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Chillers & Titanium
Heat Exchangers

Condenser General Data - Models MT- 10, 12,15 & 20 Split Chiller Unit Trane 60 Hz

		MT-10	MT-12	MT- 15	MT- 20	
		10 Tons	12 Tons	15 Tons	20 Tons	
Cooling Performance						
Gross Cooling Capacity (Btu/Hr.)						
Matched Heat Exchanger		127,000	150,000	186,000	248,000	
Condensing Unit Only		118,000	150,000	182,000	250,000	
ARI Net Cooling Capacity		123,000	150,000	184,000	244,000	
Efficiency						
Matched Heat Exchanger (EER)		11.5	11.2	11.1	10.2	
Condensing Unit Only (EER)		12.9	12	12.8	12.5	
System (IEER)		13.1	12.4	12.8	11.6	
COP		3.3	3.2	3.2	2.9	
System kW		10.3	12.9	15.6	21.8	
Compressor						
Type		Scroll	Scroll	Scroll	Scroll	
No./Tons		1 / 8.6	2 / 5.6	1/5.6, 1/7.6	1/8.7,1/10.2	
System Data						
No. Refrigerant Circuits		1	2	1	2	
Suction Line (in.) OD		1 3/8	1 1/8	1 5/8	1 3/8	
Liquid Line (in.) OD		1/2	1/2	5/8	1/2	
Outdoor Coil - Type		MCHE	MCHE	MCHE	MCHE	
Tube Size (in.) OD		0.8	1	0.8	0.8	
Face Area (sqft)		23.8	27.0	44.3	44.3	
Rows/FPI		1/23	1/23	1/23	1/23	
Outdoor Fan - Type		Propeller	Propeller	Propeller	Propeller	
No. Used/ Fan Diameter (in.)		1/28	1/28	2/28	2/28	
Drive Type /no. Speeds		Direct/1	Direct/1	Direct/1	Direct/1	
CFM		8,800	8,800	17,000	17,000	
No. Motors/HP		1/1	1/1	2/1	2/1	
Motor RPM		1100	1100	1100	1100	
Refrigerant Holding Charge (lbs of R-454b)		11.1	8.6 / 8.4	18.5	9.9 / 9.7	

Note: Capacity is rated in accordance with ARI 365 - 95F Ambient, 45F Saturated Suction Temperature.

Rev -10/2026

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Heat Exchangers

Electrical Data

Electrical Characteristics - Compressor and Condenser Fan Motors - 60 Cycle

		Compressor Motor					Condenser Fan Motor				
					Amps.					Amps.	
Tons	Unit Model No.	No.	Volts	Phase	RLA (ea.)	LRA (ea.)	No.	Volts	Phase	RLA (ea.)	LRA (ea.)
7.5	MT-9	1	208-230	3	27.1	179	1	208-230	1	2.3	8.4
	MT-9-460	1	460	3	11.3	95	1	460	1	1.1	4.2
10	MT-10	2	208-230	3	16.5	156	1	208-230	1	4.3	19.4
	MT-10-460	2	460	3	8.1	69	1	460	1	2.2	10.1
12.5	MT-12	2	208-230	3	26.8	142	2	208-230	1	4.3	19.4
	MT-12-460	2	460	3	10.6	75	2	460	1	2.2	10.1
15	MT-15	2	208-230	3	25.1	208	2	208-230	1	4.3	19.4
	MT-15-460	2	460	3	14.4	100	2	460	1	2.2	10.1
20	MT-20	2	208-230	3	36.7	255	2	208-230	1	4.3	19.4
	MT-20-460	2	460	3	18.0	140	2	460	1	2.1	10.1
25	MT-25	2	208-230	3	45.4	315	2	208-230	1	4.3	19.4
	MT-25-460	2	460	3	24.4	158	2	460	1	2.1	10.1

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

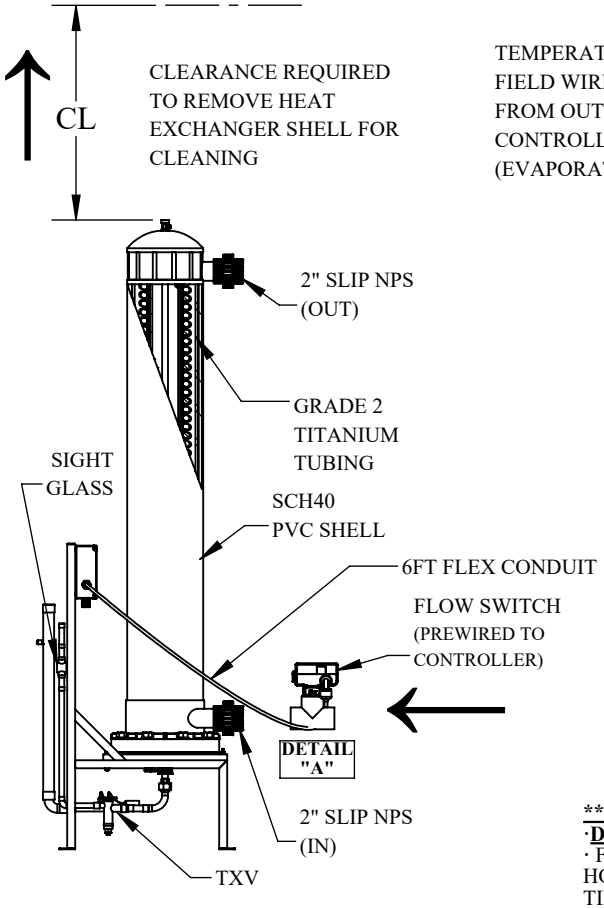
Unit Wiring

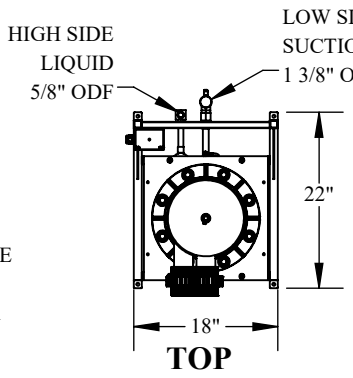
Tons	Unit Model No.	Unit Operating Voltage Range	Minimum Circuit Ampacity	Maximum Fuse Size or Maximum Circuit Breaker (a)
7.5	MT-9	187-253	38	60
	MT-9-460	414-506	17	25
10	MT-10	187-253	43	50
	MT-10-460	414-506	22	25
12.5	MT-12	187-253	66	90
	MT-12-460	414-506	28	35
15	MT-15	187-253	74	100
	MT-15-460	414-506	33	40
20	MT-20	187-253	87	110
	MT-20-460	414-506	45	60
25	MT-25	187-253	109	150
	MT-25-460	414-506	61	80

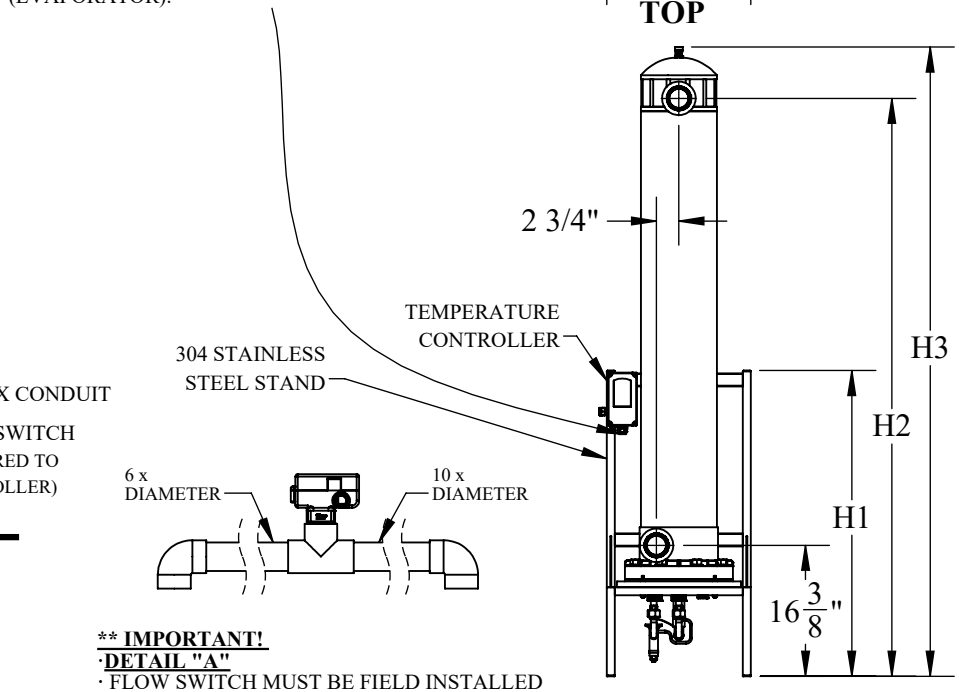
(a) HACR type circuit breaker per NEC

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

FOR INDOOR FRESH AND SALT WATER APPLICATIONS



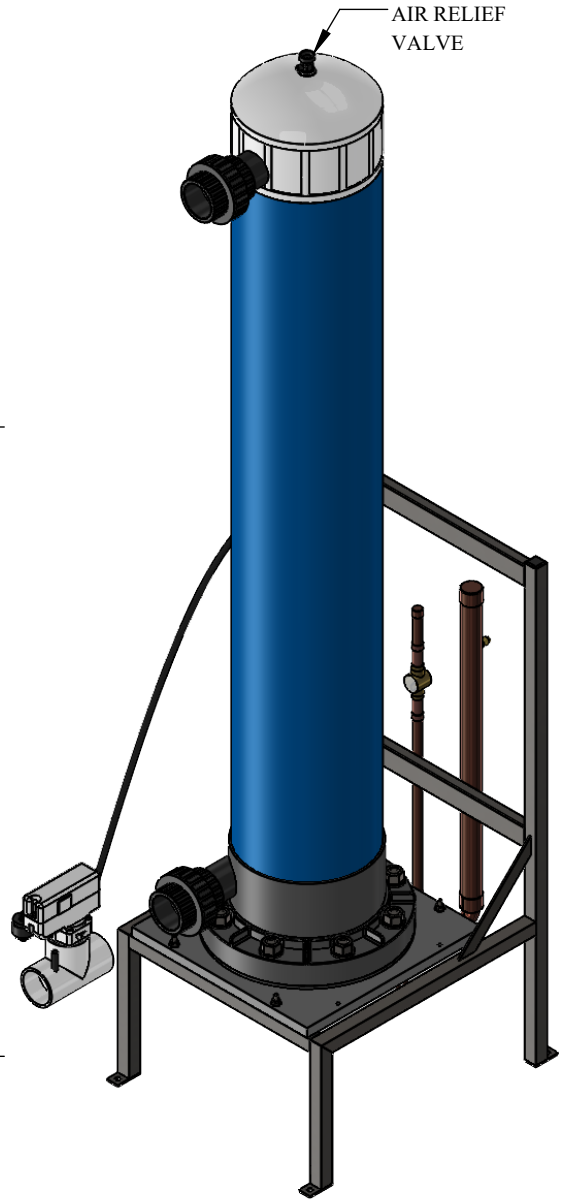




**** IMPORTANT!**

·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-DXV	7.5	90,000 / 26.3	60 / 80	38 1/4"	56 3/4"	63"	48"
HX-121-DXV	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.

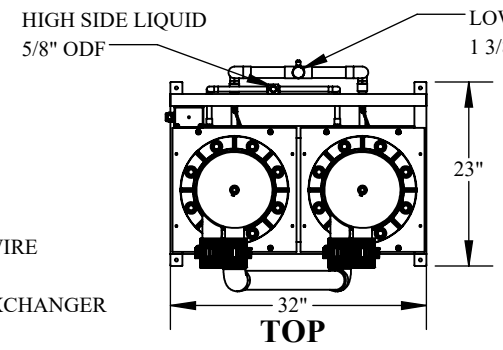
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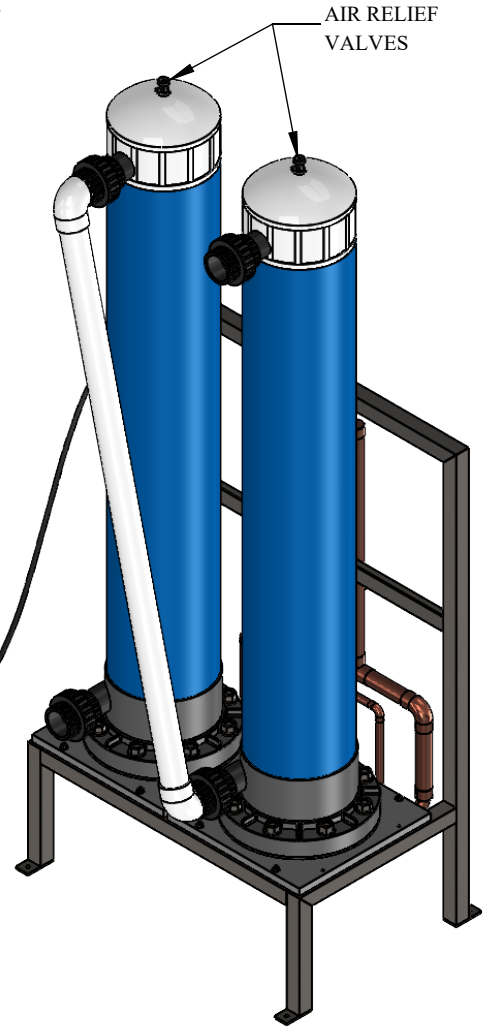
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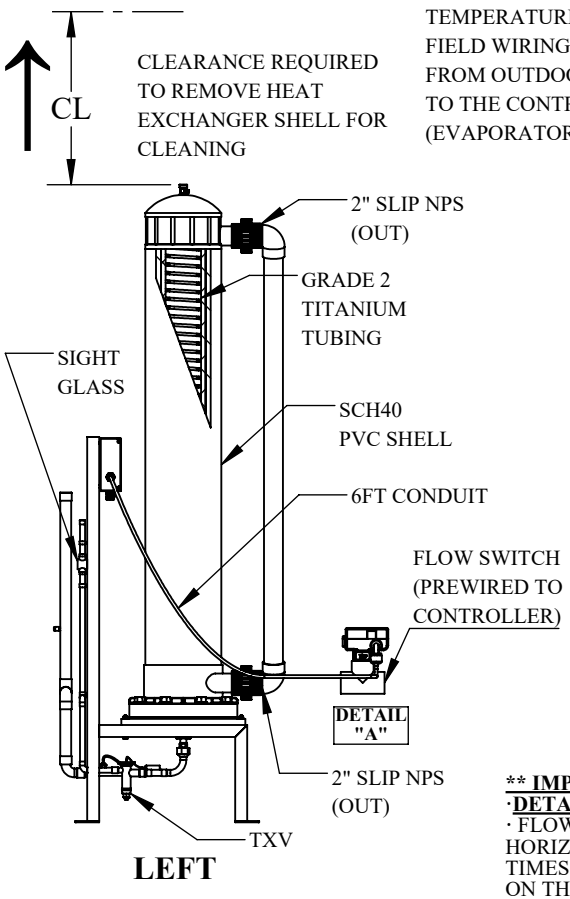
DRAWING #	SHEET TITLE			
	SPEC SHEET			
DESCRIPTION: 7.5-TON & 10-TON HEAT EXCHANGERS FOR SINGLE CIRCUIT SYSTEMS.				
DRAWN BY: J. ROBINSON	DATE: 7/23/2026	REVISION: 1.0	SCALE: –	SHEET #: 1 OF 1

HX-65-2-DXV 15-TON & HX-121-2-DXV 20-TON HEAT EXCHANGERS SPECIFICATIONS SHEET (SINGLE CIRCUIT)

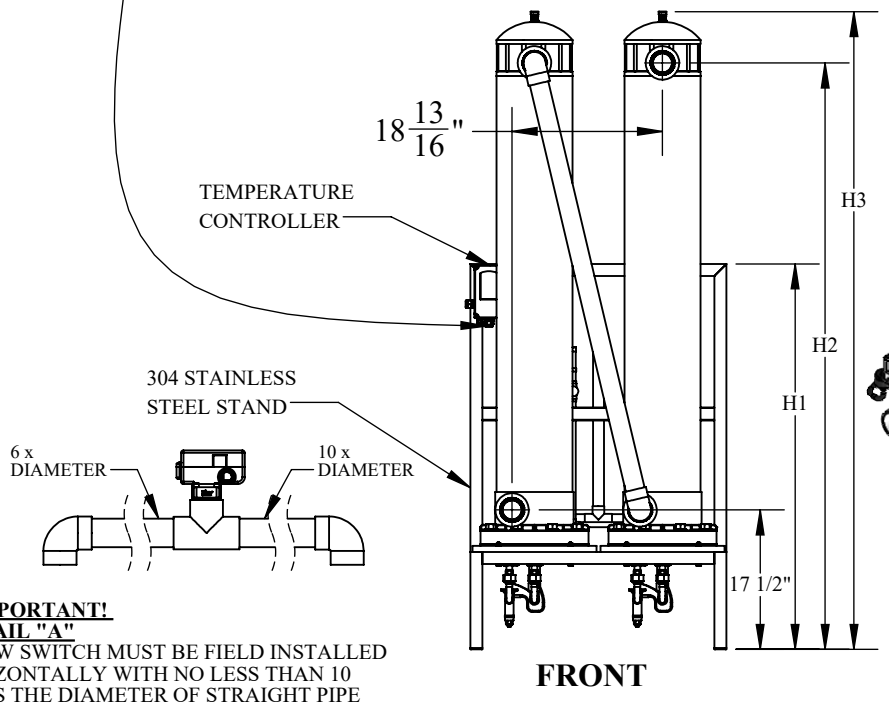
FOR INDOOR FRESH AND SALT WATER APPLICATIONS







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



**** 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-65-2-DXV	12 & 15	180,000 / 52.6	60 / 80	48 1/4"	57 3/4"	64 1/4"	48"
HX-121-2-DXV	20	240,000 / 70	60 / 80	48 1/4"	73 1/4"	79 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.
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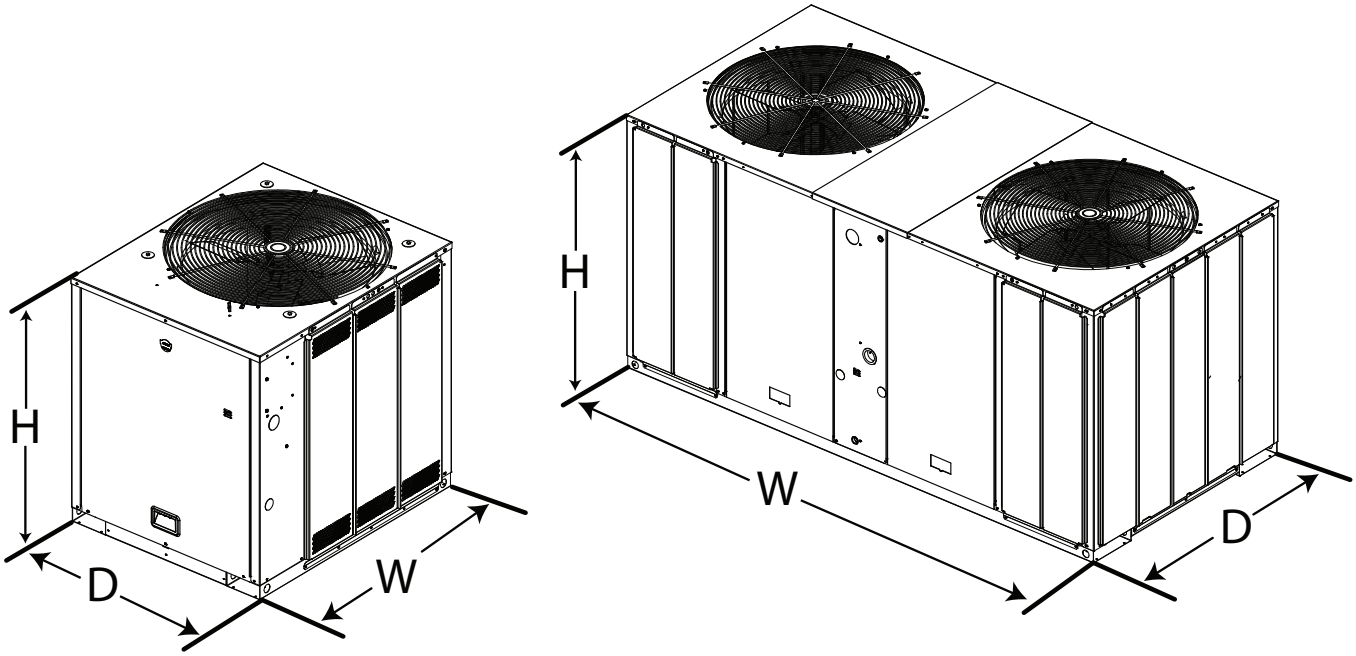
DRAWING #	SHEET TITLE
	SPEC SHEET

DESCRIPTION				
15-TON & 20-TON HEAT EXCHANGERS FOR SINGLE CIRCUIT SYSTEMS.				
DRAWN BY	DATE	REVISION	SCALE	SHEET #
J. ROBINSON	7/10/2026	1.0	–	1 OF 1

Dimensional Data

Cooling Condenser

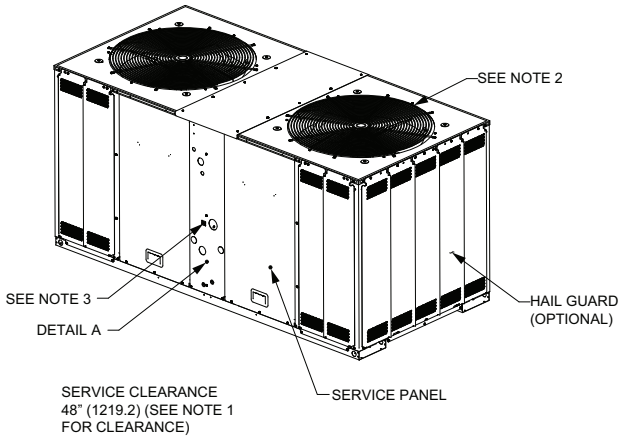
Figure 4. Height, width and depth measurements



	H - in. (mm)	W - in. (mm)	D - in. (mm)
MT-9	39.2 (996)	42.1 (1070)	36.3 (922)
MT-10	39.2 (996)	51.9 (1317)	39.3 (999)
MT-12	45.2 (1150)	51.9 (1317)	39.3 (999)
MT-15 & MT-20	45.2 (1150)	94.8 (2407)	45.4 (1152)
MT-25	51.2 (1302)	94.8 (2407)	45.4 (1152)

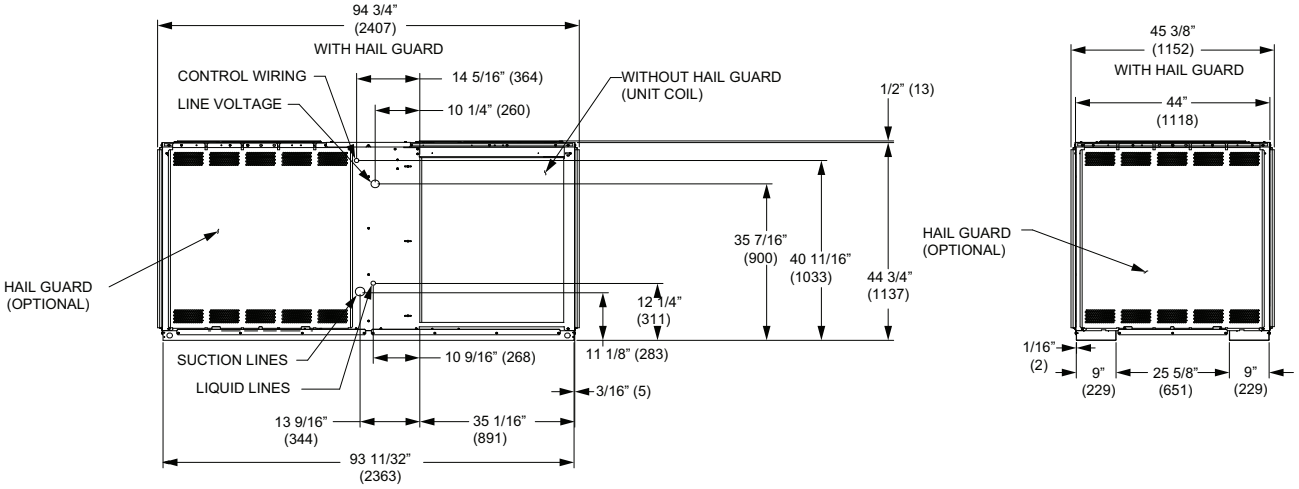
Note: *Full dimensional data available on next pages.*

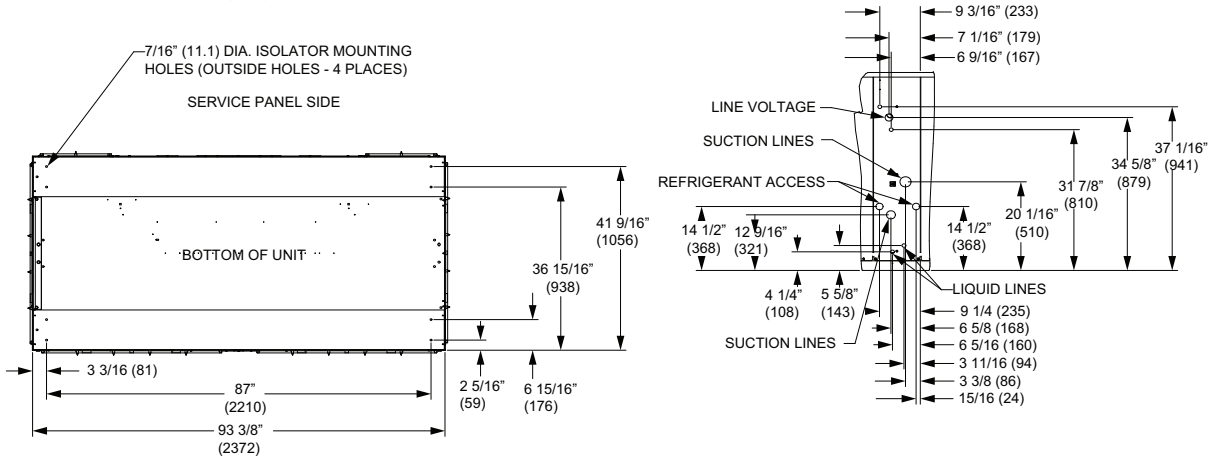
15-ton condensing, manifolded compressor – in (mm)



NOTES:

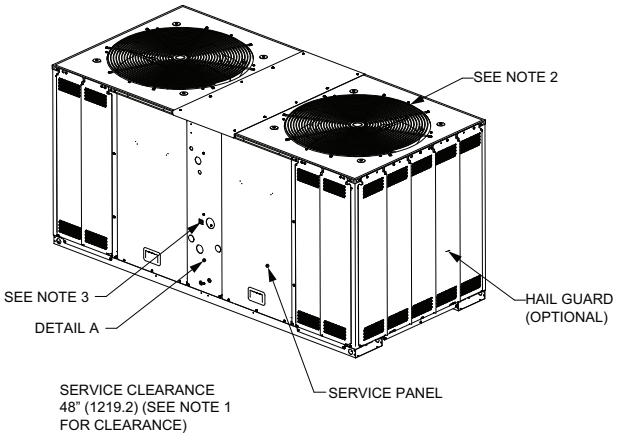
1. CLEARANCE FOR PROPER OPERATION IS 36" (914.4) FROM WALLS, SHRUBBERY, PRIVACY FENCES ETC. MINIMUM CLEARANCE BETWEEN ADJACENT UNITS IS 72" (1828.8). RECOMMENDED SERVICE CLEARANCE 48" (1219.2)
2. TOP DISCHARGE AREA SHOULD BE UNRESTRICTED FOR 100" (2540) MINIMUM. UNIT SHOULD BE PLACED SO ROOF RUN-OFF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





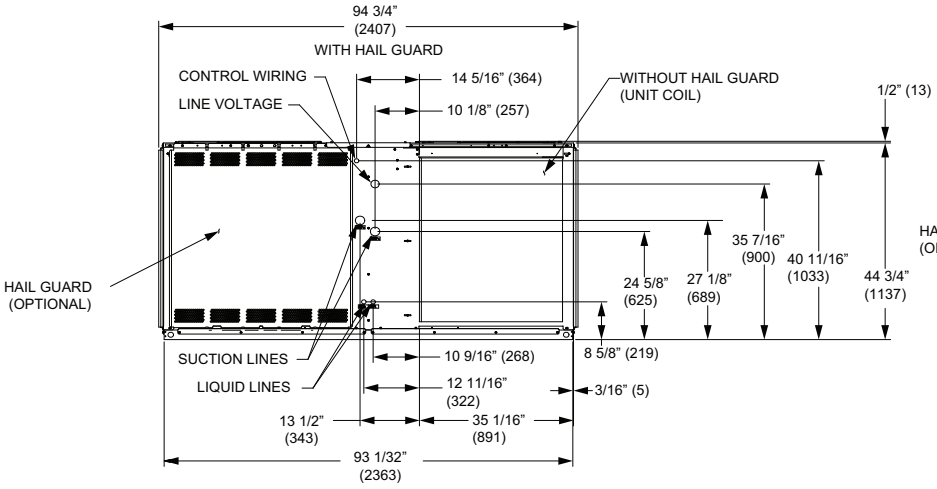
Dimensional Data

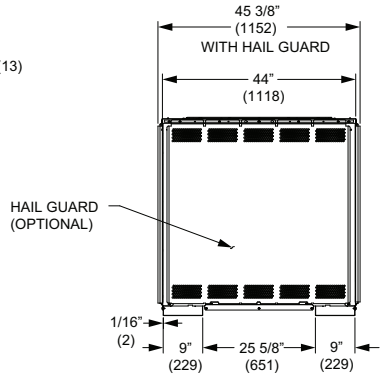
MT-20, 20 ton dual compressor – in (mm)

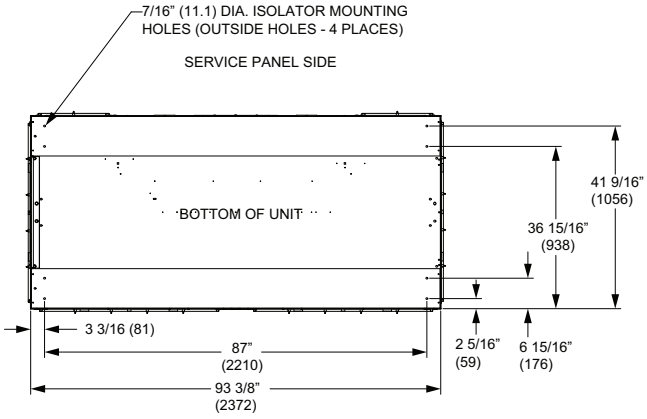


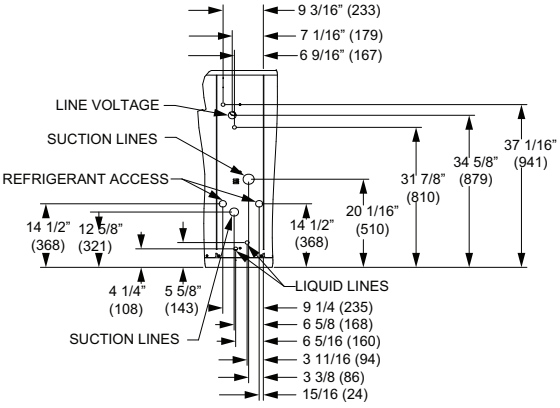
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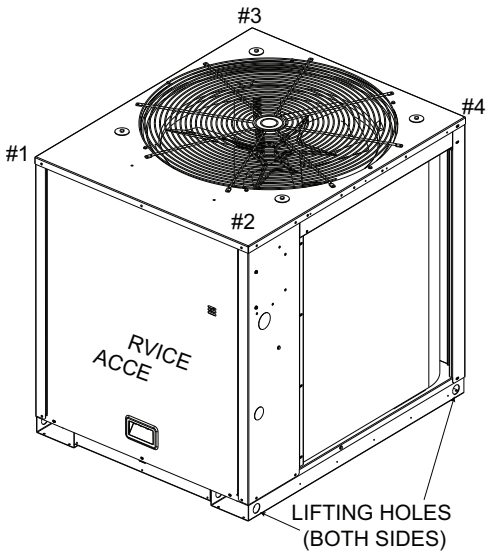
Weights

Cooling Condenser

Table 2. TTA R-454B unit and corner weights — lbs (60 Hz)

Tons	Model No.	Shipping Max (lbs)	Net Max (lbs)	Corner Weights			
				1	2	3	4
7.5	MT-9	342	309	88	95	60	66
10							
	MT-10	473	433	128	128	88	88
12.5	MT-12	504	454	136	136	91	91
15							
	MT-15	806	707	193	193	161	160
20	MT-20	872	755	210	210	167	168
25	MT-25	1020	930	263	265	200	202

MT-9,10 & 12



MT-15, 20 & 25

