

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | NE U6217U |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 863SA51 |

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 | CSIR | | |
| 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 | 3/4 | [hp] |
| 2 Displacement | 14.28 | [cm ³] (0.871 cu.in) |
| 2.1 Bore [mm] | 30.157 | |
| 2.2 Stroke [mm] | 20.000 | |
| 3 Lubricant charge | 350 | [ml] (11.84 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | AB / ISO32 | |
| 4 Weight (with oil charge) | 10.6 | [kg] (23.37 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 | Current Relay | |
| 2.1 Starting device | MTRPH-0071-65 | |
| 3 Start capacitor | 88-108(330) | [µF(VAC minimum)] |
| 4 Run capacitor | - | [µF(VAC minimum)] |
| 5 Motor protection | MRA38173-3259 | |
| 6 Start winding resistance | 14.95 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 5.35 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 21.00 | [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 | CCC - VDE | |

D - PERFORMANCE - CHECK POINT DATA

| | | | | | | | | |
|-------------------------------|----------|------|-----------------------------|-------------------------------|--|---------------------------|------------------------------|-------|
| TEST CONDITIONS: @220V50Hz | | | EN12900MBP Fan | | Evaporating temperature (Condensing temperature | | -10°C (14°F) 45°C (113°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] |
| 3523 | 888 | 1032 | 564 | 3.29 | 12.68 | 6.25 | 1.58 | 1.83 |

E - PERFORMANCE - CURVES

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|------|---------------------------------------|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | EN12900 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) | 2688 | 677 | 788 | 432 | 2.74 | 8.71 | 6.21 | 1.57 | 1.82 |
| -15 | (+ 5) | 3307 | 833 | 969 | 469 | 2.88 | 10.78 | 7.05 | 1.78 | 2.07 |
| -10 | (+14) | 4045 | 1019 | 1185 | 504 | 3.01 | 13.27 | 8.04 | 2.03 | 2.35 |
| -5 | (+23) | 4904 | 1236 | 1437 | 536 | 3.15 | 16.19 | 9.15 | 2.31 | 2.68 |
| 0 | (+32) | 5882 | 1482 | 1724 | 566 | 3.28 | 19.59 | 10.40 | 2.62 | 3.05 |
| +5 | (+41) | 6981 | 1759 | 2046 | 593 | 3.42 | 23.48 | 11.77 | 2.97 | 3.45 |
| +10 | (+50) | 8201 | 2067 | 2403 | 619 | 3.56 | 27.89 | 13.24 | 3.34 | 3.88 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|------|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | EN12900 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) | 2362 | 595 | 692 | 470 | 2.95 | 8.39 | 5.03 | 1.27 | 1.47 |
| -15 | (+ 5) | 2889 | 728 | 847 | 517 | 3.12 | 10.33 | 5.59 | 1.41 | 1.64 |
| -10 | (+14) | 3518 | 886 | 1031 | 563 | 3.29 | 12.66 | 6.25 | 1.57 | 1.83 |
| -5 | (+23) | 4247 | 1070 | 1245 | 606 | 3.44 | 15.40 | 7.00 | 1.76 | 2.05 |
| 0 | (+32) | 5078 | 1280 | 1488 | 647 | 3.59 | 18.59 | 7.84 | 1.98 | 2.30 |
| +5 | (+41) | 6011 | 1515 | 1761 | 686 | 3.74 | 22.24 | 8.77 | 2.21 | 2.57 |
| +10 | (+50) | 7045 | 1775 | 2064 | 723 | 3.88 | 26.39 | 9.76 | 2.46 | 2.86 |

| | | | | | | | | | | |
|-------------------------------|-------|----------------------------|----------|------|--|-------------------------------|-------------------------|---------------------------|-----------|-------|
| TEST CONDITIONS: @220V50Hz | | EN12900 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) | 1973 | 497 | 578 | 500 | 3.01 | 7.80 | 3.94 | 0.99 | 1.15 |
| -15 | (+ 5) | 2440 | 615 | 715 | 563 | 3.28 | 9.71 | 4.34 | 1.09 | 1.27 |
| -10 | (+14) | 2989 | 753 | 876 | 623 | 3.53 | 11.98 | 4.80 | 1.21 | 1.41 |
| -5 | (+23) | 3621 | 912 | 1061 | 681 | 3.78 | 14.64 | 5.32 | 1.34 | 1.56 |
| 0 | (+32) | 4335 | 1092 | 1270 | 738 | 4.01 | 17.71 | 5.88 | 1.48 | 1.72 |
| +5 | (+41) | 5131 | 1293 | 1504 | 792 | 4.23 | 21.23 | 6.48 | 1.63 | 1.90 |
| +10 | (+50) | 6011 | 1515 | 1761 | 844 | 4.44 | 25.21 | 7.12 | 1.79 | 2.09 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|-------------------|------|--------------------------|
| 1 Base plate | European Standard | | |
| 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 | 6.1 +0.10/+0.00 | [mm] | (0.240" +0.004"/+0.000") |
| 3.2.1 Material | Copper | | |
| 3.2.2 Shape | Straight | | |
| 3.3 PROCESS | 6.1 +0.10/+0.00 | [mm] | (0.240" +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 | | |