

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | NT X6222UV |
| Nominal Voltage/Frequency | 115-127 V 60 Hz |
| Engineering Number | 842SE72 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|------------------------------------|---|-----------------------------------|-----------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-290 | | |
| 3 Nominal voltage and frequency | 115-127 / 60 | [V / Hz] | |
| 4 Application type | Medium Back Pressure (Commercial Compressors) | | |
| 4.1 Evaporating temperature range | -20°C to 10°C | (-4°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 | 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 | [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 | AB / ISO32 | |
| 4 Weight (with oil charge) | 16.5 | [kg] (36.38 lb.) |
| 5 Nitrogen charge | - | [kgf/cm ²] |

C - ELECTRICAL DATA

| | | |
|--|------------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 115-127 V 60 Hz 1 ~ (Single phase) | |
| 2 Starting device type | Voltage Relay | |
| 2.1 Starting device | RVA9AD3C-121 | |
| 3 Start capacitor | 243-292(250) | [µF(VAC minimum)] |
| 4 Run capacitor | 35(400) | [µF(VAC minimum)] |
| 5 Motor protection | UP14NC5245-T | |
| 6 Start winding resistance | 2.82 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 0.47 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (60 Hz) | 60.00 | [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: @115V60Hz | | | ASHRAEHBP46 Fan | | Evaporating temperature (Condensing temperature | | 7.2°C (44.96°F) 54.4°C (129.92°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] |
| 11341 | 2858 | 3323 | 1170 | 10.78 | 38.81 | 9.69 | 2.44 | 2.84 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @115V60Hz | | | ASHRAE46 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) | 4600 | 1159 | 1348 | 594 | 5.71 | 12.98 | 7.74 | 1.95 | 2.27 |
| -15 | (+ 5) | 5954 | 1500 | 1745 | 666 | 6.31 | 16.87 | 8.93 | 2.25 | 2.62 |
| -10 | (+14) | 7506 | 1892 | 2199 | 732 | 6.87 | 21.36 | 10.25 | 2.58 | 3.00 |
| -5 | (+23) | 9257 | 2333 | 2713 | 791 | 7.38 | 26.46 | 11.72 | 2.95 | 3.44 |
| 0 | (+32) | 11207 | 2824 | 3284 | 843 | 7.84 | 32.21 | 13.33 | 3.36 | 3.90 |
| +5 | (+41) | 13356 | 3366 | 3914 | 888 | 8.26 | 38.63 | 15.06 | 3.79 | 4.41 |
| +10 | (+50) | 15703 | 3957 | 4601 | 926 | 8.62 | 45.76 | 16.92 | 4.26 | 4.96 |

| TEST CONDITIONS: @115V60Hz | | | ASHRAE46 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) | 4033 | 1016 | 1182 | 638 | 6.04 | 12.32 | 6.35 | 1.60 | 1.86 |
| -15 | (+ 5) | 5196 | 1309 | 1523 | 719 | 6.74 | 15.92 | 7.23 | 1.82 | 2.12 |
| -10 | (+14) | 6565 | 1654 | 1924 | 797 | 7.42 | 20.19 | 8.22 | 2.07 | 2.41 |
| -5 | (+23) | 8139 | 2051 | 2385 | 871 | 8.07 | 25.16 | 9.32 | 2.35 | 2.73 |
| 0 | (+32) | 9920 | 2500 | 2907 | 941 | 8.69 | 30.86 | 10.52 | 2.65 | 3.08 |
| +5 | (+41) | 11906 | 3000 | 3489 | 1007 | 9.29 | 37.31 | 11.83 | 2.98 | 3.47 |
| +10 | (+50) | 14098 | 3553 | 4131 | 1069 | 9.86 | 44.54 | 13.22 | 3.33 | 3.87 |

| TEST CONDITIONS: @115V60Hz | | | ASHRAE46 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) | 3578 | 902 | 1048 | 685 | 6.41 | 11.92 | 5.19 | 1.31 | 1.52 |
| -15 | (+ 5) | 4508 | 1136 | 1321 | 775 | 7.20 | 15.08 | 5.84 | 1.47 | 1.71 |
| -10 | (+14) | 5651 | 1424 | 1656 | 864 | 7.99 | 19.00 | 6.56 | 1.65 | 1.92 |
| -5 | (+23) | 7007 | 1766 | 2053 | 953 | 8.78 | 23.70 | 7.36 | 1.85 | 2.16 |
| 0 | (+32) | 8576 | 2161 | 2513 | 1041 | 9.57 | 29.20 | 8.23 | 2.07 | 2.41 |
| +5 | (+41) | 10358 | 2610 | 3035 | 1128 | 10.35 | 35.53 | 9.17 | 2.31 | 2.69 |
| +10 | (+50) | 12352 | 3113 | 3620 | 1214 | 11.13 | 42.73 | 10.17 | 2.56 | 2.98 |

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 | | |