

COMPRESSOR DEFINITION

Designation	EM C26CLT
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	700SA89

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	187 to 255 V	-
8.2 LBP (43°C Ambient temperature)	Static	187 to 255 V	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	6.9	[kgf/cm ²] (98 psig)	/ °C - °F
9.2 Peak	7.8	[kgf/cm ²] (111 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/10	[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	ALQUILB / ISO5	
4 Weight (with oil charge)	7.45	[kg] (16.42 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	2.5(350)/2(350)	[µF(VAC minimum)]
5 Motor protection	AX24BNXX	
6 Start winding resistance	25.00	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	59.15	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	2.33	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	0.36	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	0.48	[A] - Measured according to UL 984
11 Approval boards certification	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			ASHRAE LBP-NOFAN Static		Evaporating temperature (Condensing temperature	-23.3°C (-9.94°F) 54.4°C (129.92°F)		
Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
272	69	80	45	0.21	0.85	6.07	1.53	1.78

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			ASHRAE32-NOFAN 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	29	0.14	0.54	5.86	1.48	1.72
-30 (-22)	229	58	67	34	0.17	0.72	6.69	1.69	1.96
-25 (-13)	302	76	88	40	0.19	0.95	7.67	1.93	2.25
-20 (- 4)	390	98	114	45	0.21	1.23	8.78	2.21	2.57
-15 (+ 5)	495	125	145	50	0.24	1.56	10.02	2.52	2.94
-10 (+14)	618	156	181	54	0.26	1.95	11.37	2.87	3.33

TEST CONDITIONS: @220V50Hz			ASHRAE32-NOFAN 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)	149	38	44	29	0.14	0.47	5.13	1.29	1.50
-30 (-22)	206	52	60	35	0.17	0.65	5.89	1.48	1.73
-25 (-13)	277	70	81	41	0.19	0.87	6.75	1.70	1.98
-20 (- 4)	364	92	107	47	0.22	1.14	7.68	1.94	2.25
-15 (+ 5)	467	118	137	54	0.25	1.47	8.69	2.19	2.55
-10 (+14)	588	148	172	60	0.28	1.85	9.75	2.46	2.86

TEST CONDITIONS: @220V50Hz			ASHRAE32-NOFAN 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)	123	31	36	29	0.15	0.39	4.33	1.09	1.27
-30 (-22)	178	45	52	35	0.17	0.56	5.08	1.28	1.49
-25 (-13)	247	62	72	42	0.20	0.77	5.86	1.48	1.72
-20 (- 4)	331	83	97	49	0.24	1.04	6.66	1.68	1.95
-15 (+ 5)	431	109	126	57	0.27	1.36	7.48	1.88	2.19
-10 (+14)	548	138	161	66	0.31	1.73	8.30	2.09	2.43

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		ASHRAE32-NOFAN 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)	97	24	28	26	0.13	0.30	3.65	0.92	1.07
-30	(-22)	148	37	43	33	0.16	0.47	4.42	1.11	1.29
-25	(-13)	214	54	63	41	0.20	0.67	5.17	1.30	1.51
-20	(- 4)	294	74	86	50	0.23	0.93	5.89	1.48	1.72
-15	(+ 5)	390	98	114	60	0.28	1.23	6.56	1.65	1.92
-10	(+14)	503	127	147	70	0.33	1.59	7.18	1.81	2.11

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
2 Tray holder	No		
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	5.1 +0.10/+0.00	[mm]	(0.201" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Slanted 42° up + 45° 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		