



COMPRESSOR TECHNICAL DATA

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | NJ 6226Z |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 142HA14 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|--|---|-----------------------------------|-----------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-134a | | |
| 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 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 1/4 | [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 | 750 | [ml] (25.36 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ESTER / ISO22 | |
| 4 Weight (with oil charge) | 19.8 | [kg] (43.65 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 | 220-240 V 50 Hz 1 ~ (Single phase) | |
| 2 Starting device type | Voltage Relay | |
| 2.1 Starting device | RVA4M3C-109 | |
| 3 Start capacitor | 72-88(330) | [µF(VAC minimum)] |
| 4 Run capacitor | 17.5(440) | [µF(VAC minimum)] |
| 5 Motor protection | T0335/C9 | |
| 6 Start winding resistance | 8.70 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 2.00 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 31.00 | [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) | - | [A] - Measured according to UL 984 |
| 11 Approval boards certification | CCC - IMQ | |



COMPRESSOR TECHNICAL DATA

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] |
| 10156 | 2559 | 2976 | 1232 | 5.95 | 65.85 | 8.24 | 2.08 | 2.41 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V50Hz | | 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) | 6265 | 1579 | 1836 | 708 | 3.68 | 33.90 | 8.83 | 2.23 | 2.59 |
| -10 | (+14) | 7512 | 1893 | 2201 | 780 | 3.97 | 40.76 | 9.65 | 2.43 | 2.83 |
| -5 | (+23) | 9061 | 2283 | 2655 | 851 | 4.26 | 49.34 | 10.66 | 2.69 | 3.12 |
| 0 | (+32) | 10911 | 2750 | 3197 | 922 | 4.56 | 59.69 | 11.83 | 2.98 | 3.47 |
| +5 | (+41) | 13062 | 3292 | 3827 | 992 | 4.86 | 71.86 | 13.15 | 3.31 | 3.85 |
| +10 | (+50) | 15513 | 3909 | 4546 | 1064 | 5.17 | 85.90 | 14.59 | 3.68 | 4.28 |

| TEST CONDITIONS: @220V50Hz | | 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) | 4810 | 1212 | 1409 | 719 | 3.72 | 28.07 | 6.69 | 1.69 | 1.96 |
| -10 | (+14) | 6067 | 1529 | 1778 | 813 | 4.10 | 35.58 | 7.47 | 1.88 | 2.19 |
| -5 | (+23) | 7551 | 1903 | 2213 | 906 | 4.48 | 44.48 | 8.33 | 2.10 | 2.44 |
| 0 | (+32) | 9261 | 2334 | 2714 | 998 | 4.88 | 54.82 | 9.27 | 2.34 | 2.72 |
| +5 | (+41) | 11197 | 2822 | 3281 | 1091 | 5.29 | 66.64 | 10.27 | 2.59 | 3.01 |
| +10 | (+50) | 13358 | 3366 | 3914 | 1183 | 5.70 | 80.02 | 11.29 | 2.85 | 3.31 |

| TEST CONDITIONS: @220V50Hz | | 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) | 3299 | 831 | 967 | 730 | 3.76 | 21.03 | 4.53 | 1.14 | 1.33 |
| -10 | (+14) | 4560 | 1149 | 1336 | 847 | 4.23 | 29.17 | 5.36 | 1.35 | 1.57 |
| -5 | (+23) | 5973 | 1505 | 1750 | 963 | 4.71 | 38.36 | 6.19 | 1.56 | 1.81 |
| 0 | (+32) | 7537 | 1899 | 2208 | 1078 | 5.21 | 48.66 | 7.00 | 1.76 | 2.05 |
| +5 | (+41) | 9251 | 2331 | 2711 | 1193 | 5.72 | 60.13 | 7.77 | 1.96 | 2.28 |
| +10 | (+50) | 11116 | 2801 | 3257 | 1308 | 6.25 | 72.82 | 8.48 | 2.14 | 2.48 |



COMPRESSOR TECHNICAL DATA

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 | 6.42 +0.08/+0.00 | [mm] | (0.253" +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 | | |