COMPRESSOR DEFINITION

Designation	**T 6220E**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**116SA01**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-22		
3 Nominal voltage and frequency	220-240 / 50	[V / Hz]	
4 Application type	High Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-15°C to 10°C	(5°F to 50°F)	
5 Motor type	CSCR		
6 Starting torque	HST - Hight starting torque		
7 Expantion device	Capillary tube or Expansion valve		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	-	-	-
8.2 LBP (43ºC Ambient temperature)	-	-	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	21.7	[kgf/cm²] (309 psig)	/ ºC - ºF
9.2 Peak (gauge)	24.2	[kgf/cm²] (344 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1-	[hp]
2 Displacement	17.39	[cm³] (1.061 cu.in)
2.1 Bore [mm]	34.120	
2.2 Stroke [mm]	19.030	
3 Lubricant charge	550	[ml] (18.60 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ALQUILB / ISO46	
4 Weight (with oil charge)	17	[kg] (37.48 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm²] (2.84 to 4.27 psig)

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	3ARR3B6AA3	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	15(450)	[µF(VAC minimum)]
5 Motor protection	3HM179-105	
6 Start winding resistance	6.80	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	3.45	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	22.80	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	4.45	[A] - Measured according to UL 984
11 Approval boards certification		

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@220V50Hz**			**ASHRAEHBP46** **Fan**		Evaporating temperature (Condensing temperature	**7.2°C (44.96°F)** **54.4°C (129.92°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]
7691	1938	2254	846	3.80	47.50	9.09	2.29	2.66

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@220V50Hz** — **ASHRAE46** **Fan** — (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]
-15	**(+ 5)**	3280	827	961	465	1.96	17.20	7.09	1.79	2.08
-10	**(+14)**	4609	1162	1351	514	2.18	24.31	8.93	2.25	2.62
-5	**(+23)**	5927	1494	1737	563	2.41	31.42	10.51	2.65	3.08
0	**(+32)**	7233	1823	2119	611	2.64	38.54	11.85	2.99	3.47
+5	**(+41)**	8527	2149	2499	658	2.88	45.72	12.98	3.27	3.80
+10	**(+50)**	9809	2472	2874	704	3.12	52.99	13.92	3.51	4.08

TEST CONDITIONS: **@220V50Hz** — **ASHRAE46** **Fan** — (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]
-15	**(+ 5)**	3032	764	888	511	2.19	17.05	5.92	1.49	1.73
-10	**(+14)**	4117	1038	1206	568	2.46	23.19	7.25	1.83	2.12
-5	**(+23)**	5276	1329	1546	625	2.72	29.84	8.46	2.13	2.48
0	**(+32)**	6507	1640	1907	681	2.99	37.03	9.57	2.41	2.80
+5	**(+41)**	7811	1968	2289	736	3.26	44.79	10.61	2.67	3.11
+10	**(+50)**	9187	2315	2692	791	3.54	53.17	11.60	2.92	3.40

TEST CONDITIONS: **@220V50Hz** — **ASHRAE46** **Fan** — (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]
-15	**(+ 5)**	2768	698	811	560	2.43	16.69	4.93	1.24	1.44
-10	**(+14)**	3606	909	1057	625	2.74	21.86	5.80	1.46	1.70
-5	**(+23)**	4602	1160	1348	690	3.05	28.07	6.68	1.68	1.96
0	**(+32)**	5755	1450	1686	754	3.36	35.33	7.61	1.92	2.23
+5	**(+41)**	7065	1780	2070	818	3.67	43.70	8.61	2.17	2.52
+10	**(+50)**	8532	2150	2500	882	3.97	53.19	9.70	2.44	2.84

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	9.6 +0.07/+0.00	[mm]	(0.378" +0.003"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Vertical		
3.2 DISCHARGE	6.42 +0.08/+0.00	[mm]	(0.253" +0.003"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Vertical		
3.3 PROCESS	9.6 +0.07/+0.00	[mm]	(0.378" +0.003"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Vertical		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		