

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | VES A11C |
| Nominal Voltage/Frequency | 230 V 40-150 Hz |
| Engineering Number | 513907382 |

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 | 11.14 | [cm ³] (0.680 cu.in) |
| 2.1 Bore [mm] | 26.000 | |
| 2.2 Stroke [mm] | 21.000 | |
| 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 | VCC3 1156 XXXXX/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 | 13.40 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 13.40 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (46/133 Hz) | 2.10/2.10 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (46/133 Hz) | 2.10/2.10 | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (46/133 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] |
| 294 | 74 | 86 | 46 | 0.34 | 0.92 | 6.45 | 1.63 | 1.89 |

| | | | | | | | | |
|---|----------|-----|-------------------------------------|-------------------------------|---|---------------------------|--|-------|
| 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] |
| 366 | 92 | 107 | 56 | 0.41 | 1.15 | 6.51 | 1.64 | 1.91 |

| | | | | | | | | |
|---|----------|-----|-------------------------------------|-------------------------------|---|---------------------------|--|-------|
| 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] |
| 467 | 118 | 137 | 71 | 0.51 | 1.47 | 6.57 | 1.66 | 1.93 |

| | | | | | | | | |
|---|----------|-----|-------------------------------------|-------------------------------|---|---------------------------|--|-------|
| 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] |
| 707 | 178 | 207 | 110 | 0.78 | 2.22 | 6.41 | 1.62 | 1.88 |

| | | | | | | | | |
|---|----------|-----|-------------------------------------|-------------------------------|---|---------------------------|--|-------|
| TEST CONDITIONS: @220V3900RPM | | | 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] |
| 763 | 192 | 224 | 130 | 1.00 | 2.40 | 5.87 | 1.48 | 1.72 |

| | | | | | | | | |
|---|----------|-----|-------------------------------------|-------------------------------|---|---------------------------|--|-------|
| 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] |
| 942 | 237 | 276 | 157 | 1.13 | 2.96 | 6.00 | 1.51 | 1.76 |

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] |
| -35 | (-31) | 177 | 45 | 52 | 28 | 0.22 | 0.56 | 6.29 | 1.59 | 1.84 |
| -30 | (-22) | 237 | 60 | 69 | 33 | 0.26 | 0.74 | 7.14 | 1.80 | 2.09 |
| -25 | (-13) | 309 | 78 | 90 | 38 | 0.29 | 0.97 | 8.06 | 2.03 | 2.36 |
| -20 | (- 4) | 396 | 100 | 116 | 44 | 0.33 | 1.24 | 9.10 | 2.29 | 2.67 |
| -15 | (+ 5) | 499 | 126 | 146 | 49 | 0.36 | 1.57 | 10.31 | 2.60 | 3.02 |
| -10 | (+14) | 621 | 156 | 182 | 53 | 0.39 | 1.96 | 11.75 | 2.96 | 3.44 |

| 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] |
| -35 | (-31) | 163 | 41 | 48 | 29 | 0.23 | 0.51 | 5.58 | 1.41 | 1.64 |
| -30 | (-22) | 220 | 56 | 65 | 35 | 0.27 | 0.69 | 6.33 | 1.60 | 1.85 |
| -25 | (-13) | 291 | 73 | 85 | 41 | 0.32 | 0.91 | 7.09 | 1.79 | 2.08 |
| -20 | (- 4) | 377 | 95 | 110 | 48 | 0.36 | 1.18 | 7.90 | 1.99 | 2.32 |
| -15 | (+ 5) | 479 | 121 | 140 | 54 | 0.40 | 1.51 | 8.83 | 2.23 | 2.59 |
| -10 | (+14) | 600 | 151 | 176 | 60 | 0.44 | 1.89 | 9.92 | 2.50 | 2.91 |

| 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] |
| -35 | (-31) | 145 | 36 | 42 | 30 | 0.23 | 0.45 | 4.80 | 1.21 | 1.41 |
| -30 | (-22) | 199 | 50 | 58 | 36 | 0.27 | 0.62 | 5.50 | 1.39 | 1.61 |
| -25 | (-13) | 266 | 67 | 78 | 43 | 0.32 | 0.84 | 6.16 | 1.55 | 1.80 |
| -20 | (- 4) | 349 | 88 | 102 | 51 | 0.37 | 1.10 | 6.81 | 1.72 | 2.00 |
| -15 | (+ 5) | 449 | 113 | 131 | 60 | 0.43 | 1.41 | 7.52 | 1.90 | 2.20 |
| -10 | (+14) | 567 | 143 | 166 | 68 | 0.48 | 1.79 | 8.33 | 2.10 | 2.44 |

| 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] |
| -35 | (-31) | 215 | 54 | 63 | 35 | 0.27 | 0.67 | 6.24 | 1.57 | 1.83 |
| -30 | (-22) | 289 | 73 | 85 | 41 | 0.31 | 0.91 | 7.08 | 1.78 | 2.07 |
| -25 | (-13) | 381 | 96 | 112 | 47 | 0.36 | 1.20 | 8.01 | 2.02 | 2.35 |
| -20 | (- 4) | 491 | 124 | 144 | 54 | 0.40 | 1.54 | 9.06 | 2.28 | 2.65 |
| -15 | (+ 5) | 622 | 157 | 182 | 61 | 0.44 | 1.96 | 10.27 | 2.59 | 3.01 |
| -10 | (+14) | 776 | 196 | 227 | 67 | 0.48 | 2.45 | 11.70 | 2.95 | 3.43 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V1600RPM | | 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) | 204 | 51 | 60 | 36 | 0.29 | 0.64 | 5.62 | 1.42 | 1.65 |
| -30 | (-22) | 273 | 69 | 80 | 43 | 0.33 | 0.86 | 6.32 | 1.59 | 1.85 |
| -25 | (-13) | 359 | 91 | 105 | 51 | 0.38 | 1.13 | 7.05 | 1.78 | 2.07 |
| -20 | (- 4) | 465 | 117 | 136 | 59 | 0.43 | 1.46 | 7.86 | 1.98 | 2.30 |
| -15 | (+ 5) | 593 | 149 | 174 | 67 | 0.48 | 1.87 | 8.79 | 2.21 | 2.57 |
| -10 | (+14) | 743 | 187 | 218 | 75 | 0.53 | 2.34 | 9.87 | 2.49 | 2.89 |

| TEST CONDITIONS: @220V1600RPM | | 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) | 185 | 47 | 54 | 37 | 0.29 | 0.58 | 4.95 | 1.25 | 1.45 |
| -30 | (-22) | 249 | 63 | 73 | 45 | 0.34 | 0.78 | 5.61 | 1.41 | 1.64 |
| -25 | (-13) | 332 | 84 | 97 | 53 | 0.39 | 1.04 | 6.24 | 1.57 | 1.83 |
| -20 | (- 4) | 435 | 110 | 127 | 63 | 0.46 | 1.37 | 6.91 | 1.74 | 2.02 |
| -15 | (+ 5) | 560 | 141 | 164 | 73 | 0.52 | 1.76 | 7.64 | 1.93 | 2.24 |
| -10 | (+14) | 710 | 179 | 208 | 84 | 0.59 | 2.24 | 8.48 | 2.14 | 2.48 |

| TEST CONDITIONS: @220V2000RPM | | 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) | 272 | 69 | 80 | 45 | 0.33 | 0.85 | 6.11 | 1.54 | 1.79 |
| -30 | (-22) | 363 | 91 | 106 | 52 | 0.38 | 1.14 | 6.95 | 1.75 | 2.04 |
| -25 | (-13) | 476 | 120 | 140 | 60 | 0.44 | 1.49 | 7.87 | 1.98 | 2.31 |
| -20 | (- 4) | 614 | 155 | 180 | 69 | 0.50 | 1.93 | 8.89 | 2.24 | 2.60 |
| -15 | (+ 5) | 778 | 196 | 228 | 78 | 0.55 | 2.45 | 10.05 | 2.53 | 2.94 |
| -10 | (+14) | 968 | 244 | 284 | 85 | 0.60 | 3.05 | 11.38 | 2.87 | 3.34 |

| TEST CONDITIONS: @220V2000RPM | | 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) | 254 | 64 | 74 | 46 | 0.34 | 0.80 | 5.53 | 1.39 | 1.62 |
| -30 | (-22) | 341 | 86 | 100 | 55 | 0.40 | 1.07 | 6.27 | 1.58 | 1.84 |
| -25 | (-13) | 452 | 114 | 132 | 64 | 0.47 | 1.42 | 7.03 | 1.77 | 2.06 |
| -20 | (- 4) | 587 | 148 | 172 | 75 | 0.54 | 1.84 | 7.85 | 1.98 | 2.30 |
| -15 | (+ 5) | 747 | 188 | 219 | 85 | 0.61 | 2.35 | 8.77 | 2.21 | 2.57 |
| -10 | (+14) | 935 | 236 | 274 | 95 | 0.67 | 2.95 | 9.83 | 2.48 | 2.88 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @220V2000RPM | | 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) | 229 | 58 | 67 | 47 | 0.35 | 0.72 | 4.90 | 1.23 | 1.43 | |
| -30 (-22) | 314 | 79 | 92 | 56 | 0.41 | 0.99 | 5.60 | 1.41 | 1.64 | |
| -25 (-13) | 423 | 107 | 124 | 67 | 0.49 | 1.33 | 6.29 | 1.59 | 1.84 | |
| -20 (- 4) | 557 | 140 | 163 | 80 | 0.57 | 1.75 | 7.00 | 1.76 | 2.05 | |
| -15 (+ 5) | 716 | 180 | 210 | 92 | 0.65 | 2.25 | 7.76 | 1.95 | 2.27 | |
| -10 (+14) | 903 | 227 | 265 | 105 | 0.73 | 2.85 | 8.61 | 2.17 | 2.52 | |

| TEST CONDITIONS: @220V3000RPM | | 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) | 414 | 104 | 121 | 70 | 0.52 | 1.30 | 5.94 | 1.50 | 1.74 | |
| -30 (-22) | 551 | 139 | 161 | 82 | 0.59 | 1.73 | 6.75 | 1.70 | 1.98 | |
| -25 (-13) | 720 | 181 | 211 | 95 | 0.68 | 2.26 | 7.58 | 1.91 | 2.22 | |
| -20 (- 4) | 925 | 233 | 271 | 109 | 0.78 | 2.91 | 8.45 | 2.13 | 2.48 | |
| -15 (+ 5) | 1168 | 294 | 342 | 125 | 0.87 | 3.67 | 9.36 | 2.36 | 2.74 | |
| -10 (+14) | 1451 | 366 | 425 | 140 | 0.97 | 4.58 | 10.33 | 2.60 | 3.03 | |

| TEST CONDITIONS: @220V3000RPM | | 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) | 379 | 96 | 111 | 71 | 0.52 | 1.19 | 5.33 | 1.34 | 1.56 | |
| -30 (-22) | 515 | 130 | 151 | 85 | 0.61 | 1.61 | 6.05 | 1.53 | 1.77 | |
| -25 (-13) | 682 | 172 | 200 | 100 | 0.71 | 2.14 | 6.79 | 1.71 | 1.99 | |
| -20 (- 4) | 883 | 223 | 259 | 117 | 0.82 | 2.78 | 7.55 | 1.90 | 2.21 | |
| -15 (+ 5) | 1121 | 282 | 328 | 134 | 0.94 | 3.53 | 8.34 | 2.10 | 2.44 | |
| -10 (+14) | 1397 | 352 | 409 | 152 | 1.05 | 4.41 | 9.19 | 2.31 | 2.69 | |

| TEST CONDITIONS: @220V3000RPM | | 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) | 340 | 86 | 100 | 70 | 0.52 | 1.06 | 4.83 | 1.22 | 1.42 | |
| -30 (-22) | 475 | 120 | 139 | 87 | 0.62 | 1.49 | 5.49 | 1.38 | 1.61 | |
| -25 (-13) | 641 | 161 | 188 | 104 | 0.74 | 2.01 | 6.15 | 1.55 | 1.80 | |
| -20 (- 4) | 838 | 211 | 246 | 123 | 0.86 | 2.63 | 6.82 | 1.72 | 2.00 | |
| -15 (+ 5) | 1071 | 270 | 314 | 143 | 0.99 | 3.37 | 7.52 | 1.89 | 2.20 | |
| -10 (+14) | 1340 | 338 | 393 | 163 | 1.12 | 4.23 | 8.25 | 2.08 | 2.42 | |

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] | [W/W] |
| -35 (-31) | 567 | 143 | 166 | 105 | 0.74 | 1.78 | 5.39 | 1.36 | 1.58 | |
| -30 (-22) | 743 | 187 | 218 | 121 | 0.81 | 2.33 | 6.08 | 1.53 | 1.78 | |
| -25 (-13) | 938 | 236 | 275 | 137 | 0.91 | 2.94 | 6.81 | 1.72 | 1.99 | |
| -20 (- 4) | 1182 | 298 | 346 | 156 | 1.02 | 3.71 | 7.60 | 1.92 | 2.23 | |
| -15 (+ 5) | 1507 | 380 | 442 | 177 | 1.11 | 4.74 | 8.52 | 2.15 | 2.50 | |
| -10 (+14) | 1945 | 490 | 570 | 202 | 1.18 | 6.13 | 9.59 | 2.42 | 2.81 | |

| 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] | [W/W] |
| -35 (-31) | 537 | 135 | 157 | 108 | 0.77 | 1.68 | 4.98 | 1.25 | 1.46 | |
| -30 (-22) | 707 | 178 | 207 | 126 | 0.85 | 2.22 | 5.60 | 1.41 | 1.64 | |
| -25 (-13) | 899 | 227 | 263 | 144 | 0.96 | 2.82 | 6.24 | 1.57 | 1.83 | |
| -20 (- 4) | 1144 | 288 | 335 | 165 | 1.07 | 3.59 | 6.94 | 1.75 | 2.03 | |
| -15 (+ 5) | 1473 | 371 | 432 | 190 | 1.17 | 4.64 | 7.75 | 1.95 | 2.27 | |
| -10 (+14) | 1917 | 483 | 562 | 219 | 1.23 | 6.05 | 8.71 | 2.19 | 2.55 | |

| 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] | [W/W] |
| -35 (-31) | 514 | 130 | 151 | 111 | 0.78 | 1.61 | 4.60 | 1.16 | 1.35 | |
| -30 (-22) | 677 | 171 | 199 | 130 | 0.88 | 2.12 | 5.16 | 1.30 | 1.51 | |
| -25 (-13) | 865 | 218 | 254 | 151 | 1.00 | 2.72 | 5.73 | 1.44 | 1.68 | |
| -20 (- 4) | 1109 | 280 | 325 | 176 | 1.11 | 3.49 | 6.35 | 1.60 | 1.86 | |
| -15 (+ 5) | 1440 | 363 | 422 | 204 | 1.21 | 4.53 | 7.07 | 1.78 | 2.07 | |
| -10 (+14) | 1889 | 476 | 554 | 238 | 1.26 | 5.96 | 7.92 | 2.00 | 2.32 | |

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 5° out + 63° up | | |
| 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 47° 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 47° up + 59° to Back | | |
| 3.4 Oil cooler (Copper) | No | [mm] | |
| 3.5 Connector sealing | Rubber Plugs | | |