

COMPRESSOR DEFINITION

Designation	EG X110CLC
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	513703070

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	1/3	[hp]
2 Displacement	14.77	[cm ³] (0.901 cu.in)
2.1 Bore [mm]	28.000	
2.2 Stroke [mm]	24.000	
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)	11.25	[kg] (24.80 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	14.80	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	14.35	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	7.30	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	1.10	[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 - 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]
924	233	271	147	0.69	2.90	6.31	1.59	1.85

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)	546	138	160	99	0.51	1.71	5.48	1.38	1.61
-30	(-22)	687	173	201	111	0.54	2.15	6.22	1.57	1.82
-25	(-13)	871	219	255	124	0.59	2.73	7.08	1.78	2.07
-20	(- 4)	1109	279	325	138	0.66	3.48	8.06	2.03	2.36
-15	(+ 5)	1411	356	414	154	0.73	4.44	9.17	2.31	2.69
-10	(+14)	1790	451	525	172	0.81	5.65	10.38	2.62	3.04

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)	521	131	153	101	0.52	1.63	5.16	1.30	1.51
-30	(-22)	673	170	197	116	0.57	2.11	5.81	1.46	1.70
-25	(-13)	861	217	252	132	0.63	2.70	6.55	1.65	1.92
-20	(- 4)	1098	277	322	148	0.71	3.45	7.39	1.86	2.17
-15	(+ 5)	1394	351	408	167	0.79	4.39	8.32	2.10	2.44
-10	(+14)	1760	444	516	188	0.89	5.55	9.34	2.35	2.74

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)	498	125	146	104	0.52	1.56	4.80	1.21	1.41
-30	(-22)	657	166	193	122	0.58	2.06	5.38	1.36	1.58
-25	(-13)	849	214	249	140	0.66	2.66	6.03	1.52	1.77
-20	(- 4)	1082	273	317	160	0.75	3.40	6.75	1.70	1.98
-15	(+ 5)	1370	345	401	182	0.85	4.31	7.53	1.90	2.21
-10	(+14)	1722	434	505	206	0.96	5.43	8.36	2.11	2.45

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)	461	116	135	104	0.52	1.44	4.41	1.11	1.29
-30	(-22)	627	158	184	126	0.60	1.97	4.95	1.25	1.45
-25	(-13)	819	207	240	148	0.69	2.57	5.53	1.39	1.62
-20	(- 4)	1049	264	307	171	0.80	3.30	6.14	1.55	1.80
-15	(+ 5)	1326	334	389	196	0.91	4.18	6.79	1.71	1.99
-10	(+14)	1662	419	487	223	1.03	5.25	7.47	1.88	2.19

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		