

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | VES G11C |
| Nominal Voltage/Frequency | 230 V 32-150 Hz |
| Engineering Number | 513907416 |

A - APPLICATION / LIMIT WORKING CONDITIONS

| | | | |
|------------------------------------|---|-----------------------------------|-----------|
| 1 Type | Hermetic reciprocating compressor | | |
| 2 Refrigerant | R-600a | | |
| 3 Nominal voltage and frequency | 230 / 32-150 | [V / Hz] | |
| 4 Application type | Low-Medium Back Pressure (Fullmotion Compressors) | | |
| 4.1 Evaporating temperature range | -35°C to 0°C | (-31°F to 32°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) | - | - | - |
| 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 | 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 | 205 | [ml] (6.93 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ALQUILB / ISO5 | |
| 4 Weight (with oil charge) | 6.6 | [kg] (14.55 lb.) |
| 5 Nitrogen charge | - | [kgf/cm ²] |

C - ELECTRICAL DATA

| | | |
|--|------------------------------------|------------------------------------|
| 1 Nominal Voltage/Frequency/Number of Phases | 230 V 31.7-150 Hz 3~ (Three phase) | |
| 2 Starting device type | Inverter | |
| 2.1 Starting device | VCC3 1156 XXXXX | |
| 3 Start capacitor | - | [µF(VAC minimum)] |
| 4 Run capacitor | - | [µF(VAC minimum)] |
| 5 Motor protection | VCC3 1156 XX | |
| 6 Start winding resistance | 9.30 | [Ω at 25°C (77°F)] +/- 8% |
| 7 Run winding resistance | 9.30 | [Ω at 25°C (77°F)] +/- 8% |
| 8 LRA - Locked rotor amperage (32/150 Hz) | - | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (32/150 Hz) | - | [A] - Measured according to UL 984 |
| 10 FLA - Full Load Amperage HBP (32/150 Hz) | - | [A] - Measured according to UL 984 |
| 11 Approval boards certification | | |

D - PERFORMANCE - CHECK POINT DATA

| | | | | | | | | |
|--|----------|-----|-------------------------------------|----------------------------|---|--------------------------------|--|-------|
| TEST CONDITIONS: @115V950RPM | | | ASHRAELBP32 Static | | Evaporating temperature (Condensing temperature) | | -23.3°C (-9.94°F) 54.4°C (129.92°F) | |
| Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | |
| [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| 215 | 54 | 63 | 34 | 0.49 | 0.68 | 6.38 | 1.61 | 1.87 |

| | | | | | | | | |
|---|----------|-----|-------------------------------------|----------------------------|---|--------------------------------|--|-------|
| TEST CONDITIONS: @115V1300RPM | | | ASHRAELBP32 Static | | Evaporating temperature (Condensing temperature) | | -23.3°C (-9.94°F) 54.4°C (129.92°F) | |
| Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | |
| [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| 293 | 74 | 86 | 44 | 0.61 | 0.92 | 6.64 | 1.67 | 1.95 |

| | | | | | | | | |
|---|----------|-----|-------------------------------------|----------------------------|---|--------------------------------|--|-------|
| TEST CONDITIONS: @115V2000RPM | | | ASHRAELBP32 Static | | Evaporating temperature (Condensing temperature) | | -23.3°C (-9.94°F) 54.4°C (129.92°F) | |
| Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | |
| [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| 454 | 114 | 133 | 67 | 0.91 | 1.43 | 6.80 | 1.71 | 1.99 |

| | | | | | | | | |
|---|----------|-----|-------------------------------------|----------------------------|---|--------------------------------|--|-------|
| TEST CONDITIONS: @115V3000RPM | | | ASHRAELBP32 Static | | Evaporating temperature (Condensing temperature) | | -23.3°C (-9.94°F) 54.4°C (129.92°F) | |
| Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | |
| [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| 686 | 173 | 201 | 104 | 1.43 | 2.15 | 6.62 | 1.67 | 1.94 |

| | | | | | | | | |
|---|----------|-----|-------------------------------------|----------------------------|---|--------------------------------|--|-------|
| TEST CONDITIONS: @115V4000RPM | | | ASHRAELBP32 Static | | Evaporating temperature (Condensing temperature) | | -23.3°C (-9.94°F) 54.4°C (129.92°F) | |
| Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | |
| [Btu/h] | [kcal/h] | [W] | [W] | [A] | [kg/h] | [Btu/Wh] | [kcal/Wh] | [W/W] |
| 867 | 218 | 254 | 139 | 1.84 | 2.72 | 6.25 | 1.58 | 1.83 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @115V950RPM | | ASHRAE32 Static | | | (Condensing temperature 35°C (+95°F)) | | | | | |
|---------------------------------|---------------------------------|--------------------|-----|----------------------------|--|--------------------------|--------------------------------|-----------|-------|------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [W] | | | | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 | (-31) | 131 | 33 | 38 | 19 | 0.30 | 0.41 | 6.72 | 1.69 | 1.97 |
| -30 | (-22) | 172 | 43 | 51 | 23 | 0.32 | 0.54 | 7.60 | 1.91 | 2.23 |
| -25 | (-13) | 223 | 56 | 65 | 26 | 0.35 | 0.70 | 8.58 | 2.16 | 2.52 |
| -20 | (- 4) | 285 | 72 | 83 | 29 | 0.39 | 0.89 | 9.73 | 2.45 | 2.85 |
| -15 | (+ 5) | 362 | 91 | 106 | 33 | 0.42 | 1.14 | 11.08 | 2.79 | 3.25 |
| -10 | (+14) | 457 | 115 | 134 | 36 | 0.44 | 1.44 | 12.68 | 3.19 | 3.71 |
| -5 | (+23) | 575 | 145 | 168 | 40 | 0.46 | 1.82 | 14.57 | 3.67 | 4.27 |
| 0 | (+32) | 717 | 181 | 210 | 43 | 0.46 | 2.27 | 16.79 | 4.23 | 4.92 |

| TEST CONDITIONS: @115V950RPM | | ASHRAE32 Static | | | (Condensing temperature 45°C (+113°F)) | | | | | |
|---------------------------------|---------------------------------|--------------------|-----|----------------------------|---|--------------------------|--------------------------------|-----------|-------|------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [W] | | | | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 | (-31) | 115 | 29 | 34 | 20 | 0.30 | 0.36 | 5.84 | 1.47 | 1.71 |
| -30 | (-22) | 159 | 40 | 47 | 24 | 0.33 | 0.50 | 6.57 | 1.66 | 1.93 |
| -25 | (-13) | 212 | 53 | 62 | 29 | 0.37 | 0.66 | 7.33 | 1.85 | 2.15 |
| -20 | (- 4) | 276 | 70 | 81 | 34 | 0.41 | 0.87 | 8.18 | 2.06 | 2.40 |
| -15 | (+ 5) | 356 | 90 | 104 | 39 | 0.46 | 1.12 | 9.14 | 2.30 | 2.68 |
| -10 | (+14) | 454 | 114 | 133 | 44 | 0.50 | 1.43 | 10.28 | 2.59 | 3.01 |
| -5 | (+23) | 574 | 145 | 168 | 49 | 0.54 | 1.81 | 11.64 | 2.93 | 3.41 |
| 0 | (+32) | 719 | 181 | 211 | 55 | 0.56 | 2.28 | 13.25 | 3.34 | 3.88 |

| TEST CONDITIONS: @115V950RPM | | ASHRAE32 Static | | | (Condensing temperature 55°C (+131°F)) | | | | | |
|---------------------------------|---------------------------------|--------------------|-----|----------------------------|---|--------------------------|--------------------------------|-----------|-------|------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [W] | | | | [Btu/Wh] | [kcal/Wh] | [W/W] | |
| -35 | (-31) | 107 | 27 | 31 | 22 | 0.30 | 0.33 | 4.92 | 1.24 | 1.44 |
| -30 | (-22) | 152 | 38 | 44 | 27 | 0.34 | 0.47 | 5.68 | 1.43 | 1.66 |
| -25 | (-13) | 205 | 52 | 60 | 32 | 0.39 | 0.64 | 6.39 | 1.61 | 1.87 |
| -20 | (- 4) | 269 | 68 | 79 | 38 | 0.45 | 0.85 | 7.10 | 1.79 | 2.08 |
| -15 | (+ 5) | 349 | 88 | 102 | 45 | 0.51 | 1.10 | 7.86 | 1.98 | 2.30 |
| -10 | (+14) | 447 | 113 | 131 | 51 | 0.57 | 1.41 | 8.71 | 2.19 | 2.55 |
| -5 | (+23) | 567 | 143 | 166 | 58 | 0.63 | 1.79 | 9.70 | 2.44 | 2.84 |
| 0 | (+32) | 712 | 180 | 209 | 66 | 0.68 | 2.26 | 10.87 | 2.74 | 3.18 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @115V1300RPM | | ASHRAE32 Static | | | (Condensing temperature 35°C (+95°F)) | | | | | |
|----------------------------------|---------------------------------|--------------------|-----|----------------------------|--|--------------------------|--------------------------------|-------|--------|----------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [W] | | | | [W] | [A] | [kg/h] | [Btu/Wh] |
| -35 | (-31) | 179 | 45 | 52 | 27 | 0.45 | 0.56 | 6.73 | 1.69 | 1.97 |
| -30 | (-22) | 238 | 60 | 70 | 31 | 0.49 | 0.75 | 7.58 | 1.91 | 2.22 |
| -25 | (-13) | 309 | 78 | 91 | 36 | 0.54 | 0.97 | 8.56 | 2.16 | 2.51 |
| -20 | (- 4) | 394 | 99 | 116 | 41 | 0.60 | 1.24 | 9.70 | 2.44 | 2.84 |
| -15 | (+ 5) | 497 | 125 | 146 | 45 | 0.65 | 1.56 | 11.03 | 2.78 | 3.23 |
| -10 | (+14) | 620 | 156 | 182 | 49 | 0.71 | 1.96 | 12.61 | 3.18 | 3.69 |
| -5 | (+23) | 766 | 193 | 224 | 53 | 0.75 | 2.42 | 14.44 | 3.64 | 4.23 |
| 0 | (+32) | 938 | 236 | 275 | 56 | 0.79 | 2.97 | 16.59 | 4.18 | 4.86 |

| TEST CONDITIONS: @115V1300RPM | | ASHRAE32 Static | | | (Condensing temperature 45°C (+113°F)) | | | | | |
|----------------------------------|---------------------------------|--------------------|-----|----------------------------|---|--------------------------|--------------------------------|-------|--------|----------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [W] | | | | [W] | [A] | [kg/h] | [Btu/Wh] |
| -35 | (-31) | 166 | 42 | 49 | 28 | 0.45 | 0.52 | 5.94 | 1.50 | 1.74 |
| -30 | (-22) | 223 | 56 | 65 | 34 | 0.50 | 0.70 | 6.66 | 1.68 | 1.95 |
| -25 | (-13) | 292 | 74 | 86 | 39 | 0.57 | 0.92 | 7.44 | 1.87 | 2.18 |
| -20 | (- 4) | 375 | 95 | 110 | 45 | 0.65 | 1.18 | 8.32 | 2.10 | 2.44 |
| -15 | (+ 5) | 475 | 120 | 139 | 51 | 0.72 | 1.50 | 9.34 | 2.35 | 2.74 |
| -10 | (+14) | 595 | 150 | 174 | 56 | 0.80 | 1.88 | 10.52 | 2.65 | 3.08 |
| -5 | (+23) | 738 | 186 | 216 | 62 | 0.88 | 2.33 | 11.92 | 3.00 | 3.49 |
| 0 | (+32) | 906 | 228 | 266 | 67 | 0.94 | 2.87 | 13.55 | 3.41 | 3.97 |

| TEST CONDITIONS: @115V1300RPM | | ASHRAE32 Static | | | (Condensing temperature 55°C (+131°F)) | | | | | |
|----------------------------------|---------------------------------|--------------------|-----|----------------------------|---|--------------------------|--------------------------------|-------|--------|----------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [W] | | | | [W] | [A] | [kg/h] | [Btu/Wh] |
| -35 | (-31) | 149 | 38 | 44 | 28 | 0.46 | 0.47 | 5.22 | 1.32 | 1.53 |
| -30 | (-22) | 205 | 52 | 60 | 35 | 0.52 | 0.64 | 5.89 | 1.48 | 1.73 |
| -25 | (-13) | 272 | 69 | 80 | 42 | 0.60 | 0.85 | 6.57 | 1.65 | 1.92 |
| -20 | (- 4) | 353 | 89 | 103 | 49 | 0.68 | 1.11 | 7.28 | 1.83 | 2.13 |
| -15 | (+ 5) | 450 | 113 | 132 | 56 | 0.77 | 1.42 | 8.06 | 2.03 | 2.36 |
| -10 | (+14) | 567 | 143 | 166 | 63 | 0.87 | 1.79 | 8.96 | 2.26 | 2.62 |
| -5 | (+23) | 706 | 178 | 207 | 71 | 0.96 | 2.23 | 10.00 | 2.52 | 2.93 |
| 0 | (+32) | 871 | 219 | 255 | 78 | 1.05 | 2.76 | 11.21 | 2.83 | 3.29 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @115V1600RPM | | ASHRAE32 Static | | | (Condensing temperature 35°C (+95°F)) | | | | | |
|----------------------------------|---------------------------------|--------------------|---------|----------------------------|--|--------------------------|--------------------------------|-------|----------|-----------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [Btu/h] | | | | [kcal/h] | [W] | [Btu/Wh] | [kcal/Wh] |
| -35 | (-31) | 217 | 55 | 64 | 33 | 0.49 | 0.68 | 6.49 | 1.64 | 1.90 |
| -30 | (-22) | 286 | 72 | 84 | 39 | 0.55 | 0.90 | 7.36 | 1.86 | 2.16 |
| -25 | (-13) | 371 | 93 | 109 | 44 | 0.62 | 1.16 | 8.34 | 2.10 | 2.44 |
| -20 | (- 4) | 474 | 120 | 139 | 50 | 0.68 | 1.49 | 9.46 | 2.38 | 2.77 |
| -15 | (+ 5) | 601 | 152 | 176 | 56 | 0.75 | 1.89 | 10.78 | 2.72 | 3.16 |
| -10 | (+14) | 755 | 190 | 221 | 61 | 0.82 | 2.38 | 12.34 | 3.11 | 3.62 |
| -5 | (+23) | 940 | 237 | 275 | 66 | 0.90 | 2.97 | 14.19 | 3.58 | 4.16 |
| 0 | (+32) | 1160 | 292 | 340 | 71 | 0.98 | 3.68 | 16.38 | 4.13 | 4.80 |

| TEST CONDITIONS: @115V1600RPM | | ASHRAE32 Static | | | (Condensing temperature 45°C (+113°F)) | | | | | |
|----------------------------------|---------------------------------|--------------------|---------|----------------------------|---|--------------------------|--------------------------------|-------|----------|-----------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [Btu/h] | | | | [kcal/h] | [W] | [Btu/Wh] | [kcal/Wh] |
| -35 | (-31) | 206 | 52 | 60 | 35 | 0.53 | 0.64 | 5.93 | 1.49 | 1.74 |
| -30 | (-22) | 276 | 69 | 81 | 41 | 0.60 | 0.86 | 6.66 | 1.68 | 1.95 |
| -25 | (-13) | 359 | 90 | 105 | 48 | 0.67 | 1.13 | 7.44 | 1.87 | 2.18 |
| -20 | (- 4) | 460 | 116 | 135 | 55 | 0.75 | 1.45 | 8.30 | 2.09 | 2.43 |
| -15 | (+ 5) | 583 | 147 | 171 | 63 | 0.83 | 1.83 | 9.30 | 2.34 | 2.73 |
| -10 | (+14) | 731 | 184 | 214 | 70 | 0.91 | 2.31 | 10.48 | 2.64 | 3.07 |
| -5 | (+23) | 909 | 229 | 266 | 77 | 1.01 | 2.87 | 11.89 | 3.00 | 3.48 |
| 0 | (+32) | 1120 | 282 | 328 | 83 | 1.11 | 3.55 | 13.57 | 3.42 | 3.98 |

| TEST CONDITIONS: @115V1600RPM | | ASHRAE32 Static | | | (Condensing temperature 55°C (+131°F)) | | | | | |
|----------------------------------|---------------------------------|--------------------|---------|----------------------------|---|--------------------------|--------------------------------|-------|----------|-----------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [Btu/h] | | | | [kcal/h] | [W] | [Btu/Wh] | [kcal/Wh] |
| -35 | (-31) | 184 | 46 | 54 | 35 | 0.53 | 0.58 | 5.21 | 1.31 | 1.53 |
| -30 | (-22) | 254 | 64 | 75 | 43 | 0.61 | 0.80 | 5.91 | 1.49 | 1.73 |
| -25 | (-13) | 337 | 85 | 99 | 51 | 0.70 | 1.06 | 6.60 | 1.66 | 1.93 |
| -20 | (- 4) | 436 | 110 | 128 | 60 | 0.80 | 1.37 | 7.32 | 1.84 | 2.14 |
| -15 | (+ 5) | 555 | 140 | 163 | 69 | 0.90 | 1.75 | 8.10 | 2.04 | 2.37 |
| -10 | (+14) | 698 | 176 | 205 | 77 | 1.01 | 2.20 | 9.01 | 2.27 | 2.64 |
| -5 | (+23) | 869 | 219 | 255 | 86 | 1.13 | 2.75 | 10.08 | 2.54 | 2.95 |
| 0 | (+32) | 1072 | 270 | 314 | 95 | 1.26 | 3.40 | 11.36 | 2.86 | 3.33 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @115V2000RPM | | ASHRAE32 Static | | | (Condensing temperature 35°C (+95°F)) | | | | | |
|----------------------------------|---------------------------------|--------------------|-----|----------------------------|--|--------------------------|--------------------------------|-------|--------|----------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [W] | | | | [W] | [A] | [kg/h] | [Btu/Wh] |
| -35 | (-31) | 272 | 69 | 80 | 42 | 0.57 | 0.85 | 6.44 | 1.62 | 1.89 |
| -30 | (-22) | 359 | 91 | 105 | 49 | 0.66 | 1.13 | 7.30 | 1.84 | 2.14 |
| -25 | (-13) | 467 | 118 | 137 | 56 | 0.75 | 1.47 | 8.28 | 2.09 | 2.43 |
| -20 | (- 4) | 599 | 151 | 175 | 64 | 0.84 | 1.88 | 9.39 | 2.37 | 2.75 |
| -15 | (+ 5) | 757 | 191 | 222 | 71 | 0.93 | 2.38 | 10.64 | 2.68 | 3.12 |
| -10 | (+14) | 946 | 238 | 277 | 79 | 1.02 | 2.98 | 12.04 | 3.04 | 3.53 |
| -5 | (+23) | 1169 | 295 | 343 | 86 | 1.10 | 3.70 | 13.62 | 3.43 | 3.99 |
| 0 | (+32) | 1429 | 360 | 419 | 93 | 1.18 | 4.53 | 15.38 | 3.88 | 4.51 |

| TEST CONDITIONS: @115V2000RPM | | ASHRAE32 Static | | | (Condensing temperature 45°C (+113°F)) | | | | | |
|----------------------------------|---------------------------------|--------------------|-----|----------------------------|---|--------------------------|--------------------------------|-------|--------|----------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [W] | | | | [W] | [A] | [kg/h] | [Btu/Wh] |
| -35 | (-31) | 257 | 65 | 75 | 44 | 0.61 | 0.81 | 5.84 | 1.47 | 1.71 |
| -30 | (-22) | 343 | 87 | 101 | 52 | 0.70 | 1.08 | 6.56 | 1.65 | 1.92 |
| -25 | (-13) | 449 | 113 | 131 | 61 | 0.80 | 1.41 | 7.36 | 1.86 | 2.16 |
| -20 | (- 4) | 577 | 145 | 169 | 70 | 0.91 | 1.81 | 8.26 | 2.08 | 2.42 |
| -15 | (+ 5) | 731 | 184 | 214 | 79 | 1.02 | 2.30 | 9.26 | 2.33 | 2.71 |
| -10 | (+14) | 915 | 230 | 268 | 88 | 1.13 | 2.88 | 10.37 | 2.61 | 3.04 |
| -5 | (+23) | 1131 | 285 | 331 | 97 | 1.25 | 3.58 | 11.62 | 2.93 | 3.41 |
| 0 | (+32) | 1384 | 349 | 406 | 107 | 1.36 | 4.39 | 13.02 | 3.28 | 3.81 |

| TEST CONDITIONS: @115V2000RPM | | ASHRAE32 Static | | | (Condensing temperature 55°C (+131°F)) | | | | | |
|----------------------------------|---------------------------------|--------------------|-----|----------------------------|---|--------------------------|--------------------------------|-------|--------|----------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [W] | | | | [W] | [A] | [kg/h] | [Btu/Wh] |
| -35 | (-31) | 232 | 58 | 68 | 45 | 0.61 | 0.73 | 5.21 | 1.31 | 1.53 |
| -30 | (-22) | 318 | 80 | 93 | 54 | 0.71 | 1.00 | 5.87 | 1.48 | 1.72 |
| -25 | (-13) | 422 | 106 | 124 | 64 | 0.83 | 1.32 | 6.57 | 1.66 | 1.92 |
| -20 | (- 4) | 548 | 138 | 161 | 75 | 0.96 | 1.72 | 7.32 | 1.84 | 2.15 |
| -15 | (+ 5) | 699 | 176 | 205 | 86 | 1.10 | 2.20 | 8.14 | 2.05 | 2.39 |
| -10 | (+14) | 879 | 221 | 257 | 97 | 1.24 | 2.77 | 9.04 | 2.28 | 2.65 |
| -5 | (+23) | 1090 | 275 | 319 | 109 | 1.39 | 3.45 | 10.03 | 2.53 | 2.94 |
| 0 | (+32) | 1337 | 337 | 392 | 120 | 1.55 | 4.24 | 11.14 | 2.81 | 3.26 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @115V3000RPM | | ASHRAE32 Static | | | (Condensing temperature 35°C (+95°F)) | | | | | |
|----------------------------------|---------------------------------|--------------------|---------|----------------------------|--|--------------------------|--------------------------------|-------|----------|-----------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [Btu/h] | | | | [kcal/h] | [W] | [Btu/Wh] | [kcal/Wh] |
| -35 | (-31) | 389 | 98 | 114 | 66 | 0.88 | 1.22 | 5.91 | 1.49 | 1.73 |
| -30 | (-22) | 521 | 131 | 153 | 76 | 1.00 | 1.63 | 6.81 | 1.72 | 1.99 |
| -25 | (-13) | 683 | 172 | 200 | 88 | 1.14 | 2.14 | 7.75 | 1.95 | 2.27 |
| -20 | (- 4) | 878 | 221 | 257 | 100 | 1.30 | 2.76 | 8.74 | 2.20 | 2.56 |
| -15 | (+ 5) | 1112 | 280 | 326 | 114 | 1.47 | 3.50 | 9.79 | 2.47 | 2.87 |
| -10 | (+14) | 1388 | 350 | 407 | 127 | 1.65 | 4.38 | 10.90 | 2.75 | 3.19 |
| -5 | (+23) | 1711 | 431 | 501 | 142 | 1.84 | 5.41 | 12.07 | 3.04 | 3.54 |
| 0 | (+32) | 2084 | 525 | 611 | 157 | 2.03 | 6.60 | 13.30 | 3.35 | 3.90 |

| TEST CONDITIONS: @115V3000RPM | | ASHRAE32 Static | | | (Condensing temperature 45°C (+113°F)) | | | | | |
|----------------------------------|---------------------------------|--------------------|---------|----------------------------|---|--------------------------|--------------------------------|-------|----------|-----------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [Btu/h] | | | | [kcal/h] | [W] | [Btu/Wh] | [kcal/Wh] |
| -35 | (-31) | 381 | 96 | 112 | 68 | 0.90 | 1.19 | 5.59 | 1.41 | 1.64 |
| -30 | (-22) | 507 | 128 | 149 | 81 | 1.04 | 1.59 | 6.30 | 1.59 | 1.85 |
| -25 | (-13) | 663 | 167 | 194 | 94 | 1.21 | 2.08 | 7.06 | 1.78 | 2.07 |
| -20 | (- 4) | 853 | 215 | 250 | 108 | 1.40 | 2.68 | 7.88 | 1.99 | 2.31 |
| -15 | (+ 5) | 1082 | 273 | 317 | 124 | 1.60 | 3.40 | 8.75 | 2.21 | 2.56 |
| -10 | (+14) | 1352 | 341 | 396 | 140 | 1.81 | 4.27 | 9.68 | 2.44 | 2.84 |
| -5 | (+23) | 1669 | 421 | 489 | 156 | 2.03 | 5.28 | 10.68 | 2.69 | 3.13 |
| 0 | (+32) | 2036 | 513 | 597 | 173 | 2.25 | 6.45 | 11.74 | 2.96 | 3.44 |

| TEST CONDITIONS: @115V3000RPM | | ASHRAE32 Static | | | (Condensing temperature 55°C (+131°F)) | | | | | |
|----------------------------------|---------------------------------|--------------------|---------|----------------------------|---|--------------------------|--------------------------------|-------|----------|-----------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [Btu/h] | | | | [kcal/h] | [W] | [Btu/Wh] | [kcal/Wh] |
| -35 | (-31) | 349 | 88 | 102 | 69 | 0.92 | 1.09 | 5.08 | 1.28 | 1.49 |
| -30 | (-22) | 472 | 119 | 138 | 83 | 1.09 | 1.48 | 5.67 | 1.43 | 1.66 |
| -25 | (-13) | 625 | 157 | 183 | 99 | 1.28 | 1.96 | 6.31 | 1.59 | 1.85 |
| -20 | (- 4) | 812 | 205 | 238 | 116 | 1.50 | 2.55 | 7.01 | 1.77 | 2.05 |
| -15 | (+ 5) | 1037 | 261 | 304 | 133 | 1.72 | 3.27 | 7.77 | 1.96 | 2.28 |
| -10 | (+14) | 1304 | 329 | 382 | 152 | 1.97 | 4.12 | 8.59 | 2.16 | 2.52 |
| -5 | (+23) | 1618 | 408 | 474 | 171 | 2.21 | 5.12 | 9.47 | 2.39 | 2.78 |
| 0 | (+32) | 1982 | 500 | 581 | 191 | 2.46 | 6.28 | 10.43 | 2.63 | 3.06 |

E - PERFORMANCE - CURVES

| TEST CONDITIONS: @115V4500RPM | | ASHRAE32 Static | | | (Condensing temperature 35°C (+95°F)) | | | | | |
|----------------------------------|---------------------------------|--------------------|---------|----------------------------|--|--------------------------|--------------------------------|-------|----------|-----------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [Btu/h] | | | | [kcal/h] | [W] | [Btu/Wh] | [kcal/Wh] |
| -35 | (-31) | 530 | 134 | 155 | 93 | 1.23 | 1.66 | 5.68 | 1.43 | 1.66 |
| -30 | (-22) | 684 | 172 | 200 | 107 | 1.46 | 2.14 | 6.41 | 1.62 | 1.88 |
| -25 | (-13) | 885 | 223 | 259 | 122 | 1.64 | 2.78 | 7.27 | 1.83 | 2.13 |
| -20 | (- 4) | 1123 | 283 | 329 | 136 | 1.79 | 3.53 | 8.23 | 2.07 | 2.41 |
| -15 | (+ 5) | 1388 | 350 | 407 | 150 | 1.93 | 4.37 | 9.27 | 2.34 | 2.72 |
| -10 | (+14) | 1671 | 421 | 490 | 162 | 2.08 | 5.27 | 10.35 | 2.61 | 3.03 |
| -5 | (+23) | 1963 | 495 | 575 | 171 | 2.27 | 6.21 | 11.46 | 2.89 | 3.36 |
| 0 | (+32) | 2253 | 568 | 660 | 177 | 2.51 | 7.14 | 12.56 | 3.16 | 3.68 |

| TEST CONDITIONS: @115V4500RPM | | ASHRAE32 Static | | | (Condensing temperature 45°C (+113°F)) | | | | | |
|----------------------------------|---------------------------------|--------------------|---------|----------------------------|---|--------------------------|--------------------------------|-------|----------|-----------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [Btu/h] | | | | [kcal/h] | [W] | [Btu/Wh] | [kcal/Wh] |
| -35 | (-31) | 495 | 125 | 145 | 94 | 1.25 | 1.55 | 5.27 | 1.33 | 1.54 |
| -30 | (-22) | 652 | 164 | 191 | 111 | 1.52 | 2.04 | 5.90 | 1.49 | 1.73 |
| -25 | (-13) | 855 | 215 | 251 | 128 | 1.73 | 2.68 | 6.65 | 1.68 | 1.95 |
| -20 | (- 4) | 1094 | 276 | 321 | 146 | 1.92 | 3.44 | 7.49 | 1.89 | 2.19 |
| -15 | (+ 5) | 1359 | 342 | 398 | 162 | 2.10 | 4.28 | 8.38 | 2.11 | 2.46 |
| -10 | (+14) | 1641 | 414 | 481 | 176 | 2.30 | 5.18 | 9.32 | 2.35 | 2.73 |
| -5 | (+23) | 1930 | 486 | 566 | 188 | 2.52 | 6.10 | 10.25 | 2.58 | 3.00 |
| 0 | (+32) | 2217 | 559 | 650 | 197 | 2.81 | 7.03 | 11.17 | 2.82 | 3.27 |

| TEST CONDITIONS: @115V4500RPM | | ASHRAE32 Static | | | (Condensing temperature 55°C (+131°F)) | | | | | |
|----------------------------------|---------------------------------|--------------------|---------|----------------------------|---|--------------------------|--------------------------------|-------|----------|-----------|
| Evaporating temperature | Cooling capacity (Qe) +/- 5% | | | Input power (We) +/- 5% | Electric current +/- 5% | Mass flow rate +/- 5% | Efficiency EER & COP +/- 7% | | | |
| | °C | (°F) | [Btu/h] | | | | [kcal/h] | [W] | [Btu/Wh] | [kcal/Wh] |
| -35 | (-31) | 457 | 115 | 134 | 95 | 1.29 | 1.43 | 4.79 | 1.21 | 1.40 |
| -30 | (-22) | 605 | 153 | 177 | 114 | 1.60 | 1.90 | 5.36 | 1.35 | 1.57 |
| -25 | (-13) | 798 | 201 | 234 | 132 | 1.85 | 2.50 | 6.04 | 1.52 | 1.77 |
| -20 | (- 4) | 1026 | 259 | 301 | 151 | 2.08 | 3.22 | 6.79 | 1.71 | 1.99 |
| -15 | (+ 5) | 1279 | 322 | 375 | 169 | 2.31 | 4.03 | 7.59 | 1.91 | 2.22 |
| -10 | (+14) | 1547 | 390 | 453 | 184 | 2.54 | 4.88 | 8.40 | 2.12 | 2.46 |
| -5 | (+23) | 1822 | 459 | 534 | 198 | 2.82 | 5.76 | 9.22 | 2.32 | 2.70 |
| 0 | (+32) | 2093 | 527 | 613 | 207 | 3.15 | 6.64 | 10.00 | 2.52 | 2.93 |

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 63° up + 0° 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 10° 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 | | |