Technical Datasheet

2/15/2022

Model: THG1352YKS

Product Description

Type: Reciprocating Compressors
Application: LBP - Low Back Pressure
ProductDescription: R-134a
Voltage/Frequency: 220-240V ~ 50Hz
Version: N/A

Product Specifications

Performance

		Refrigeration Capacity			Input Power	(E) Efficiency							
Condition	Test Voltage	(R) Btu/h	(R) kcal/h	(R) W	(I) W	(E) Btu/Wh	(E) kcal/Wh	W/W	EVAP TEMP	Condition	AMBIENT TEMP	RETURN GAS	LIQUID TEMP
CECOMAF	220V ~ 50HZ	335	84	98	99	3.38	.85	.99	-23°C (-10°F)	55°C (131°F)	32°C (90°F)	32°C (90°F)	55°C (131°F)
ASHRAE	220V ~ 50HZ	460	116	135	108	4.26	1.07	1.25	-23°C (-10°F)	54°C (130°F)	32°C (90°F)	32°C (90°F)	32°C (90°F)

General

Evaporating Temp. Range: -34.4°C to -12.2°C (-30°F to 10°F)
Motor Torque: Low Start Torque (LST)
Compressor Cooling: Static

Mechanical

Weight: 8
Weight Unit of Measure: KG
Displacement (cc): 5.01
Oil Type: Polyolester
Viscosity (cSt): 10
Oil Charge (cc): 243

Electrical

Voltage Range (50 Hz): 195-253
Voltage Range (60 Hz):
Locked Rotor Amps (LRA): 9
Rated Load Amps (RLA 50 Hz): .71
Rated Load Amps (RLA 60 Hz): 0
Max. Continuous Current (MCC in Amps): 0

Motor Resistance (Ohm) - Main:	21.76
Motor Resistance (Ohm) - Start:	30.57
MotorType:	PTCCS_IR
Overload Type:	
Relay Type:	

Agency Approval

CE Listed, GOST RUSSIA Listed, VDE Listed

Tecumseh

Performance Data Sheet

THG1352YKS

General

Model	THG1352YKS	**Unit of Measure**	Celsius
Condition	ASHRAE()	**Voltage/Frequency**	220V~50HZ
RETURN GAS		**MotorType**	PTCCS_IR

Performance Information

EVAP TEMP (°C)		Condensing Temperature (°C)							
		30	35	40	45	50	55	60	65
-40	Btu/h	236	204	178	157	138	119	99.0	75.2
	Watts (Power)	48.5	46.7	45.3	44.2	43.4	42.8	42.3	41.8
	Amps	0.52	0.49	0.48	0.47	0.47	0.46	0.45	0.43
	Lb/h	2.97	2.57	2.25	1.99	1.75	1.52	1.26	0.97
-35	Btu/h	319	288	262	239	217	195	171	142
	Watts (Power)	55.1	53.9	52.9	52.1	51.4	50.7	49.9	48.9
	Amps	0.57	0.55	0.54	0.53	0.53	0.52	0.51	0.49
	Lb/h	3.99	3.60	3.28	3.00	2.73	2.46	2.15	1.78
-30	Btu/h	426	395	369	345	321	296	267	233
	Watts (Power)	62.7	62.4	62.2	62.0	61.7	61.2	60.4	59.3
	Amps	0.62	0.61	0.60	0.60	0.60	0.59	0.58	0.56
	Lb/h	5.30	4.93	4.60	4.30	4.01	3.69	3.34	2.91
-25	Btu/h	557	527	501	476	450	422	390	350
	Watts (Power)	70.7	71.7	72.6	73.3	73.7	73.8	73.3	72.3
	Amps	0.68	0.67	0.67	0.67	0.68	0.68	0.67	0.66
	Lb/h	6.91	6.54	6.22	5.91	5.59	5.24	4.84	4.35
-23.3	Btu/h	607	577	551	526	500	471	437	396
	Watts (Power)	73.4	74.9	76.3	77.4	78.1	78.4	78.1	77.3
	Amps	0.70	0.69	0.69	0.70	0.71	0.71	0.71	0.69
	Lb/h	7.53	7.16	6.84	6.53	6.20	5.84	5.42	4.92
-20	Btu/h	712	684	658	632	605	575	538	495
	Watts (Power)	78.5	81.2	83.5	85.4	86.9	87.8	88.0	87.5
	Amps	0.74	0.74	0.74	0.76	0.77	0.78	0.77	0.76
	Lb/h	8.82	8.47	8.15	7.83	7.50	7.12	6.67	6.13
-15	Btu/h	894	867	842	816	787	754	715	667
	Watts (Power)	85.6	90.2	94.3	97.8	101	103	104	104
	Amps	0.80	0.81	0.82	0.84	0.86	0.88	0.89	0.88
	Lb/h	11.1	10.7	10.4	10.1	9.73	9.33	8.84	8.25
-10	Btu/h	1100	1080	1050	1030	997	962	920	868
	Watts (Power)	91.4	98.3	104	110	114	118	120	122
	Amps	0.86	0.88	0.91	0.94	0.97	0.99	1.01	1.01
	Lb/h	13.6	13.3	13.0	12.7	12.3	11.9	11.4	10.7

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.800000E+03	5.410000E+00	1.030000E+00	2.220000E+01
C2	4.850000E+01	-4.450000E+00	-1.260000E-02	5.960000E-01

C3	-1.160000E+01	3.430000E+00	-1.880000E-02	-1.430000E-01
C4	5.560000E-01	-9.870000E-02	-3.150000E-04	6.830000E-03
C5	3.620000E-01	1.720000E-01	8.250000E-04	4.430000E-03
C6	2.460000E-01	-9.120000E-03	7.240000E-04	3.020000E-03
C7	1.240000E-03	-7.600000E-04	-1.920000E-06	1.530000E-05
C8	1.170000E-03	1.290000E-03	6.920000E-06	1.440000E-05
C9	-3.930000E-03	-7.600000E-04	-2.560000E-06	-4.800000E-05
C10	-2.640000E-03	-1.170000E-04	-5.720000E-06	-3.240000E-05

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

Te = Evaporator Temperature
Tc = Condensing Temperature