

**Model: AHC4518YGZ (FH4518Y)**
**Product Description**

**Type:** Reciprocating  
**Application:** HBP - High Back Pressure  
**Refrigerant:** R-134a  
**Voltage/Frequency:** 208-220V ~ 50Hz  
**Version:** N/A


**Product Specifications**
**Performance**

Condition	Test Voltage	Refrigeration Capacity			Input Power	Efficiency			EVAP TEMP	COND TEMP	AMBIENT TEMP	RETURN GAS	LIQUID TEMP
		Btu/h	kcal/h	W	W	Btu/Wh	kcal/Wh	W/W					
EN12900	220V ~ 50HZ	15392	3879	4510	1579	9.75	2.46	2.86	5°C (41°F)	45°C (113°F)	32°C (90°F)	15°C (59°F)	45°C (113°F)

**General**

**Evaporating Temp. Range:** -15°C to 15°C (5°F to 59°F)  
**Motor Torque:** High Start Torque (HST)  
**Compressor Cooling:** Fan

**Mechanical**

**Weight:** 33  
**Weight Unit of Measure:** KG  
**Displacement (cc):** 53.2  
**Oil Type:** Polyolester  
**Viscosity (cSt):** 32  
**Oil Charge (cc):** 1480

**Electrical**

**Voltage Range (50 Hz):** 187-242  
**Voltage Range (60 Hz):** N/A  
**Locked Rotor Amps (LRA):** 51  
**Rated Load Amps (RLA 50 Hz):** 8.1  
**Rated Load Amps (RLA 60 Hz):** 8.3  
**Max. Continuous Current (MCC in Amps):** 12.1  
**Motor Resistance (Ohm) - Main:** 1.25  
**Motor Resistance (Ohm) - Start:** 4.2  
**Motor Type:** CSR  
**Overload Type:** N/A  
**Relay Type:** N/A

**Agency Approval**

CE Listed, GOST RUSSIA Listed



# Tecumseh

## Performance Data Sheet

### AHC4518YGZ

### General Information

<b>Model</b>	AHC4518YGZ	<b>Refrigerant</b>	R-134a
<b>Test Condition</b>	Tecumseh Europe	<b>Performance Test Voltage</b>	220V ~ 50HZ
<b>Return Gas</b>	-6.7°C (20°F) SUPERHEAT	<b>Motor Type</b>	CSR

### Performance Information

Evap Temp (°C)	Condensing Temperature (°C)				
		30	40	50	60
-6.7	Watts (Capacity)	3380	2860	2350	1830
	Watts (Power)	1150	1200	1240	1290
	Amps	6.15	6.28	6.40	6.53
-5	Watts (Capacity)	3740	3180	2620	2060
	Watts (Power)	1190	1250	1300	1360
	Amps	6.37	6.53	6.69	6.85
0	Watts (Capacity)	4890	4200	3510	2820
	Watts (Power)	1290	1390	1480	1570
	Amps	6.96	7.25	7.53	7.82
5	Watts (Capacity)	6150	5330	4510	3680
	Watts (Power)	1380	1510	1650	1780
	Amps	7.47	7.92	8.37	8.82
7.2	Watts (Capacity)	6740	5860	4980	4100
	Watts (Power)	1410	1560	1720	1880
	Amps	7.67	8.20	8.74	9.28
10	Watts (Capacity)	7530	6570	5610	4650
	Watts (Power)	1440	1620	1810	2000
	Amps	7.90	8.56	9.21	9.86
15	Watts (Capacity)	9030	7930	6830	5730
	Watts (Power)	1480	1720	1970	2210
	Amps	8.26	9.15	10.0	10.9

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	6.953762E+03	1.024559E+03	6.088556E+00	
C2	3.196544E+02	-5.368901E+00	2.210999E-02	
C3	-6.886325E+01	8.886613E+00	2.930113E-02	

C4	2.560925E+00	-8.697321E-01	-3.736815E-03	
C5	-2.625308E+00	7.934662E-01	2.924127E-03	
C6	-3.048970E-04	5.192736E-03	-1.400320E-05	
C7	-1.000000E-16	0.000000E+00	0.000000E+00	
C8	-7.454286E-03	1.516221E-02	7.332280E-05	
C9	4.460000E-11	5.250000E-06	-9.420000E-09	
C10	2.030000E-06	-3.340000E-05	1.080000E-07	

$$\text{Value} = C1 + C2 * \text{Te} + C4 * \text{Te}^2 + C7 * \text{Te}^3 + (C3 + C5 * \text{Te} + C8 * \text{Te}^2) * \text{Tc} + (C6 + C9 * \text{Te}) * \text{Tc}^2 + C10 * \text{Tc}^3$$

Te = Evaporator Temperature

Tc = Condensing Temperature