

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | EM T49HLP |
| Nominal Voltage/Frequency | 220-240 V 50 Hz |
| Engineering Number | 192EA65 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|------------------------------------|-----------------------------------|-----------------------------------|-----------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-134a | | |
| 3 Nominal voltage and frequency | 220-240 / 50 | [V / Hz] | |
| 4 Application type | Low Back Pressure R134a | | |
| 4.1 Evaporating temperature range | -30°C to -5°C | (-22°F to 23°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) | - | - | - |
| 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 | 14.2 | [kgf/cm ²] (202 psig) | / °C - °F |
| 9.2 Peak | 15.9 | [kgf/cm ²] (226 psig) | / °C - °F |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|---------------|----------------------------------|
| 1 Commercial designation | | [hp] |
| 2 Displacement | 5.56 | [cm ³] (0.339 cu.in) |
| 2.1 Bore [mm] | 22.500 | |
| 2.2 Stroke [mm] | 14.000 | |
| 3 Lubricant charge | 180 | [ml] (6.09 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ESTER / ISO22 | |
| 4 Weight (with oil charge) | 7.71 | [kg] (17.00 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 | T0222-26 | |
| 6 Start winding resistance | 34.50 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 18.50 | [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] |
| 10 FLA - Full Load Amperage HBP (50 Hz) | - | [A] |
| 11 Approval boards certification | IMQ | |

D - PERFORMANCE - CHECK POINT DATA

| TEST CONDITIONS: @220V50Hz | | | EN12900LBP_HH Static | | Evaporating temperature (Condensing temperature | | -35°C (-31°F) 40°C (104°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] |
| 284 | 72 | 83 | 75 | 0.65 | | 3.79 | 0.96 | 1.11 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V50Hz | | | EN12900HH 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) | 317 | 80 | 93 | 74 | 0.65 | - 0.48 | 4.19 | 1.05 | 1.23 |
| -30 | (-22) | 405 | 102 | 119 | 86 | 0.68 | - 0.31 | 4.69 | 1.18 | 1.38 |
| -25 | (-13) | 523 | 132 | 153 | 98 | 0.72 | 1.00 | 5.32 | 1.34 | 1.56 |
| -20 | (- 4) | 673 | 170 | 197 | 111 | 0.76 | 2.94 | 6.07 | 1.53 | 1.78 |
| -15 | (+ 5) | 858 | 216 | 251 | 124 | 0.80 | 5.03 | 6.91 | 1.74 | 2.02 |
| -10 | (+14) | 1081 | 273 | 317 | 138 | 0.85 | 6.80 | 7.84 | 1.98 | 2.30 |

| TEST CONDITIONS: @220V50Hz | | | EN12900HH 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) | 253 | 64 | 74 | 76 | 0.66 | - 0.33 | 3.36 | 0.85 | 0.98 |
| -30 | (-22) | 337 | 85 | 99 | 89 | 0.69 | - 0.27 | 3.80 | 0.96 | 1.11 |
| -25 | (-13) | 445 | 112 | 130 | 103 | 0.73 | 0.92 | 4.32 | 1.09 | 1.27 |
| -20 | (- 4) | 579 | 146 | 170 | 118 | 0.78 | 2.76 | 4.90 | 1.23 | 1.44 |
| -15 | (+ 5) | 743 | 187 | 218 | 134 | 0.83 | 4.76 | 5.53 | 1.39 | 1.62 |
| -10 | (+14) | 938 | 236 | 275 | 151 | 0.90 | 6.44 | 6.21 | 1.56 | 1.82 |

| TEST CONDITIONS: @220V50Hz | | | EN12900HH 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) | 198 | 50 | 58 | 78 | 0.66 | - 0.18 | 2.60 | 0.65 | 0.76 |
| -30 | (-22) | 278 | 70 | 81 | 92 | 0.70 | - 0.24 | 3.02 | 0.76 | 0.89 |
| -25 | (-13) | 376 | 95 | 110 | 108 | 0.74 | 0.84 | 3.48 | 0.88 | 1.02 |
| -20 | (- 4) | 494 | 124 | 145 | 125 | 0.80 | 2.58 | 3.95 | 0.99 | 1.16 |
| -15 | (+ 5) | 635 | 160 | 186 | 144 | 0.87 | 4.49 | 4.42 | 1.11 | 1.30 |
| -10 | (+14) | 801 | 202 | 235 | 164 | 0.94 | 6.09 | 4.89 | 1.23 | 1.43 |

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 | 5.02 +0.02/-0.02 | [mm] | (0.198" +0.001"/-0.001") |
| 3.2.1 Material | Copper | | |
| 3.2.2 Shape | Slanted parallel to Base Plate | | |
| 3.3 PROCESS | 6 +0.08/-0.08 | [mm] | (0.236" +0.003"/-0.003") |
| 3.3.1 Material | Copper(OD) | | |
| 3.3.2 Shape | Slanted 42° | | |
| 3.4 Oil cooler (Copper) | No | [mm] | |
| 3.5 Connector sealing | Rubber Plugs | | |