COMPRESSOR DEFINITION

Designation	**EM 2C55CLT**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**513304634**

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		[hp]	
2 Displacement	9.04	[cm³] (0.552 cu.in)	
2.1 Bore [mm]	24.000		
2.2 Stroke [mm]	20.000		
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)	8.36	[kg] (18.43 lb.)	
5 Nitrogen charge	-	[kgf/cm²]	

C - ELECTRICAL 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	5(310)/4(300)	[µF(VAC minimum)]
5 Motor protection	4TM189NFBYY-53	
6 Start winding resistance	18.00	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	20.80	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	4.30	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	0.65	[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 (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
386	97	113	80	0.37	1.47	4.85	1.22	1.42

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@220V50Hz**		**CECOMAF-NOFAN** **Static**				(Condensing temperature **35ºC (+95ºF))**				
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35	**(-31)**	295	74	86	55	0.27	0.94	5.31	1.34	1.56
-30	**(-22)**	403	101	118	64	0.31	1.30	6.28	1.58	1.84
-25	**(-13)**	525	132	154	73	0.35	1.69	7.20	1.82	2.11
-20	**(- 4)**	669	169	196	82	0.39	2.15	8.15	2.05	2.39
-15	**(+ 5)**	842	212	247	92	0.43	2.71	9.16	2.31	2.68
-10	**(+14)**	1051	265	308	102	0.47	3.39	10.30	2.59	3.02

TEST CONDITIONS: **@220V50Hz**		**CECOMAF-NOFAN** **Static**				(Condensing temperature **45ºC (+113ºF))**				
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35	**(-31)**	248	63	73	55	0.27	0.86	4.48	1.13	1.31
-30	**(-22)**	345	87	101	65	0.31	1.20	5.25	1.32	1.54
-25	**(-13)**	454	114	133	76	0.36	1.58	5.96	1.50	1.75
-20	**(- 4)**	582	147	170	87	0.41	2.03	6.68	1.68	1.96
-15	**(+ 5)**	736	185	216	99	0.46	2.57	7.44	1.88	2.18
-10	**(+14)**	924	233	271	111	0.52	3.23	8.31	2.09	2.44

TEST CONDITIONS: **@220V50Hz**		**CECOMAF-NOFAN** **Static**				(Condensing temperature **55ºC (+131ºF))**				
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35	**(-31)**	204	51	60	55	0.27	0.78	3.71	0.94	1.09
-30	**(-22)**	290	73	85	67	0.32	1.10	4.34	1.09	1.27
-25	**(-13)**	386	97	113	79	0.37	1.47	4.91	1.24	1.44
-20	**(- 4)**	498	126	146	92	0.43	1.90	5.45	1.37	1.60
-15	**(+ 5)**	634	160	186	105	0.49	2.43	6.03	1.52	1.77
-10	**(+14)**	801	202	235	119	0.56	3.08	6.69	1.69	1.96

E - PERFORMANCE - CURVES

TEST CONDITIONS: **CECOMAF-NOFAN** (Condensing temperature **65ºC (+149ºF))**
@220V50Hz **Static**

Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	**(°F)**	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35	**(-31)**	161	41	47	53	0.27	0.68	3.01	0.76	0.88
-30	**(-22)**	238	60	70	66	0.32	1.00	3.56	0.90	1.04
-25	**(-13)**	321	81	94	80	0.37	1.35	4.03	1.02	1.18
-20	**(- 4)**	418	105	123	94	0.44	1.77	4.47	1.13	1.31
-15	**(+ 5)**	537	135	157	109	0.51	2.29	4.92	1.24	1.44
-10	**(+14)**	683	172	200	125	0.59	2.92	5.44	1.37	1.59

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
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		
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 30° up + 24° to Back		
3.3 PROCESS	6.5 +0.12/-0.08	[mm]	(0.256" +0.005"/-0.003")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 43° up + 45° to Back		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		