

### COMPRESSOR DEFINITION

Designation	<b>EM X66CLC</b>
Nominal Voltage/Frequency	<b>220-240 V 50 Hz</b>
Engineering Number	<b>700BA72</b>

### 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	-	-
8.2 LBP (43°C Ambient temperature)	Static	-	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating (gauge)	6.9	[kgf/cm <sup>2</sup> ] (98 psig)	/ °C - °F
9.2 Peak (gauge)	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)	7.6	[kg] (16.75 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	TSD-220V0.6	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	4(350)	[µF(VAC minimum)]
5 Motor protection	4TM189NFBYY-73	
6 Start winding resistance	17.80	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	18.60	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	6.42	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	0.90	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	1.30	[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	<b>-25°C (-13°F)</b> <b>55°C (131°F)</b>		
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	100	0.50	1.78	4.68	1.18	1.37

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			<b>CECOMAF-NOFAN</b> Static		(Condensing temperature <b>45°C (+113°F)</b> )				
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]
<b>-35 (-31)</b>	307	77	90	74	0.60	1.07	4.15	1.05	1.22
<b>-30 (-22)</b>	416	105	122	86	0.64	1.45	4.86	1.23	1.43
<b>-25 (-13)</b>	548	138	160	100	0.69	1.91	5.50	1.39	1.61
<b>-20 (- 4)</b>	705	178	207	116	0.74	2.46	6.11	1.54	1.79
<b>-15 (+ 5)</b>	889	224	261	132	0.80	3.11	6.73	1.70	1.97
<b>-10 (+14)</b>	1102	278	323	149	0.86	3.86	7.40	1.86	2.17

TEST CONDITIONS: @220V50Hz			<b>CECOMAF-NOFAN</b> Static		(Condensing temperature <b>55°C (+131°F)</b> )				
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]
<b>-35 (-31)</b>	243	61	71	69	0.59	0.93	3.53	0.89	1.03
<b>-30 (-22)</b>	344	87	101	83	0.64	1.31	4.14	1.04	1.21
<b>-25 (-13)</b>	465	117	136	99	0.70	1.77	4.66	1.17	1.37
<b>-20 (- 4)</b>	608	153	178	118	0.76	2.32	5.12	1.29	1.50
<b>-15 (+ 5)</b>	775	195	227	139	0.84	2.97	5.57	1.40	1.63
<b>-10 (+14)</b>	968	244	284	160	0.92	3.72	6.05	1.52	1.77

TEST CONDITIONS: @220V50Hz			<b>CECOMAF-NOFAN</b> Static		(Condensing temperature <b>65°C (+149°F)</b> )				
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]
<b>-35 (-31)</b>	201	51	59	73	0.59	0.85	2.74	0.69	0.80
<b>-30 (-22)</b>	285	72	84	87	0.64	1.20	3.27	0.83	0.96
<b>-25 (-13)</b>	387	97	113	105	0.71	1.63	3.69	0.93	1.08
<b>-20 (- 4)</b>	507	128	149	126	0.79	2.15	4.03	1.02	1.18
<b>-15 (+ 5)</b>	649	164	190	150	0.87	2.76	4.34	1.09	1.27
<b>-10 (+14)</b>	814	205	239	174	0.97	3.47	4.65	1.17	1.36

### 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	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		