

### COMPRESSOR DEFINITION

Designation	EG YS60HLP
Nominal Voltage/Frequency	115-127 V 60 Hz
Engineering Number	513701202

### 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 Expansion device	Capillary tube		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	Static	-	98 to 140 V
8.2 LBP (43°C Ambient temperature)	Static	-	98 to 140 V
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	16.2	[kgf/cm <sup>2</sup> ] (230 psig)	/ °C - °F
9.2 Peak (gauge)	20.6	[kgf/cm <sup>2</sup> ] (293 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation	1/5	[hp]
2 Displacement	5.09	[cm <sup>3</sup> ] (0.311 cu.in)
2.1 Bore [mm]	22.500	
2.2 Stroke [mm]	12.800	
3 Lubricant charge	230	[ml] (7.78 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO7	
4 Weight (with oil charge)	9.67	[kg] (21.32 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm <sup>2</sup> ] (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	PTC	
2.1 Starting device	4SP14U427KF/4SP14W427KF/4SP21U427KF/4SP21W427KF	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	4SP14/21(U/W)427KFX	
6 Start winding resistance	7.19	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	4.74	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	10.90	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	1.85	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	2.20	[A] - Measured according to UL 984
11 Approval boards certification	UL	

### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @115V60Hz			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]
610	154	179	109	1.32	3.47	5.59	1.41	1.64

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz			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)	314	79	92	72	0.88	1.78	4.37	1.10	1.28
-30 (-22)	423	107	124	86	1.04	2.40	5.00	1.26	1.47
-25 (-13)	600	151	176	103	1.25	3.41	5.83	1.47	1.71
-20 (- 4)	833	210	244	122	1.46	4.74	6.82	1.72	2.00
-15 (+ 5)	1109	280	325	140	1.68	6.33	7.93	2.00	2.32
-10 (+14)	1417	357	415	156	1.86	8.12	9.15	2.30	2.68

TEST CONDITIONS: @115V60Hz			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)	249	63	73	64	0.80	1.41	3.82	0.96	1.12
-30 (-22)	358	90	105	81	0.99	2.03	4.48	1.13	1.31
-25 (-13)	533	134	156	101	1.22	3.02	5.25	1.32	1.54
-20 (- 4)	762	192	223	124	1.49	4.33	6.09	1.54	1.79
-15 (+ 5)	1032	260	303	148	1.77	5.89	6.98	1.76	2.05
-10 (+14)	1332	336	390	170	2.04	7.63	7.88	1.99	2.31

TEST CONDITIONS: @115V60Hz			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)	155	39	45	58	0.73	0.88	2.74	0.69	0.80
-30 (-22)	267	67	78	76	0.93	1.51	3.60	0.91	1.05
-25 (-13)	444	112	130	99	1.19	2.52	4.48	1.13	1.31
-20 (- 4)	673	170	197	125	1.50	3.83	5.34	1.35	1.57
-15 (+ 5)	942	237	276	153	1.83	5.38	6.17	1.55	1.81
-10 (+14)	1239	312	363	180	2.17	7.10	6.91	1.74	2.03

### F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
2 Tray holder	No		
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		