

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------------------------|
| Designation | J 6226ZX |
| Nominal Voltage/Frequency | 380-420 V 50 Hz / 440-480 V 60 Hz |
| Engineering Number | 168IM01 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|--|---|-----------------------------------|-----------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-134a | | |
| 3 Nominal voltage and frequency | 380-420 / 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 | 3PHASE | | |
| 6 Starting torque | HST - Hight 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) | 16.2 | [kgf/cm ²] (230 psig) | / °C - °F |
| 9.2 Peak (gauge) | 20.6 | [kgf/cm ²] (293 psig) | / °C - °F |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|---------------|--|
| 1 Commercial designation | 1+ | [hp] |
| 2 Displacement | 34.38 | [cm ³] (2.098 cu.in) |
| 2.1 Bore [mm] | 42.850 | |
| 2.2 Stroke [mm] | 23.850 | |
| 3 Lubricant charge | 890 | [ml] (30.10 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ESTER / ISO22 | |
| 4 Weight (with oil charge) | 20.05 | [kg] (44.20 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 | 380-420 V 50 Hz / 440-480 V 60 Hz 3 ~ (Three phase) | |
| 2 Starting device type | 3PHASE | |
| 2.1 Starting device | | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | - | [µF(VAC minimum)] |
| 5 Motor protection | 31HM26-36 | |
| 6 Start winding resistance | 7.39 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 7.39 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 13.00 | [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) | 2.30 | [A] - Measured according to UL 984 |
| 11 Approval boards certification | | |

D - PERFORMANCE - CHECK POINT DATA

| | | | | | | | | |
|-------------------------------|----------|------|-----------------------------|-------------------------------|--|---------------------------|--------------------------------------|-------|
| TEST CONDITIONS: @440V60Hz | | | 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] |
| 11882 | 2994 | 3482 | 1390 | 2.36 | 77.04 | 8.55 | 2.15 | 2.51 |

E - PERFORMANCE - CURVES

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|------|-----------------------------|---------------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @440V50Hz | | 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) | 6329 | 1595 | 1855 | 666 | 1.68 | 34.24 | 9.49 | 2.39 | 2.78 |
| -10 | (+14) | 7589 | 1912 | 2224 | 735 | 1.73 | 41.18 | 10.35 | 2.61 | 3.03 |
| -5 | (+23) | 9153 | 2307 | 2682 | 804 | 1.79 | 49.84 | 11.39 | 2.87 | 3.34 |
| 0 | (+32) | 11022 | 2778 | 3230 | 873 | 1.86 | 60.30 | 12.61 | 3.18 | 3.70 |
| +5 | (+41) | 13195 | 3325 | 3867 | 942 | 1.94 | 72.59 | 13.99 | 3.53 | 4.10 |
| +10 | (+50) | 15673 | 3950 | 4592 | 1011 | 2.03 | 86.79 | 15.51 | 3.91 | 4.55 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|------|-----------------------------|--|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @440V50Hz | | 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) | 4858 | 1224 | 1424 | 672 | 1.68 | 28.36 | 7.23 | 1.82 | 2.12 |
| -10 | (+14) | 6128 | 1544 | 1796 | 765 | 1.76 | 35.94 | 8.01 | 2.02 | 2.35 |
| -5 | (+23) | 7627 | 1922 | 2235 | 858 | 1.86 | 44.93 | 8.89 | 2.24 | 2.61 |
| 0 | (+32) | 9355 | 2357 | 2741 | 949 | 1.97 | 55.37 | 9.85 | 2.48 | 2.89 |
| +5 | (+41) | 11310 | 2850 | 3314 | 1040 | 2.09 | 67.32 | 10.88 | 2.74 | 3.19 |
| +10 | (+50) | 13494 | 3401 | 3954 | 1129 | 2.21 | 80.83 | 11.95 | 3.01 | 3.50 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|------|-----------------------------|--|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @440V50Hz | | 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) | 3332 | 840 | 976 | 678 | 1.68 | 21.24 | 4.93 | 1.24 | 1.44 |
| -10 | (+14) | 4606 | 1161 | 1350 | 797 | 1.80 | 29.46 | 5.76 | 1.45 | 1.69 |
| -5 | (+23) | 6033 | 1520 | 1768 | 914 | 1.94 | 38.75 | 6.59 | 1.66 | 1.93 |
| 0 | (+32) | 7613 | 1918 | 2231 | 1029 | 2.08 | 49.16 | 7.41 | 1.87 | 2.17 |
| +5 | (+41) | 9345 | 2355 | 2738 | 1142 | 2.24 | 60.74 | 8.20 | 2.07 | 2.40 |
| +10 | (+50) | 11230 | 2830 | 3291 | 1252 | 2.40 | 73.56 | 8.95 | 2.26 | 2.62 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @440V60Hz | | 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] |
| -15 | (+ 5) | 7405 | 1866 | 2170 | 797 | 1.71 | 40.07 | 9.28 | 2.34 | 2.72 |
| -10 | (+14) | 8879 | 2238 | 2602 | 874 | 1.76 | 48.18 | 10.18 | 2.57 | 2.98 |
| -5 | (+23) | 10709 | 2699 | 3138 | 950 | 1.82 | 58.32 | 11.28 | 2.84 | 3.30 |
| 0 | (+32) | 12896 | 3250 | 3779 | 1027 | 1.90 | 70.55 | 12.55 | 3.16 | 3.68 |
| +5 | (+41) | 15438 | 3890 | 4524 | 1104 | 1.98 | 84.93 | 13.97 | 3.52 | 4.09 |
| +10 | (+50) | 18337 | 4621 | 5373 | 1181 | 2.07 | 101.54 | 15.54 | 3.92 | 4.55 |

| TEST CONDITIONS: @440V60Hz | | 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] |
| -15 | (+ 5) | 5684 | 1432 | 1666 | 809 | 1.71 | 33.17 | 7.02 | 1.77 | 2.06 |
| -10 | (+14) | 7170 | 1807 | 2101 | 913 | 1.80 | 42.05 | 7.86 | 1.98 | 2.30 |
| -5 | (+23) | 8924 | 2249 | 2615 | 1015 | 1.90 | 52.57 | 8.79 | 2.21 | 2.58 |
| 0 | (+32) | 10944 | 2758 | 3207 | 1117 | 2.01 | 64.78 | 9.80 | 2.47 | 2.87 |
| +5 | (+41) | 13232 | 3335 | 3877 | 1217 | 2.13 | 78.76 | 10.87 | 2.74 | 3.19 |
| +10 | (+50) | 15788 | 3979 | 4626 | 1317 | 2.26 | 94.57 | 11.99 | 3.02 | 3.51 |

| TEST CONDITIONS: @440V60Hz | | 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] |
| -15 | (+ 5) | 3898 | 982 | 1142 | 821 | 1.71 | 24.85 | 4.76 | 1.20 | 1.40 |
| -10 | (+14) | 5390 | 1358 | 1579 | 953 | 1.84 | 34.47 | 5.63 | 1.42 | 1.65 |
| -5 | (+23) | 7059 | 1779 | 2069 | 1083 | 1.98 | 45.34 | 6.51 | 1.64 | 1.91 |
| 0 | (+32) | 8907 | 2245 | 2610 | 1210 | 2.12 | 57.52 | 7.37 | 1.86 | 2.16 |
| +5 | (+41) | 10934 | 2755 | 3204 | 1336 | 2.28 | 71.07 | 8.20 | 2.07 | 2.40 |
| +10 | (+50) | 13139 | 3311 | 3850 | 1459 | 2.45 | 86.07 | 8.99 | 2.27 | 2.63 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|-------------------|------|--------------------------|
| 1 Base plate | American 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 | 8 +0.07/+0.00 | [mm] | (0.315" +0.003"/+0.000") |
| 3.2.1 Material | Copper | | |
| 3.2.2 Shape | Slanted J | | |
| 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 | | |