

COMPRESSOR DEFINITION

Designation	EM X66CLC
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	701QA97

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	10.61	[cm ³] (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)	7.6	[kg] (16.75 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	MI2021/V230	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	5(350)/4(350)	[µF(VAC minimum)]
5 Motor protection	AE18BQX	
6 Start winding resistance	15.20	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	20.50	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	-	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[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]
467	118	137	102	0.53	1.78	4.59	1.16	1.34

E - PERFORMANCE - CURVES

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)	307	77	90	76	0.60	1.07	4.04	1.02	1.18
-30 (-22)	416	105	122	88	0.64	1.45	4.75	1.20	1.39
-25 (-13)	548	138	160	102	0.69	1.91	5.39	1.36	1.58
-20 (- 4)	705	178	207	118	0.74	2.46	6.01	1.51	1.76
-15 (+ 5)	889	224	261	134	0.80	3.11	6.63	1.67	1.94
-10 (+14)	1102	278	323	151	0.86	3.86	7.30	1.84	2.14

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)	243	61	71	71	0.59	0.93	3.43	0.86	1.01
-30 (-22)	344	87	101	85	0.64	1.31	4.05	1.02	1.19
-25 (-13)	465	117	136	101	0.70	1.77	4.57	1.15	1.34
-20 (- 4)	608	153	178	120	0.76	2.32	5.04	1.27	1.48
-15 (+ 5)	775	195	227	141	0.84	2.97	5.49	1.38	1.61
-10 (+14)	968	244	284	162	0.92	3.72	5.98	1.51	1.75

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)	201	51	59	75	0.59	0.85	2.67	0.67	0.78
-30 (-22)	285	72	84	89	0.64	1.20	3.20	0.81	0.94
-25 (-13)	387	97	113	107	0.71	1.63	3.62	0.91	1.06
-20 (- 4)	507	128	149	128	0.79	2.15	3.97	1.00	1.16
-15 (+ 5)	649	164	190	152	0.87	2.76	4.28	1.08	1.25
-10 (+14)	814	205	239	176	0.97	3.47	4.60	1.16	1.35

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	5.1 +0.10/+0.00 [mm] (0.201" +0.004"/+0.000")
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