

COMPRESSOR DEFINITION

Designation	EM T49HLP
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	192EA47

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 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		[hp]
2 Displacement	5.56	[cm ³] (0.339 cu.in)
2.1 Bore [mm]	22.500	
2.2 Stroke [mm]	14.000	
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)	7.71	[kg] (17.00 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

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	T0222-26	
6 Start winding resistance	34.50	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	18.50	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	-	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A]
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A]
11 Approval boards certification	IMQ	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			EN12900LBP_HH Static		Evaporating temperature (Condensing temperature		-35°C (-31°F) 40°C (104°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]
284	72	83	75	0.65		3.79	0.96	1.11

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			EN12900HH 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)	317	80	93	74	0.65	- 0.48	4.19	1.05	1.23
-30	(-22)	405	102	119	86	0.68	- 0.31	4.69	1.18	1.38
-25	(-13)	523	132	153	98	0.72	1.00	5.32	1.34	1.56
-20	(- 4)	673	170	197	111	0.76	2.94	6.07	1.53	1.78
-15	(+ 5)	858	216	251	124	0.80	5.03	6.91	1.74	2.02
-10	(+14)	1081	273	317	138	0.85	6.80	7.84	1.98	2.30

TEST CONDITIONS: @220V50Hz			EN12900HH 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)	253	64	74	76	0.66	- 0.33	3.36	0.85	0.98
-30	(-22)	337	85	99	89	0.69	- 0.27	3.80	0.96	1.11
-25	(-13)	445	112	130	103	0.73	0.92	4.32	1.09	1.27
-20	(- 4)	579	146	170	118	0.78	2.76	4.90	1.23	1.44
-15	(+ 5)	743	187	218	134	0.83	4.76	5.53	1.39	1.62
-10	(+14)	938	236	275	151	0.90	6.44	6.21	1.56	1.82

TEST CONDITIONS: @220V50Hz			EN12900HH 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	78	0.66	- 0.18	2.60	0.65	0.76
-30	(-22)	278	70	81	92	0.70	- 0.24	3.02	0.76	0.89
-25	(-13)	376	95	110	108	0.74	0.84	3.48	0.88	1.02
-20	(- 4)	494	124	145	125	0.80	2.58	3.95	0.99	1.16
-15	(+ 5)	635	160	186	144	0.87	4.49	4.42	1.11	1.30
-10	(+14)	801	202	235	164	0.94	6.09	4.89	1.23	1.43

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	Slanted parallel to Base Plate		
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		