COMPRESSOR DEFINITION

Designation	**EM 2C32CLT**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**513304569**

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	RSCR		
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	198 to 255 V	-
8.2 LBP (43ºC Ambient temperature)	Static	198 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	1/7	[hp]
2 Displacement	5.96	[cm³] (0.364 cu.in)
2.1 Bore [mm]	22.500	
2.2 Stroke [mm]	15.000	
3 Lubricant charge	150	[ml] (5.07 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	MINERAL / ISO5	
4 Weight (with oil charge)	7.68	[kg] (16.93 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	TSD	
2.1 Starting device	TSD-220V	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	2(350)/3(350)/2.5(350)	[µF(VAC minimum)]
5 Motor protection	4TM110NFBYY-53	
6 Start winding resistance	31.70	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	34.50	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	2.60	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	0.40	[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 - IRAM - UKCA - VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@220V50Hz**			**CECOMAFLBP-NOFAN** **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]
246	62	72	51	0.26	0.94	4.82	1.21	1.41

E - PERFORMANCE - CURVES

TEST CONDITIONS: **CECOMAF-NOFAN** (Condensing temperature **35ºC (+95ºF))**
@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)**	195	49	57	36	0.17	0.62	5.33	1.34	1.56
-30	**(-22)**	258	65	76	42	0.20	0.83	6.17	1.55	1.81
-25	**(-13)**	338	85	99	48	0.22	1.09	7.16	1.80	2.10
-20	**(- 4)**	437	110	128	53	0.25	1.40	8.30	2.09	2.43
-15	**(+ 5)**	556	140	163	58	0.27	1.79	9.61	2.42	2.81
-10	**(+14)**	698	176	204	63	0.29	2.25	11.07	2.79	3.24

TEST CONDITIONS: **CECOMAF-NOFAN** (Condensing temperature **45ºC (+113ºF))**
@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)**	159	40	47	36	0.18	0.55	4.39	1.11	1.29
-30	**(-22)**	218	55	64	43	0.21	0.76	5.10	1.28	1.49
-25	**(-13)**	291	73	85	49	0.24	1.01	5.89	1.48	1.73
-20	**(- 4)**	381	96	112	56	0.26	1.33	6.78	1.71	1.99
-15	**(+ 5)**	490	123	144	63	0.29	1.71	7.76	1.96	2.27
-10	**(+14)**	619	156	181	70	0.32	2.17	8.84	2.23	2.59

TEST CONDITIONS: **CECOMAF-NOFAN** (Condensing temperature **55ºC (+131ºF))**
@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)**	127	32	37	37	0.19	0.48	3.49	0.88	1.02
-30	**(-22)**	180	45	53	43	0.22	0.69	4.15	1.04	1.22
-25	**(-13)**	246	62	72	51	0.25	0.94	4.82	1.22	1.41
-20	**(- 4)**	327	82	96	59	0.28	1.25	5.53	1.39	1.62
-15	**(+ 5)**	424	107	124	67	0.31	1.62	6.27	1.58	1.84
-10	**(+14)**	539	136	158	76	0.35	2.07	7.04	1.78	2.06

E - PERFORMANCE - CURVES

TEST CONDITIONS: **CECOMAF-NOFAN** (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)**	96	24	28	37	0.18	0.41	2.60	0.66	0.76
-30	**(-22)**	143	36	42	44	0.21	0.60	3.28	0.83	0.96
-25	**(-13)**	201	51	59	52	0.25	0.85	3.91	0.99	1.15
-20	**(- 4)**	271	68	80	61	0.29	1.15	4.51	1.14	1.32
-15	**(+ 5)**	356	90	104	70	0.33	1.51	5.08	1.28	1.49
-10	**(+14)**	457	115	134	81	0.38	1.95	5.63	1.42	1.65

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard EUEM		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	6.5 +0.12/-0.08	[mm]	(0.256" +0.005"/-0.003")
3.1.1 Material	Copper plated steel		
3.1.2 Shape	Slanted 42º 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 parallet BP+24°to Back		
3.3 PROCESS	6.35 +0.08/-0.08	[mm]	(0.250" +0.003"/-0.003")
3.3.1 Material	Copper(OD)		
3.3.2 Shape	Slanted 45° up + 45° to Back		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		