

COMPRESSOR DEFINITION

Designation	EM 2C26CLT
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	513304510

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-600a		
3 Nominal voltage and frequency	220-240 / 50	[V / Hz]	
4 Application type	Low Back Pressure		
4.1 Evaporating temperature range	-35°C to -10°C	(-31°F to 14°F)	
5 Motor type	RSCR		
6 Starting torque	LST - Low Starting Torque		
7 Expansion device	Capillary tube		
8 Compressor cooling	Operating voltage range		
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	Static	198 to 255 V	-
8.2 LBP (43°C Ambient temperature)	Static	198 to 255 V	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	7.7	[kgf/cm ²] (109 psig)	/ °C - °F
9.2 Peak (gauge)	9.8	[kgf/cm ²] (139 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation		[hp]
2 Displacement	5.19	[cm ³] (0.317 cu.in)
2.1 Bore [mm]	21.000	
2.2 Stroke [mm]	15.000	
3 Lubricant charge	150	[ml] (5.07 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	MINERAL / ISO5	
4 Weight (with oil charge)	8.21	[kg] (18.10 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	PTC	
2.1 Starting device	7M220MD3/8EA17C3	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	3(300)/2.5(300)/2(300)	[µF(VAC minimum)]
5 Motor protection	4TM110KFBYY-73	
6 Start winding resistance	31.90	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	44.40	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	2.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	0.30	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	VDE	

D - PERFORMANCE - CHECK POINT DATA

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		ASHRAE32 Static			(Condensing temperature 35°C (+95°F))					
Evaporating temperature	Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%			
	°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35 (-31)	172	43	50	31	0.15	0.54	5.51	1.39	1.62	
-30 (-22)	232	58	68	36	0.17	0.73	6.36	1.60	1.86	
-25 (-13)	303	76	89	42	0.19	0.95	7.27	1.83	2.13	
-20 (- 4)	387	98	114	47	0.21	1.22	8.31	2.09	2.44	
-15 (+ 5)	490	123	143	51	0.23	1.54	9.56	2.41	2.80	
-10 (+14)	612	154	179	55	0.25	1.93	11.08	2.79	3.25	

TEST CONDITIONS: @220V50Hz		ASHRAE32 Static			(Condensing temperature 45°C (+113°F))					
Evaporating temperature	Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%			
	°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35 (-31)	144	36	42	32	0.15	0.45	4.46	1.12	1.31	
-30 (-22)	206	52	60	38	0.17	0.65	5.37	1.35	1.57	
-25 (-13)	278	70	81	44	0.19	0.87	6.25	1.57	1.83	
-20 (- 4)	362	91	106	50	0.22	1.14	7.15	1.80	2.10	
-15 (+ 5)	462	116	135	56	0.25	1.45	8.17	2.06	2.39	
-10 (+14)	581	146	170	62	0.27	1.83	9.37	2.36	2.75	

TEST CONDITIONS: @220V50Hz		ASHRAE32 Static			(Condensing temperature 55°C (+131°F))					
Evaporating temperature	Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%			
	°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35 (-31)	120	30	35	34	0.14	0.38	3.59	0.91	1.05	
-30 (-22)	183	46	54	40	0.17	0.58	4.61	1.16	1.35	
-25 (-13)	255	64	75	46	0.20	0.80	5.50	1.39	1.61	
-20 (- 4)	338	85	99	53	0.23	1.06	6.33	1.59	1.85	
-15 (+ 5)	436	110	128	61	0.26	1.37	7.17	1.81	2.10	
-10 (+14)	551	139	162	68	0.30	1.74	8.09	2.04	2.37	

TEST CONDITIONS: @220V50Hz		ASHRAE32 Static			(Condensing temperature 65°C (+149°F))					
Evaporating temperature	Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%			
	°C (°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35 (-31)	98	25	29	35	0.14	0.31	2.80	0.71	0.82	
-30 (-22)	163	41	48	41	0.17	0.51	3.99	1.01	1.17	
-25 (-13)	235	59	69	48	0.20	0.74	4.94	1.25	1.45	
-20 (- 4)	316	80	93	56	0.24	0.99	5.74	1.45	1.68	
-15 (+ 5)	411	104	121	64	0.28	1.30	6.45	1.63	1.89	
-10 (+14)	523	132	153	73	0.32	1.65	7.16	1.80	2.10	

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard EUEM		
2 Tray holder	Yes		
3 Connectors			
3.1 SUCTION	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 42° up + 45° to Back		
3.2 DISCHARGE	4.9 +0.10/-0.05	[mm]	(0.193" +0.004"/-0.002")
3.2.1 Material	Copper		
3.2.2 Shape	Slanted 90° up + 24° to Back		
3.3 PROCESS	6 +0.08/-0.08	[mm]	(0.236" +0.003"/-0.003")
3.3.1 Material	Copper(OD)		
3.3.2 Shape	Slanted 43° up + 45° to Back		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		