

COMPRESSOR DEFINITION

| | |
|---------------------------|------------------------|
| Designation | NT6220Z |
| Nominal Voltage/Frequency | 200-240 V 50 Hz |
| Engineering Number | 212CN06 |


A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|--|-----------------------------------|-------------------------|-------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R134a | | |
| 3 Nominal voltage and frequency | 200-240 / 50 | [V / Hz] | |
| 4 Application type | High Back Pressure | | |
| 4.1 Evaporating temperature range | -15°C to +10°C | | |
| 5 Motor type | CSIR | | |
| 6 Starting torque | HST - High starting torque | | |
| 7 Expansion device | Capillary tube or Expansion valve | | |
| 8 Compressor cooling | Fan cooled | 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) | 13.9 | [bar] | |
| 9.2 Peak (gauge) | 15.8 | [bar] | |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|---------------|-------|
| 1 Commercial designation | 1 | [hp] |
| 2 Displacement | 22.4 | [cm³] |
| 2.1 Bore | 37.0 | [mm] |
| 2.2 Stroke | 20.83 | [mm] |
| 3 Lubricant charge | 450 | [ml] |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ESTER / ISO22 | |
| 4 Weight(with oil charge) | 17.2 | [kg] |
| 5 Nitrogen charge | 0.2 to 0.3 | [bar] |

C - ELETRICAL DATA

| | | |
|--|------------------------------------|---------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 200-240 V 50 Hz 1 ~ (Single phase) | |
| 2 Starting device type | Current Relay | |
| 2.1 Starting device | MTRPH55 | |
| 3 Start capacitor | 88-108 (330) | [µF(VAC minimum)] |
| 4 Run capacitor | | [µF(VAC minimum)] |
| 5 Motor protection (external) | T0901 | |
| 6 Start winding resistance | 12.16 | [ohm at 25°C] +/- 8% |
| 7 Run winding resistance | 1.86 | [ohm at 25°C] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 28.0 | [A] - According to UL 984 |
| 9 FLA - Full load amperage L/MBP (50 Hz) | - | [A] - According to UL 984 |
| 10 FLA - Full Load Amperage HBP (50 Hz) | - | [A] - According to UL 984 |
| 11 Approval boards certification | IMQ | |

D - PERFORMANCE - CHECK POINT DATA

| TEST CONDITIONS: @200V50Hz | | EN12900 HBP Fan cooled | | Evap. Temp +5°C Return Gas +20°C Cond. Temp +50°C Liquid Subcooling 0 K | |
|-------------------------------|--|-----------------------------|-------------------------------|--|---------------------------|
| Cooling capacity +/- 5% | | Power consumption +/- 5% | Current consumption +/- 5% | Gas Flow rate +/- 5% | Efficiency rate +/- 7% |
| [W] | | [W] | [A] | [kg/h] | [W/W] |
| 1744 | | 820 | 5.10 | 43.71 | 2.13 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @200V50Hz | | EN12900 Fan cooled | | Condensing temperature | | 35°C | |
|-------------------------------|----------------------------|-----------------------------|-------------------------------|-------------------------|---------------------------|------|--|
| Evaporating temperature | Cooling capacity +/- 5% | Power consumption +/- 5% | Current consumption +/- 5% | Gas Flow rate +/- 5% | Efficiency rate +/- 7% | | |
| °C | [W] | [W] | [A] | [kg/h] | [W/W] | | |
| -15 | 929 | 486 | 3.66 | 19.66 | 1.91 | | |
| -10 | 1169 | 536 | 3.85 | 24.87 | 2.18 | | |
| -5 | 1458 | 586 | 4.06 | 31.16 | 2.49 | | |
| 0 | 1799 | 640 | 4.29 | 38.69 | 2.81 | | |
| +5 | 2199 | 697 | 4.54 | 47.65 | 3.16 | | |
| +10 | 2662 | 759 | 4.82 | 58.22 | 3.51 | | |

| TEST CONDITIONS: @200V50Hz | | EN12900 Fan cooled | | Condensing temperature | | 45°C | |
|-------------------------------|----------------------------|-----------------------------|-------------------------------|-------------------------|---------------------------|------|--|
| Evaporating temperature | Cooling capacity +/- 5% | Power consumption +/- 5% | Current consumption +/- 5% | Gas Flow rate +/- 5% | Efficiency rate +/- 7% | | |
| °C | [W] | [W] | [A] | [kg/h] | [W/W] | | |
| -15 | 800 | 525 | 3.81 | 18.57 | 1.52 | | |
| -10 | 1011 | 586 | 4.05 | 23.57 | 1.73 | | |
| -5 | 1260 | 647 | 4.32 | 29.56 | 1.95 | | |
| 0 | 1554 | 710 | 4.60 | 36.70 | 2.19 | | |
| +5 | 1897 | 777 | 4.91 | 45.18 | 2.44 | | |
| +10 | 2294 | 848 | 5.23 | 55.16 | 2.70 | | |

| TEST CONDITIONS: @200V50Hz | | EN12900 Fan cooled | | Condensing temperature | | 55°C | |
|-------------------------------|----------------------------|-----------------------------|-------------------------------|-------------------------|---------------------------|------|--|
| Evaporating temperature | Cooling capacity +/- 5% | Power consumption +/- 5% | Current consumption +/- 5% | Gas Flow rate +/- 5% | Efficiency rate +/- 7% | | |
| °C | [W] | [W] | [A] | [kg/h] | [W/W] | | |
| -15 | 675 | 557 | 3.93 | 17.43 | 1.21 | | |
| -10 | 852 | 633 | 4.24 | 22.10 | 1.35 | | |
| -5 | 1060 | 708 | 4.57 | 27.65 | 1.50 | | |
| 0 | 1303 | 785 | 4.92 | 34.26 | 1.66 | | |
| +5 | 1586 | 865 | 5.30 | 42.10 | 1.83 | | |
| +10 | 1915 | 949 | 5.70 | 51.36 | 2.02 | | |

| | |
|-----------------------|-----------------------|
| 1 Base plate | Universal |
| 2 Tray holder | No |
| 3 Connectors | |
| 3.1 SUCTION | 9.6 +0.07/+0.00 [mm] |
| 3.1.1 Material | Copper |
| 3.1.2 Shape | Slanted 42 |
| 3.2 DISCHARGE | 6.42 +0.08/+0.00 [mm] |
| 3.2.1 Material | Copper |
| 3.2.2 Shape | Straight |
| 3.3 PROCESS | 9.6 +0.07/+0.00 [mm] |
| 3.3.1 Material | Copper |
| 3.3.2 Shape | Vertical |
| 3.4 Oil cooler | No |
| 3.5 Connector sealing | Rubber Plugs |