

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	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	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	TSD	
2.1 Starting device	TSD-220V/TSD-220V0.6	
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			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]
801	202	235	130	0.60	2.52	6.17	1.55	1.81

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		ASHRAE32-NOFAN 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)	479	121	140	86	0.41	1.50	5.55	1.40	1.63
-30	(-22)	612	154	179	97	0.45	1.92	6.31	1.59	1.85
-25	(-13)	781	197	229	110	0.50	2.45	7.15	1.80	2.09
-20	(- 4)	996	251	292	123	0.57	3.13	8.08	2.04	2.37
-15	(+ 5)	1264	318	370	138	0.64	3.98	9.14	2.30	2.68
-10	(+14)	1593	401	467	154	0.71	5.02	10.32	2.60	3.03

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)	457	115	134	91	0.42	1.43	5.03	1.27	1.47
-30	(-22)	592	149	173	103	0.46	1.86	5.74	1.45	1.68
-25	(-13)	761	192	223	117	0.52	2.39	6.49	1.64	1.90
-20	(- 4)	971	245	284	133	0.59	3.05	7.31	1.84	2.14
-15	(+ 5)	1230	310	361	149	0.68	3.87	8.21	2.07	2.41
-10	(+14)	1548	390	454	167	0.76	4.88	9.21	2.32	2.70

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)	428	108	125	94	0.44	1.34	4.58	1.15	1.34
-30	(-22)	566	143	166	108	0.49	1.78	5.24	1.32	1.53
-25	(-13)	734	185	215	124	0.57	2.30	5.91	1.49	1.73
-20	(- 4)	940	237	275	142	0.65	2.95	6.61	1.67	1.94
-15	(+ 5)	1191	300	349	162	0.74	3.75	7.36	1.86	2.16
-10	(+14)	1497	377	439	183	0.84	4.72	8.19	2.06	2.40

E - PERFORMANCE - CURVES

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)	394	99	115	94	0.44	1.23	4.18	1.05	1.22
-30	(-22)	535	135	157	111	0.51	1.68	4.78	1.21	1.40
-25	(-13)	702	177	206	131	0.59	2.20	5.37	1.35	1.57
-20	(- 4)	903	228	265	152	0.69	2.84	5.96	1.50	1.75
-15	(+ 5)	1147	289	336	175	0.80	3.61	6.57	1.66	1.93
-10	(+14)	1442	363	423	200	0.91	4.55	7.22	1.82	2.12

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		