

COMPRESSOR DEFINITION

Designation	EM T6152GK
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	513306219

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	220-240 / 50	[V / Hz]	
4 Application type	Medium Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-20°C to 10°C	(-4°F to 50°F)	
5 Motor type	CSIR		
6 Starting torque	HST - Hight starting torque		
7 Expantion device	Capillary tube or Expansion valve		
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)	25,7	[kgf/cm²] (365 psig)	/ °C - °F
9.2 Peak (gauge)	28,7	[kgf/cm²] (408 psig)	
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/4	[hp]
2 Displacement	4,50	[cm³] (0.275 cu.in)
2.1 Bore [mm]	21,000	
2.2 Stroke [mm]	13,000	
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)	7,74	[kg] (17.06 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	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRP-34	
3 Start capacitor	43-53(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0827/G6	
6 Start winding resistance	21.30	[Wat 25°C (77°F)] +/- 8%
7 Run winding resistance	12.95	[Wat 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	8.50	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	2.15	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	2.30	[A] - Measured according to UL 984
11 Approval boards certification	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			ASHRAEHBP46 Fan		Evaporating temperature (Condensing temperature	7,2°C (44,96°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]
2586	652	758	329	1,77	21,29	7,86	1,98	2,30

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		ASHRAE46 Fan				(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]
-20	(- 4)	1254	316	368	179	1,22	7,96	7,01	1,77	2,05
-15	(+ 5)	1548	390	454	194	1,27	9,88	7,98	2,01	2,34
-10	(+14)	1891	477	554	208	1,31	12,15	9,09	2,29	2,66
-5	(+23)	2287	577	670	222	1,36	14,80	10,30	2,60	3,02
0	(+32)	2741	691	803	235	1,41	17,89	11,66	2,94	3,42
+5	(+41)	3255	821	954	249	1,47	21,47	13,07	3,30	3,83
+10	(+50)	3836	967	1124	262	1,51	25,60	14,64	3,69	4,29

TEST CONDITIONS: @220V50Hz		ASHRAE46 Fan				(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]
-20	(- 4)	1061	268	311	192	1,25	7,43	5,53	1,39	1,62
-15	(+ 5)	1323	334	388	211	1,32	9,32	6,27	1,58	1,84
-10	(+14)	1626	410	477	229	1,39	11,54	7,10	1,79	2,08
-5	(+23)	1976	498	579	247	1,45	14,14	8,00	2,02	2,34
0	(+32)	2375	599	696	264	1,52	17,16	9,00	2,27	2,64
+5	(+41)	2830	714	829	282	1,59	20,68	10,04	2,53	2,94
+10	(+50)	3343	843	980	300	1,66	24,75	11,14	2,81	3,26

TEST CONDITIONS: @220V50Hz		ASHRAE46 Fan			(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]
-20	(- 4)	872	220	256	202	1,29	6,86	4,32	1,09	1,27
-15	(+ 5)	1094	276	321	226	1,37	8,66	4,84	1,22	1,42
-10	(+14)	1351	341	396	250	1,45	10,78	5,40	1,36	1,58
-5	(+23)	1647	415	483	274	1,55	13,26	6,01	1,52	1,76
0	(+32)	1987	501	582	297	1,64	16,18	6,69	1,69	1,96
+5	(+41)	2373	598	695	320	1,74	19,57	7,42	1,87	2,17
+10	(+50)	2812	709	824	344	1,82	23,54	8,17	2,06	2,39

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard EUEM		
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° up + 45° to Back		
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 BP+24°to Back		
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 45° up + 45° to Back		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		