



# Indoor Condensing Unit Technical Data Sheet



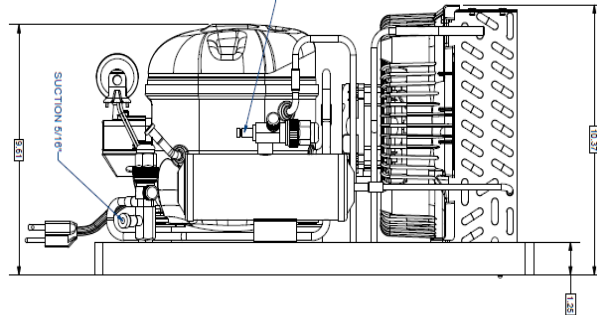
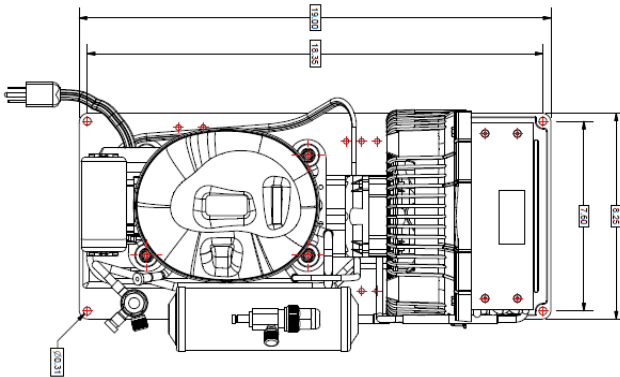
*Tecumseh*

Model: AE4430Y-AA1AG\*

BoM: 33Y430-\*(9)

R-134a / R-513A

1/4 HP



Model	Dimensions, inches				Line Connection*		Pumpdown 90 °F 90%	Air CFM	Oil Ch Oz.	Gr. Wt. Lbs.						
	L	W	H	CH	Suction	Liquid										
AE4430Y-AA1AGL	19.0	8.7	10.4	9.61	5/16" S	1/4" S	N/A	242	9.5	36.6						
AE4430Y-AA1AGK		9.7									1.78 lbs.	40.2				
AE4430Y-AA1AGB													5/16"RS	1/4"RS	2.16 lbs.	40.8
AE4430Y-AA1AGC																

\* F = Flare, S = Solder, RF or RS = Rotolock with Flare or Solder Connections, C = Compression Fitting  
Factory charge: 20 PSIG Nitrogen – **MUST BE EVACUATED**

Evaporator		R-134a Performance											Ambient Temperatures		
		80°F			90°F			100°F			110°F				
°F	PSIG	BTU/H	Watts	Cond T	BTU/H	Watts	Cond T	BTU/H	Watts	Cond T	BTU/H	Watts	Cond T		
20	18.4	2020	340	105	1870	350	114	1730	360	123	1580	370	131		
25	22.1	2270	360	108	2090	380	117	1940	380	126	1750	390	134		
30	26.0	2510	380	111	2310	400	120	2150	410	129	1940	420	137		
35	30.3	2750	410	114	2540	420	123	2360	430	132	2140	450	140		
40	35.0	2990	430	118	2760	450	127	2580	460	135	2350	480	143		
<b>45</b>	<b>40.0</b>	<b>3220</b>	<b>460</b>	<b>122</b>	<b>2990</b>	<b>470</b>	<b>130</b>	<b>2800</b>	<b>490</b>	<b>138</b>	---	---	---		
50	45.3	3450	490	126	3220	500	134	3030	520	141	---	---	---		

Evaporator		R-513A Performance											Ambient Temperatures		
		80°F			90°F			100°F			110°F				
°F	PSIG	BTU/H	Watts	Cond T	BTU/H	Watts	Cond T	BTU/H	Watts	Cond T	BTU/H	Watts	Cond T		
20	22.4	2093	370	104	1937	381	113	1792	392	122	1637	403	129		
25	26.4	2352	392	107	2165	414	116	2010	414	125	1813	425	132		
30	30.6	2600	414	110	2393	436	119	2227	446	128	2010	457	135		
35	35.2	2849	446	113	2631	457	122	2445	468	130	2217	490	138		
40	40.1	3097	468	117	2859	490	126	2673	501	133	2434	523	141		
<b>45</b>	<b>45.4</b>	<b>3336</b>	<b>501</b>	<b>121</b>	<b>3097</b>	<b>512</b>	<b>129</b>	<b>2901</b>	<b>534</b>	<b>136</b>	<b>2662</b>	<b>555</b>	<b>144</b>		
50	51.1	3574	534	125	3336	544	132	3139	566	139	---	---	---		

**60 Hz Performance**

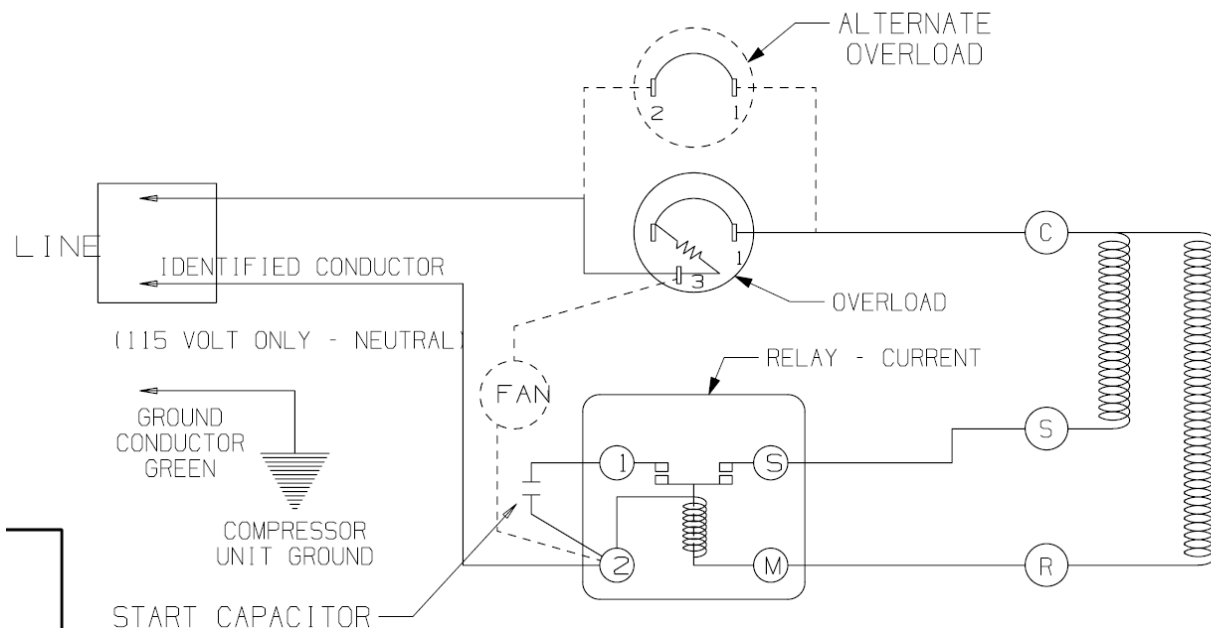
Return gas temp. 65°F, 5°F sub cooling

**Specifications/ Parts:**

<b>Unit Model</b>	<b>AE4430Y-AA1AGL</b>
<b>Unit Bill of Material</b>	<b>33Y430-29</b>
Refrigeration Range	20° F to 55° F
Design Pressure Low	150
Design Pressure High	450
Nominal Volts-Hz-Ph	115/60/1
Voltage Range	103 to 127
Min. Circuit Ampacity	6.53
Max. Fuse Size (amps)	15
Compressor Model	AE4430Y-AA1A
Comp. Bill of Material	AE1023E-212-J7
Compressor RLA/LRA	4.91/27.5
Overload	830-10043
Relay	820-10030
Run Capacitor	N/A
Start Capacitor	85PS110C76
Power Cord	N/A
Fan Motor	810L006B94
Fan Motor RLA	.41
Fan Blade	51577
Fan Shroud/Guard Combo	116-003P
Condenser	50733-G04
Unit Drawing	DGBU-062
Wiring Diagram	DEAE-10

<b>Unit Model</b>	<b>AE4430Y-AA1AGK</b>
<b>Unit Bill of Material</b>	<b>33Y430-39</b>
Power Cord	85106-10
Unit Drawing	DGBU-062
<b>Unit Model</b>	<b>AE4430Y-AA1AGB</b>
<b>Unit Bill of Material</b>	<b>33Y430-49</b>
Receiver Tank	51085-1H
Power Cord	85106-10
Unit Drawing	DGBU-062R
<b>Unit Model</b>	<b>AE4430Y-AA1AGC</b>
<b>Unit Bill of Material</b>	<b>33Y430-59</b>
Receiver w/Liquid Valve	51085-1HV
Suction Valve	56580-1
Power Cord	85106-10
Unit Drawing	DGBU-062V
Replacement Kit: Relay	K71-35
Replacement Kit: O/L	K90-55
Replacement Kit: St. Cap	K146-17

**Electrical Diagram**



115 OR 230 VOLT - SCHEMATIC WIRING DIAGRAM - CSIR  
REF. DWG. MD-472-1