

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | NE X6222UA |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 865BA46 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|------------------------------------|---|-----------------------------------|-----------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-290 | | |
| 3 Nominal voltage and frequency | 220-240 / 50 | [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 | 18.70 | [cm ³] (1.141 cu.in) |
| 2.1 Bore [mm] | 32.186 | |
| 2.2 Stroke [mm] | 23.000 | |
| 3 Lubricant charge | 350 | [ml] (11.84 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ESTER / ISO22 | |
| 4 Weight (with oil charge) | 11.6 | [kg] (25.57 lb.) |
| 5 Nitrogen charge | - | [kgf/cm ²] |

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 | RVA4AL3C-649 | |
| 3 Start capacitor | 108-130(330) | [µF(VAC minimum)] |
| 4 Run capacitor | 17.5(400) | [µF(VAC minimum)] |
| 5 Motor protection | USP-523-83 | |
| 6 Start winding resistance | 8.40 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 4.27 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 24.00 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50 Hz) | - | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (50 Hz) | - | [A] - Measured according to UL 984 |
| 11 Approval boards certification | VDE | |

D - PERFORMANCE - CHECK POINT DATA

| | | | | | | | | |
|-------------------------------|----------|------|-----------------------------|-------------------------------|--|---------------------------|--------------------------------------|-------|
| 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] |
| 8930 | 2250 | 2617 | 928 | 4.32 | 30.56 | 9.62 | 2.42 | 2.82 |

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] |
| -20 | (- 4) | 4146 | 1045 | 1215 | 521 | 2.42 | 11.70 | 7.95 | 2.00 | 2.33 |
| -15 | (+ 5) | 5045 | 1271 | 1478 | 559 | 2.60 | 14.29 | 9.03 | 2.28 | 2.65 |
| -10 | (+14) | 6138 | 1547 | 1799 | 594 | 2.76 | 17.46 | 10.34 | 2.60 | 3.03 |
| -5 | (+23) | 7427 | 1872 | 2176 | 627 | 2.91 | 21.23 | 11.85 | 2.99 | 3.47 |
| 0 | (+32) | 8911 | 2246 | 2611 | 658 | 3.05 | 25.61 | 13.56 | 3.42 | 3.97 |
| +5 | (+41) | 10590 | 2669 | 3103 | 685 | 3.17 | 30.63 | 15.45 | 3.89 | 4.53 |
| +10 | (+50) | 12464 | 3141 | 3652 | 711 | 3.28 | 36.33 | 17.52 | 4.41 | 5.13 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| 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] |
| -20 | (- 4) | 3647 | 919 | 1069 | 568 | 2.64 | 11.13 | 6.44 | 1.62 | 1.89 |
| -15 | (+ 5) | 4459 | 1124 | 1307 | 618 | 2.87 | 13.66 | 7.21 | 1.82 | 2.11 |
| -10 | (+14) | 5443 | 1372 | 1595 | 666 | 3.09 | 16.75 | 8.16 | 2.06 | 2.39 |
| -5 | (+23) | 6601 | 1664 | 1934 | 711 | 3.29 | 20.42 | 9.26 | 2.33 | 2.71 |
| 0 | (+32) | 7932 | 1999 | 2324 | 754 | 3.49 | 24.68 | 10.50 | 2.65 | 3.08 |
| +5 | (+41) | 9437 | 2378 | 2765 | 795 | 3.67 | 29.57 | 11.87 | 2.99 | 3.48 |
| +10 | (+50) | 11114 | 2801 | 3257 | 833 | 3.84 | 35.10 | 13.36 | 3.37 | 3.91 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|-----------------|------|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| 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] |
| -20 | (- 4) | 3172 | 799 | 930 | 609 | 2.83 | 10.57 | 5.20 | 1.31 | 1.52 |
| -15 | (+ 5) | 3878 | 977 | 1136 | 673 | 3.13 | 12.98 | 5.77 | 1.45 | 1.69 |
| -10 | (+14) | 4735 | 1193 | 1388 | 735 | 3.42 | 15.92 | 6.45 | 1.63 | 1.89 |
| -5 | (+23) | 5744 | 1447 | 1683 | 794 | 3.70 | 19.42 | 7.24 | 1.82 | 2.12 |
| 0 | (+32) | 6904 | 1740 | 2023 | 852 | 3.96 | 23.50 | 8.11 | 2.04 | 2.38 |
| +5 | (+41) | 8215 | 2070 | 2407 | 907 | 4.21 | 28.18 | 9.06 | 2.28 | 2.66 |
| +10 | (+50) | 9677 | 2439 | 2836 | 960 | 4.46 | 33.49 | 10.07 | 2.54 | 2.95 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|------------------|------|--------------------------|
| 1 Base plate | Universal | | |
| 2 Tray holder | No | | |
| 3 Connectors | | | |
| 3.1 SUCTION | 8.1 +0.10/+0.00 | [mm] | (0.319" +0.004"/+0.000") |
| 3.1.1 Material | Copper | | |
| 3.1.2 Shape | Slanted 42° | | |
| 3.2 DISCHARGE | 6.45 +0.10/+0.00 | [mm] | (0.254" +0.004"/+0.000") |
| 3.2.1 Material | Copper | | |
| 3.2.2 Shape | Straight | | |
| 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 | Slanted 42° | | |
| 3.4 Oil cooler (Copper) | No | [mm] | |
| 3.5 Connector sealing | Rubber Plugs | | |