

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	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		[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	TSD	
2.1 Starting device	MI.E-START 2021	
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)	4.15	[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	82	0.37	1.50	4.82	1.21	1.41

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	56	0.26	0.96	5.36	1.35	1.57	
-30 (-22)	409	103	120	66	0.30	1.31	6.25	1.58	1.83	
-25 (-13)	540	136	158	75	0.34	1.73	7.21	1.82	2.11	
-20 (- 4)	693	175	203	85	0.38	2.23	8.23	2.07	2.41	
-15 (+ 5)	871	220	255	94	0.42	2.80	9.31	2.35	2.73	
-10 (+14)	1074	271	315	103	0.46	3.46	10.43	2.63	3.06	

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	56	0.26	0.86	4.44	1.12	1.30	
-30 (-22)	346	87	101	67	0.31	1.20	5.15	1.30	1.51	
-25 (-13)	464	117	136	78	0.36	1.61	5.90	1.49	1.73	
-20 (- 4)	603	152	177	90	0.41	2.10	6.69	1.69	1.96	
-15 (+ 5)	766	193	224	102	0.46	2.67	7.51	1.89	2.20	
-10 (+14)	952	240	279	114	0.52	3.33	8.35	2.10	2.45	

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	57	0.26	0.78	3.64	0.92	1.07	
-30 (-22)	288	73	84	68	0.31	1.10	4.22	1.06	1.24	
-25 (-13)	391	99	115	81	0.37	1.49	4.82	1.21	1.41	
-20 (- 4)	515	130	151	94	0.43	1.97	5.43	1.37	1.59	
-15 (+ 5)	660	166	193	109	0.50	2.53	6.04	1.52	1.77	
-10 (+14)	828	209	243	124	0.57	3.18	6.65	1.68	1.95	

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	56	0.26	0.69	2.91	0.73	0.85
-30	(-22)	233	59	68	68	0.31	0.98	3.41	0.86	1.00
-25	(-13)	320	81	94	82	0.37	1.36	3.91	0.98	1.14
-20	(- 4)	427	108	125	98	0.44	1.81	4.39	1.11	1.29
-15	(+ 5)	553	139	162	114	0.52	2.35	4.85	1.22	1.42
-10	(+14)	700	176	205	133	0.61	2.98	5.28	1.33	1.55

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		