

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | VES C7C |
| Nominal Voltage/Frequency | 230 V 40-150 Hz |
| Engineering Number | 513907161 |

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 | - | - |
| 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 | 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 | 0.2 to 0.3 | [kgf/cm ²] (2.84 to 4.27 psig) |

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 | VCC32456XXXXX | |
| 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] |
| 179 | 45 | 52 | 28 | 0.23 | 0.56 | 6.39 | 1.61 | 1.87 |

| | | | | | | | | |
|---|----------|-----|-------------------------------------|-------------------------------|---|---------------------------|--|-------|
| 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] |
| 223 | 56 | 65 | 34 | 0.28 | 0.70 | 6.56 | 1.65 | 1.92 |

| | | | | | | | | |
|---|----------|-----|-------------------------------------|-------------------------------|---|---------------------------|--|-------|
| 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] |
| 275 | 69 | 81 | 43 | 0.32 | 0.86 | 6.40 | 1.61 | 1.88 |

| | | | | | | | | |
|---|----------|-----|-------------------------------------|-------------------------------|---|---------------------------|--|-------|
| 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] |
| 426 | 107 | 125 | 65 | 0.49 | 1.34 | 6.55 | 1.65 | 1.92 |

| | | | | | | | | |
|---|----------|-----|-------------------------------------|-------------------------------|---|---------------------------|--|-------|
| 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] |
| 628 | 158 | 184 | 103 | 0.76 | 1.97 | 6.10 | 1.54 | 1.79 |

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) | 106 | 27 | 31 | 18 | 0.12 | 0.33 | 5.98 | 1.51 | 1.75 |
| -30 | (-22) | 142 | 36 | 42 | 20 | 0.15 | 0.45 | 6.93 | 1.75 | 2.03 |
| -25 | (-13) | 186 | 47 | 55 | 24 | 0.18 | 0.58 | 7.92 | 2.00 | 2.32 |
| -20 | (- 4) | 240 | 61 | 70 | 27 | 0.20 | 0.75 | 9.05 | 2.28 | 2.65 |
| -15 | (+ 5) | 306 | 77 | 90 | 30 | 0.22 | 0.96 | 10.38 | 2.61 | 3.04 |
| -10 | (+14) | 386 | 97 | 113 | 32 | 0.24 | 1.22 | 11.99 | 3.02 | 3.51 |

| 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) | 90 | 23 | 27 | 18 | 0.14 | 0.28 | 5.02 | 1.27 | 1.47 |
| -30 | (-22) | 126 | 32 | 37 | 21 | 0.16 | 0.39 | 5.93 | 1.49 | 1.74 |
| -25 | (-13) | 169 | 43 | 50 | 25 | 0.19 | 0.53 | 6.80 | 1.71 | 1.99 |
| -20 | (- 4) | 222 | 56 | 65 | 29 | 0.22 | 0.70 | 7.72 | 1.94 | 2.26 |
| -15 | (+ 5) | 286 | 72 | 84 | 33 | 0.24 | 0.90 | 8.76 | 2.21 | 2.57 |
| -10 | (+14) | 364 | 92 | 107 | 36 | 0.27 | 1.15 | 10.01 | 2.52 | 2.93 |

| 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) | 66 | 17 | 19 | 17 | 0.14 | 0.21 | 3.83 | 0.97 | 1.12 |
| -30 | (-22) | 103 | 26 | 30 | 21 | 0.17 | 0.32 | 4.84 | 1.22 | 1.42 |
| -25 | (-13) | 148 | 37 | 43 | 26 | 0.20 | 0.46 | 5.73 | 1.44 | 1.68 |
| -20 | (- 4) | 201 | 51 | 59 | 30 | 0.23 | 0.63 | 6.59 | 1.66 | 1.93 |
| -15 | (+ 5) | 265 | 67 | 78 | 35 | 0.26 | 0.83 | 7.49 | 1.89 | 2.19 |
| -10 | (+14) | 342 | 86 | 100 | 40 | 0.29 | 1.08 | 8.51 | 2.14 | 2.49 |

| 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) | 127 | 32 | 37 | 22 | 0.16 | 0.40 | 5.82 | 1.47 | 1.71 |
| -30 | (-22) | 175 | 44 | 51 | 25 | 0.19 | 0.55 | 6.89 | 1.74 | 2.02 |
| -25 | (-13) | 232 | 58 | 68 | 29 | 0.21 | 0.73 | 7.96 | 2.01 | 2.33 |
| -20 | (- 4) | 300 | 76 | 88 | 33 | 0.24 | 0.94 | 9.12 | 2.30 | 2.67 |
| -15 | (+ 5) | 382 | 96 | 112 | 37 | 0.26 | 1.20 | 10.46 | 2.64 | 3.06 |
| -10 | (+14) | 480 | 121 | 141 | 40 | 0.29 | 1.51 | 12.05 | 3.04 | 3.53 |

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) | 110 | 28 | 32 | 22 | 0.17 | 0.35 | 5.06 | 1.27 | 1.48 |
| -30 | (-22) | 159 | 40 | 46 | 26 | 0.20 | 0.50 | 6.05 | 1.52 | 1.77 |
| -25 | (-13) | 215 | 54 | 63 | 31 | 0.23 | 0.67 | 6.97 | 1.76 | 2.04 |
| -20 | (- 4) | 281 | 71 | 82 | 36 | 0.26 | 0.88 | 7.89 | 1.99 | 2.31 |
| -15 | (+ 5) | 360 | 91 | 105 | 40 | 0.30 | 1.13 | 8.91 | 2.25 | 2.61 |
| -10 | (+14) | 454 | 114 | 133 | 45 | 0.33 | 1.43 | 10.11 | 2.55 | 2.96 |

| 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) | 86 | 22 | 25 | 21 | 0.15 | 0.27 | 4.12 | 1.04 | 1.21 |
| -30 | (-22) | 135 | 34 | 40 | 26 | 0.19 | 0.42 | 5.15 | 1.30 | 1.51 |
| -25 | (-13) | 191 | 48 | 56 | 32 | 0.24 | 0.60 | 6.04 | 1.52 | 1.77 |
| -20 | (- 4) | 257 | 65 | 75 | 38 | 0.28 | 0.81 | 6.85 | 1.73 | 2.01 |
| -15 | (+ 5) | 334 | 84 | 98 | 43 | 0.32 | 1.05 | 7.68 | 1.94 | 2.25 |
| -10 | (+14) | 425 | 107 | 125 | 49 | 0.36 | 1.34 | 8.61 | 2.17 | 2.52 |

| 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) | 158 | 40 | 46 | 27 | 0.20 | 0.49 | 5.78 | 1.46 | 1.69 |
| -30 | (-22) | 216 | 54 | 63 | 32 | 0.23 | 0.68 | 6.75 | 1.70 | 1.98 |
| -25 | (-13) | 288 | 73 | 84 | 37 | 0.26 | 0.90 | 7.80 | 1.97 | 2.29 |
| -20 | (- 4) | 375 | 95 | 110 | 42 | 0.30 | 1.18 | 8.98 | 2.26 | 2.63 |
| -15 | (+ 5) | 479 | 121 | 140 | 47 | 0.33 | 1.51 | 10.32 | 2.60 | 3.02 |
| -10 | (+14) | 600 | 151 | 176 | 51 | 0.36 | 1.89 | 11.88 | 2.99 | 3.48 |

| 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) | 137 | 35 | 40 | 27 | 0.21 | 0.43 | 5.05 | 1.27 | 1.48 |
| -30 | (-22) | 195 | 49 | 57 | 33 | 0.24 | 0.61 | 5.95 | 1.50 | 1.74 |
| -25 | (-13) | 266 | 67 | 78 | 39 | 0.28 | 0.83 | 6.87 | 1.73 | 2.01 |
| -20 | (- 4) | 353 | 89 | 103 | 45 | 0.32 | 1.11 | 7.84 | 1.98 | 2.30 |
| -15 | (+ 5) | 456 | 115 | 134 | 51 | 0.36 | 1.44 | 8.91 | 2.25 | 2.61 |
| -10 | (+14) | 577 | 145 | 169 | 57 | 0.40 | 1.82 | 10.13 | 2.55 | 2.97 |

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) | 116 | 29 | 34 | 27 | 0.21 | 0.36 | 4.27 | 1.08 | 1.25 | |
| -30 (-22) | 171 | 43 | 50 | 33 | 0.24 | 0.54 | 5.21 | 1.31 | 1.53 | |
| -25 (-13) | 241 | 61 | 71 | 40 | 0.28 | 0.76 | 6.08 | 1.53 | 1.78 | |
| -20 (- 4) | 326 | 82 | 95 | 47 | 0.33 | 1.02 | 6.95 | 1.75 | 2.04 | |
| -15 (+ 5) | 427 | 108 | 125 | 54 | 0.39 | 1.35 | 7.85 | 1.98 | 2.30 | |
| -10 (+14) | 547 | 138 | 160 | 62 | 0.44 | 1.72 | 8.84 | 2.23 | 2.59 | |

| 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) | 233 | 59 | 68 | 42 | 0.31 | 0.73 | 5.60 | 1.41 | 1.64 | |
| -30 (-22) | 326 | 82 | 95 | 50 | 0.35 | 1.02 | 6.54 | 1.65 | 1.92 | |
| -25 (-13) | 439 | 111 | 129 | 58 | 0.41 | 1.38 | 7.55 | 1.90 | 2.21 | |
| -20 (- 4) | 574 | 145 | 168 | 66 | 0.47 | 1.80 | 8.67 | 2.18 | 2.54 | |
| -15 (+ 5) | 735 | 185 | 215 | 74 | 0.52 | 2.31 | 9.90 | 2.50 | 2.90 | |
| -10 (+14) | 921 | 232 | 270 | 82 | 0.58 | 2.91 | 11.28 | 2.84 | 3.31 | |

| 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) | 211 | 53 | 62 | 42 | 0.32 | 0.66 | 5.03 | 1.27 | 1.47 | |
| -30 (-22) | 297 | 75 | 87 | 51 | 0.37 | 0.93 | 5.84 | 1.47 | 1.71 | |
| -25 (-13) | 404 | 102 | 118 | 60 | 0.43 | 1.27 | 6.71 | 1.69 | 1.97 | |
| -20 (- 4) | 536 | 135 | 157 | 70 | 0.50 | 1.69 | 7.65 | 1.93 | 2.24 | |
| -15 (+ 5) | 695 | 175 | 204 | 80 | 0.57 | 2.19 | 8.68 | 2.19 | 2.54 | |
| -10 (+14) | 882 | 222 | 259 | 90 | 0.63 | 2.78 | 9.84 | 2.48 | 2.88 | |

| 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) | 193 | 49 | 56 | 43 | 0.31 | 0.60 | 4.52 | 1.14 | 1.32 | |
| -30 (-22) | 268 | 67 | 78 | 51 | 0.37 | 0.84 | 5.25 | 1.32 | 1.54 | |
| -25 (-13) | 367 | 92 | 108 | 61 | 0.44 | 1.15 | 6.01 | 1.51 | 1.76 | |
| -20 (- 4) | 493 | 124 | 144 | 72 | 0.52 | 1.55 | 6.81 | 1.72 | 2.00 | |
| -15 (+ 5) | 647 | 163 | 190 | 84 | 0.60 | 2.04 | 7.69 | 1.94 | 2.25 | |
| -10 (+14) | 832 | 210 | 244 | 96 | 0.68 | 2.63 | 8.65 | 2.18 | 2.54 | |

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) | 372 | 94 | 109 | 69 | 0.49 | 1.16 | 5.39 | 1.36 | 1.58 |
| -30 | (-22) | 497 | 125 | 146 | 79 | 0.56 | 1.56 | 6.25 | 1.57 | 1.83 |
| -25 | (-13) | 634 | 160 | 186 | 89 | 0.62 | 1.99 | 7.12 | 1.79 | 2.09 |
| -20 | (- 4) | 797 | 201 | 234 | 99 | 0.68 | 2.50 | 8.06 | 2.03 | 2.36 |
| -15 | (+ 5) | 1001 | 252 | 293 | 110 | 0.74 | 3.15 | 9.12 | 2.30 | 2.67 |
| -10 | (+14) | 1260 | 318 | 369 | 121 | 0.81 | 3.97 | 10.35 | 2.61 | 3.03 |

| 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) | 331 | 83 | 97 | 68 | 0.49 | 1.04 | 4.87 | 1.23 | 1.43 |
| -30 | (-22) | 469 | 118 | 137 | 82 | 0.58 | 1.47 | 5.70 | 1.44 | 1.67 |
| -25 | (-13) | 615 | 155 | 180 | 95 | 0.66 | 1.93 | 6.49 | 1.64 | 1.90 |
| -20 | (- 4) | 784 | 198 | 230 | 107 | 0.73 | 2.46 | 7.31 | 1.84 | 2.14 |
| -15 | (+ 5) | 989 | 249 | 290 | 120 | 0.80 | 3.11 | 8.21 | 2.07 | 2.41 |
| -10 | (+14) | 1246 | 314 | 365 | 135 | 0.87 | 3.93 | 9.23 | 2.33 | 2.71 |

| 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) | 274 | 69 | 80 | 63 | 0.46 | 0.86 | 4.35 | 1.10 | 1.27 |
| -30 | (-22) | 420 | 106 | 123 | 80 | 0.58 | 1.32 | 5.17 | 1.30 | 1.52 |
| -25 | (-13) | 570 | 144 | 167 | 96 | 0.68 | 1.79 | 5.93 | 1.49 | 1.74 |
| -20 | (- 4) | 739 | 186 | 216 | 111 | 0.76 | 2.32 | 6.67 | 1.68 | 1.95 |
| -15 | (+ 5) | 940 | 237 | 276 | 127 | 0.85 | 2.96 | 7.44 | 1.87 | 2.18 |
| -10 | (+14) | 1189 | 300 | 348 | 143 | 0.93 | 3.75 | 8.29 | 2.09 | 2.43 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|------------------------------|------|--------------------------|
| 1 Base plate | Universal VES | | |
| 2 Tray holder | No | | |
| 3 Connectors | | | |
| 3.1 SUCTION | 6.5 +0.12/-0.08 | [mm] | (0.256" +0.005"/-0.003") |
| 3.1.1 Material | Copper | | |
| 3.1.2 Shape | Slanted 45° up + 49° 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 | 6.5 +0.12/-0.08 | [mm] | (0.256" +0.005"/-0.003") |
| 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 | | |