

### COMPRESSOR DEFINITION

Designation	EG X60HLC
Nominal Voltage/Frequency	115-127 V 60 Hz
Engineering Number	513703081

### 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	RSCR		
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 temperature			
9.1 Operating	14.2	[kgf/cm <sup>2</sup> ] (202 psig)	/ °C - °F
9.2 Peak	15.9	[kgf/cm <sup>2</sup> ] (226 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 / ISO10	
4 Weight (with oil charge)	10.9	[kg] (24.03 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	8EA14C3/QPS2-A4R7MD3	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	12(180)	[µF(VAC minimum)]
5 Motor protection	4TM319KFBYY-53	
6 Start winding resistance		[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance		[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	10.40	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	1.00	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	1.45	[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]
594	150	174	104	0.90	3.38	5.70	1.44	1.67

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz		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)	378	95	111	76	0.60	2.14	4.94	1.24	1.45	
-30 (-22)	522	131	153	88	0.71	2.96	5.96	1.50	1.75	
-25 (-13)	682	172	200	98	0.81	3.87	7.05	1.78	2.07	
-20 (- 4)	867	219	254	106	0.90	4.94	8.25	2.08	2.42	
-15 (+ 5)	1087	274	319	113	0.98	6.21	9.58	2.41	2.81	
-10 (+14)	1350	340	396	121	1.04	7.74	11.09	2.79	3.25	

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)	282	71	83	67	0.58	1.59	4.23	1.07	1.24	
-30 (-22)	436	110	128	83	0.71	2.47	5.21	1.31	1.53	
-25 (-13)	607	153	178	98	0.84	3.45	6.19	1.56	1.81	
-20 (- 4)	803	202	235	111	0.97	4.57	7.20	1.81	2.11	
-15 (+ 5)	1034	261	303	124	1.09	5.90	8.27	2.08	2.42	
-10 (+14)	1307	329	383	138	1.21	7.49	9.45	2.38	2.77	

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)	198	50	58	59	0.53	1.12	3.39	0.85	0.99	
-30 (-22)	354	89	104	79	0.68	2.01	4.42	1.11	1.29	
-25 (-13)	526	133	154	98	0.84	2.99	5.36	1.35	1.57	
-20 (- 4)	723	182	212	115	1.00	4.12	6.27	1.58	1.84	
-15 (+ 5)	954	240	280	133	1.16	5.45	7.17	1.81	2.10	
-10 (+14)	1228	310	360	151	1.33	7.04	8.10	2.04	2.37	

### E - PERFORMANCE - CURVES

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)	127	32	37	54	0.47	0.72	2.34	0.59	0.69
-30	(-22)	274	69	80	76	0.63	1.56	3.49	0.88	1.02
-25	(-13)	438	110	128	97	0.81	2.49	4.49	1.13	1.32
-20	(- 4)	627	158	184	118	0.99	3.56	5.38	1.36	1.58
-15	(+ 5)	849	214	249	139	1.19	4.84	6.19	1.56	1.81
-10	(+14)	1114	281	326	161	1.40	6.38	6.95	1.75	2.04

### 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		