COMPRESSOR DEFINITION

Designation	**EM D55CLT**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**701VA89**

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	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	9.04	[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	ALQUILB / ISO5	
4 Weight (with oil charge)	8.1	[kg] (17.86 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	TSD2-220V/TSD2-220V1.2/TSD2-D-220V	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	4(350)/3(350)	[µF(VAC minimum)]
5 Motor protection	CP4TMC212K61A5	
6 Start winding resistance	21.36	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	18.81	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	5.63	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	0.87	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	1.07	[A] - Measured according to UL 984
11 Approval boards certification	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]
391	99	115	77	0.38	1.49	5.10	1.29	1.49

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@220V50Hz** — **CECOMAF-NOFAN** **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)**	271	68	80	51	0.25	0.87	5.28	1.33	1.55
-30	**(-22)**	378	95	111	60	0.31	1.21	6.30	1.59	1.85
-25	**(-13)**	508	128	149	69	0.36	1.63	7.36	1.85	2.16
-20	**(- 4)**	663	167	194	78	0.39	2.13	8.46	2.13	2.48
-15	**(+ 5)**	846	213	248	88	0.42	2.72	9.61	2.42	2.81
-10	**(+14)**	1057	266	310	98	0.46	3.41	10.79	2.72	3.16

TEST CONDITIONS: **@220V50Hz** — **CECOMAF-NOFAN** **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)**	236	59	69	51	0.27	0.82	4.60	1.16	1.35
-30	**(-22)**	333	84	98	62	0.32	1.16	5.37	1.35	1.57
-25	**(-13)**	450	113	132	73	0.37	1.57	6.18	1.56	1.81
-20	**(- 4)**	589	149	173	84	0.41	2.06	7.02	1.77	2.06
-15	**(+ 5)**	752	190	220	95	0.45	2.63	7.88	1.99	2.31
-10	**(+14)**	940	237	275	107	0.50	3.29	8.78	2.21	2.57

TEST CONDITIONS: **@220V50Hz** — **CECOMAF-NOFAN** **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)**	199	50	58	51	0.28	0.76	3.89	0.98	1.14
-30	**(-22)**	287	72	84	64	0.33	1.09	4.49	1.13	1.31
-25	**(-13)**	391	99	115	77	0.37	1.49	5.10	1.29	1.49
-20	**(- 4)**	514	130	151	90	0.41	1.97	5.74	1.45	1.68
-15	**(+ 5)**	658	166	193	103	0.47	2.52	6.39	1.61	1.87
-10	**(+14)**	822	207	241	116	0.54	3.16	7.06	1.78	2.07

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)**	156	39	46	50	0.28	0.66	3.12	0.79	0.91
-30	**(-22)**	235	59	69	65	0.32	0.99	3.59	0.91	1.05
-25	**(-13)**	327	82	96	80	0.35	1.38	4.08	1.03	1.20
-20	**(- 4)**	434	109	127	95	0.40	1.84	4.58	1.15	1.34
-15	**(+ 5)**	558	141	163	110	0.45	2.37	5.08	1.28	1.49
-10	**(+14)**	700	176	205	125	0.54	2.98	5.59	1.41	1.64

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 42º up + 45° to Back		
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 42º up + 45° 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		