

COMPRESSOR DEFINITION

Designation	EM T32CLP
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	891CA78

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-Medium Back Pressure		
4.1 Evaporating temperature range	-35°C to -5°C	(-31°F to 23°F)	
5 Motor type	RSCR		
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)	Static	198 to 254 V	-
8.2 LBP (43°C Ambient temperature)	Static	198 to 254 V	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	7.7	[kgf/cm ²] (109 psig)	/ °C - °F
9.2 Peak (gauge)	9.8	[kgf/cm ²] (139 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation		[hp]
2 Displacement	5.96	[cm ³] (0.364 cu.in)
2.1 Bore [mm]	22.500	
2.2 Stroke [mm]	15.000	
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)	7.3	[kg] (16.09 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	MSDA3	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	2.5(450)	[µF(VAC minimum)]
5 Motor protection	4TM134RFBYY-153	
6 Start winding resistance	32.00	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	31.50	[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	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]
248	62	73	69	0.37	0.95	3.62	0.91	1.06

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		CECOMAF 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)	195	49	57	54	0.34	0.62	3.60	0.91	1.05
-30	(-22)	260	65	76	60	0.35	0.83	4.35	1.10	1.28
-25	(-13)	339	85	99	66	0.37	1.09	5.17	1.30	1.52
-20	(- 4)	433	109	127	71	0.39	1.39	6.07	1.53	1.78
-15	(+ 5)	545	137	160	77	0.41	1.75	7.05	1.78	2.07
-10	(+14)	675	170	198	83	0.42	2.18	8.13	2.05	2.38
-5	(+23)	825	208	242	89	0.43	2.67	9.32	2.35	2.73

TEST CONDITIONS: @220V50Hz		CECOMAF 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)	163	41	48	54	0.33	0.57	3.01	0.76	0.88
-30	(-22)	224	56	66	61	0.35	0.78	3.67	0.92	1.08
-25	(-13)	297	75	87	68	0.37	1.03	4.37	1.10	1.28
-20	(- 4)	383	97	112	75	0.40	1.34	5.13	1.29	1.50
-15	(+ 5)	485	122	142	81	0.42	1.70	5.96	1.50	1.75
-10	(+14)	604	152	177	88	0.44	2.11	6.86	1.73	2.01
-5	(+23)	741	187	217	94	0.45	2.60	7.86	1.98	2.30

TEST CONDITIONS: @220V50Hz		CECOMAF 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)	129	33	38	54	0.33	0.49	2.40	0.61	0.70
-30	(-22)	184	46	54	62	0.35	0.70	2.99	0.75	0.88
-25	(-13)	249	63	73	69	0.38	0.95	3.60	0.91	1.06
-20	(- 4)	326	82	96	77	0.41	1.25	4.25	1.07	1.24
-15	(+ 5)	417	105	122	84	0.43	1.60	4.93	1.24	1.45
-10	(+14)	523	132	153	92	0.46	2.01	5.68	1.43	1.66
-5	(+23)	646	163	189	99	0.48	2.48	6.49	1.64	1.90

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		CECOMAF Static			(Condensing temperature 65°C (+149°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)	97	24	28	54	0.33	0.41	1.79	0.45	0.52
-30	(-22)	144	36	42	62	0.36	0.61	2.33	0.59	0.68
-25	(-13)	201	51	59	70	0.39	0.85	2.86	0.72	0.84
-20	(- 4)	267	67	78	79	0.42	1.13	3.41	0.86	1.00
-15	(+ 5)	346	87	101	87	0.45	1.47	3.98	1.00	1.17
-10	(+14)	438	110	128	96	0.48	1.87	4.59	1.16	1.34
-5	(+23)	544	137	159	104	0.50	2.33	5.24	1.32	1.54

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
2 Tray holder	No		
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	5.1 +0.10/+0.00	[mm]	(0.201" +0.004"/+0.000")
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		