

COMPRESSOR DEFINITION

Designation	EM C55CLT
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	700CA89

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	PSC		
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		[hp]
2 Displacement	9.04	[cm ³] (0.552 cu.in)
2.1 Bore [mm]	24.000	
2.2 Stroke [mm]	20.000	
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	PTC	
2.1 Starting device	MI2021XV230	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	4(350)	[µF(VAC minimum)]
5 Motor protection	AE64FS	
6 Start winding resistance	21.45	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	26.20	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	4.07	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	0.54	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	0.79	[A] - Measured according to UL 984
11 Approval boards certification	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			CECOMAFLBP-NOFAN Static		Evaporating temperature (Condensing temperature		-25°C (-13°F) 55°C (131°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]
393	99	115	84	0.37	1.50	4.71	1.19	1.38

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		CECOMAF-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)	301	76	88	58	0.26	0.96	5.18	1.30	1.52
-30	(-22)	409	103	120	68	0.30	1.31	6.07	1.53	1.78
-25	(-13)	540	136	158	77	0.34	1.73	7.02	1.77	2.06
-20	(- 4)	693	175	203	87	0.38	2.23	8.04	2.03	2.36
-15	(+ 5)	871	220	255	96	0.42	2.80	9.11	2.30	2.67
-10	(+14)	1074	271	315	105	0.46	3.46	10.23	2.58	3.00

TEST CONDITIONS: @220V50Hz		CECOMAF-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)	249	63	73	58	0.26	0.86	4.29	1.08	1.26
-30	(-22)	346	87	101	69	0.31	1.20	5.00	1.26	1.46
-25	(-13)	464	117	136	80	0.36	1.61	5.75	1.45	1.69
-20	(- 4)	603	152	177	92	0.41	2.10	6.54	1.65	1.92
-15	(+ 5)	766	193	224	104	0.46	2.67	7.36	1.86	2.16
-10	(+14)	952	240	279	116	0.52	3.33	8.20	2.07	2.40

TEST CONDITIONS: @220V50Hz		CECOMAF-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)	204	51	60	59	0.26	0.78	3.51	0.89	1.03
-30	(-22)	288	73	84	70	0.31	1.10	4.10	1.03	1.20
-25	(-13)	391	99	115	83	0.37	1.49	4.70	1.18	1.38
-20	(- 4)	515	130	151	96	0.43	1.97	5.31	1.34	1.56
-15	(+ 5)	660	166	193	111	0.50	2.53	5.93	1.49	1.74
-10	(+14)	828	209	243	126	0.57	3.18	6.54	1.65	1.92

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		CECOMAF-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)	164	41	48	58	0.26	0.69	2.81	0.71	0.82
-30	(-22)	233	59	68	70	0.31	0.98	3.31	0.84	0.97
-25	(-13)	320	81	94	84	0.37	1.36	3.82	0.96	1.12
-20	(- 4)	427	108	125	100	0.44	1.81	4.30	1.08	1.26
-15	(+ 5)	553	139	162	116	0.52	2.35	4.77	1.20	1.40
-10	(+14)	700	176	205	135	0.61	2.98	5.20	1.31	1.53

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		