

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	TSD	
2.1 Starting device	MI.E-START 2021	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	3(300)/2.5(300)/2(300)	[µF(VAC minimum)]
5 Motor protection	AE23AHNX	
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		CECOMAF 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)	171	43	50	30	0.16	0.55	5.72	1.44	1.68	
-30 (-22)	230	58	68	35	0.18	0.74	6.56	1.65	1.92	
-25 (-13)	300	76	88	41	0.20	0.96	7.44	1.88	2.18	
-20 (- 4)	383	97	112	46	0.22	1.23	8.46	2.13	2.48	
-15 (+ 5)	483	122	141	50	0.24	1.55	9.67	2.44	2.83	
-10 (+14)	603	152	177	54	0.26	1.94	11.17	2.81	3.27	

TEST CONDITIONS: @220V50Hz		CECOMAF 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)	134	34	39	31	0.16	0.46	4.35	1.10	1.27	
-30 (-22)	191	48	56	37	0.18	0.66	5.15	1.30	1.51	
-25 (-13)	255	64	75	43	0.20	0.89	5.92	1.49	1.73	
-20 (- 4)	330	83	97	49	0.23	1.15	6.71	1.69	1.97	
-15 (+ 5)	420	106	123	55	0.26	1.47	7.62	1.92	2.23	
-10 (+14)	528	133	155	61	0.28	1.85	8.70	2.19	2.55	

TEST CONDITIONS: @220V50Hz		CECOMAF 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)	102	26	30	33	0.15	0.39	3.18	0.80	0.93	
-30 (-22)	156	39	46	38	0.18	0.59	4.03	1.02	1.18	
-25 (-13)	215	54	63	45	0.21	0.82	4.74	1.20	1.39	
-20 (- 4)	283	71	83	52	0.24	1.08	5.39	1.36	1.58	
-15 (+ 5)	362	91	106	59	0.27	1.39	6.05	1.52	1.77	
-10 (+14)	457	115	134	67	0.31	1.75	6.80	1.71	1.99	

TEST CONDITIONS: @220V50Hz		CECOMAF 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)	75	19	22	33	0.15	0.32	2.21	0.56	0.65	
-30 (-22)	126	32	37	39	0.18	0.53	3.17	0.80	0.93	
-25 (-13)	179	45	52	46	0.21	0.75	3.90	0.98	1.14	
-20 (- 4)	239	60	70	54	0.25	1.01	4.47	1.13	1.31	
-15 (+ 5)	308	78	90	63	0.29	1.31	4.95	1.25	1.45	
-10 (+14)	389	98	114	72	0.33	1.66	5.44	1.37	1.59	

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		