

PRODUCT SPECIFICATION

COMPRESSOR MODEL

CR30K6M-TFM-XXX

BILL OF MATERIALS

131, 631

Emerson Climate Technologies (India) Limited
Karad Dhebewadi Road
Karad - 415 110
INDIA

Note : Sales compressor drawing number and compressor model name are the same.

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PRODUCT SPECIFICATION**MODEL : CR30K6M-TFM-XXX****A) MODEL DESCRIPTION**

Model Name	CR30K6M-TFM-XXX
Compressor Type	Reciprocating, Connecting Rod Type
Application Group	High Temperature (HBP)
Evaporating Temperature Range	-23.3 °C To 12.8 °C (-10 °F To 55 °F)
Refrigerant	R-22
Rated Voltage	400 V, 50 Hz, 3 Phase
Compressor Cooling	Fan : 400 ft ³ / minute
Typical Application	Air - conditioning, Heat Pump
Certifications & Approvals	---

B) PERFORMANCE SPECIFICATION @ RATED CONDITION

Parameter	Unit	ASRE / T	ARI
Cooling Capacity	Btu / h	24,400	23,700
	kcal / h	6,161	5,984
	W	7,144	6,939
	Nominal HP	2.44	2.37
Input Power	W	2,275	2,275
Input Current	A	4.2	4.2
EER = $\frac{\text{Cooling Capacity}}{\text{Input Power}}$	Btu / W-h	10.72	10.41
	kcal / W-h	2.70	2.63
	W / W	3.14	3.05

Note : Above performance parameters are nominal values & subject to \pm 5% variation.

C) RATING CONDITIONS

Parameter	Unit	ASRE / T	ARI
Evaporating Temperature	°C (°F)	7.2 (45)	7.2 (45)
Condensing Temperature	°C (°F)	54.4 (130)	54.4 (130)
Ambient Temperature	°C (°F)	35 (95)	35 (95)
Sub - cooled Liquid Temperature	°C (°F)	46 (115)	46 (115)
Return Gas Temperature	°C (°F)	35 (95)	18.3 (65)
Test Voltage	V	400	400

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MODEL : CR30K6M-TFM-XXX

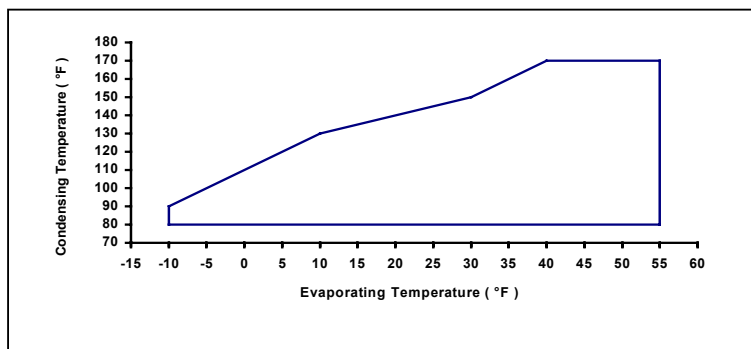
D) MECHANICAL SPECIFICATION

Parameter	Unit	Value
Number of Cylinders	Number	Two (2)
Displacement	cm ³ (inch ³) / rev	51.47 (3.141)
Net Weight	kg	30.0
Approximate Shipping Weight	kg	30.6
Oil Charge	cm ³ (Oz)	1,330 (45)
Oil Type	Refrigeration Grade	Mineral
IPRV (Pressure Differential)	kg / cm ² (psig)	31.64 / 38.67 (450 / 550)
Crank - Case Heater	W @ V	N / A

E) ELECTRICAL SPECIFICATION

Parameter	Unit	Value
Operating Voltage Range	V	342 To 462
Motor Circuit	---	3 Phase
Electrical Accessories	---	
➤ Start Capacitor	μF @ V AC	N / A
➤ Run Capacitor	μF @ V AC	N / A
➤ Relay	---	N / A
➤ Over Load Protector	---	Internal
Lock Rotor Ampere (LRA)	A	28
Maximum Continuous Current (MCC)	A	6.1
Motor Insulation	---	B Class
High Potential Test	(kV / second / mA)	2.3/1/5.5 ± 0.5

F) OPERATING ENVELOP @ 400 V, 50 Hz, 3 Phase



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PRODUCT SPECIFICATION**MODEL : CR30K6M-TFM-XXX****PERFORMANCE TABLES**

Superheating	11 °C (20 °F)	Voltage	400 V, 50 Hz, 3 Phase
Sub - cooling	8.3 °C (15 °F)	Compressor cooling	400 ft ³ / minute
Ambient Temperature	35 °C (95 °F)	-	-

A) COOLING CAPACITY (Btu / h)

Condensing Temperature		Evaporating Temperature								
		-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10	12.8
°C	(°F)	-10	0	10	20	30	40	45	50	55
37.8	100	5700	7730	12200	16800	21800	27700	31100	34900	39100
43.3	110	-	6970	11100	15300	19200	25500	28700	32300	36400
48.9	120	-	-	9620	13500	17800	23000	26100	29500	33400
54.4	130	-	-	8040	11600	15600	20400	23700	26700	30400
60.0	140	-	-	-	9880	13600	18200	20900	24100	27600

B) INPUT POWER (W)

Condensing Temperature		Evaporating Temperature								
		-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10	12.8
°C	(°F)	-10	0	10	20	30	40	45	50	55
37.8	100	1050	1180	1330	1490	1640	1760	1800	1830	1850
43.3	110	-	1120	1310	1520	1710	1870	1940	1990	2030
48.9	120	-	-	1350	1600	1830	2030	2120	2200	2260
54.4	130	-	-	1380	1660	1930	2180	2275	2380	2460
60.0	140	-	-	-	1640	1950	2240	2360	2480	2580

C) INPUT CURRENT (A)

Condensing Temperature		Evaporating Temperature								
		-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10	12.8
°C	(°F)	-10	0	10	20	30	40	45	50	55
37.8	100	2.7	2.9	3.2	3.4	3.5	3.6	3.7	3.8	3.8
43.3	110	-	3.0	3.2	3.5	3.7	3.8	3.9	4.0	4.1
48.9	120	-	-	3.2	3.5	3.8	4.0	4.1	4.2	4.2
54.4	130	-	-	3.2	3.5	3.8	4.1	4.2	4.3	4.4
60.0	140	-	-	-	3.6	3.9	4.2	4.4	4.5	4.7

Note : 1. Nominal Performance Values (± 5%) based on 24 h of 'run in'. Subject to change without notice.

2. Compressor is intended to be operated in the range of condensing & evaporating temperatures where performance values are specified in above tables.

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