

### COMPRESSOR DEFINITION

Designation	EG AS80CLP
Nominal Voltage/Frequency	220 V 60 Hz
Engineering Number	513701141

### 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 <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	1/4	[hp]
2 Displacement	11.14	[cm <sup>3</sup> ] (0.680 cu.in)
2.1 Bore [mm]	26.000	
2.2 Stroke [mm]	21.000	
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)	10.97	[kg] (24.18 lb.)
5 Nitrogen charge	-	[kgf/cm <sup>2</sup> ]

### 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	8EA17E61	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	4TM232RFBYY-53	
6 Start winding resistance	20.00	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	14.80	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	7.25	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	1.26	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	-	[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]
830	209	243	155	0.94	2.61	5.36	1.35	1.57

### 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)	484	122	142	98	0.78	1.51	4.88	1.23	1.43
-30	(-22)	638	161	187	114	0.82	2.00	5.62	1.42	1.65
-25	(-13)	818	206	240	129	0.88	2.57	6.38	1.61	1.87
-20	(- 4)	1034	261	303	144	0.93	3.25	7.21	1.82	2.11
-15	(+ 5)	1294	326	379	158	0.99	4.07	8.17	2.06	2.39
-10	(+14)	1609	405	471	173	1.05	5.07	9.30	2.34	2.73

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)	444	112	130	100	0.78	1.39	4.49	1.13	1.32
-30	(-22)	605	152	177	117	0.84	1.90	5.20	1.31	1.52
-25	(-13)	789	199	231	135	0.90	2.48	5.87	1.48	1.72
-20	(- 4)	1006	253	295	153	0.97	3.16	6.56	1.65	1.92
-15	(+ 5)	1265	319	371	172	1.05	3.98	7.33	1.85	2.15
-10	(+14)	1574	397	461	190	1.13	4.97	8.22	2.07	2.41

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)	404	102	118	99	0.77	1.26	4.06	1.02	1.19
-30	(-22)	571	144	167	119	0.84	1.79	4.78	1.20	1.40
-25	(-13)	759	191	222	140	0.92	2.38	5.41	1.36	1.59
-20	(- 4)	977	246	286	163	1.01	3.07	6.01	1.51	1.76
-15	(+ 5)	1234	311	362	186	1.11	3.89	6.63	1.67	1.94
-10	(+14)	1540	388	451	210	1.21	4.86	7.32	1.84	2.14

### 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)	332	84	97	95	0.76	1.04	3.49	0.88	1.02
-30	(-22)	506	128	148	118	0.84	1.59	4.25	1.07	1.25
-25	(-13)	699	176	205	143	0.93	2.19	4.88	1.23	1.43
-20	(- 4)	918	231	269	170	1.04	2.89	5.43	1.37	1.59
-15	(+ 5)	1174	296	344	198	1.16	3.70	5.94	1.50	1.74
-10	(+14)	1475	372	432	228	1.29	4.66	6.46	1.63	1.89

### F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal 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		