

COMPRESSOR DEFINITION

Designation	EG 130HLRW
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	513700306

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	220-240 / 50	[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-CSIR		
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	178 to 255 V	-
8.2 LBP (43°C Ambient temperature)	Static	178 to 255 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 ²] (202 psig)	/ °C - °F
9.2 Peak	15.9	[kgf/cm ²] (226 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/3+	[hp]
2 Displacement	10.61	[cm ³] (0.647 cu.in)
2.1 Bore [mm]	26.000	
2.2 Stroke [mm]	20.000	
3 Lubricant charge	280	[ml] (9.47 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	11.28	[kg] (24.87 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	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	213516442/213516469	
3 Start capacitor	72-88(220)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	4TM319NFBYY-53	
6 Start winding resistance	34.70	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	7.60	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	16.20	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	2.30	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	2.65	[A] - Measured according to UL 984
11 Approval boards certification		

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			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]
1052	265	308	218	1.72	5.98	4.83	1.22	1.42

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			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)	568	143	166	149	1.56	3.21	3.80	0.96	1.11
-30 (-22)	768	194	225	174	1.64	4.35	4.41	1.11	1.29
-25 (-13)	1015	256	297	200	1.70	5.76	5.05	1.27	1.48
-20 (- 4)	1319	332	387	229	1.77	7.51	5.76	1.45	1.69
-15 (+ 5)	1690	426	495	259	1.84	9.65	6.53	1.65	1.91
-10 (+14)	2139	539	627	290	1.92	12.26	7.39	1.86	2.16

TEST CONDITIONS: @220V50Hz			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)	496	125	145	144	1.57	2.81	3.43	0.87	1.01
-30 (-22)	690	174	202	177	1.64	3.91	3.90	0.98	1.14
-25 (-13)	927	234	272	210	1.71	5.26	4.42	1.11	1.30
-20 (- 4)	1220	307	357	244	1.79	6.94	5.01	1.26	1.47
-15 (+ 5)	1577	397	462	278	1.88	9.00	5.67	1.43	1.66
-10 (+14)	2009	506	589	312	1.99	11.51	6.44	1.62	1.89

TEST CONDITIONS: @220V50Hz			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)	392	99	115	139	1.59	2.22	2.82	0.71	0.83
-30 (-22)	585	147	171	177	1.65	3.32	3.29	0.83	0.96
-25 (-13)	820	207	240	214	1.72	4.66	3.82	0.96	1.12
-20 (- 4)	1107	279	325	250	1.81	6.30	4.42	1.11	1.30
-15 (+ 5)	1457	367	427	285	1.91	8.32	5.12	1.29	1.50
-10 (+14)	1880	474	551	318	2.05	10.77	5.92	1.49	1.73

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal EG/F/AMEM version 2		
2 Tray holder	Yes		
3 Connectors			
3.1 SUCTION	8.2 +0.12/-0.08	[mm]	(0.323" +0.005"/-0.003")
3.1.1 Material	Copper plated steel		
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 plated steel		
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 plated steel		
3.3.2 Shape	Slanted		
3.4 Oil cooler (Copper)	6.5 +0.09/-0.09	[mm]	(0.256" +0.004"/-0.004")
3.5 Connector sealing	Rubber Plugs		