

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | VES A7C |
| Nominal Voltage/Frequency | 230 V 40-150 Hz |
| Engineering Number | 513907107 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|------------------------------------|-----------------------------------|-----------------------------------|--------------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-600a | | |
| 3 Nominal voltage and frequency | 230 / 40-150 | [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 Expansion device | Capillary tube | | |
| 8 Compressor cooling | | Operating voltage range | |
| | | 50 Hz | 60 Hz |
| 8.1 LBP (32°C Ambient temperature) | Static | 187 to 255 V | 187 to 255 V |
| 8.2 LBP (43°C Ambient temperature) | Static | 187 to 255 V | 187 to 255 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 | 1/5 | [hp] |
| 2 Displacement | 7.23 | [cm ³] (0.441 cu.in) |
| 2.1 Bore [mm] | 24.000 | |
| 2.2 Stroke [mm] | 16.000 | |
| 3 Lubricant charge | 190 | [ml] (6.42 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ALQUILB / ISO5 | |
| 4 Weight (with oil charge) | 6.45 | [kg] (14.22 lb.) |
| 5 Nitrogen charge | - | [kgf/cm ²] |

C - ELETRICAL DATA

| | | |
|--|-----------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 230 V 40-150 Hz 3 ~ (Three phase) | |
| 2 Starting device type | Inverter | |
| 2.1 Starting device | VES 2456 XX X X | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | - | [µF(VAC minimum)] |
| 5 Motor protection | INVERTER VES 2456X | |
| 6 Start winding resistance | 11.50 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 11.50 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (40/150 Hz) | 2.10/2.10 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (40/150 Hz) | 2.10/2.10 | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (40/150 Hz) | - | [A] - Measured according to UL 984 |
| 11 Approval boards certification | CCC - VDE | |

D - PERFORMANCE - CHECK POINT DATA

| | | | | | | | | |
|---|----------|-----|-------------------------------------|-------------------------------|---|--|-----------|-------|
| TEST CONDITIONS: @220V1300RPM | | | 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] |
| 162 | 41 | 47 | 29 | 0.25 | 0.51 | 5.64 | 1.42 | 1.65 |

| | | | | | | | | |
|---|----------|-----|-------------------------------------|-------------------------------|---|--|-----------|-------|
| 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] |
| 206 | 52 | 60 | 35 | 0.29 | 0.65 | 5.97 | 1.50 | 1.75 |

| | | | | | | | | |
|---|----------|-----|-------------------------------------|-------------------------------|---|--|-----------|-------|
| 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] |
| 264 | 67 | 77 | 43 | 0.34 | 0.83 | 6.21 | 1.56 | 1.82 |

| | | | | | | | | |
|---|----------|-----|-------------------------------------|-------------------------------|---|--|-----------|-------|
| 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] |
| 407 | 103 | 119 | 65 | 0.50 | 1.28 | 6.23 | 1.57 | 1.83 |

| | | | | | | | | |
|---|----------|-----|-------------------------------------|-------------------------------|---|--|-----------|-------|
| TEST CONDITIONS: @220V4500RPM | | | 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] |
| 611 | 154 | 179 | 101 | 0.77 | 1.92 | 6.08 | 1.53 | 1.78 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V1300RPM | | ASHRAE32 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) | 102 | 26 | 30 | 17 | 0.15 | 0.32 | 5.86 | 1.48 | 1.72 | |
| -30 (-22) | 135 | 34 | 40 | 21 | 0.18 | 0.42 | 6.56 | 1.65 | 1.92 | |
| -25 (-13) | 180 | 45 | 53 | 24 | 0.21 | 0.57 | 7.46 | 1.88 | 2.19 | |
| -20 (- 4) | 238 | 60 | 70 | 28 | 0.24 | 0.75 | 8.57 | 2.16 | 2.51 | |
| -15 (+ 5) | 306 | 77 | 90 | 31 | 0.26 | 0.96 | 9.89 | 2.49 | 2.90 | |
| -10 (+14) | 384 | 97 | 112 | 34 | 0.29 | 1.21 | 11.43 | 2.88 | 3.35 | |

| TEST CONDITIONS: @220V1300RPM | | 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) | 84 | 21 | 25 | 18 | 0.16 | 0.26 | 4.73 | 1.19 | 1.39 | |
| -30 (-22) | 117 | 30 | 34 | 22 | 0.19 | 0.37 | 5.43 | 1.37 | 1.59 | |
| -25 (-13) | 163 | 41 | 48 | 26 | 0.22 | 0.51 | 6.24 | 1.57 | 1.83 | |
| -20 (- 4) | 220 | 56 | 65 | 31 | 0.26 | 0.69 | 7.17 | 1.81 | 2.10 | |
| -15 (+ 5) | 288 | 73 | 85 | 35 | 0.29 | 0.91 | 8.22 | 2.07 | 2.41 | |
| -10 (+14) | 366 | 92 | 107 | 39 | 0.32 | 1.15 | 9.39 | 2.37 | 2.75 | |

| TEST CONDITIONS: @220V1300RPM | | ASHRAE32 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) | 65 | 16 | 19 | 17 | 0.15 | 0.21 | 3.80 | 0.96 | 1.11 | |
| -30 (-22) | 98 | 25 | 29 | 22 | 0.19 | 0.31 | 4.55 | 1.15 | 1.33 | |
| -25 (-13) | 142 | 36 | 42 | 27 | 0.23 | 0.45 | 5.33 | 1.34 | 1.56 | |
| -20 (- 4) | 198 | 50 | 58 | 32 | 0.27 | 0.62 | 6.13 | 1.54 | 1.80 | |
| -15 (+ 5) | 265 | 67 | 78 | 38 | 0.32 | 0.83 | 6.96 | 1.75 | 2.04 | |
| -10 (+14) | 341 | 86 | 100 | 44 | 0.36 | 1.07 | 7.83 | 1.97 | 2.29 | |

| TEST CONDITIONS: @220V1600RPM | | ASHRAE32 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) | 124 | 31 | 36 | 22 | 0.19 | 0.39 | 5.74 | 1.45 | 1.68 | |
| -30 (-22) | 174 | 44 | 51 | 26 | 0.22 | 0.55 | 6.74 | 1.70 | 1.97 | |
| -25 (-13) | 231 | 58 | 68 | 30 | 0.25 | 0.73 | 7.73 | 1.95 | 2.26 | |
| -20 (- 4) | 298 | 75 | 87 | 34 | 0.28 | 0.94 | 8.81 | 2.22 | 2.58 | |
| -15 (+ 5) | 378 | 95 | 111 | 38 | 0.31 | 1.19 | 10.07 | 2.54 | 2.95 | |
| -10 (+14) | 474 | 119 | 139 | 41 | 0.34 | 1.50 | 11.59 | 2.92 | 3.40 | |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: | | ASHRAE32 | | | (Condensing temperature 45°C (+113°F)) | | | | | |
|-------------------------|------------------|----------|-----|-------------------|--|---------------|-----------------|-----------|-------|--|
| @220V1600RPM | | Static | | | | | | | | |
| Evaporating temperature | Cooling capacity | | | Power consumption | Current consumption | Gas flow rate | EFFICIENCY RATE | | | |
| | +/- 5% | | | | | | +/- 7% | | | |
| °C (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 (-31) | 103 | 26 | 30 | 21 | 0.19 | 0.32 | 4.86 | 1.22 | 1.42 | |
| -30 (-22) | 153 | 38 | 45 | 26 | 0.22 | 0.48 | 5.80 | 1.46 | 1.70 | |
| -25 (-13) | 210 | 53 | 61 | 32 | 0.26 | 0.66 | 6.65 | 1.68 | 1.95 | |
| -20 (- 4) | 277 | 70 | 81 | 37 | 0.30 | 0.87 | 7.52 | 1.90 | 2.20 | |
| -15 (+ 5) | 357 | 90 | 105 | 42 | 0.34 | 1.12 | 8.49 | 2.14 | 2.49 | |
| -10 (+14) | 453 | 114 | 133 | 47 | 0.38 | 1.43 | 9.65 | 2.43 | 2.83 | |

| TEST CONDITIONS: | | ASHRAE32 | | | (Condensing temperature 55°C (+131°F)) | | | | | |
|-------------------------|------------------|----------|-----|-------------------|--|---------------|-----------------|-----------|-------|--|
| @220V1600RPM | | Static | | | | | | | | |
| Evaporating temperature | Cooling capacity | | | Power consumption | Current consumption | Gas flow rate | EFFICIENCY RATE | | | |
| | +/- 5% | | | | | | +/- 7% | | | |
| °C (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 (-31) | 79 | 20 | 23 | 20 | 0.18 | 0.25 | 3.82 | 0.96 | 1.12 | |
| -30 (-22) | 127 | 32 | 37 | 26 | 0.22 | 0.40 | 4.82 | 1.21 | 1.41 | |
| -25 (-13) | 183 | 46 | 54 | 32 | 0.27 | 0.57 | 5.65 | 1.42 | 1.66 | |
| -20 (- 4) | 249 | 63 | 73 | 39 | 0.32 | 0.78 | 6.42 | 1.62 | 1.88 | |
| -15 (+ 5) | 329 | 83 | 96 | 46 | 0.37 | 1.04 | 7.21 | 1.82 | 2.11 | |
| -10 (+14) | 424 | 107 | 124 | 52 | 0.42 | 1.34 | 8.12 | 2.05 | 2.38 | |

| TEST CONDITIONS: | | ASHRAE32 | | | (Condensing temperature 35°C (+95°F)) | | | | | |
|-------------------------|------------------|----------|-----|-------------------|---------------------------------------|---------------|-----------------|-----------|-------|--|
| @220V2000RPM | | Static | | | | | | | | |
| Evaporating temperature | Cooling capacity | | | Power consumption | Current consumption | Gas flow rate | EFFICIENCY RATE | | | |
| | +/- 5% | | | | | | +/- 7% | | | |
| °C (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 (-31) | 156 | 39 | 46 | 27 | 0.23 | 0.49 | 5.71 | 1.44 | 1.67 | |
| -30 (-22) | 212 | 53 | 62 | 32 | 0.27 | 0.67 | 6.66 | 1.68 | 1.95 | |
| -25 (-13) | 284 | 72 | 83 | 37 | 0.31 | 0.89 | 7.67 | 1.93 | 2.25 | |
| -20 (- 4) | 373 | 94 | 109 | 42 | 0.35 | 1.17 | 8.78 | 2.21 | 2.57 | |
| -15 (+ 5) | 478 | 120 | 140 | 48 | 0.39 | 1.50 | 10.07 | 2.54 | 2.95 | |
| -10 (+14) | 599 | 151 | 176 | 52 | 0.43 | 1.89 | 11.58 | 2.92 | 3.39 | |

| TEST CONDITIONS: | | ASHRAE32 | | | (Condensing temperature 45°C (+113°F)) | | | | | |
|-------------------------|------------------|----------|-----|-------------------|--|---------------|-----------------|-----------|-------|--|
| @220V2000RPM | | Static | | | | | | | | |
| Evaporating temperature | Cooling capacity | | | Power consumption | Current consumption | Gas flow rate | EFFICIENCY RATE | | | |
| | +/- 5% | | | | | | +/- 7% | | | |
| °C (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 (-31) | 134 | 34 | 39 | 27 | 0.23 | 0.42 | 4.97 | 1.25 | 1.46 | |
| -30 (-22) | 190 | 48 | 56 | 32 | 0.27 | 0.59 | 5.86 | 1.48 | 1.72 | |
| -25 (-13) | 262 | 66 | 77 | 39 | 0.32 | 0.82 | 6.73 | 1.69 | 1.97 | |
| -20 (- 4) | 350 | 88 | 103 | 46 | 0.37 | 1.10 | 7.63 | 1.92 | 2.24 | |
| -15 (+ 5) | 455 | 115 | 133 | 53 | 0.42 | 1.43 | 8.64 | 2.18 | 2.53 | |
| -10 (+14) | 577 | 145 | 169 | 59 | 0.47 | 1.82 | 9.80 | 2.47 | 2.87 | |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: | | ASHRAE32 | | | (Condensing temperature 55°C (+131°F)) | | | | | |
|-------------------------|------------------|----------|-----|-------------------|--|---------------|-----------------|-----------|-------|--|
| @220V2000RPM | | Static | | | | | | | | |
| Evaporating temperature | Cooling capacity | | | Power consumption | Current consumption | Gas flow rate | EFFICIENCY RATE | | | |
| | +/- 5% | | | | | | +/- 7% | | | |
| °C (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 (-31) | 110 | 28 | 32 | 26 | 0.22 | 0.34 | 4.16 | 1.05 | 1.22 | |
| -30 (-22) | 164 | 41 | 48 | 33 | 0.27 | 0.52 | 5.07 | 1.28 | 1.49 | |
| -25 (-13) | 235 | 59 | 69 | 40 | 0.32 | 0.74 | 5.90 | 1.49 | 1.73 | |
| -20 (- 4) | 322 | 81 | 94 | 48 | 0.38 | 1.01 | 6.70 | 1.69 | 1.96 | |
| -15 (+ 5) | 425 | 107 | 125 | 57 | 0.45 | 1.34 | 7.52 | 1.89 | 2.20 | |
| -10 (+14) | 545 | 137 | 160 | 65 | 0.51 | 1.72 | 8.42 | 2.12 | 2.47 | |

| TEST CONDITIONS: | | ASHRAE32 | | | (Condensing temperature 35°C (+95°F)) | | | | | |
|-------------------------|------------------|----------|-----|-------------------|---------------------------------------|---------------|-----------------|-----------|-------|--|
| @220V3000RPM | | Static | | | | | | | | |
| Evaporating temperature | Cooling capacity | | | Power consumption | Current consumption | Gas flow rate | EFFICIENCY RATE | | | |
| | +/- 5% | | | | | | +/- 7% | | | |
| °C (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 (-31) | 228 | 57 | 67 | 42 | 0.34 | 0.71 | 5.48 | 1.38 | 1.61 | |
| -30 (-22) | 327 | 82 | 96 | 50 | 0.39 | 1.02 | 6.43 | 1.62 | 1.88 | |
| -25 (-13) | 445 | 112 | 130 | 59 | 0.45 | 1.40 | 7.51 | 1.89 | 2.20 | |
| -20 (- 4) | 583 | 147 | 171 | 67 | 0.52 | 1.83 | 8.70 | 2.19 | 2.55 | |
| -15 (+ 5) | 743 | 187 | 218 | 75 | 0.59 | 2.34 | 9.99 | 2.52 | 2.93 | |
| -10 (+14) | 926 | 233 | 271 | 82 | 0.64 | 2.92 | 11.36 | 2.86 | 3.33 | |

| TEST CONDITIONS: | | ASHRAE32 | | | (Condensing temperature 45°C (+113°F)) | | | | | |
|-------------------------|------------------|----------|-----|-------------------|--|---------------|-----------------|-----------|-------|--|
| @220V3000RPM | | Static | | | | | | | | |
| Evaporating temperature | Cooling capacity | | | Power consumption | Current consumption | Gas flow rate | EFFICIENCY RATE | | | |
| | +/- 5% | | | | | | +/- 7% | | | |
| °C (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 (-31) | 209 | 53 | 61 | 42 | 0.35 | 0.65 | 5.02 | 1.27 | 1.47 | |
| -30 (-22) | 297 | 75 | 87 | 51 | 0.40 | 0.93 | 5.80 | 1.46 | 1.70 | |
| -25 (-13) | 408 | 103 | 119 | 61 | 0.47 | 1.28 | 6.68 | 1.68 | 1.96 | |
| -20 (- 4) | 542 | 137 | 159 | 71 | 0.55 | 1.70 | 7.65 | 1.93 | 2.24 | |
| -15 (+ 5) | 702 | 177 | 206 | 81 | 0.63 | 2.21 | 8.70 | 2.19 | 2.55 | |
| -10 (+14) | 888 | 224 | 260 | 91 | 0.71 | 2.80 | 9.81 | 2.47 | 2.87 | |

| TEST CONDITIONS: | | ASHRAE32 | | | (Condensing temperature 55°C (+131°F)) | | | | | |
|-------------------------|------------------|----------|-----|-------------------|--|---------------|-----------------|-----------|-------|--|
| @220V3000RPM | | Static | | | | | | | | |
| Evaporating temperature | Cooling capacity | | | Power consumption | Current consumption | Gas flow rate | EFFICIENCY RATE | | | |
| | +/- 5% | | | | | | +/- 7% | | | |
| °C (°F) | [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 (-31) | 189 | 48 | 55 | 42 | 0.35 | 0.59 | 4.44 | 1.12 | 1.30 | |
| -30 (-22) | 263 | 66 | 77 | 52 | 0.40 | 0.82 | 5.13 | 1.29 | 1.50 | |
| -25 (-13) | 363 | 92 | 106 | 62 | 0.48 | 1.14 | 5.91 | 1.49 | 1.73 | |
| -20 (- 4) | 491 | 124 | 144 | 73 | 0.56 | 1.54 | 6.75 | 1.70 | 1.98 | |
| -15 (+ 5) | 648 | 163 | 190 | 85 | 0.65 | 2.04 | 7.65 | 1.93 | 2.24 | |
| -10 (+14) | 835 | 211 | 245 | 97 | 0.74 | 2.64 | 8.59 | 2.17 | 2.52 | |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V4500RPM | | ASHRAE32 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] |
| -35 | (-31) | 364 | 92 | 107 | 67 | 0.53 | 1.14 | 5.42 | 1.37 | 1.59 |
| -30 | (-22) | 496 | 125 | 145 | 79 | 0.60 | 1.56 | 6.25 | 1.57 | 1.83 |
| -25 | (-13) | 650 | 164 | 190 | 91 | 0.69 | 2.04 | 7.13 | 1.80 | 2.09 |
| -20 | (- 4) | 833 | 210 | 244 | 103 | 0.78 | 2.62 | 8.08 | 2.04 | 2.37 |
| -15 | (+ 5) | 1054 | 266 | 309 | 116 | 0.88 | 3.32 | 9.11 | 2.29 | 2.67 |
| -10 | (+14) | 1322 | 333 | 387 | 129 | 0.99 | 4.17 | 10.21 | 2.57 | 2.99 |

| TEST CONDITIONS: @220V4500RPM | | 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] |
| -35 | (-31) | 324 | 82 | 95 | 66 | 0.53 | 1.01 | 4.93 | 1.24 | 1.44 |
| -30 | (-22) | 457 | 115 | 134 | 80 | 0.62 | 1.43 | 5.68 | 1.43 | 1.67 |
| -25 | (-13) | 610 | 154 | 179 | 94 | 0.72 | 1.92 | 6.47 | 1.63 | 1.90 |
| -20 | (- 4) | 792 | 200 | 232 | 109 | 0.83 | 2.49 | 7.31 | 1.84 | 2.14 |
| -15 | (+ 5) | 1011 | 255 | 296 | 123 | 0.94 | 3.18 | 8.19 | 2.06 | 2.40 |
| -10 | (+14) | 1274 | 321 | 373 | 139 | 1.05 | 4.02 | 9.13 | 2.30 | 2.68 |

| TEST CONDITIONS: @220V4500RPM | | ASHRAE32 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] |
| -35 | (-31) | 264 | 67 | 77 | 62 | 0.49 | 0.83 | 4.28 | 1.08 | 1.25 |
| -30 | (-22) | 397 | 100 | 116 | 79 | 0.61 | 1.25 | 5.02 | 1.27 | 1.47 |
| -25 | (-13) | 550 | 139 | 161 | 95 | 0.73 | 1.72 | 5.78 | 1.46 | 1.69 |
| -20 | (- 4) | 729 | 184 | 214 | 112 | 0.85 | 2.29 | 6.55 | 1.65 | 1.92 |
| -15 | (+ 5) | 944 | 238 | 277 | 129 | 0.98 | 2.97 | 7.35 | 1.85 | 2.15 |
| -10 | (+14) | 1204 | 303 | 353 | 147 | 1.11 | 3.80 | 8.17 | 2.06 | 2.40 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|------------------------------|------|--------------------------|
| 1 Base plate | European Standard VES | | |
| 2 Tray holder | Yes | | |
| 3 Connectors | | | |
| 3.1 SUCTION | 6.2 +0.05/+0.05 | [mm] | (0.244" +0.002"/+0.002") |
| 3.1.1 Material | Copper | | |
| 3.1.2 Shape | Slanted 25° up + 45° to Back | | |
| 3.2 DISCHARGE | 4.9 +0.10/-0.05 | [mm] | (0.193" +0.004"/-0.002") |
| 3.2.1 Material | Copper | | |
| 3.2.2 Shape | Slanted 0° up + 24° to Back | | |
| 3.3 PROCESS | 6.2 +0.05/+0.05 | [mm] | (0.244" +0.002"/+0.002") |
| 3.3.1 Material | Copper | | |
| 3.3.2 Shape | Slanted 20° up + 59° to back | | |
| 3.4 Oil cooler (Copper) | No | [mm] | |
| 3.5 Connector sealing | Rubber Plugs | | |