

COMPRESSOR DEFINITION

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|---------------------------|-----------------|
| Designation | NT 2212GK |
| Nominal Voltage/Frequency | 208-230 V 60 Hz |
| Engineering Number | 925DD08 |

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 | 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 temperature | | | |
| 9.1 Operating | 25.2 | [kgf/cm ²] (358 psig) | / °C - °F |
| 9.2 Peak | 28.3 | [kgf/cm ²] (402 psig) | / °C - °F |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|---------------|----------------------------------|
| 1 Commercial designation | 1 1/2 | [hp] |
| 2 Displacement | 27.80 | [cm ³] (1.696 cu.in) |
| 2.1 Bore [mm] | 38.100 | |
| 2.2 Stroke [mm] | 24.400 | |
| 3 Lubricant charge | 650 | [ml] (21.98 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ESTER / ISO22 | |
| 4 Weight (with oil charge) | 17.8 | [kg] (39.24 lb.) |
| 5 Nitrogen charge | - | [kgf/cm ²] |

C - ELETRICAL DATA

| | | |
|--|-----------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 208-230 V 60 Hz 1~ (Single phase) | |
| 2 Starting device type | Voltage Relay | |
| 2.1 Starting device | RVA2AM3C-104 | |
| 3 Start capacitor | 130-156(330) | [µF(VAC minimum)] |
| 4 Run capacitor | 25(440) | [µF(VAC minimum)] |
| 5 Motor protection | 15HM1962-240 | |
| 6 Start winding resistance | 3.30 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 1.35 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (60 Hz) | 45.00 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (60 Hz) | - | [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

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|-------------------------------|----------|------|-----------------------------|-------------------------------|--|---------------------------|--|-------|
| TEST CONDITIONS: @230V60Hz | | | ARILBP Fan | | Evaporating temperature (Condensing temperature | | -23.3°C (-9.94°F) 48.9°C (120.02°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] |
| 4198 | 1058 | 1230 | 1193 | 5.56 | 43.46 | 3.52 | 0.89 | 1.03 |

E - PERFORMANCE - CURVES

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|-------------------------------|-------|----------------------------|----------|------|---------------------------------------|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @230V60Hz | | ARI4 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) | 2325 | 586 | 681 | 705 | 3.58 | 19.11 | 3.28 | 0.83 | 0.96 |
| -35 | (-31) | 3149 | 794 | 923 | 833 | 4.08 | 26.09 | 3.79 | 0.95 | 1.11 |
| -30 | (-22) | 4147 | 1045 | 1215 | 959 | 4.58 | 34.55 | 4.33 | 1.09 | 1.27 |
| -25 | (-13) | 5319 | 1340 | 1559 | 1085 | 5.08 | 44.60 | 4.91 | 1.24 | 1.44 |
| -20 | (- 4) | 6663 | 1679 | 1952 | 1210 | 5.60 | 56.33 | 5.51 | 1.39 | 1.61 |
| -15 | (+ 5) | 8178 | 2061 | 2396 | 1334 | 6.13 | 69.86 | 6.13 | 1.54 | 1.80 |
| -10 | (+14) | 9862 | 2485 | 2890 | 1459 | 6.68 | 85.27 | 6.75 | 1.70 | 1.98 |

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|-------------------------------|-------|----------------------------|----------|------|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @230V60Hz | | ARI4 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) | 1645 | 415 | 482 | 705 | 3.59 | 15.60 | 2.36 | 0.59 | 0.69 |
| -35 | (-31) | 2366 | 596 | 693 | 842 | 4.12 | 22.55 | 2.81 | 0.71 | 0.82 |
| -30 | (-22) | 3240 | 816 | 949 | 982 | 4.68 | 31.05 | 3.28 | 0.83 | 0.96 |
| -25 | (-13) | 4265 | 1075 | 1250 | 1123 | 5.26 | 41.19 | 3.78 | 0.95 | 1.11 |
| -20 | (- 4) | 5439 | 1371 | 1594 | 1268 | 5.86 | 53.08 | 4.28 | 1.08 | 1.25 |
| -15 | (+ 5) | 6763 | 1704 | 1982 | 1416 | 6.49 | 66.82 | 4.78 | 1.20 | 1.40 |
| -10 | (+14) | 8234 | 2075 | 2413 | 1567 | 7.15 | 82.51 | 5.27 | 1.33 | 1.55 |

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|-------------------------------|-------|----------------------------|----------|------|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @230V60Hz | | ARI4 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) | 1238 | 312 | 363 | 708 | 3.60 | 14.02 | 1.74 | 0.44 | 0.51 |
| -35 | (-31) | 1787 | 450 | 524 | 853 | 4.17 | 20.38 | 2.10 | 0.53 | 0.61 |
| -30 | (-22) | 2466 | 621 | 722 | 1003 | 4.77 | 28.34 | 2.46 | 0.62 | 0.72 |
| -25 | (-13) | 3274 | 825 | 959 | 1158 | 5.41 | 38.00 | 2.83 | 0.71 | 0.83 |
| -20 | (- 4) | 4210 | 1061 | 1234 | 1320 | 6.09 | 49.48 | 3.20 | 0.81 | 0.94 |
| -15 | (+ 5) | 5272 | 1329 | 1545 | 1489 | 6.81 | 62.86 | 3.55 | 0.89 | 1.04 |
| -10 | (+14) | 6461 | 1628 | 1893 | 1664 | 7.57 | 78.26 | 3.87 | 0.97 | 1.13 |

F - EXTERNAL CHARACTERISTICS

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|-------------------------|--|
| 1 Base plate | Universal |
| 2 Tray holder | No |
| 3 Connectors | |
| 3.1 SUCTION | 12.7 +0.25/-0.25 [mm] (0.500" +0.010"/-0.010") |
| 3.1.1 Material | Steel |
| 3.1.2 Shape | ROTOLOCK(Ex. thr. 1"-14UNS-2A) |
| 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 |