

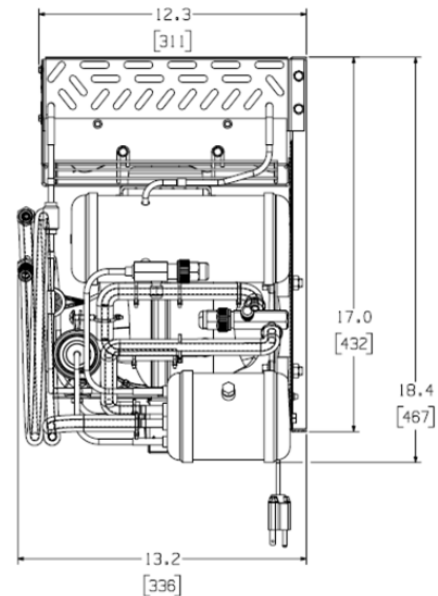
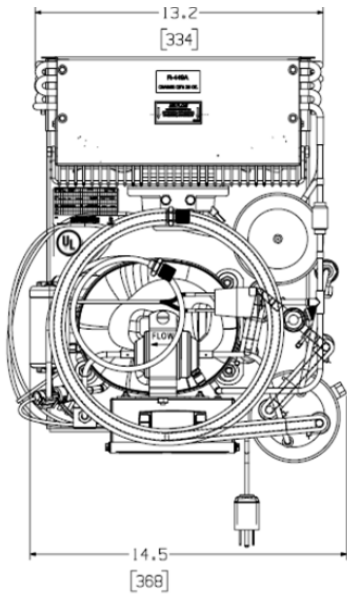


Tecumseh

# Indoor Condensing Unit Technical Datasheet

May 21, 2020  
Revision: REL

Model: AE2420Z-AA1BXM    BoM: 2E299-1    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 20 psig of dry air. **MUST BE EVACUATED.**

## AE2420Z-AA1BXM R404A Performance

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

Evaporator T		Ambient Temperatures											
		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

<b>AE2420Z-AA1BXM R452A Performance</b>													
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:**

<b>Model</b>	<b>AE2420Z-AA1BXM</b>
Unit Bill of Material	2E299-1
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**

