

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | NT X6233UV |
| Nominal Voltage/Frequency | 208-230 V 60 Hz |
| Engineering Number | 843ND72 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|------------------------------------|-----------------------------------|-----------------------------------|-----------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-290 | | |
| 3 Nominal voltage and frequency | 208-230 / 60 | [V / Hz] | |
| 4 Application type | Medium Back Pressure | | |
| 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 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 | 18.4 | [kgf/cm ²] (262 psig) | / °C - °F |
| 9.2 Peak | 20.6 | [kgf/cm ²] (293 psig) | / °C - °F |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|------------|----------------------------------|
| 1 Commercial designation | 1 1/4 | [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 | 450 | [ml] (15.22 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | AB / ISO32 | |
| 4 Weight (with oil charge) | 17.6 | [kg] (38.80 lb.) |
| 5 Nitrogen charge | - | [kgf/cm ²] |

C - ELECTRICAL 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 | RVA2AE3C-105 | |
| 3 Start capacitor | 108-130(330) | [µF(VAC minimum)] |
| 4 Run capacitor | 25(400) | [µF(VAC minimum)] |
| 5 Motor protection | USP-577-84 | |
| 6 Start winding resistance | 2.44 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 1.39 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (60 Hz) | 40.00 | [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

| | | | | | | | | |
|---------------------------------|----------|------|----------------------------|----------------------------|--|--------------------------------|---------------------------------------|-------|
| TEST CONDITIONS: @230V60Hz | | | ARIMBP Fan | | Evaporating temperature (Condensing temperature | | -6.7°C (19.94°F) 48.9°C (120.02°F) | |
| Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | |
| [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| 8521 | 2147 | 2497 | 1344 | 6.19 | 35.61 | 6.34 | 1.60 | 1.86 |

E - PERFORMANCE - CURVES

| | | | | | | | | | | |
|-------------------------------|-------|---------------------------------|-------------|------|---------------------------------------|----------------------------|--------------------------|--------------------------------|-----------|-------|
| TEST CONDITIONS: @230V60Hz | | | ARI4 Fan | | (Condensing temperature 35°C (+95°F)) | | | | | |
| Evaporating temperature | | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -20 | (- 4) | 6240 | 1572 | 1828 | 993 | 4.77 | 22.04 | 6.29 | 1.58 | 1.84 |
| -15 | (+ 5) | 7538 | 1900 | 2209 | 1061 | 5.09 | 26.81 | 7.11 | 1.79 | 2.08 |
| -10 | (+14) | 9151 | 2306 | 2681 | 1132 | 5.40 | 32.80 | 8.08 | 2.04 | 2.37 |
| -5 | (+23) | 11077 | 2791 | 3246 | 1206 | 5.70 | 40.08 | 9.18 | 2.31 | 2.69 |
| 0 | (+32) | 13317 | 3356 | 3902 | 1283 | 6.00 | 48.72 | 10.39 | 2.62 | 3.04 |

| | | | | | | | | | | |
|-------------------------------|-------|---------------------------------|-------------|------|--|----------------------------|--------------------------|--------------------------------|-----------|-------|
| TEST CONDITIONS: @230V60Hz | | | ARI4 Fan | | (Condensing temperature 45°C (+113°F)) | | | | | |
| Evaporating temperature | | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -20 | (- 4) | 5286 | 1332 | 1549 | 1044 | 4.96 | 20.65 | 5.06 | 1.28 | 1.48 |
| -15 | (+ 5) | 6445 | 1624 | 1888 | 1140 | 5.37 | 25.36 | 5.65 | 1.42 | 1.66 |
| -10 | (+14) | 7883 | 1986 | 2310 | 1233 | 5.76 | 31.29 | 6.39 | 1.61 | 1.87 |
| -5 | (+23) | 9601 | 2419 | 2813 | 1323 | 6.14 | 38.51 | 7.26 | 1.83 | 2.13 |
| 0 | (+32) | 11599 | 2923 | 3399 | 1410 | 6.51 | 47.11 | 8.22 | 2.07 | 2.41 |

| | | | | | | | | | | |
|-------------------------------|-------|---------------------------------|-------------|------|--|----------------------------|--------------------------|--------------------------------|-----------|-------|
| TEST CONDITIONS: @230V60Hz | | | ARI4 Fan | | (Condensing temperature 55°C (+131°F)) | | | | | |
| Evaporating temperature | | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -20 | (- 4) | 4322 | 1089 | 1266 | 1082 | 5.17 | 18.99 | 4.00 | 1.01 | 1.17 |
| -15 | (+ 5) | 5338 | 1345 | 1564 | 1211 | 5.69 | 23.66 | 4.41 | 1.11 | 1.29 |
| -10 | (+14) | 6600 | 1663 | 1934 | 1330 | 6.18 | 29.55 | 4.96 | 1.25 | 1.45 |
| -5 | (+23) | 8108 | 2043 | 2376 | 1441 | 6.65 | 36.74 | 5.63 | 1.42 | 1.65 |
| 0 | (+32) | 9863 | 2485 | 2890 | 1542 | 7.11 | 45.30 | 6.39 | 1.61 | 1.87 |

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 | 6.45 +0.10/+0.00 | [mm] | (0.254" +0.004"/+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 | | |