COMPRESSOR DEFINITION

Designation	**EG ZS80CLC**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**513701140**

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 Expantion device	Capillary tube		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	Static	198 to 255 V	-
8.2 LBP (43ºC Ambient temperature)	Static	198 to 255 V	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	7.7	[kgf/cm²] (109 psig)	/ ºC - ºF
9.2 Peak (gauge)	9.8	[kgf/cm²] (139 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation		[hp]
2 Displacement	11.14	[cm³] (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/cm²]

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	7M220MD3/8EA17C3/8M220MD3	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	5(270)/4(270)	[µF(VAC minimum)]
5 Motor protection	4TM283KFBYY-53	
6 Start winding resistance	18.50	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	13.70	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50/60 Hz)	7.60/6.70	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50/60 Hz)	1.13/1.02	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50/60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	IRAM - VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@220V50Hz**			**CECOMAFLBP** **Static**		Evaporating temperature (Condensing temperature	**-25°C (-13°F)** **55°C (131°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]
513	129	150	108	0.54	1.96	4.77	1.20	1.40

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@220V50Hz**		**CECOMAF** **Static**				(Condensing temperature **35ºC (+95ºF))**				
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)**	387	98	114	76	0.47	1.24	5.09	1.28	1.49
-30	**(-22)**	511	129	150	86	0.49	1.65	5.94	1.50	1.74
-25	**(-13)**	658	166	193	97	0.53	2.12	6.84	1.72	2.00
-20	**(- 4)**	839	211	246	107	0.58	2.69	7.83	1.97	2.30
-15	**(+ 5)**	1064	268	312	119	0.64	3.42	8.96	2.26	2.63
-10	**(+14)**	1343	338	394	131	0.70	4.33	10.25	2.58	3.00

TEST CONDITIONS: **@220V50Hz**		**CECOMAF** **Static**				(Condensing temperature **45ºC (+113ºF))**				
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)**	344	87	101	80	0.47	1.19	4.32	1.09	1.27
-30	**(-22)**	458	115	134	91	0.49	1.59	5.03	1.27	1.47
-25	**(-13)**	589	148	173	102	0.53	2.05	5.76	1.45	1.69
-20	**(- 4)**	748	188	219	114	0.59	2.61	6.55	1.65	1.92
-15	**(+ 5)**	945	238	277	127	0.66	3.30	7.43	1.87	2.18
-10	**(+14)**	1191	300	349	140	0.72	4.17	8.45	2.13	2.48

TEST CONDITIONS: **@220V50Hz**		**CECOMAF** **Static**				(Condensing temperature **55ºC (+131ºF))**				
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)**	297	75	87	82	0.47	1.13	3.62	0.91	1.06
-30	**(-22)**	401	101	118	95	0.50	1.53	4.21	1.06	1.23
-25	**(-13)**	517	130	151	108	0.55	1.97	4.79	1.21	1.40
-20	**(- 4)**	655	165	192	121	0.61	2.50	5.39	1.36	1.58
-15	**(+ 5)**	825	208	242	136	0.69	3.16	6.05	1.53	1.77
-10	**(+14)**	1038	262	304	152	0.77	3.99	6.82	1.72	2.00

E - PERFORMANCE - CURVES

TEST CONDITIONS: **CECOMAF** (Condensing temperature **65ºC (+149ºF))**
@220V50Hz **Static**

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)**	248	62	73	83	0.50	1.05	3.00	0.76	0.88
-30	**(-22)**	344	87	101	97	0.53	1.44	3.49	0.88	1.02
-25	**(-13)**	445	112	130	113	0.58	1.87	3.94	0.99	1.15
-20	**(- 4)**	563	142	165	129	0.66	2.38	4.37	1.10	1.28
-15	**(+ 5)**	707	178	207	147	0.74	3.01	4.84	1.22	1.42
-10	**(+14)**	888	224	260	165	0.84	3.79	5.37	1.35	1.57

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard EG/F/AMEM Version 2		
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		