COMPRESSOR DEFINITION

Designation	**EG Z60HLP**
Nominal Voltage/Frequency	**115-127 V 60 Hz**
Engineering Number	**PROT-LGE-02**

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 Expantion device	Capillary tube		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	Static	85 to 110 V	98 to 140 V
8.2 LBP (43ºC Ambient temperature)	Static	85 to 110 V	98 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	1/5	[hp]
2 Displacement	5.56	[cm³] (0.339 cu.in)
2.1 Bore [mm]	22.500	
2.2 Stroke [mm]	14.000	
3 Lubricant charge	280	[ml] (9.47 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO10	
4 Weight (with oil charge)	10.7	[kg] (23.59 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	TSD	
2.1 Starting device	TSD- 115V	
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 25ºC (77ºF)] +/- 8%
7 Run winding resistance	5.10	[Ω at 25ºC (77ºF)] +/- 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

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]
645	163	189	110	0.97	3.66	5.86	1.48	1.72

E - PERFORMANCE - CURVES

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **35ºC (+95ºF))**
@115V60Hz **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)**	369	93	108	71	0.64	2.09	5.17	1.30	1.52
-30	**(-22)**	486	122	142	81	0.74	2.75	6.04	1.52	1.77
-25	**(-13)**	638	161	187	93	0.85	3.62	6.92	1.74	2.03
-20	**(- 4)**	835	210	245	106	0.95	4.75	7.89	1.99	2.31
-15	**(+ 5)**	1083	273	317	119	1.07	6.18	9.02	2.27	2.64
-10	**(+14)**	1392	351	408	133	1.19	7.98	10.38	2.62	3.04

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **45ºC (+113ºF))**
@115V60Hz **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)**	325	82	95	72	0.65	1.84	4.51	1.14	1.32
-30	**(-22)**	453	114	133	85	0.77	2.57	5.40	1.36	1.58
-25	**(-13)**	608	153	178	99	0.89	3.45	6.22	1.57	1.82
-20	**(- 4)**	797	201	233	114	1.01	4.53	7.04	1.77	2.06
-15	**(+ 5)**	1028	259	301	129	1.14	5.87	7.93	2.00	2.32
-10	**(+14)**	1310	330	384	145	1.28	7.50	8.97	2.26	2.63

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **55ºC (+131ºF))**
@115V60Hz **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)**	250	63	73	66	0.61	1.42	3.71	0.94	1.09
-30	**(-22)**	398	100	117	84	0.76	2.25	4.70	1.19	1.38
-25	**(-13)**	561	141	165	102	0.91	3.19	5.54	1.40	1.62
-20	**(- 4)**	750	189	220	120	1.07	4.27	6.29	1.58	1.84
-15	**(+ 5)**	971	245	285	139	1.23	5.54	7.02	1.77	2.06
-10	**(+14)**	1233	311	361	158	1.40	7.06	7.83	1.97	2.29

E - PERFORMANCE - CURVES

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **65ºC (+149ºF))**
@115V60Hz **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)**	130	33	38	54	0.50	0.74	2.55	0.64	0.75
-30	**(-22)**	304	77	89	77	0.70	1.72	3.72	0.94	1.09
-25	**(-13)**	484	122	142	101	0.90	2.75	4.65	1.17	1.36
-20	**(- 4)**	680	171	199	125	1.11	3.87	5.41	1.36	1.58
-15	**(+ 5)**	898	226	263	149	1.32	5.13	6.07	1.53	1.78
-10	**(+14)**	1148	289	336	172	1.53	6.58	6.71	1.69	1.97

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
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		