

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | NT 2192GKV |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 923DA04 |

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 | Low Back Pressure R404A | | |
| 4.1 Evaporating temperature range | -40°C to -10°C | (-40°F to 14°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) | 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 | 22.37 | [cm ³] (1.365 cu.in) |
| 2.1 Bore [mm] | 36.990 | |
| 2.2 Stroke [mm] | 20.830 | |
| 3 Lubricant charge | 450 | [ml] (15.22 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ESTER / ISO22 | |
| 4 Weight (with oil charge) | 17.5 | [kg] (38.58 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 | RVA3N3C-122 | |
| 3 Start capacitor | 130-156(250) | [µF(VAC minimum)] |
| 4 Run capacitor | 15(440) | [µF(VAC minimum)] |
| 5 Motor protection | T0883/G9 | |
| 6 Start winding resistance | 8.40 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 1.90 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 35.00 | [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 | IMQ - IRAM | |

D - PERFORMANCE - CHECK POINT DATA

| | | | | | | | | |
|-------------------------------|----------|------|-----------------------------|-------------------------------|--|---------------------------|--|-------|
| TEST CONDITIONS: @220V50Hz | | | ASHRAELBP32 Fan | | Evaporating temperature (Condensing temperature | | -23.3°C (-9.94°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] |
| 3716 | 936 | 1089 | 742 | 3.45 | 25.19 | 5.01 | 1.26 | 1.47 |

E - PERFORMANCE - CURVES

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|---------------------------------------|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | | ASHRAE32 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] |
| -40 | (-40) | 1729 | 436 | 507 | 424 | 2.21 | 11.62 | 4.06 | 1.02 | 1.19 |
| -35 | (-31) | 2282 | 575 | 669 | 494 | 2.45 | 15.39 | 4.64 | 1.17 | 1.36 |
| -30 | (-22) | 3004 | 757 | 880 | 565 | 2.72 | 20.32 | 5.33 | 1.34 | 1.56 |
| -25 | (-13) | 3893 | 981 | 1141 | 636 | 3.03 | 26.45 | 6.12 | 1.54 | 1.79 |
| -20 | (- 4) | 4953 | 1248 | 1451 | 708 | 3.38 | 33.83 | 6.99 | 1.76 | 2.05 |
| -15 | (+ 5) | 6183 | 1558 | 1812 | 780 | 3.76 | 42.49 | 7.92 | 2.00 | 2.32 |
| -10 | (+14) | 7585 | 1911 | 2223 | 853 | 4.18 | 52.47 | 8.90 | 2.24 | 2.61 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | | ASHRAE32 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] |
| -40 | (-40) | 1507 | 380 | 442 | 424 | 2.20 | 10.11 | 3.56 | 0.90 | 1.04 |
| -35 | (-31) | 2069 | 521 | 606 | 508 | 2.50 | 13.93 | 4.08 | 1.03 | 1.19 |
| -30 | (-22) | 2779 | 700 | 814 | 593 | 2.83 | 18.77 | 4.69 | 1.18 | 1.37 |
| -25 | (-13) | 3637 | 917 | 1066 | 678 | 3.18 | 24.66 | 5.36 | 1.35 | 1.57 |
| -20 | (- 4) | 4645 | 1171 | 1361 | 763 | 3.56 | 31.66 | 6.09 | 1.53 | 1.78 |
| -15 | (+ 5) | 5803 | 1462 | 1701 | 848 | 3.97 | 39.79 | 6.85 | 1.73 | 2.01 |
| -10 | (+14) | 7113 | 1793 | 2084 | 933 | 4.40 | 49.11 | 7.62 | 1.92 | 2.23 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | | ASHRAE32 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] |
| -40 | (-40) | 1285 | 324 | 377 | 411 | 2.19 | 8.60 | 3.14 | 0.79 | 0.92 |
| -35 | (-31) | 1859 | 469 | 545 | 510 | 2.55 | 12.49 | 3.64 | 0.92 | 1.07 |
| -30 | (-22) | 2561 | 645 | 750 | 610 | 2.93 | 17.26 | 4.19 | 1.06 | 1.23 |
| -25 | (-13) | 3391 | 855 | 994 | 709 | 3.32 | 22.95 | 4.78 | 1.20 | 1.40 |
| -20 | (- 4) | 4351 | 1096 | 1275 | 809 | 3.74 | 29.59 | 5.39 | 1.36 | 1.58 |
| -15 | (+ 5) | 5441 | 1371 | 1594 | 908 | 4.17 | 37.23 | 6.00 | 1.51 | 1.76 |
| -10 | (+14) | 6663 | 1679 | 1952 | 1007 | 4.61 | 45.91 | 6.60 | 1.66 | 1.94 |

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 | 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 | | |