

COMPRESSOR DEFINITION

Designation	EG X100CLC
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	513703068

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	198 to 255 V	-
8.2 LBP (43°C Ambient temperature)	Static	198 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	1/3	[hp]
2 Displacement	13.54	[cm ³] (0.826 cu.in)
2.1 Bore [mm]	28.000	
2.2 Stroke [mm]	22.000	
3 Lubricant charge	280	[ml] (9.47 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ALQUILB / ISO5	
4 Weight (with oil charge)	11.24	[kg] (24.78 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	8EA17C3/8EA17E62/QPS2-A22MD3	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	4(350)/5(350)	[µF(VAC minimum)]
5 Motor protection	4TM283KFBYY-53	
6 Start winding resistance	21.20	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	19.60	[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	CCC - CE - UKCA - VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			ASHRAE LBP-NOFAN Static		Evaporating temperature (Condensing temperature		-23.3°C (-9.94°F) 54.4°C (129.92°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]
762	192	223	124	0.56	2.39	6.16	1.55	1.81

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			ASHRAE32-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)	438	110	128	84	0.40	1.37	5.19	1.31	1.52
-30 (-22)	579	146	170	100	0.46	1.82	5.85	1.47	1.71
-25 (-13)	727	183	213	112	0.52	2.28	6.55	1.65	1.92
-20 (- 4)	901	227	264	123	0.57	2.83	7.31	1.84	2.14
-15 (+ 5)	1122	283	329	136	0.63	3.53	8.14	2.05	2.39
-10 (+14)	1408	355	413	153	0.71	4.44	9.09	2.29	2.66

TEST CONDITIONS: @220V50Hz			ASHRAE32-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)	374	94	110	82	0.39	1.17	4.56	1.15	1.34
-30 (-22)	541	136	159	102	0.47	1.70	5.27	1.33	1.54
-25 (-13)	703	177	206	119	0.54	2.21	5.94	1.50	1.74
-20 (- 4)	879	221	257	134	0.61	2.76	6.62	1.67	1.94
-15 (+ 5)	1089	274	319	149	0.68	3.43	7.31	1.84	2.14
-10 (+14)	1353	341	397	168	0.77	4.27	8.03	2.02	2.35

TEST CONDITIONS: @220V50Hz			ASHRAE32-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)	267	67	78	71	0.36	0.84	3.75	0.95	1.10
-30 (-22)	469	118	137	99	0.47	1.47	4.56	1.15	1.34
-25 (-13)	653	165	191	122	0.56	2.05	5.28	1.33	1.55
-20 (- 4)	840	212	246	142	0.65	2.64	5.94	1.50	1.74
-15 (+ 5)	1048	264	307	161	0.73	3.30	6.55	1.65	1.92
-10 (+14)	1299	327	381	183	0.83	4.10	7.13	1.80	2.09

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		
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		
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		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		