

COMPRESSOR DEFINITION

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|---------------------------|-----------------|
| Designation | NT 6217Z |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 212BA09 |

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 temperature | | | |
| 9.1 Operating | 14.2 | [kgf/cm ²] (202 psig) | / °C - °F |
| 9.2 Peak | 15.9 | [kgf/cm ²] (226 psig) | / °C - °F |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|---------------|--|
| 1 Commercial designation | 3/4 | [hp] |
| 2 Displacement | 20.44 | [cm ³] (1.247 cu.in) |
| 2.1 Bore [mm] | 36.990 | |
| 2.2 Stroke [mm] | 19.030 | |
| 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 | [kg] (37.48 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 | RVA2M3C-111 | |
| 3 Start capacitor | 72-88(330) | [µF(VAC minimum)] |
| 4 Run capacitor | 15(400) | [µF(VAC minimum)] |
| 5 Motor protection | T0634/G9 | |
| 6 Start winding resistance | 11.22 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 3.00 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 25.00 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50 Hz) | 3.54 | [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

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|-------------------------------|----------|------|-----------------------------|-------------------------------|--|---------------------------|--------------------------------------|-------|
| 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] |
| 6630 | 1671 | 1943 | 727 | 3.40 | 42.99 | 9.12 | 2.30 | 2.67 |

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) | 3298 | 831 | 967 | 430 | 2.15 | 17.84 | 7.66 | 1.93 | 2.25 |
| -10 (+14) | 4098 | 1033 | 1201 | 463 | 2.28 | 22.24 | 8.87 | 2.24 | 2.60 |
| -5 (+23) | 5128 | 1292 | 1502 | 497 | 2.43 | 27.92 | 10.32 | 2.60 | 3.03 |
| 0 (+32) | 6387 | 1609 | 1871 | 533 | 2.58 | 34.94 | 11.98 | 3.02 | 3.51 |
| +5 (+41) | 7875 | 1985 | 2308 | 571 | 2.74 | 43.33 | 13.79 | 3.48 | 4.04 |
| +10 (+50) | 9594 | 2418 | 2811 | 610 | 2.91 | 53.12 | 15.73 | 3.96 | 4.61 |

| | | | | | | | | | |
|-------------------------------|----------------------------|----------|-----------------|-----------------------------|--|-------------------------|---------------------------|-----------|-------|
| 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) | 2864 | 722 | 839 | 461 | 2.26 | 16.72 | 6.21 | 1.57 | 1.82 |
| -10 (+14) | 3590 | 905 | 1052 | 503 | 2.44 | 21.05 | 7.15 | 1.80 | 2.09 |
| -5 (+23) | 4515 | 1138 | 1323 | 545 | 2.62 | 26.59 | 8.28 | 2.09 | 2.43 |
| 0 (+32) | 5637 | 1421 | 1652 | 588 | 2.80 | 33.36 | 9.58 | 2.41 | 2.81 |
| +5 (+41) | 6958 | 1753 | 2039 | 632 | 2.99 | 41.41 | 11.00 | 2.77 | 3.22 |
| +10 (+50) | 8476 | 2136 | 2484 | 678 | 3.19 | 50.79 | 12.51 | 3.15 | 3.66 |

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|-------------------------------|----------------------------|----------|-----------------|-----------------------------|--|-------------------------|---------------------------|-----------|-------|
| 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) | 2469 | 622 | 723 | 487 | 2.37 | 15.73 | 5.07 | 1.28 | 1.49 |
| -10 (+14) | 3120 | 786 | 914 | 541 | 2.60 | 19.95 | 5.76 | 1.45 | 1.69 |
| -5 (+23) | 3937 | 992 | 1154 | 594 | 2.83 | 25.29 | 6.62 | 1.67 | 1.94 |
| 0 (+32) | 4921 | 1240 | 1442 | 648 | 3.06 | 31.79 | 7.60 | 1.91 | 2.23 |
| +5 (+41) | 6071 | 1530 | 1779 | 702 | 3.30 | 39.47 | 8.66 | 2.18 | 2.54 |
| +10 (+50) | 7388 | 1862 | 2165 | 756 | 3.54 | 48.38 | 9.77 | 2.46 | 2.86 |

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 |