

COMPRESSOR DEFINITION

Designation	T 6217E-
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	116RG71

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-22		
3 Nominal voltage and frequency	115 / 60	[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	CSIR		
6 Starting torque	HST - High starting torque		
7 Expansion device	Capillary tube or Expansion valve		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	-	-	-
8.2 LBP (43°C Ambient temperature)	-	-	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	21.7	[kgf/cm ²] (309 psig)	/ °C - °F
9.2 Peak (gauge)	24.2	[kgf/cm ²] (344 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	3/4-	[hp]
2 Displacement	14.50	[cm ³] (0.885 cu.in)
2.1 Bore [mm]	34.120	
2.2 Stroke [mm]	15.870	
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/cm ²] (2.84 to 4.27 psig)

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	115 V 60 Hz 1~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	3ARR2KCP172S	
3 Start capacitor	145-175(250)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	CST00GK-3031	
6 Start winding resistance	4.10	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.54	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	55.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	13.00	[A] - Measured according to UL 984
11 Approval boards certification	UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @100V50Hz			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]
6449	1625	1890	908	11.17	39.83	7.10	1.79	2.08

E - PERFORMANCE - CURVES

TEST CONDITIONS: @100V50Hz			ASHRAE46 Fan		(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]
-15	(+ 5)	2849	718	835	458	5.44	14.96	6.22	1.57	1.82
-10	(+14)	3992	1006	1170	516	5.98	21.05	7.73	1.95	2.26
-5	(+23)	5230	1318	1533	570	6.47	27.71	9.18	2.31	2.69
0	(+32)	6565	1654	1924	619	6.90	34.97	10.61	2.67	3.11
+5	(+41)	7995	2015	2343	664	7.31	42.87	12.05	3.04	3.53
+10	(+50)	9522	2400	2790	704	7.70	51.45	13.52	3.41	3.96

TEST CONDITIONS: @100V50Hz			ASHRAE46 Fan		(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]
-15	(+ 5)	2320	585	680	521	5.78	13.01	4.47	1.13	1.31
-10	(+14)	3348	844	981	587	6.63	18.86	5.70	1.44	1.67
-5	(+23)	4466	1126	1309	651	7.38	25.29	6.86	1.73	2.01
0	(+32)	5675	1430	1663	711	8.05	32.32	7.97	2.01	2.34
+5	(+41)	6974	1757	2044	768	8.64	40.00	9.07	2.29	2.66
+10	(+50)	8364	2108	2451	823	9.19	48.37	10.18	2.56	2.98

TEST CONDITIONS: @100V50Hz			ASHRAE46 Fan		(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]
-15	(+ 5)	1769	446	518	586	6.13	10.68	3.01	0.76	0.88
-10	(+14)	2678	675	785	661	7.28	16.24	4.05	1.02	1.19
-5	(+23)	3671	925	1076	735	8.29	22.38	5.00	1.26	1.47
0	(+32)	4748	1197	1391	807	9.19	29.14	5.89	1.48	1.73
+5	(+41)	5911	1490	1732	877	9.98	36.55	6.73	1.70	1.97
+10	(+50)	7158	1804	2098	946	10.67	44.65	7.57	1.91	2.22

E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 35°C (+95°F))					
@100V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+ 5)	3334	840	977	536	4.87	17.50	6.22	1.57	1.82
-10	(+14)	4670	1177	1368	604	5.57	24.63	7.73	1.95	2.27
-5	(+23)	6119	1542	1793	666	6.22	32.42	9.19	2.31	2.69
0	(+32)	7680	1935	2251	724	6.80	40.92	10.62	2.68	3.11
+5	(+41)	9354	2357	2741	777	7.33	50.16	12.05	3.04	3.53
+10	(+50)	11140	2807	3264	824	7.80	60.20	13.51	3.40	3.96

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 45°C (+113°F))					
@100V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+ 5)	2715	684	795	609	5.52	15.23	4.47	1.13	1.31
-10	(+14)	3917	987	1148	687	6.47	22.07	5.70	1.44	1.67
-5	(+23)	5226	1317	1531	761	7.30	29.59	6.86	1.73	2.01
0	(+32)	6640	1673	1946	832	8.04	37.82	7.97	2.01	2.34
+5	(+41)	8160	2056	2391	899	8.67	46.81	9.07	2.29	2.66
+10	(+50)	9786	2466	2867	962	9.20	56.59	10.18	2.57	2.98

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 55°C (+131°F))					
@100V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+ 5)	2070	522	607	685	6.17	12.49	3.01	0.76	0.88
-10	(+14)	3133	789	918	774	7.36	19.00	4.05	1.02	1.19
-5	(+23)	4295	1082	1258	860	8.39	26.18	5.00	1.26	1.46
0	(+32)	5556	1400	1628	945	9.28	34.09	5.88	1.48	1.72
+5	(+41)	6916	1743	2027	1027	10.01	42.76	6.73	1.70	1.97
+10	(+50)	8375	2111	2454	1106	10.60	52.24	7.57	1.91	2.22

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
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		