



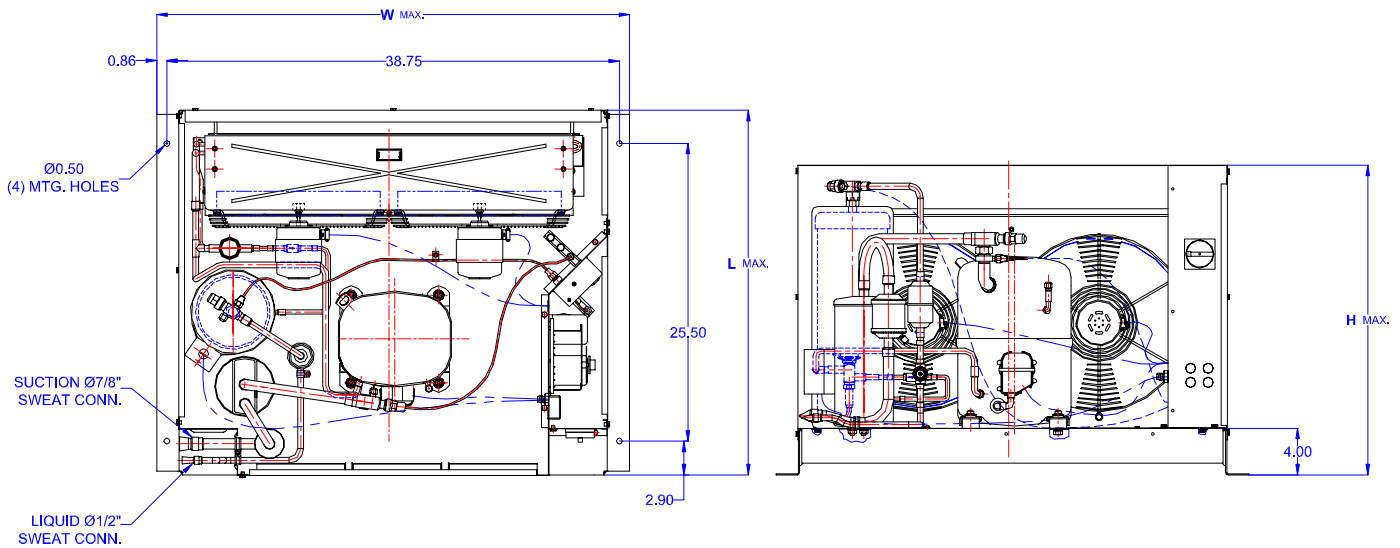
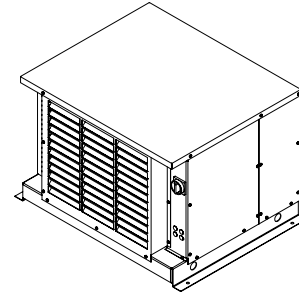
# TECUMSEH HERMETIC CONDENSING UNIT

AVA2512ZXTHL  
TPC rev 04  
March 23, 2004

**Model** AVA2512ZXTHL  
**BOM** 2K3141-2E

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**Air Cooled** 2 3/4 HP  
**Application** Low Temp  
**Refrigerant** R404A



Model	Dimensions (inch)			Line connections		Pumpdown	Air flow	Oil Ch.	Gross weight
	L	W	H	Suction	Liquid	90% @ 90°F	SCFM	Oz.	Lbs.
<b>AVA2512ZXTHL</b>	31.50	40.50	26.75	7/8 Sweat	1/2 Sweat	22.63	1600	54	320

Factory charge 20 psig dry air, **MUST BE EVACUATED**

Evaporator	Ambient Temperatures																
	85°F					90°F				100°F				110°F			
°F	Psig	BTUH	Watts	Head	Cond T	BTUH	Watts	Head	Cond T	BTUH	Watts	Head	Cond T	BTUH	Watts	Head	Cond T
-40	5.5	4068	1695	215	98	4139	1661	231	98	3245	1501	268	108	2429	822	292	115
-35	8.0	5342	1854	222	95	5313	1828	238	100	4296	1677	273	110	3499	1151	300	117
-30	10.7	6662	2023	229	97	6531	2005	244	102	5387	1863	278	111	4582	1470	308	119
-25	14.0	8027	2202	237	100	7794	2192	252	104	6518	2057	285	113	5678	1779	317	121
-20	17.1	9437	2392	244	102	9102	2389	260	106	7689	2260	292	115	6786	2078	326	123
-15	19.3	10893	2591	254	104	10454	2596	269	109	8900	2471	300	117	7907	2367	335	125
<b>-10</b>	<b>24.5</b>	<b>12393</b>	<b>2801</b>	<b>263</b>	<b>106</b>	<b>11851</b>	<b>2813</b>	<b>278</b>	<b>111</b>	<b>10151</b>	<b>2692</b>	<b>309</b>	<b>119</b>	<b>9041</b>	<b>2646</b>	<b>345</b>	<b>128</b>
-5	28.8	13939	3021	273	109	13292	3040	288	114	11442	2921	319	121	10187	2915	355	130
0	33.5	15530	3251	284	112	14778	3277	299	116	12772	3159	329	124	11345	3174	366	132
5	36.5	17166	3490	295	114	16309	3524	311	119	14142	3405	340	126	12517	3423	378	134
10	43.7	18848	3741	307	117	17884	3781	323	122	15553	3661	353	129	13701	3662	389	137

Performance @ 60 Hz, Return Gas Temperature 40°F, --- SubCooling 5°F

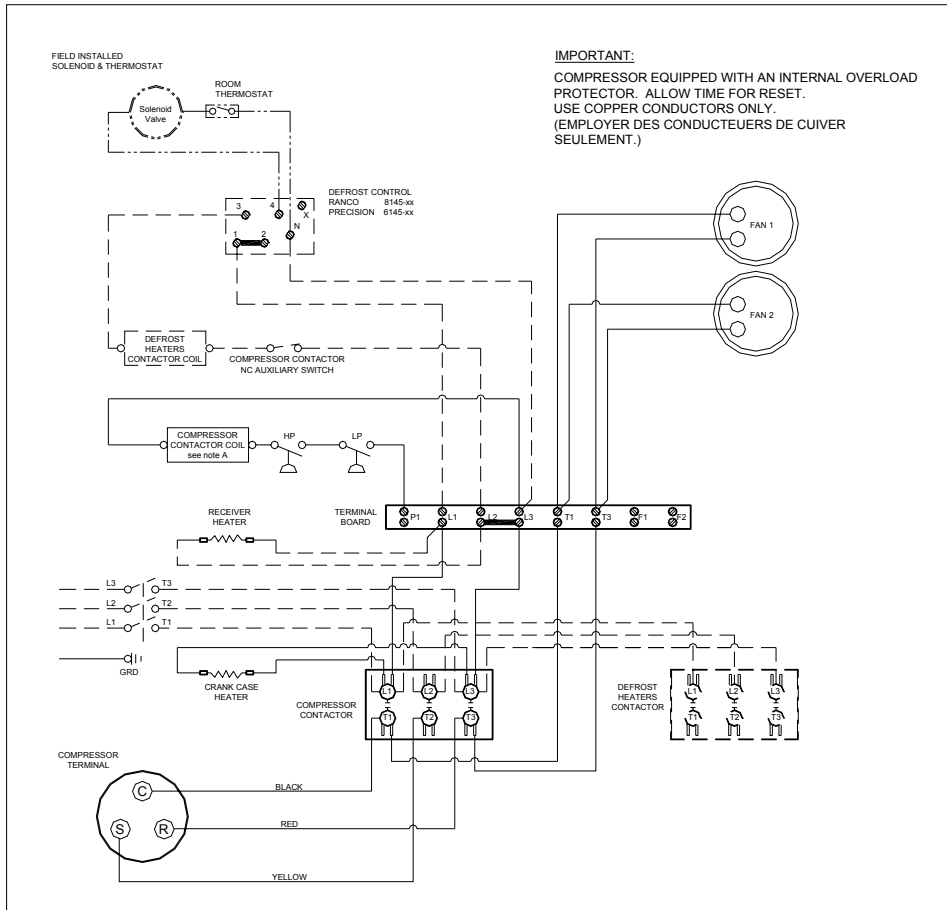
Parts/Specifications

STANDARD		OPTIONAL	
Unit BOM	2K3141-2E	Fan Motor	810S037B01
Unit MODEL	AVA2512ZXTHL	Fan Motor Qty	2
		Fan Motor RLA	1.1
Refrigeration RANGE	-40F TO +10F	Fan Blade	51533-2
Design Pressure Low	181	Fan Guard	70831
Design Pressure High	450	Shroud	70648-2
Volts - HZ - Ph	200-230-60-3		
Voltage Range	253 - 180	High Pressure switch	84095-2
Min. Circuit Ampacity	14.8	Low Pressure Control	84026-D
Max. Fuse Size	20	Dual Pressure Control	
		Condenser	50852
Compressor MODEL	AVA2490ZXT	Head Master Valve	LAC-4-215-3/8
Compressor BOM	AV182RT-012-A2	Check Valve	CV-020-1011
Compressor LRA	65.1	Process Valve	
Compressor RLA	9.9	Liquid Valve	31590
OverLoad	Internal	Suction Valve	31529-1
Relay			
Run Capacitor		Receiver	51082-2
Run Capacitor Rating		Receiver Qty	1
Start Capacitor		Accumulator	TK00042000
Start Capacitor Rating		Liquid Filter	52000-084D
Contactor	91014	Sight Glass	SG-08D
		Suction Filter	70822-5
Unit Drawing	DGU1920-1KE		
Wiring no Fan controls	WD23-2XT2	CrankCase Heater	90699

BOM INDEX DESCRIPTION

2xYYYY- 2ERA(F)TnDS

- E Enclosure
- R Receiver Heater
- A Adjustable fan control
- F Fixed fan Control
- T1 Defrost timer option
- T2 Defrost timer & Defrost Heaters Contactor
- D Disconnect
- S Solenoid liquid Valve (supplied loose)



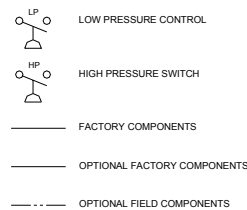
NOTES

FIELD WIRING NOTES

- ALL FIELD WIRING MUST BE DONE IN COMPLIANCE WITH ALL APPLICABLE LOCAL AND NATIONAL CODES.
- CONNECT INCOMING POWER LEADS FROM POWER SUPPLY TO L1, L2, AND L3 IN COMPRESSOR CONTACTOR OR TO L1, L2 AND L3 IN DISCONNECT SWITCH (IF PROVIDED). USE COPPER CONDUCTORS ONLY. (EMPLOYER DES CONDUCTEURS DE CUIVRE SEULEMENT.) PROVIDE EQUIPMENT GROUNDING CONDUCTOR. USE 75°C (MIN.) WIRING
- PLACE JUMPER ACROSS P1 AND L1 IN TERMINAL BOARD IF NO OTHER CONTROLLING DEVICE IS INSTALLED.
- DEFROST HEATERS LOADS SHOULD NOT BE HIGHER THEN THE MAXIMUM HEATERS LOAD. INDICATED ON THE UNIT LABEL.

GENERAL NOTES:

- A. CONTACTOR COIL CIRCUIT IS FACTORY CONNECTED TO 230 V SOURCE IN PANEL AS SHOWN
- B. COMPRESSOR EQUIPPED WITH AN INTERNAL OVERLOAD PROTECTOR. ALLOW TIME FOR RESET.



CONDENSING UNIT WIRING, 230V 60Hz 3 Ph, NO fan controls, T1 & T2 defrost options

REVISION **A** MAY 23, 2003 **WD23-2XT2**