COMPRESSOR DEFINITION

Designation	**EG AS100CLP**
Nominal Voltage/Frequency	**220 V 50-60 Hz**
Engineering Number	**513701389**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-600a		
3 Nominal voltage and frequency	220 / 50-60	[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 Expantion device	Capillary tube		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	Static	198 to 242 V	198 to 242 V
8.2 LBP (43ºC Ambient temperature)	Static	198 to 242 V	198 to 242 V
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	6.9	[kgf/cm²] (98 psig)	/ ºC - ºF
9.2 Peak (gauge)	7.8	[kgf/cm²] (111 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/3	[hp]
2 Displacement	13.54	[cm³] (0.826 cu.in)
2.1 Bore [mm]	28.000	
2.2 Stroke [mm]	22.000	
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)	10.35	[kg] (22.82 lb.)
5 Nitrogen charge	-	[kgf/cm²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220 V 50-60 Hz 1 ~ (Single phase)	
2 Starting device type	PTC	
2.1 Starting device	8M220MC1/QPS2-A22MG1 092	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	4TM319LFBYY-53	
6 Start winding resistance	15.39	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	12.41	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	10.25/9.70	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	2.02/1.82	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	2.28/2.09	[A] - Measured according to UL 984
11 Approval boards certification	IRAM - TUV	

D - PERFORMANCE - CHECK POINT DATA

E - PERFORMANCE - CURVES

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **35ºC (+95ºF))**
@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)**	477	120	140	120	1.41	1.49	3.97	1.00	1.16
-30	**(-22)**	625	158	183	134	1.42	1.96	4.69	1.18	1.37
-25	**(-13)**	823	207	241	148	1.44	2.58	5.56	1.40	1.63
-20	**(- 4)**	1072	270	314	163	1.47	3.37	6.55	1.65	1.92
-15	**(+ 5)**	1374	346	403	180	1.50	4.32	7.62	1.92	2.23
-10	**(+14)**	1731	436	507	198	1.54	5.46	8.73	2.20	2.56

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **45ºC (+113ºF))**
@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)**	451	114	132	128	1.42	1.41	3.52	0.89	1.03
-30	**(-22)**	587	148	172	142	1.43	1.84	4.14	1.04	1.21
-25	**(-13)**	771	194	226	157	1.45	2.42	4.92	1.24	1.44
-20	**(- 4)**	1004	253	294	173	1.48	3.16	5.81	1.46	1.70
-15	**(+ 5)**	1289	325	378	191	1.52	4.06	6.77	1.71	1.98
-10	**(+14)**	1627	410	477	210	1.57	5.13	7.76	1.96	2.27

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **55ºC (+131ºF))**
@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)**	429	108	126	132	1.42	1.34	3.25	0.82	0.95
-30	**(-22)**	558	141	163	148	1.43	1.75	3.78	0.95	1.11
-25	**(-13)**	732	185	215	164	1.46	2.30	4.46	1.12	1.31
-20	**(- 4)**	954	240	280	182	1.50	3.00	5.24	1.32	1.54
-15	**(+ 5)**	1226	309	359	201	1.54	3.86	6.10	1.54	1.79
-10	**(+14)**	1549	390	454	222	1.60	4.89	6.98	1.76	2.04

TEST CONDITIONS: **ASHRAE32** (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)**	410	103	120	130	1.41	1.28	3.15	0.79	0.92
-30	**(-22)**	536	135	157	150	1.43	1.68	3.58	0.90	1.05
-25	**(-13)**	706	178	207	169	1.47	2.22	4.16	1.05	1.22
-20	**(- 4)**	922	232	270	190	1.51	2.90	4.83	1.22	1.42
-15	**(+ 5)**	1185	299	347	212	1.57	3.73	5.58	1.41	1.63
-10	**(+14)**	1498	377	439	237	1.64	4.73	6.34	1.60	1.86

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard EG/F/AMEM Version 2		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	8.2 +0.12/-0.08	[mm]	(0.323" +0.005"/-0.003")
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	6.5 +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		