



Model: AHC4525YKZ (TFH4525Y)

Product Description

Type: Reciprocating
Application: HBP - High Back Pressure
Refrigerant: R-134a
Voltage/Frequency: 220V 3~ 60Hz 220V 3~ 50Hz
Version: N/A

Product Specifications

Performance

Condition	Test Voltage	Refrigeration Capacity			Input Power W	Efficiency			EVAP TEMP	COND TEMP	AMBIENT TEMP	RETURN GAS	LIQUID TEMP
		Btu/h	kcal/h	W		Btu/Wh	kcal/Wh	W/W					
EN12900	220V 3~ 50HZ	20304	5117	5949	1971	10.3	2.6	3.02	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: 30
Weight Unit of Measure: KG
Displacement (cc): 74.25
Oil Type: Polyolester
Viscosity (cSt): 32
Oil Charge (cc): 1480

Electrical

Voltage Range (50 Hz): 180-253
Voltage Range (60 Hz): 187-264
Locked Rotor Amps (LRA): 45
Rated Load Amps (RLA 50 Hz): 7.7
Rated Load Amps (RLA 60 Hz): 7.7
Max. Continuous Current (MCC in Amps): 0
Motor Resistance (Ohm) - Main: 1.8
Motor Resistance (Ohm) - Start: 1.8
Motor Type: 3PH
Overload Type: N/A
Relay Type: N/A

Agency Approval

CE Listed, GOST RUSSIA Listed, GOST UKRAINE
 Listed



Tecumseh

Performance Data Sheet

AHC4525YKZ

General Information

Model	AHC4525YKZ	Refrigerant	R-134a
Test Condition	Tecumseh Europe	Performance Test Voltage	220V 3~ 50HZ
Return Gas	-6.7°C (20°F) SUPERHEAT	Motor Type	3PH

Performance Information

Evap Temp (°C)		Condensing Temperature (°C)							
		30	35	40	45	50	55	60	65
-6.7	Watts (Capacity)	4620	4270	3910	3560	3210	2850	2500	2150
	Watts (Power)	1420	1450	1480	1500	1530	1560	1590	1610
	Amps	5.18	5.23	5.28	5.34	5.39	5.44	5.49	5.55
-5	Watts (Capacity)	5050	4680	4300	3920	3540	3160	2780	2410
	Watts (Power)	1470	1500	1540	1570	1610	1640	1680	1710
	Amps	5.29	5.36	5.42	5.49	5.55	5.62	5.69	5.75
0	Watts (Capacity)	6470	6010	5560	5100	4650	4190	3740	3280
	Watts (Power)	1600	1660	1720	1770	1830	1890	1940	2000
	Amps	5.60	5.71	5.83	5.94	6.06	6.17	6.29	6.41
5	Watts (Capacity)	8110	7570	7030	6490	5950	5400	4860	4320
	Watts (Power)	1720	1800	1890	1970	2060	2140	2220	2310
	Amps	5.87	6.05	6.23	6.41	6.58	6.76	6.94	7.12
7.2	Watts (Capacity)	8900	8320	7740	7160	6580	5990	5410	4830
	Watts (Power)	1760	1860	1960	2060	2150	2250	2350	2450
	Amps	5.99	6.19	6.40	6.61	6.82	7.03	7.24	7.45
10	Watts (Capacity)	9970	9340	8700	8070	7430	6800	6160	5520
	Watts (Power)	1810	1930	2050	2160	2280	2400	2520	2630
	Amps	6.12	6.37	6.63	6.88	7.13	7.38	7.64	7.89
15	Watts (Capacity)	12100	11300	10600	9850	9110	8370	7630	6890
	Watts (Power)	1890	2040	2200	2350	2510	2660	2820	2970
	Amps	6.34	6.68	7.02	7.36	7.70	8.04	8.38	8.72

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	9.200902E+03	1.268188E+03	4.897365E+00	
C2	4.034704E+02	-5.459768E+00	-8.548299E-03	
C3	-9.100288E+01	1.102792E+01	2.353564E-02	

C4	5.508173E+00	-9.834354E-01	-2.137322E-03	
C5	-3.259655E+00	1.004233E+00	2.231049E-03	
C6	-1.165304E-03	6.429026E-03	-1.064410E-05	
C7	-1.000000E-16	0.000000E+00	0.000000E+00	
C8	-3.456601E-02	2.023554E-02	5.148140E-05	
C9	2.860000E-11	6.440000E-06	-1.040000E-08	
C10	7.770000E-06	-4.130000E-05	8.320000E-08	

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

Te = Evaporator Temperature

Tc = Condensing Temperature