

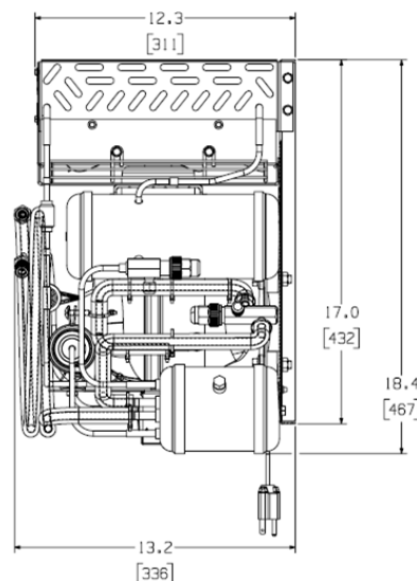
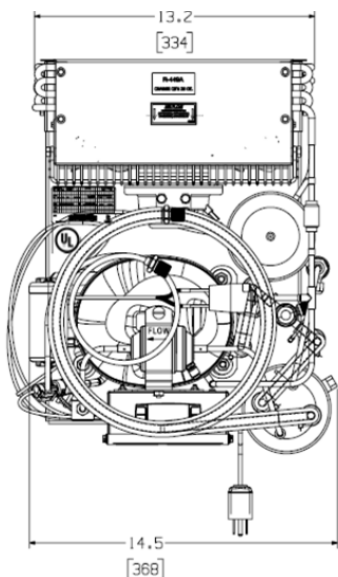


Indoor Condensing Unit

Technical Datasheet

May 21, 2020
Revision: REL

Model: AE2420Z-AA1BXM BoM'S: 2E299-2, 2E299-3, 2E299-4 R-404A/R-452A 1/2 HP AIRCOOLED



Model	Dimensions, inches				Line Connection*		Pumpdown	Air	Oil Ch	Gr. Wt.
	L	W	H	CH	Suction	Liquid	90 °F 90%	SCFM	Oz.	Lbs.
AE2420Z-AA1BXM	18.4	14.3	13.0	9.4	3/8" T	1/4" T	5.32 lbs	230	13.2	55

* F = Flare, S = Solder, RF or RS = Rotolock with Flare or Solder Connections, C = Compression Fitting, T = Threaded Coupler
Units are Factory Charged with 280Z (2E299-2), 400Z (2E299-3) and 520Z (2E299-4) of R-449A.

AE2420Z-AA1ABXM R404A Performance

Performance @ 60Hz, Return Gas 40°F, Sub cooling 5°F

		Ambient Temperatures											
Evaporator T		80°F			90°F			100°F			110°F		
°F	PSIG	BTUH	Watts	Cond T	BTUH	Watts	Cond T	BTUH	Watts	Cond T	BTUH	Watts	Cond T
-40	4.3	928	315	86	822	312	95	716	310	104	610	307	113
-35	6.8	1117	338	87	995	337	96	874	336	105	752	335	114
-30	9.6	1316	362	88	1178	363	97	1041	364	106	904	364	115
-25	12.7	1524	387	89	1371	390	98	1218	392	106	1065	394	116
-20	16	1742	413	90	1574	417	99	1405	421	108	1236	425	117
-15	19.7	1970	440	91	1786	446	100	1602	452	109	1417	457	118
-10	23.6	2208	468	92	2008	475	101	1808	483	110	1608	490	119
-5	27.9	2456	497	94	2240	506	102	2025	515	111	1809	524	120
0	32.6	2714	526	95	2482	537	103	2251	548	112	2020	559	121
5	37.7	2981	557	96	2734	570	105	2487	582	113	2240	595	122
10	43.1	3259	589	98	2996	603	106	2733	617	115	2471	631	123

60 Hz Performance

Return gas temp. 40°F, 5°F sub-cooling

AE2420Z-AA1BXM R452A Performance													
Performance @ 60Hz, Return Gas 40°F, Sub cooling 5°F													
		Ambient Temperatures											
Evaporator T		80°F			90°F			100°F			110°F		
°F	PSIG	BTUH	Watts	Cond T	BTUH	Watts	Cond T	BTUH	Watts	Cond T	BTUH	Watts	Cond T
-40	2.4	793	280.2	86.5	707	279.4	95.7	621	278.6	105	535	277.7	114
-35	4.7	974	302	86.5	880	302.4	96	785	302.8	105.3	691	303.2	114.2
-30	7.3	1159	324.7	87	1056	326.4	96.5	954	328	105.6	851	329.7	114.4
-25	10.1	1348	348.4	87.5	1237	351.3	97	1126	354.2	105.8	1016	357.1	114.6
-20	13.2	1540	373.1	88	1422	377.2	97.4	1303	381.3	106.1	1184	385.4	114.8
-15	16.7	1737	398.7	88.5	1610	404	97.8	1483	409.3	106.2	1356	414.7	115
-10	20.4	1938	425.2	89	1803	431.8	98	1668	438.3	106.4	1533	444.9	115.3
-5	24.4	2143	452.6	89.5	2000	460.5	98.4	1856	468.3	106.8	1713	476.1	115.6
0	28.9	2352	481.1	89.8	2200	490.1	98.8	2049	499.1	107.2	1897	508.2	115.9
5	33.7	2564	510.4	90	2405	520.7	99	2245	531	107.5	2086	541.2	116.1
10	38.8	2781	540.7	90.9	2613	552.2	99.4	2446	563.7	107.9	2278	575.2	116.3

Specifications/ Parts:

Model	AE2420Z-AA1BXM
Unit Bill of Material	2E299-2, 2E299-3, 2E299-4
Nominal Volts/Hz/Ph	115/60/1
Refrigeration Range	-40° to 10°F
Design Pressure Low	181
Design Pressure High	450
Voltage Range	103-127
Min. Circuit Ampacity	8.2
Max. Fuse Size (amps)	15
Compressor Model	AE2420Z-DS1B
Comp. Bill of Material	AE1322E-679-J7
Compressor RLA/LRA	6.25 / 45
Overload	830-10276
Overload Replacement Kit	K90-117
Relay	820-10232
Relay Replacement Kit	K71-85
Start Capacitor	85PS165C27
Start Capacitor Replacement Kit	K146-14
Unit Drawing	DGU1896-258
Wiring Diagram	91289

Fan Motor	810-10007
Fan Motor RLA	0.40
Fan Blade	515-10004
Fan Guard	116-10009
Fan Shroud	707-10018
High Pressure Control	841-10007
Condenser	506-10159
Receiver Tank	510-10010
Sight Glass	70084-3S
Accumulator	102-10034
Power Cord	85106-10
Suction Valve	56581-2
Liquid Filter	704-10496
Liquid Filter Bracket	285-10081
Low Pressure Transducer	84125-10
Hot Key Cable	900-12336
Controller	900-11968
Check Valve	14948303
1/4" Threaded Male Coupler	122-10233
3/8" Threaded Male Coupler	122-10234

Electrical Diagram

