**COMPRESSOR DEFINITION**

| | |
|---|---|
| Designation | **VEG Y7C** |
| Nominal Voltage/Frequency | **230 V 53-133 Hz** |
| Engineering Number | **513800035** |

**A - APPLICATION / LIMIT WORKING CONDITIONS**

| | | | |
|---|---|---|---|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-600a | | |
| 3 Nominal voltage and frequency | 230 / 53-133 | [ 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 | BPM | | |
| 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 (32ºC Ambient temperature) | Static | 198 to 265 V | 198 to 265 V |
| 8.2 LBP (43ºC Ambient temperature) | Static | 198 to 265 V | 198 to 265 V |
| 8.3 HBP (32ºC Ambient temperature) | - | - | - |
| 8.4 HBP (43ºC Ambient temperature) | - | - | - |
| 9 Maximum condensing pressures/temperature | | | |
| 9.1 Operating (gauge) | 7.7 | [kgf/cm²] (109 psig) | / ºC - ºF |
| 9.2 Peak (gauge) | 9.8 | [kgf/cm²] (139 psig) | / ºC - ºF |
| 10 Maximum winding temperature | 130 | [ °C ] | |

**B - MECHANICAL DATA**

| | | |
|---|---|---|
| 1 Commercial designation | 1/5 | [hp] |
| 2 Displacement | 7.15 | [cm³] (0.436 cu.in) |
| 2.1 Bore [mm] | 22.500 | |
| 2.2 Stroke [mm] | 18.000 | |
| 3 Lubricant charge | 430 | [ml] (14.54 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | MINERAL / ISO10 | |
| 4 Weight (with oil charge) | 10.93 | [kg] (24.10 lb.) |
| 5 Nitrogen charge | - | [kgf/cm²] |

**C - ELETRICAL DATA**

| | | |
|---|---|---|
| 1 Nominal Voltage/Frequency/Number of Phases | 230 V 53-133 Hz 3 ~ (Three phase) | |
| 2 Starting device type | Inverter | |
| 2.1 Starting device | EU245608B02/EU245609N00 | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | - | [µF(VAC minimum)] |
| 5 Motor protection | EU2456 09 N 00 | |
| 6 Start winding resistance | 7.60 | [Ω at 25ºC (77ºF)] +/- 8% |
| 7 Run winding resistance | 7.60 | [Ω at 25ºC (77ºF)] +/- 8% |
| 8 LRA - Locked rotor amperage (50/60 Hz) | 3.30 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (50/60 Hz) | 3.30 | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (50/60 Hz) | - | [A] - Measured according to UL 984 |
| 11 Approval boards certification | VDE | |

## D - PERFORMANCE - CHECK POINT DATA

| TEST CONDITIONS: **@220V1600RPM** | | | **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] |
| 230 | 58 | 67 | 38 | 0.31 | 0.72 | 6.10 | 1.54 | 1.79 |

| TEST CONDITIONS: **@220V2000RPM** | | | **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 | 47 | 0.39 | 0.88 | 5.98 | 1.51 | 1.75 |

| TEST CONDITIONS: **@220V3000RPM** | | | **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] |
| 450 | 113 | 132 | 77 | 0.71 | 1.41 | 5.86 | 1.48 | 1.72 |

| TEST CONDITIONS: **@220V4000RPM** | | | **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] |
| 580 | 146 | 170 | 104 | 0.80 | 1.82 | 5.56 | 1.40 | 1.63 |

## E - PERFORMANCE - CURVES

## F - EXTERNAL CHARACTERISTICS

| | | | |
|---|---|---|---|
| 1 Base plate | European Standard EG/F/AMEM Version 2 | | |
| 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 | | |
| 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 | | |
| 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 | | |
| 3.4 Oil cooler (Copper) | No | [mm] | |
| 3.5 Connector sealing | Rubber Plugs | | |