COMPRESSOR DEFINITION

Designation	**EG AS80HLP**
Nominal Voltage/Frequency	**115-127 V 60 Hz**
Engineering Number	**513701306**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	115-127 / 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/Fan	-	103 to 140 V
8.2 LBP (43ºC Ambient temperature)	Static/Fan	-	103 to 140 V
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	14.2	[kgf/cm²] (202 psig)	/ ºC - ºF
9.2 Peak	15.9	[kgf/cm²] (226 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/4	[hp]
2 Displacement	6.44	[cm³] (0.393 cu.in)
2.1 Bore [mm]	22.500	
2.2 Stroke [mm]	16.200	
3 Lubricant charge	230	[ml] (7.78 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO10	
4 Weight (with oil charge)	9.7	[kg] (21.38 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm²] (2.84 to 4.27 psig)

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	115-127 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	Combo	
2.1 Starting device	8EA14E61/8EA14E63/8EA21E63/QPS2-C4R7MD3J8	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	4TM437NFBYY-53	
6 Start winding resistance	6.40	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	4.00	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	16.56	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	2.90	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	3.42	[A] - Measured according to UL 984
11 Approval boards certification	CE - TUV - UKCA	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@127V60Hz**			**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]
809	204	237	164	2.20	4.60	4.94	1.24	1.45

TEST CONDITIONS: **@127V60Hz**			**ASHRAELBP32** **Fan**		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]
816	206	239	161	2.30	4.64	5.08	1.28	1.49

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@127V60Hz**		**ASHRAE32** **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)**	481	121	141	106	1.85	2.72	4.55	1.15	1.33
-30	**(-22)**	650	164	190	121	1.91	3.68	5.37	1.35	1.57
-25	**(-13)**	858	216	251	138	1.99	4.87	6.24	1.57	1.83
-20	**(- 4)**	1106	279	324	154	2.08	6.30	7.19	1.81	2.11
-15	**(+ 5)**	1398	352	410	169	2.16	7.98	8.28	2.09	2.43
-10	**(+14)**	1735	437	508	182	2.23	9.94	9.55	2.41	2.80

TEST CONDITIONS: **@127V60Hz**		**ASHRAE32** **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)**	419	106	123	105	1.84	2.37	3.99	1.01	1.17
-30	**(-22)**	599	151	176	125	1.92	3.40	4.80	1.21	1.41
-25	**(-13)**	817	206	239	146	2.03	4.64	5.57	1.40	1.63
-20	**(- 4)**	1073	270	314	168	2.15	6.11	6.38	1.61	1.87
-15	**(+ 5)**	1371	345	402	188	2.28	7.83	7.25	1.83	2.12
-10	**(+14)**	1712	431	502	208	2.41	9.81	8.23	2.08	2.41

E - PERFORMANCE - CURVES

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **55ºC (+131ºF))**
@127V60Hz **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)**	330	83	97	98	1.81	1.87	3.37	0.85	0.99
-30	**(-22)**	517	130	152	123	1.91	2.93	4.20	1.06	1.23
-25	**(-13)**	740	186	217	150	2.05	4.20	4.95	1.25	1.45
-20	**(- 4)**	1000	252	293	177	2.21	5.69	5.65	1.42	1.66
-15	**(+ 5)**	1299	327	381	204	2.38	7.41	6.36	1.60	1.86
-10	**(+14)**	1640	413	480	230	2.57	9.39	7.12	1.79	2.09

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **65ºC (+149ºF))**
@127V60Hz **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)**	216	54	63	84	1.75	1.22	2.59	0.65	0.76
-30	**(-22)**	406	102	119	114	1.88	2.30	3.50	0.88	1.03
-25	**(-13)**	629	158	184	147	2.04	3.57	4.26	1.07	1.25
-20	**(- 4)**	887	224	260	181	2.24	5.05	4.92	1.24	1.44
-15	**(+ 5)**	1183	298	347	216	2.46	6.75	5.51	1.39	1.62
-10	**(+14)**	1519	383	445	250	2.70	8.70	6.10	1.54	1.79

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	Slanted		
3.2 DISCHARGE	6.5 +0.12/-0.08	[mm]	(0.256" +0.005"/-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	Slanted		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		