

COMPRESSOR DEFINITION

Designation	EM C32CLT
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	701LA77

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	1/7	[hp]
2 Displacement	5.96	[cm ³] (0.364 cu.in)
2.1 Bore [mm]	22.500	
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)	8	[kg] (17.64 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	TSD-220V0.6/TSD2-220V/TSD2-220V1.2/TSD2-D-220V	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	3(350)/2(350)/2.5(350)	[µF(VAC minimum)]
5 Motor protection	CP4TMC112K61A5	
6 Start winding resistance	36.40	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	40.00	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	2.68	[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)	0.51	[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]
234	59	69	49	0.22	0.89	4.80	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)	167	42	49	31	0.15	0.53	5.37	1.35	1.57	
-30 (-22)	242	61	71	39	0.17	0.78	6.27	1.58	1.84	
-25 (-13)	328	83	96	45	0.20	1.05	7.32	1.84	2.14	
-20 (- 4)	428	108	125	51	0.23	1.38	8.48	2.14	2.49	
-15 (+ 5)	546	138	160	56	0.26	1.76	9.75	2.46	2.86	
-10 (+14)	685	173	201	62	0.29	2.21	11.08	2.79	3.25	

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)	141	36	41	32	0.15	0.49	4.44	1.12	1.30	
-30 (-22)	207	52	61	40	0.18	0.72	5.15	1.30	1.51	
-25 (-13)	283	71	83	47	0.21	0.99	5.97	1.50	1.75	
-20 (- 4)	372	94	109	54	0.24	1.30	6.87	1.73	2.01	
-15 (+ 5)	477	120	140	61	0.28	1.67	7.83	1.97	2.30	
-10 (+14)	602	152	176	68	0.31	2.11	8.82	2.22	2.59	

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)	110	28	32	31	0.15	0.42	3.55	0.89	1.04	
-30 (-22)	168	42	49	40	0.18	0.64	4.14	1.04	1.21	
-25 (-13)	234	59	69	49	0.22	0.89	4.80	1.21	1.41	
-20 (- 4)	313	79	92	57	0.26	1.19	5.51	1.39	1.62	
-15 (+ 5)	406	102	119	65	0.30	1.55	6.24	1.57	1.83	
-10 (+14)	518	130	152	74	0.34	1.99	6.97	1.76	2.04	

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)	73	18	21	27	0.14	0.31	2.67	0.67	0.78
-30	(-22)	123	31	36	38	0.17	0.52	3.21	0.81	0.94
-25	(-13)	181	46	53	47	0.21	0.76	3.79	0.96	1.11
-20	(- 4)	249	63	73	57	0.26	1.06	4.39	1.11	1.29
-15	(+ 5)	331	83	97	67	0.31	1.41	4.96	1.25	1.45
-10	(+14)	430	108	126	79	0.37	1.83	5.49	1.38	1.61

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
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	4.94 +0.08/-0.08	[mm]	(0.194" +0.003"/-0.003")
3.2.1 Material	Copper		
3.2.2 Shape	Slanted 0° up + 45° to Back		
3.3 PROCESS	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 45° up + 45° to Back		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		