

COMPRESSOR DEFINITION

| | |
|---------------------------|------------------------|
| Designation | NJ 9232GK |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 943NA01 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|--|---|-----------------------------------|-----------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-404A | | |
| 3 Nominal voltage and frequency | 220-240 / 50 | [V / Hz] | |
| 4 Application type | Medium Back Pressure (Commercial Compressors R404A) | | |
| 4.1 Evaporating temperature range | -20°C to 0°C | (-4°F to 32°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 (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 ²] (365 psig) | / °C - °F |
| 9.2 Peak (gauge) | 28.7 | [kgf/cm ²] (408 psig) | / °C - °F |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|---------------|---|
| 1 Commercial designation | 1 1/4 | [hp] |
| 2 Displacement | 26.11 | [cm ³] (1.593 cu.in) |
| 2.1 Bore | 41.770 | |
| 2.2 Stroke | 9.533 | |
| 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) | 21.6 | [kg] (47.62 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 | 3ARR3B10AT3 | |
| 3 Start capacitor | 88-108(330) | [µF(VAC minimum)] |
| 4 Run capacitor | 30(450) | [µF(VAC minimum)] |
| 5 Motor protection (external) | T0809/C9 | |
| 6 Start winding resistance | 5.40 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 1.75 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | - | [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 | IMQ | |

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] |
| 13754 | 3466 | 4030 | 1576 | 7.16 | 113.23 | 8.73 | 2.20 | 2.56 |

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] |
| -20 (- 4) | 5822 | 1467 | 1706 | 866 | 4.38 | 36.97 | 6.72 | 1.69 | 1.97 |
| -15 (+ 5) | 7429 | 1872 | 2177 | 953 | 4.63 | 47.42 | 7.80 | 1.96 | 2.28 |
| -10 (+14) | 9413 | 2372 | 2758 | 1035 | 4.88 | 60.45 | 9.10 | 2.29 | 2.67 |
| -5 (+23) | 11774 | 2967 | 3450 | 1111 | 5.13 | 76.18 | 10.60 | 2.67 | 3.11 |
| 0 (+32) | 14512 | 3657 | 4252 | 1182 | 5.39 | 94.73 | 12.27 | 3.09 | 3.60 |

| | | | | | | | | | |
|-------------------------------|----------------------------|----------|------------------------|-----------------------------|--|-------------------------|---------------------------|-----------|-------|
| 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] |
| -20 (- 4) | 4859 | 1224 | 1424 | 870 | 4.37 | 34.03 | 5.59 | 1.41 | 1.64 |
| -15 (+ 5) | 6300 | 1587 | 1846 | 982 | 4.75 | 44.40 | 6.41 | 1.62 | 1.88 |
| -10 (+14) | 8054 | 2030 | 2360 | 1089 | 5.14 | 57.17 | 7.39 | 1.86 | 2.17 |
| -5 (+23) | 10122 | 2551 | 2966 | 1191 | 5.52 | 72.43 | 8.49 | 2.14 | 2.49 |
| 0 (+32) | 12504 | 3151 | 3664 | 1289 | 5.90 | 90.32 | 9.71 | 2.45 | 2.84 |

| | | | | | | | | | |
|-------------------------------|----------------------------|----------|------------------------|-----------------------------|--|-------------------------|---------------------------|-----------|-------|
| 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] |
| -20 (- 4) | 3859 | 972 | 1131 | 875 | 4.37 | 30.35 | 4.41 | 1.11 | 1.29 |
| -15 (+ 5) | 5123 | 1291 | 1501 | 1012 | 4.88 | 40.55 | 5.06 | 1.28 | 1.48 |
| -10 (+14) | 6637 | 1672 | 1945 | 1145 | 5.40 | 52.95 | 5.80 | 1.46 | 1.70 |
| -5 (+23) | 8401 | 2117 | 2462 | 1275 | 5.91 | 67.65 | 6.59 | 1.66 | 1.93 |
| 0 (+32) | 10415 | 2625 | 3052 | 1401 | 6.43 | 84.79 | 7.43 | 1.87 | 2.18 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|-------------------|------|--------------------------|
| 1 Base plate | American Standard | | |
| 2 Tray holder | No | | |
| 3 Connectors | | | |
| 3.1 SUCTION | 12.77 +0.08/+0.00 | [mm] | (0.503" +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 | | |