

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EM Y26CLC |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 897BA77 |

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 Expantion 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/cm²] (98 psig) | / °C - °F |
| 9.2 Peak | 7.8 | [kgf/cm²] (111 psig) | / °C - °F |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|----------------|---------------------|
| 1 Commercial designation | | [hp] |
| 2 Displacement | 5.19 | [cm³] (0.317 cu.in) |
| 2.1 Bore [mm] | 21.000 | |
| 2.2 Stroke [mm] | 15.000 | |
| 3 Lubricant charge | 180 | [ml] (6.09 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ALQUILB / ISO5 | |
| 4 Weight (with oil charge) | 7.7 | [kg] (16.98 lb.) |
| 5 Nitrogen charge | - | [kgf/cm²] |

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 | 2.5(440) | [μF(VAC minimum)] |
| 5 Motor protection | T0882/07 | |
| 6 Start winding resistance | 27.30 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 38.00 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (50 Hz) | 2.70 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50 Hz) | 0.25 | [A] |
| 10 FLA - Full Load Amperage HBP (50 Hz) | - | [A] |
| 11 Approval boards certification | VDE | |

D - PERFORMANCE - CHECK POINT DATA

| | | | | | | | | |
|--------------------------------|----------|-----|------------------------------------|--------------------------------------|--|-------------------------------|---|-------|
| TEST CONDITIONS: @220V50Hz | | | ASHRAELBP32 Static | | Evaporating temperature (Condensing temperature | | -23.3°C (-9.94°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] |
| 280 | 71 | 82 | 53 | 0.26 | 0.88 | 5.26 | 1.33 | 1.54 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V50Hz | | | | ASHRAE32 Static | | (Condensing temperature 35°C (+95°F)) | | | | |
|-------------------------------|-------|------------------|----------|--------------------|-------------------|--|---------------|-----------------|-----------|-------|
| Evaporating temperature | | Cooling capacity | | | Power consumption | Current consumption | Gas flow rate | EFFICIENCY RATE | | |
| | | +/- 5% | | | +/- 5% | +/- 5% | +/- 5% | +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 168 | 42 | 49 | 36 | 0.20 | 0.53 | 4.62 | 1.16 | 1.35 |
| -30 | (-22) | 227 | 57 | 67 | 42 | 0.22 | 0.71 | 5.45 | 1.37 | 1.60 |
| -25 | (-13) | 299 | 75 | 87 | 47 | 0.23 | 0.94 | 6.36 | 1.60 | 1.86 |
| -20 | (- 4) | 385 | 97 | 113 | 52 | 0.25 | 1.21 | 7.36 | 1.86 | 2.16 |
| -15 | (+ 5) | 488 | 123 | 143 | 57 | 0.26 | 1.54 | 8.50 | 2.14 | 2.49 |
| -10 | (+14) | 611 | 154 | 179 | 62 | 0.28 | 1.93 | 9.79 | 2.47 | 2.87 |

| TEST CONDITIONS: @220V50Hz | | | | ASHRAE32 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) | 144 | 36 | 42 | 36 | 0.20 | 0.45 | 3.94 | 0.99 | 1.16 |
| -30 | (-22) | 205 | 52 | 60 | 43 | 0.22 | 0.64 | 4.75 | 1.20 | 1.39 |
| -25 | (-13) | 277 | 70 | 81 | 50 | 0.24 | 0.87 | 5.57 | 1.40 | 1.63 |
| -20 | (- 4) | 362 | 91 | 106 | 56 | 0.26 | 1.14 | 6.42 | 1.62 | 1.88 |
| -15 | (+ 5) | 463 | 117 | 136 | 63 | 0.28 | 1.46 | 7.34 | 1.85 | 2.15 |
| -10 | (+14) | 583 | 147 | 171 | 70 | 0.31 | 1.84 | 8.34 | 2.10 | 2.44 |

| TEST CONDITIONS: @220V50Hz | | | | ASHRAE32 Static | | (Condensing temperature 55°C (+131°F)) | | | | |
|-------------------------------|-------|------------------|----------|--------------------|-------------------|---|---------------|-----------------|-----------|-------|
| Evaporating temperature | | Cooling capacity | | | Power consumption | Current consumption | Gas flow rate | EFFICIENCY RATE | | |
| | | +/- 5% | | | +/- 5% | +/- 5% | +/- 5% | +/- 7% | | |
| °C | (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| -35 | (-31) | 115 | 29 | 34 | 35 | 0.20 | 0.36 | 3.29 | 0.83 | 0.96 |
| -30 | (-22) | 178 | 45 | 52 | 43 | 0.22 | 0.56 | 4.15 | 1.05 | 1.22 |
| -25 | (-13) | 251 | 63 | 74 | 51 | 0.25 | 0.79 | 4.96 | 1.25 | 1.45 |
| -20 | (- 4) | 336 | 85 | 99 | 59 | 0.27 | 1.06 | 5.73 | 1.44 | 1.68 |
| -15 | (+ 5) | 436 | 110 | 128 | 67 | 0.30 | 1.37 | 6.50 | 1.64 | 1.91 |
| -10 | (+14) | 552 | 139 | 162 | 76 | 0.33 | 1.74 | 7.30 | 1.84 | 2.14 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V50Hz | | ASHRAE32 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) | 78 | 20 | 23 | 33 | 0.19 | 0.24 | 2.37 | 0.60 | 0.69 |
| -30 | (-22) | 144 | 36 | 42 | 42 | 0.22 | 0.45 | 3.36 | 0.85 | 0.98 |
| -25 | (-13) | 219 | 55 | 64 | 51 | 0.25 | 0.69 | 4.22 | 1.06 | 1.24 |
| -20 | (- 4) | 304 | 77 | 89 | 61 | 0.28 | 0.96 | 4.99 | 1.26 | 1.46 |
| -15 | (+ 5) | 402 | 101 | 118 | 71 | 0.31 | 1.27 | 5.70 | 1.44 | 1.67 |
| -10 | (+14) | 516 | 130 | 151 | 81 | 0.35 | 1.63 | 6.36 | 1.60 | 1.86 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|-------------------|------|--------------------------|
| 1 Base plate | European Standard | | |
| 2 Tray holder | Yes | | |
| 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 | 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 | | |