COMPRESSOR DEFINITION

Designation	**EM T56CLP**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**513306006**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-600a		
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		
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	187 to 255 V	-
8.2 LBP (43ºC Ambient temperature)	Static	187 to 255 V	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	6.9	[kgf/cm²] (98 psig)	/ ºC - ºF
9.2 Peak	7.8	[kgf/cm²] (111 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation		[hp]
2 Displacement	9.34	[cm³] (0.570 cu.in)
2.1 Bore [mm]	26.000	
2.2 Stroke [mm]	17.600	
3 Lubricant charge	180	[ml] (6.09 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	MINERAL / ISO7	
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	T0062/07	
6 Start winding resistance	26.90	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	17.50	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	5.90	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	2.20	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	CE - UKCA - VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@220V50Hz**			**CECOMAFLBP** **Static**		Evaporating temperature (Condensing temperature	**-25°C (-13°F)** **55°C (131°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]
422	106	124	115	0.87	1.61	3.67	0.92	1.08

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@220V50Hz** — **CECOMAF** **Static** — (Condensing temperature **35ºC (+95ºF))**

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)**	335	84	98	80	0.79	1.07	4.18	1.05	1.23
-30	**(-22)**	448	113	131	92	0.81	1.44	4.90	1.24	1.44
-25	**(-13)**	577	146	169	103	0.84	1.86	5.64	1.42	1.65
-20	**(- 4)**	731	184	214	115	0.86	2.35	6.41	1.61	1.88
-15	**(+ 5)**	914	230	268	127	0.89	2.94	7.22	1.82	2.12
-10	**(+14)**	1133	286	332	139	0.93	3.65	8.11	2.04	2.38

TEST CONDITIONS: **@220V50Hz** — **CECOMAF** **Static** — (Condensing temperature **45ºC (+113ºF))**

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)**	285	72	83	82	0.78	0.99	3.45	0.87	1.01
-30	**(-22)**	389	98	114	95	0.81	1.35	4.07	1.03	1.19
-25	**(-13)**	507	128	149	108	0.84	1.77	4.69	1.18	1.38
-20	**(- 4)**	646	163	189	121	0.88	2.25	5.34	1.35	1.56
-15	**(+ 5)**	813	205	238	135	0.92	2.84	6.02	1.52	1.77
-10	**(+14)**	1014	255	297	150	0.96	3.55	6.76	1.70	1.98

TEST CONDITIONS: **@220V50Hz** — **CECOMAF** **Static** — (Condensing temperature **55ºC (+131ºF))**

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)**	236	60	69	85	0.79	0.90	2.77	0.70	0.81
-30	**(-22)**	328	83	96	99	0.83	1.25	3.29	0.83	0.96
-25	**(-13)**	433	109	127	113	0.86	1.65	3.80	0.96	1.11
-20	**(- 4)**	555	140	163	128	0.90	2.12	4.32	1.09	1.27
-15	**(+ 5)**	703	177	206	144	0.94	2.69	4.87	1.23	1.43
-10	**(+14)**	881	222	258	162	1.00	3.38	5.45	1.37	1.60

E - PERFORMANCE - CURVES

TEST CONDITIONS: **CECOMAF** (Condensing temperature **65ºC (+149ºF))**
@220V50Hz **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)**	194	49	57	85	0.80	0.82	2.29	0.58	0.67
-30	**(-22)**	271	68	79	100	0.83	1.14	2.70	0.68	0.79
-25	**(-13)**	358	90	105	116	0.87	1.51	3.09	0.78	0.90
-20	**(- 4)**	461	116	135	133	0.91	1.95	3.47	0.88	1.02
-15	**(+ 5)**	587	148	172	152	0.96	2.50	3.87	0.98	1.13
-10	**(+14)**	741	187	217	172	1.02	3.16	4.30	1.08	1.26

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 42º up + 45° to Back		
3.2 DISCHARGE	4.9 +0.10/-0.05	[mm]	(0.193" +0.004"/-0.002")
3.2.1 Material	Copper		
3.2.2 Shape	Slanted 90° up + 24° to Back		
3.3 PROCESS	6 +0.08/-0.08	[mm]	(0.236" +0.003"/-0.003")
3.3.1 Material	Copper(OD)		
3.3.2 Shape	Slanted 43° up + 45° to Back		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		