



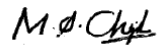
PRODUCT SPECIFICATION

COMPRESSOR MODEL

CS10K6ME-PFV-XXXXX

Emerson Climate Technologies (India) Private Limited
INDIA

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

DVM				01	F45-0820-0072 EN No.	A2 04.08.2020
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PRODUCT SPECIFICATION**MODEL: CS10K6ME-PFV-XXXXX****A) MODEL DESCRIPTION**



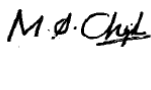
Model Name	CS10K6ME-PFV-XXXXX
Compressor Type	Reciprocating, Connecting Rod Type
Application Group	Medium Temp
Evaporating Temperature Range	(-)31.7 °C To (-)1.1 °C Or (-)25 °F To 30 °F
Refrigerant	R-404A
Rated Voltage	200-220 V, 50 Hz, 1 Phase 208-230 V, 60 Hz, 1 Phase
Compressor Cooling	Fan: 400 ft ³ / minute
Typical Application	Cold Room Application

B) PERFORMANCE SPECIFICATION @ RATED CONDITION

Parameter	Unit	ARI-MBP	
		50 Hz	60 Hz
Cooling Capacity	Btu / h	8590	9800
	kcal / h	2165	2470
	W	2515	2870
Input Power	W	1430	1615
Input Current	A	7.8	7.2
EER = $\frac{\text{Cooling Capacity}}{\text{Input Power}}$	Btu / W-h	6.01	6.07
	kcal / W-h	1.51	1.53
	W / W	1.76	1.78

Note: Above Performance Parameters are Nominal Values & subject to $\pm 5\%$ variation.**C) RATING CONDITIONS**

Parameter	Unit	ARI-MBP
Evaporating Temperature	°C (°F)	-6.7 (20)
Condensing Temperature	°C (°F)	48.9 (120)
Ambient Temperature	°C (°F)	35 (95)
Sub-cooled Liquid Temperature	°C (°F)	48.9 (120)
Return Gas Temperature	°C (°F)	4.4 (40)
Test Voltage	V	200 @ 50Hz
		230 @ 60Hz

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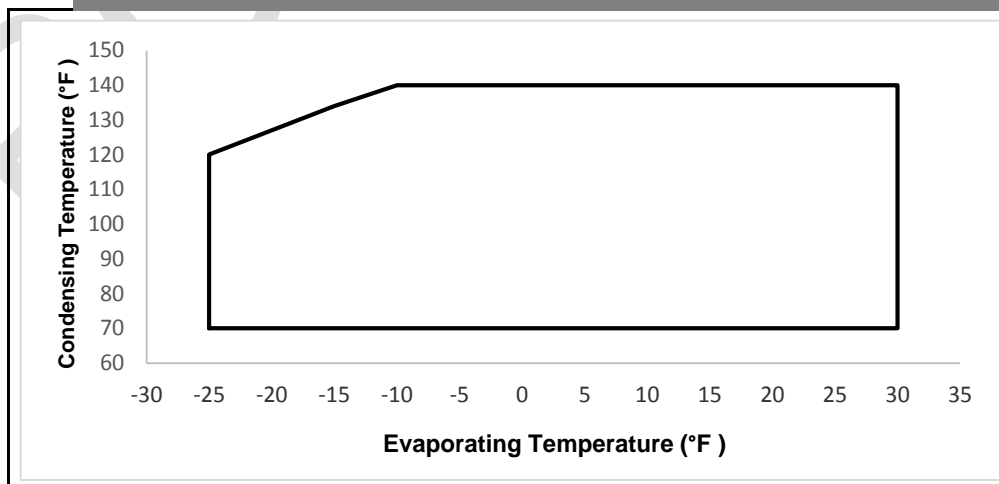
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PRODUCT SPECIFICATION**MODEL : CS10K6ME-PFV-XXXXX****D) MECHANICAL SPECIFICATIONS**

Parameter	Unit	Value
Number of Cylinders	Number	Two (2)
Displacement	cm ³ (inch ³) / rev	40.80 (2.490)
Net Weight	kg	29.8
Approximate Shipping Weight	kg	33.1
Oil Charge	cm ³ (Oz)	1,330 (45)
Oil Type	Refrigeration Grade	POE
IPRV (Pressure Differential)	kg/cm ² (psig)	31.64 / 38.67 (450 / 550)
Crank - Case Heater	W @ V	40 @ 240 for CS10K6ME-PFV-XX5 40 @ 480 for CS10K6ME-PFV-XX6

E) ELECTRICAL SPECIFICATIONS

Parameter	Unit	Value
Operating Voltage Range	V	180 To 242, 50Hz 197 To 253, 60Hz
Motor Circuit	---	CSCR
Electrical Accessories	---	
➤ Start Capacitor	μF @ V AC	189-227 @ 330
➤ Run Capacitor	μF @ V AC	36 @440
➤ Relay	---	Potential
➤ Over Load Protector	---	Internal
Locked Rotor Ampere (LRA)	A	56A@ 50Hz & 56A@ 60Hz
Maximum Continuous Current (MCC)	AS	19.0
High Potential Test	(kV / second / mA)	1.85 / 1 / 5.5 ± 0.5

F) OPERATING ENVELOP, 50Hz & 60 Hz, 1 Phase

DVM	<i>Sutar</i>	<i>Abhijeet</i>	<i>M. S. Chiplunkar</i>	03	F45-0820-0072 EN No.	A2 04.08.2020
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PRODUCT SPECIFICATION**MODEL : CS10K6ME-PFV-XXXXX****M) MECHANICAL SPECIFICATIONS**

Parameter	Unit	Value
Cylinder Bore Diameter	cm (inch)	4.21 (1.656)
Crank - Shaft Eccentricity	cm (inch)	0.73 (0.290)
Crank - Shaft Stroke	cm (inch)	1.47(0.580)
Approximate Internal Free Volume (Without Oil)	cm ³ (inch ³)	6.500(397)
Maximum Residual Moisture	mg	300
Maximum Internal Solid Residue / Impurities	mg	40

N) ELECTRICAL SPECIFICATIONS

Parameter	Unit	Value
Motor Type	---	2 Pole, Induction, Single Phase
Nominal Motor Speed	rpm	2,900 @ 50Hz, 3,500 @ 60Hz
Nominal Motor Winding Resistance (@ 25 °C)	Main	Ω 1.37 To 1.57
	Aux.	Ω 2.01 To 2.30
Nominal Motor Output Power	kW	1.48
Max. Allowable Motor Winding Temp.	°F (°C)	266 (130) B Class Insulation
Relay		
Type	---	Potential
Part Number	---	HLR3800-6H3C-1
Pick Up (Maximum)	V	195 To 215 @ 50Hz
Drop Out (Minimum)	V	80 To 110
Maximum Voltage Rating of Coils	V	430
Over Load Protector		
Type	---	Internal
Part Number		5DN-0708-78
Disc Opening Temperature	°F (°C)	239 To 257 (115 To 125)
Disc Closing Temperature	°F (°C)	140 TO 172 (60 TO 77.8)
1 st Cycle Trip Current	A	42
1 st Cycle Trip on Time	second	2 To 10
Terminal Fused Cluster	---	¼" Quick connector
Wire Material	---	Hermetic Grade Round Enameled
Wire Enamel Designation & Construction	---	H Class, Dual Coated

SPECIFICATION

DVM	<i>Sutar</i>	<i>Abhijeet Kulkarni</i>	<i>M. d. Chiplunkar</i>	04	F45-0820-0072 EN No.	A2 04.08.2020
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PRODUCT SPECIFICATION**MODEL: CS10K6ME-PFV-XXXXX****P) PERFORMANCE SPECIFICATIONS**

Parameter	Unit	Value
Bare Compressor Sound	dB(A)	78.0 Maximum
Bare Compressor Vibration	µm	85 Maximum
Compressor Discharge Pulse	psi	5.0 Maximum

Q) TEST CONDITIONS



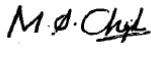
Parameter	Voltage	Suction Pressure	Discharge Pressure	Top Shell Temperature	Ambient Temperature
Unit	V	kg/cm ² (psig)	kg/cm ² (psig)	°C (°F)	°C (°F)
Overload (High Load)	242,50Hz 253,60Hz	5.13 (73)	31.70 (451)	--	46 (115)
Blocked Fan	200,50Hz 230,60Hz	6.7 (95)	30.58 (435)	--	35(95)
Low Voltage Start: Equalised	180,50Hz 197,60Hz	8 (114) 14.3 (203)	25.3(360) 14.3(203)	65(149) 65(149)	--
Low Voltage Run	180,50Hz 197,60Hz	5.13 (73)	31.70 (451)	--	46 (115)

Note: Above test conditions are only for reference. Refer operating envelop and maximum allowable discharge line temperature for safe operation of compressor.

R) REFERENCE APPLICATION DETIAL CONDITIONS

Parameter	Unit	Value
Maximum Allowable Ambient Temperature	°C (°F)	46 (115)
Maximum Discharge Line Temperature	°C (°F)	135 (275)
Maximum Return Gas Temperature	°C (°F)	43 (109)

Note: Application details are the guidelines for safe operation of compressor.

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