

### COMPRESSOR DEFINITION

Designation	EG US110CLC
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	513701298

### 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 <sup>2</sup> ] (98 psig)	/ °C - °F
9.2 Peak	7.8	[kgf/cm <sup>2</sup> ] (111 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation	1/3	[hp]
2 Displacement	14.77	[cm <sup>3</sup> ] (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)	10.69	[kg] (23.57 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	PTC	
2.1 Starting device	8EA17C3/8EA17E61/8EA17E62/8EA17E63/QPS2-A22MD3/QPS3	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	5(350)	[µF(VAC minimum)]
5 Motor protection	4TM232RFBYY-53	
6 Start winding resistance	26.10	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	16.75	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	7.75	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	1.39	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	1.58	[A] - Measured according to UL 984
11 Approval boards certification		

### 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]
833	210	244	152	0.76	2.62	5.48	1.38	1.61

### 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)	509	128	149	102	0.57	1.59	4.96	1.25	1.45	
-30 (-22)	654	165	192	116	0.62	2.05	5.62	1.42	1.65	
-25 (-13)	810	204	237	128	0.66	2.54	6.34	1.60	1.86	
-20 (- 4)	985	248	289	139	0.70	3.09	7.10	1.79	2.08	
-15 (+ 5)	1189	300	348	151	0.75	3.74	7.90	1.99	2.31	
-10 (+14)	1430	360	419	164	0.80	4.51	8.72	2.20	2.56	

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)	492	124	144	106	0.58	1.54	4.64	1.17	1.36	
-30 (-22)	644	162	189	122	0.64	2.02	5.25	1.32	1.54	
-25 (-13)	819	206	240	138	0.70	2.57	5.91	1.49	1.73	
-20 (- 4)	1026	259	301	154	0.77	3.22	6.62	1.67	1.94	
-15 (+ 5)	1273	321	373	173	0.85	4.01	7.36	1.86	2.16	
-10 (+14)	1568	395	459	193	0.94	4.95	8.13	2.05	2.38	

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)	463	117	136	111	0.59	1.45	4.20	1.06	1.23	
-30 (-22)	607	153	178	128	0.66	1.90	4.76	1.20	1.40	
-25 (-13)	787	198	231	146	0.73	2.47	5.39	1.36	1.58	
-20 (- 4)	1010	255	296	166	0.82	3.18	6.06	1.53	1.78	
-15 (+ 5)	1285	324	377	189	0.92	4.05	6.77	1.70	1.98	
-10 (+14)	1620	408	475	216	1.04	5.11	7.50	1.89	2.20	

### 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)	414	104	121	116	0.62	1.30	3.54	0.89	1.04
-30	(-22)	537	135	157	133	0.68	1.68	4.09	1.03	1.20
-25	(-13)	706	178	207	152	0.76	2.22	4.69	1.18	1.37
-20	(- 4)	931	234	273	175	0.85	2.92	5.34	1.35	1.57
-15	(+ 5)	1218	307	357	202	0.97	3.84	6.03	1.52	1.77
-10	(+14)	1577	397	462	233	1.11	4.98	6.75	1.70	1.98

### 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		
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		