

COMPRESSOR DEFINITION

| | |
|---------------------------|------------------------|
| Designation | NB T1118Y |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 815FA47 |

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-RSCR | | |
| 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 pressures/temperature | | | |
| 9.1 Operating (gauge) | 7.7 | [kgf/cm ²] (109 psig) | / °C - °F |
| 9.2 Peak (gauge) | 9.8 | [kgf/cm ²] (139 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 | 280 | [ml] (9.47 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ALQUILB / ISO5 | |
| 4 Weight (with oil charge) | 10.25 | [kg] (22.60 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 | 4(450) | [μF(VAC minimum)] |
| 5 Motor protection | T0062/07 | |
| 6 Start winding resistance | 22.60 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 15.00 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | - | [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 | | | 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] |
| 594 | 150 | 174 | 138 | 0.71 | 2.26 | 4.30 | 1.08 | 1.26 |

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) | 479 | 121 | 140 | 100 | 0.50 | 1.53 | 4.79 | 1.21 | 1.40 |
| -30 | (-22) | 586 | 148 | 172 | 108 | 0.57 | 1.88 | 5.46 | 1.38 | 1.60 |
| -25 | (-13) | 755 | 190 | 221 | 120 | 0.65 | 2.42 | 6.31 | 1.59 | 1.85 |
| -20 | (- 4) | 985 | 248 | 289 | 135 | 0.72 | 3.16 | 7.28 | 1.83 | 2.13 |
| -15 | (+ 5) | 1273 | 321 | 373 | 152 | 0.80 | 4.10 | 8.33 | 2.10 | 2.44 |
| -10 | (+14) | 1618 | 408 | 474 | 172 | 0.88 | 5.22 | 9.41 | 2.37 | 2.76 |

| 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) | 427 | 108 | 125 | 103 | 0.52 | 1.48 | 4.14 | 1.04 | 1.21 |
| -30 | (-22) | 521 | 131 | 153 | 114 | 0.59 | 1.81 | 4.61 | 1.16 | 1.35 |
| -25 | (-13) | 670 | 169 | 196 | 128 | 0.67 | 2.33 | 5.25 | 1.32 | 1.54 |
| -20 | (- 4) | 870 | 219 | 255 | 145 | 0.75 | 3.03 | 6.00 | 1.51 | 1.76 |
| -15 | (+ 5) | 1120 | 282 | 328 | 164 | 0.84 | 3.91 | 6.81 | 1.72 | 2.00 |
| -10 | (+14) | 1418 | 357 | 416 | 185 | 0.94 | 4.97 | 7.65 | 1.93 | 2.24 |

| 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) | 383 | 97 | 112 | 107 | 0.52 | 1.46 | 3.58 | 0.90 | 1.05 |
| -30 | (-22) | 465 | 117 | 136 | 120 | 0.61 | 1.77 | 3.88 | 0.98 | 1.14 |
| -25 | (-13) | 593 | 149 | 174 | 137 | 0.70 | 2.26 | 4.33 | 1.09 | 1.27 |
| -20 | (- 4) | 765 | 193 | 224 | 156 | 0.79 | 2.92 | 4.88 | 1.23 | 1.43 |
| -15 | (+ 5) | 979 | 247 | 287 | 179 | 0.90 | 3.75 | 5.48 | 1.38 | 1.61 |
| -10 | (+14) | 1232 | 310 | 361 | 203 | 1.02 | 4.73 | 6.08 | 1.53 | 1.78 |

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 | | |