

COMPRESSOR DEFINITION

Designation	EM T60HLP
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	192GA47

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 R134a		
4.1 Evaporating temperature range	-30°C to -5°C	(-22°F to 23°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)	-	-	-
8.2 LBP (43°C Ambient temperature)	-	-	-
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/cm²] (230 psig)	/ °C - °F
9.2 Peak (gauge)	20.6	[kgf/cm²] (293 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation		[hp]
2 Displacement	6.76	[cm³] (0.413 cu.in)
2.1 Bore [mm]	22.500	
2.2 Stroke [mm]	17.000	
3 Lubricant charge	180	[ml] (6.09 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	7.65	[kg] (16.87 lb.)
5 Nitrogen charge	-	[kgf/cm²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	PTC	
2.1 Starting device	V230	
3 Start capacitor	-	[μF(VAC minimum)]
4 Run capacitor	-	[μF(VAC minimum)]
5 Motor protection	T0536/26	
6 Start winding resistance	43.60	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	17.00	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	6.20	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	0.99	[A]
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A]
11 Approval boards certification	IMQ	

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]
604	152	177	151	0.99	3.43	4.00	1.01	1.17

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		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)	373	94	109	98	0.85	2.11	3.69	0.93	1.08
-30	(-22)	488	123	143	113	0.89	2.77	4.32	1.09	1.26
-25	(-13)	647	163	190	129	0.93	3.67	5.03	1.27	1.47
-20	(- 4)	847	214	248	146	0.98	4.82	5.80	1.46	1.70
-15	(+ 5)	1088	274	319	165	1.04	6.21	6.59	1.66	1.93
-10	(+14)	1366	344	400	185	1.10	7.83	7.37	1.86	2.16
-5	(+23)	1681	424	493	207	1.18	9.67	8.11	2.04	2.38

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)	336	85	98	101	0.86	1.90	3.27	0.82	0.96
-30	(-22)	448	113	131	117	0.90	2.54	3.83	0.97	1.12
-25	(-13)	602	152	176	135	0.95	3.42	4.46	1.12	1.31
-20	(- 4)	797	201	233	156	1.01	4.54	5.11	1.29	1.50
-15	(+ 5)	1030	260	302	178	1.08	5.88	5.78	1.46	1.69
-10	(+14)	1301	328	381	203	1.16	7.45	6.41	1.62	1.88
-5	(+23)	1606	405	471	230	1.26	9.24	6.99	1.76	2.05

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)	294	74	86	101	0.87	1.66	2.86	0.72	0.84
-30	(-22)	401	101	118	119	0.91	2.27	3.37	0.85	0.99
-25	(-13)	549	138	161	140	0.97	3.12	3.93	0.99	1.15
-20	(- 4)	737	186	216	164	1.03	4.19	4.50	1.13	1.32
-15	(+ 5)	962	242	282	190	1.12	5.49	5.05	1.27	1.48
-10	(+14)	1222	308	358	220	1.22	7.00	5.56	1.40	1.63
-5	(+23)	1517	382	444	253	1.34	8.72	5.99	1.51	1.76

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
2 Tray holder	Yes		
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 42°		
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	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		