

COMPRESSOR DEFINITION

| | |
|---------------------------|------------------------|
| Designation | NB T1118Y |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 811BA42 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|------------------------------------|-----------------------------------|-----------------------------------|-----------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-600a | | |
| 3 Nominal voltage and frequency | 220-240 / 50 | [V / Hz] | |
| 4 Application type | Low Back Pressure | | |
| 4.1 Evaporating temperature range | -35°C to -10°C | (-31°F to 14°F) | |
| 5 Motor type | RSIR | | |
| 6 Starting torque | LST - Low Starting Torque | | |
| 7 Expansion device | Capillary tube | | |
| 8 Compressor cooling | Operating voltage range | | |
| | | 50 Hz | 60 Hz |
| 8.1 LBP (32°C Ambient temperature) | Static | 198 to 254 V | - |
| 8.2 LBP (43°C Ambient temperature) | Static | 198 to 254 V | - |
| 8.3 HBP (32°C Ambient temperature) | - | - | - |
| 8.4 HBP (43°C Ambient temperature) | - | - | - |
| 9 Maximum condensing temperature | | | |
| 9.1 Operating | 6.9 | [kgf/cm ²] (98 psig) | / °C - °F |
| 9.2 Peak | 7.8 | [kgf/cm ²] (111 psig) | / °C - °F |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|-----------------|----------------------------------|
| 1 Commercial designation | | [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 | MINERAL / ISO10 | |
| 4 Weight (with oil charge) | 10.8 | [kg] (23.81 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 | PTC | |
| 2.1 Starting device | V230 | |
| 3 Start capacitor | - | [μF(VAC minimum)] |
| 4 Run capacitor | - | [μF(VAC minimum)] |
| 5 Motor protection | T0062/07 | |
| 6 Start winding resistance | 16.40 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 11.00 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 6.90 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50 Hz) | 0.94 | [A] |
| 10 FLA - Full Load Amperage HBP (50 Hz) | - | [A] |
| 11 Approval boards certification | CCIB - VDE | |

D - PERFORMANCE - CHECK POINT DATA

| TEST CONDITIONS: @220V50Hz | | | CECOMAFLBP Static | | Evaporating temperature (Condensing temperature | | -25°C (-13°F) 55°C (131°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] |
| 600 | 151 | 176 | 150 | 0.92 | 2.29 | 3.99 | 1.01 | 1.17 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V50Hz | | | CECOMAF Static | | (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] |
| -35 | (-31) | 465 | 117 | 136 | 102 | 0.77 | 1.49 | 4.56 | 1.15 | 1.34 |
| -30 | (-22) | 612 | 154 | 179 | 116 | 0.81 | 1.97 | 5.28 | 1.33 | 1.55 |
| -25 | (-13) | 785 | 198 | 230 | 131 | 0.86 | 2.52 | 5.98 | 1.51 | 1.75 |
| -20 | (- 4) | 991 | 250 | 290 | 148 | 0.92 | 3.18 | 6.70 | 1.69 | 1.96 |
| -15 | (+ 5) | 1238 | 312 | 363 | 166 | 0.98 | 3.98 | 7.45 | 1.88 | 2.18 |
| -10 | (+14) | 1534 | 386 | 449 | 185 | 1.05 | 4.94 | 8.25 | 2.08 | 2.42 |

| TEST CONDITIONS: @220V50Hz | | | CECOMAF Static | | (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] |
| -35 | (-31) | 401 | 101 | 117 | 104 | 0.77 | 1.39 | 3.83 | 0.96 | 1.12 |
| -30 | (-22) | 538 | 136 | 158 | 122 | 0.82 | 1.87 | 4.41 | 1.11 | 1.29 |
| -25 | (-13) | 696 | 175 | 204 | 140 | 0.88 | 2.42 | 4.98 | 1.25 | 1.46 |
| -20 | (- 4) | 881 | 222 | 258 | 159 | 0.95 | 3.07 | 5.55 | 1.40 | 1.63 |
| -15 | (+ 5) | 1102 | 278 | 323 | 180 | 1.03 | 3.85 | 6.13 | 1.55 | 1.80 |
| -10 | (+14) | 1366 | 344 | 400 | 202 | 1.11 | 4.78 | 6.76 | 1.70 | 1.98 |

| TEST CONDITIONS: @220V50Hz | | | CECOMAF Static | | (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] |
| -35 | (-31) | 327 | 82 | 96 | 106 | 0.77 | 1.24 | 3.06 | 0.77 | 0.90 |
| -30 | (-22) | 456 | 115 | 134 | 128 | 0.84 | 1.73 | 3.54 | 0.89 | 1.04 |
| -25 | (-13) | 600 | 151 | 176 | 150 | 0.91 | 2.29 | 4.00 | 1.01 | 1.17 |
| -20 | (- 4) | 766 | 193 | 225 | 173 | 0.99 | 2.93 | 4.45 | 1.12 | 1.30 |
| -15 | (+ 5) | 963 | 243 | 282 | 197 | 1.08 | 3.69 | 4.90 | 1.24 | 1.44 |
| -10 | (+14) | 1196 | 302 | 351 | 222 | 1.19 | 4.59 | 5.39 | 1.36 | 1.58 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V50Hz | | CECOMAF Static | | | (Condensing temperature 65°C (+149°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] |
| -35 | (-31) | 245 | 62 | 72 | 102 | 0.77 | 1.04 | 2.42 | 0.61 | 0.71 |
| -30 | (-22) | 368 | 93 | 108 | 128 | 0.84 | 1.55 | 2.84 | 0.71 | 0.83 |
| -25 | (-13) | 500 | 126 | 146 | 155 | 0.93 | 2.11 | 3.21 | 0.81 | 0.94 |
| -20 | (- 4) | 649 | 164 | 190 | 182 | 1.03 | 2.75 | 3.57 | 0.90 | 1.05 |
| -15 | (+ 5) | 823 | 207 | 241 | 210 | 1.14 | 3.50 | 3.93 | 0.99 | 1.15 |
| -10 | (+14) | 1029 | 259 | 301 | 239 | 1.26 | 4.39 | 4.30 | 1.08 | 1.26 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|--------------------------------|------|--------------------------|
| 1 Base plate | European Standard | | |
| 2 Tray holder | No | | |
| 3 Connectors | | | |
| 3.1 SUCTION | 6.1 +0.10/+0.00 | [mm] | (0.240" +0.004"/+0.000") |
| 3.1.1 Material | Copper | | |
| 3.1.2 Shape | Slanted 42° | | |
| 3.2 DISCHARGE | 4.94 +0.08/-0.08 | [mm] | (0.194" +0.003"/-0.003") |
| 3.2.1 Material | Copper | | |
| 3.2.2 Shape | Slanted parallel to Base Plate | | |
| 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 | | |