

COMPRESSOR DEFINITION

Designation	EG D60HLC
Nominal Voltage/Frequency	115-127 V 60 Hz
Engineering Number	513703073

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 pressures/temperature			
9.1 Operating (gauge)	16.2	[kgf/cm ²] (230 psig)	/ °C - °F
9.2 Peak (gauge)	20.6	[kgf/cm ²] (293 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/5	[hp]
2 Displacement	5.17	[cm ³] (0.315 cu.in)
2.1 Bore [mm]	22.500	
2.2 Stroke [mm]	13.000	
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)	10.49	[kg] (23.13 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm ²] (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	TSD	
2.1 Starting device	TSD- 115V/TSD2-115V/TSD2-115V0.6	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	12(180)	[µF(VAC minimum)]
5 Motor protection	4TM319NFBYY-53	
6 Start winding resistance	5.70	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	5.10	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	9.30	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	1.50	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	UL	

D - PERFORMANCE - CHECK POINT DATA

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)	360	91	106	66	0.62	2.04	5.41	1.36	1.59	
-30 (-22)	509	128	149	79	0.71	2.88	6.46	1.63	1.89	
-25 (-13)	679	171	199	90	0.81	3.85	7.51	1.89	2.20	
-20 (- 4)	876	221	257	101	0.91	4.98	8.64	2.18	2.53	
-15 (+ 5)	1105	278	324	111	1.01	6.31	9.91	2.50	2.90	
-10 (+14)	1373	346	402	121	1.10	7.86	11.36	2.86	3.33	

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)	289	73	85	64	0.59	1.63	4.49	1.13	1.31	
-30 (-22)	437	110	128	79	0.70	2.48	5.51	1.39	1.62	
-25 (-13)	608	153	178	94	0.83	3.45	6.48	1.63	1.90	
-20 (- 4)	807	203	237	109	0.96	4.59	7.44	1.87	2.18	
-15 (+ 5)	1040	262	305	123	1.10	5.94	8.46	2.13	2.48	
-10 (+14)	1312	331	385	136	1.23	7.52	9.59	2.42	2.81	

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)	203	51	60	56	0.53	1.15	3.58	0.90	1.05	
-30 (-22)	351	88	103	75	0.67	1.99	4.68	1.18	1.37	
-25 (-13)	522	132	153	93	0.82	2.97	5.65	1.42	1.66	
-20 (- 4)	723	182	212	111	0.99	4.12	6.54	1.65	1.92	
-15 (+ 5)	959	242	281	130	1.16	5.47	7.41	1.87	2.17	
-10 (+14)	1235	311	362	148	1.34	7.07	8.32	2.10	2.44	

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)	104	26	30	43	0.45	0.59	2.47	0.62	0.72	
-30 (-22)	250	63	73	64	0.61	1.42	3.75	0.94	1.10	
-25 (-13)	422	106	124	87	0.80	2.39	4.81	1.21	1.41	
-20 (- 4)	623	157	183	109	1.00	3.55	5.73	1.44	1.68	
-15 (+ 5)	861	217	252	132	1.21	4.91	6.55	1.65	1.92	
-10 (+14)	1140	287	334	156	1.43	6.53	7.33	1.85	2.15	

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal 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	Straight		
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	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		