTION				
7.5-TON & 10-TON HEAT EXCHANGERS FOR SINGLE CIRCUIT SYSTEMS.				
DRAWN BY	DATE	REVISION	SCALE	SHEET #
J. ROBINSON	7/8/2026	1.0	–	1 OF 1