

COMPRESSOR DEFINITION

Designation	EG AS70CLP
Nominal Voltage/Frequency	220 V 60 Hz
Engineering Number	513701244

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-600a		
3 Nominal voltage and frequency	220 / 60	[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	RSIR		
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 242 V
8.2 LBP (43°C Ambient temperature)	Static	-	198 to 242 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	1/4	[hp]
2 Displacement	9.66	[cm ³] (0.589 cu.in)
2.1 Bore [mm]	26.000	
2.2 Stroke [mm]	18.200	
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)	10.38	[kg] (22.88 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	PTC	
2.1 Starting device	8EA17C1/QPS2-A22MG1/QPS2-A22MG1 092	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	4TM283KFBYY-53	
6 Start winding resistance	24.60	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	21.50	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	5.18/5.18	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	1.16/0.97	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	1.35/1.24	[A] - Measured according to UL 984
11 Approval boards certification	CE - TUV - UKCA	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V60Hz			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]
709	179	208	137	0.86	2.23	5.16	1.30	1.51

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V60Hz		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)	424	107	124	87	0.73	1.33	4.85	1.22	1.42
-30 (-22)	545	137	160	99	0.76	1.71	5.51	1.39	1.61
-25 (-13)	686	173	201	109	0.79	2.15	6.34	1.60	1.86
-20 (- 4)	857	216	251	118	0.82	2.69	7.30	1.84	2.14
-15 (+ 5)	1071	270	314	129	0.86	3.37	8.32	2.10	2.44
-10 (+14)	1339	337	392	143	0.90	4.22	9.35	2.36	2.74

TEST CONDITIONS: @220V60Hz		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)	398	100	117	92	0.74	1.25	4.29	1.08	1.26
-30 (-22)	531	134	156	110	0.78	1.66	4.77	1.20	1.40
-25 (-13)	678	171	199	123	0.82	2.13	5.47	1.38	1.60
-20 (- 4)	850	214	249	135	0.86	2.67	6.32	1.59	1.85
-15 (+ 5)	1058	267	310	146	0.91	3.33	7.28	1.84	2.13
-10 (+14)	1315	331	385	159	0.96	4.15	8.29	2.09	2.43

TEST CONDITIONS: @220V60Hz		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)	340	86	100	79	0.73	1.07	4.43	1.12	1.30
-30 (-22)	490	123	144	105	0.79	1.54	4.59	1.16	1.35
-25 (-13)	648	163	190	127	0.84	2.03	5.01	1.26	1.47
-20 (- 4)	825	208	242	145	0.90	2.59	5.62	1.42	1.65
-15 (+ 5)	1034	261	303	161	0.96	3.26	6.38	1.61	1.87
-10 (+14)	1285	324	377	178	1.03	4.05	7.23	1.82	2.12

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V60Hz		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)	251	63	73	46	0.71	0.79	5.37	1.35	1.57
-30	(-22)	422	106	124	86	0.78	1.32	5.08	1.28	1.49
-25	(-13)	596	150	175	120	0.85	1.87	5.08	1.28	1.49
-20	(- 4)	784	198	230	148	0.92	2.47	5.31	1.34	1.56
-15	(+ 5)	998	251	292	174	1.00	3.14	5.73	1.44	1.68
-10	(+14)	1248	315	366	199	1.09	3.94	6.27	1.58	1.84

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard EG/F/AMEM Version 2		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	6.5 +0.12/-0.08	[mm]	(0.256" +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		