

### COMPRESSOR DEFINITION

Designation	<b>T 6217GK</b>
Nominal Voltage/Frequency	<b>208-230 V 60 Hz</b>
Engineering Number	<b>931AD61</b>

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	208-230 / 60	[ V / Hz ]	
4 Application type	Medium Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-20°C to 0°C	(-4°F to 32°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)	25.7	[kgf/cm <sup>2</sup> ] (365 psig)	/ °C - °F
9.2 Peak (gauge)	28.7	[kgf/cm <sup>2</sup> ] (408 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation	3/4+	[hp]
2 Displacement	14.50	[cm <sup>3</sup> ] (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	ESTER / ISO22	
4 Weight (with oil charge)	17	[kg] (37.48 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm <sup>2</sup> ] (2.84 to 4.27 psig)

### C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRPH-0072	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0060/20	
6 Start winding resistance	9.00	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	2.30	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	30.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	6.90	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	UL	

### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: <b>@208V60Hz</b>			<b>ASHRAEHBP46</b> <b>Fan</b>		Evaporating temperature (Condensing temperature		<b>7.2°C (44.96°F)</b> <b>54.4°C (129.92°F)</b>	
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]
7939	2001	2326	1268	6.88	65.36	6.26	1.58	1.83

### E - PERFORMANCE - CURVES

TEST CONDITIONS: <b>@208V50Hz</b>			<b>ASHRAE46</b> <b>Fan</b>		(Condensing temperature <b>35°C (+95°F)</b> )					
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]
<b>-20</b>	<b>(- 4)</b>	2830	713	829	460	3.25	17.96	6.15	1.55	1.80
<b>-15</b>	<b>(+ 5)</b>	3792	956	1111	540	3.55	24.21	7.03	1.77	2.06
<b>-10</b>	<b>(+14)</b>	4863	1225	1425	614	3.85	31.24	7.92	2.00	2.32
<b>-5</b>	<b>(+23)</b>	6041	1522	1770	682	4.14	39.09	8.86	2.23	2.59
<b>0</b>	<b>(+32)</b>	7328	1847	2147	744	4.41	47.83	9.84	2.48	2.88
<b>+5</b>	<b>(+41)</b>	8723	2198	2556	799	4.65	57.50	10.90	2.75	3.19
<b>+10</b>	<b>(+50)</b>	10227	2577	2997	846	4.85	68.16	12.04	3.03	3.53

TEST CONDITIONS: <b>@208V50Hz</b>			<b>ASHRAE46</b> <b>Fan</b>		(Condensing temperature <b>45°C (+113°F)</b> )					
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]
<b>-20</b>	<b>(- 4)</b>	2325	586	681	475	3.32	16.30	4.90	1.24	1.44
<b>-15</b>	<b>(+ 5)</b>	3154	795	924	557	3.63	22.23	5.66	1.43	1.66
<b>-10</b>	<b>(+14)</b>	4088	1030	1198	638	3.95	29.00	6.40	1.61	1.88
<b>-5</b>	<b>(+23)</b>	5127	1292	1502	717	4.28	36.68	7.14	1.80	2.09
<b>0</b>	<b>(+32)</b>	6272	1581	1838	794	4.62	45.32	7.91	1.99	2.32
<b>+5</b>	<b>(+41)</b>	7522	1896	2204	867	4.94	54.96	8.71	2.20	2.55
<b>+10</b>	<b>(+50)</b>	8879	2237	2602	937	5.25	65.65	9.57	2.41	2.80

TEST CONDITIONS: <b>@208V50Hz</b>			<b>ASHRAE46</b> <b>Fan</b>		(Condensing temperature <b>55°C (+131°F)</b> )					
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]
<b>-20</b>	<b>(- 4)</b>	1800	454	527	490	3.40	14.15	3.67	0.92	1.07
<b>-15</b>	<b>(+ 5)</b>	2489	627	729	575	3.70	19.71	4.34	1.09	1.27
<b>-10</b>	<b>(+14)</b>	3281	827	961	662	4.05	26.18	4.96	1.25	1.45
<b>-5</b>	<b>(+23)</b>	4175	1052	1223	752	4.43	33.63	5.55	1.40	1.63
<b>0</b>	<b>(+32)</b>	5172	1303	1516	843	4.82	42.10	6.13	1.55	1.80
<b>+5</b>	<b>(+41)</b>	6272	1580	1838	935	5.23	51.65	6.72	1.69	1.97
<b>+10</b>	<b>(+50)</b>	7475	1884	2190	1028	5.63	62.33	7.32	1.85	2.15

### E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 35°C (+95°F))					
@208V60Hz		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]
-20	(- 4)	3311	834	970	538	3.80	21.01	6.15	1.55	1.80
-15	(+ 5)	4437	1118	1300	632	4.16	28.33	7.03	1.77	2.06
-10	(+14)	5690	1434	1667	719	4.50	36.55	7.92	2.00	2.32
-5	(+23)	7068	1781	2071	799	4.84	45.74	8.85	2.23	2.59
0	(+32)	8573	2160	2512	871	5.17	55.95	9.84	2.48	2.88
+5	(+41)	10204	2571	2990	935	5.49	67.26	10.89	2.74	3.19
+10	(+50)	11962	3015	3505	991	5.80	79.73	12.02	3.03	3.52

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 45°C (+113°F))					
@208V60Hz		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]
-20	(- 4)	2720	685	797	556	3.89	19.06	4.90	1.23	1.44
-15	(+ 5)	3690	930	1081	652	4.25	26.00	5.66	1.43	1.66
-10	(+14)	4783	1205	1402	747	4.62	33.94	6.40	1.61	1.87
-5	(+23)	5999	1512	1758	839	5.01	42.92	7.14	1.80	2.09
0	(+32)	7338	1849	2150	929	5.41	53.02	7.91	1.99	2.32
+5	(+41)	8800	2218	2579	1016	5.83	64.29	8.71	2.19	2.55
+10	(+50)	10386	2617	3043	1099	6.26	76.80	9.55	2.41	2.80

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 55°C (+131°F))					
@208V60Hz		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]
-20	(- 4)	2106	531	617	574	3.98	16.56	3.66	0.92	1.07
-15	(+ 5)	2913	734	854	673	4.34	23.06	4.33	1.09	1.27
-10	(+14)	3839	967	1125	775	4.74	30.63	4.96	1.25	1.45
-5	(+23)	4885	1231	1431	880	5.18	39.35	5.55	1.40	1.63
0	(+32)	6051	1525	1773	987	5.65	49.25	6.13	1.54	1.80
+5	(+41)	7337	1849	2150	1096	6.16	60.42	6.71	1.69	1.97
+10	(+50)	8743	2203	2562	1206	6.71	72.91	7.30	1.84	2.14

### 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	Slanted 42°		
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	Straight		
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	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		