

COMPRESSOR DEFINITION

Designation	EG X100CLC
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	513703055

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		[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)	11.19	[kg] (24.67 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/QPS2-A22MD3	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	5(330)	[µF(VAC minimum)]
5 Motor protection	4TM283KFBYY-53	
6 Start winding resistance	17.60	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	17.30	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	6.10	[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)	-	[A] - Measured according to UL 984
11 Approval boards certification	CE - UKCA - VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			ASHRAELBP32 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]
846	213	248	133	0.61	2.66	6.38	1.61	1.87

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		ASHRAE32 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)	506	128	148	88	0.41	1.58	5.74	1.45	1.68
-30	(-22)	646	163	189	99	0.46	2.03	6.53	1.64	1.91
-25	(-13)	826	208	242	112	0.52	2.59	7.39	1.86	2.17
-20	(- 4)	1052	265	308	126	0.58	3.31	8.36	2.11	2.45
-15	(+ 5)	1335	336	391	141	0.65	4.20	9.45	2.38	2.77
-10	(+14)	1683	424	493	157	0.72	5.31	10.68	2.69	3.13

TEST CONDITIONS: @220V50Hz		ASHRAE32 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)	482	122	141	93	0.43	1.51	5.20	1.31	1.52
-30	(-22)	625	158	183	106	0.49	1.96	5.93	1.49	1.74
-25	(-13)	803	202	235	120	0.55	2.52	6.71	1.69	1.97
-20	(- 4)	1025	258	300	135	0.62	3.22	7.55	1.90	2.21
-15	(+ 5)	1299	327	381	153	0.70	4.09	8.49	2.14	2.49
-10	(+14)	1635	412	479	171	0.78	5.16	9.53	2.40	2.79

TEST CONDITIONS: @220V50Hz		ASHRAE32 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)	452	114	132	96	0.44	1.42	4.74	1.19	1.39
-30	(-22)	598	151	175	110	0.51	1.87	5.41	1.36	1.59
-25	(-13)	775	195	227	127	0.58	2.43	6.10	1.54	1.79
-20	(- 4)	992	250	291	145	0.66	3.12	6.83	1.72	2.00
-15	(+ 5)	1258	317	369	165	0.75	3.96	7.61	1.92	2.23
-10	(+14)	1581	398	463	187	0.85	4.99	8.46	2.13	2.48

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		ASHRAE32 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)	416	105	122	96	0.44	1.30	4.32	1.09	1.27
-30	(-22)	565	142	166	114	0.52	1.77	4.95	1.25	1.45
-25	(-13)	741	187	217	134	0.61	2.33	5.55	1.40	1.63
-20	(- 4)	954	240	280	155	0.71	3.00	6.16	1.55	1.81
-15	(+ 5)	1212	305	355	179	0.82	3.82	6.79	1.71	1.99
-10	(+14)	1523	384	446	204	0.93	4.81	7.46	1.88	2.19

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal EG/F/AMEM version 2		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	8.2 +0.12/-0.08	[mm]	(0.323" +0.005"/-0.003")
3.1.1 Material	Copper		
3.1.2 Shape	Straight		
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	Straight		
3.3 PROCESS	6.5 +0.12/-0.08	[mm]	(0.256" +0.005"/-0.003")
3.3.1 Material	Copper		
3.3.2 Shape	Straight		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		