

### COMPRESSOR DEFINITION

Designation	EM D66CLT
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	701TA77

### 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 <sup>2</sup> ] (98 psig)	/ °C - °F
9.2 Peak	7.8	[kgf/cm <sup>2</sup> ] (111 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation		[hp]
2 Displacement	10.61	[cm <sup>3</sup> ] (0.647 cu.in)
2.1 Bore [mm]	26.000	
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)	8.1	[kg] (17.86 lb.)
5 Nitrogen charge	-	[kgf/cm <sup>2</sup> ]

### 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	TSD2-220V	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	5(350)	[µF(VAC minimum)]
5 Motor protection	4TM232KFBYY-53	
6 Start winding resistance	15.80	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	20.00	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	5.41	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	0.69	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	1.01	[A] - Measured according to UL 984
11 Approval boards certification	VDE	

### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			<b>CECOMAFLBP-NOFAN</b> 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]
462	116	135	91	0.44	1.76	5.08	1.28	1.49

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		<b>CECOMAF-NOFAN</b> 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)	361	91	106	64	0.33	1.16	5.61	1.41	1.65	
-30 (-22)	479	121	140	73	0.36	1.54	6.56	1.65	1.92	
-25 (-13)	624	157	183	83	0.40	2.00	7.57	1.91	2.22	
-20 (- 4)	798	201	234	93	0.45	2.57	8.61	2.17	2.52	
-15 (+ 5)	1001	252	293	103	0.49	3.22	9.67	2.44	2.83	
-10 (+14)	1235	311	362	115	0.54	3.99	10.74	2.71	3.15	

TEST CONDITIONS: @220V50Hz		<b>CECOMAF-NOFAN</b> 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)	310	78	91	64	0.33	1.08	4.85	1.22	1.42	
-30 (-22)	417	105	122	74	0.37	1.45	5.61	1.41	1.64	
-25 (-13)	549	138	161	85	0.42	1.91	6.41	1.62	1.88	
-20 (- 4)	707	178	207	97	0.47	2.46	7.25	1.83	2.12	
-15 (+ 5)	892	225	261	110	0.53	3.12	8.09	2.04	2.37	
-10 (+14)	1106	279	324	124	0.59	3.87	8.93	2.25	2.62	

TEST CONDITIONS: @220V50Hz		<b>CECOMAF-NOFAN</b> 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)	249	63	73	65	0.33	0.95	3.84	0.97	1.13	
-30 (-22)	344	87	101	78	0.38	1.31	4.45	1.12	1.30	
-25 (-13)	461	116	135	91	0.44	1.76	5.08	1.28	1.49	
-20 (- 4)	603	152	177	105	0.50	2.30	5.73	1.44	1.68	
-15 (+ 5)	770	194	226	120	0.57	2.95	6.38	1.61	1.87	
-10 (+14)	963	243	282	137	0.64	3.70	7.01	1.77	2.06	

### 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)	206	52	60	63	0.33	0.87	3.21	0.81	0.94
-30	(-22)	287	72	84	78	0.38	1.21	3.69	0.93	1.08
-25	(-13)	389	98	114	93	0.44	1.64	4.18	1.05	1.22
-20	(- 4)	513	129	150	110	0.52	2.17	4.67	1.18	1.37
-15	(+ 5)	660	166	193	128	0.60	2.80	5.15	1.30	1.51
-10	(+14)	831	209	244	148	0.69	3.54	5.61	1.41	1.64

### 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		