

COMPRESSOR DEFINITION

| | |
|---------------------------|-----------------|
| Designation | VES A9C |
| Nominal Voltage/Frequency | 230 V 40-150 Hz |
| Engineering Number | 513907013 |

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 pressures/temperature | | | |
| 9.1 Operating (gauge) | 7.7 | [kgf/cm ²] (109 psig) | / °C - °F |
| 9.2 Peak (gauge) | 9.8 | [kgf/cm ²] (139 psig) | / °C - °F |
| 10 Maximum winding temperature | 130 | [°C] | |

B - MECHANICAL DATA

| | | |
|-------------------------------|----------------|----------------------------------|
| 1 Commercial designation | 1/5 | [hp] |
| 2 Displacement | 9.04 | [cm ³] (0.552 cu.in) |
| 2.1 Bore [mm] | 24.000 | |
| 2.2 Stroke [mm] | 20.000 | |
| 3 Lubricant charge | 200 | [ml] (6.76 fl.oz.) |
| 3.1 Lubricants approved | | |
| 3.2 Lubricants type/viscosity | ALQUILB / ISO5 | |
| 4 Weight (with oil charge) | 6 | [kg] (13.23 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 | [A] - Measured according to UL 984 |
| 9 FLA - Full load amperage L/MBP (40/150 Hz) | 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

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) | 137 | 35 | 40 | 24 | 0.21 | 0.43 | 5.79 | 1.46 | 1.70 | |
| -30 (-22) | 182 | 46 | 53 | 27 | 0.24 | 0.57 | 6.68 | 1.68 | 1.96 | |
| -25 (-13) | 237 | 60 | 70 | 31 | 0.28 | 0.74 | 7.53 | 1.90 | 2.21 | |
| -20 (- 4) | 306 | 77 | 90 | 36 | 0.32 | 0.96 | 8.45 | 2.13 | 2.48 | |
| -15 (+ 5) | 389 | 98 | 114 | 41 | 0.35 | 1.23 | 9.55 | 2.41 | 2.80 | |
| -10 (+14) | 489 | 123 | 143 | 45 | 0.38 | 1.54 | 10.93 | 2.75 | 3.20 | |

| 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) | 122 | 31 | 36 | 23 | 0.21 | 0.38 | 5.31 | 1.34 | 1.55 | |
| -30 (-22) | 169 | 43 | 50 | 28 | 0.25 | 0.53 | 5.98 | 1.51 | 1.75 | |
| -25 (-13) | 228 | 57 | 67 | 35 | 0.29 | 0.72 | 6.57 | 1.65 | 1.92 | |
| -20 (- 4) | 299 | 75 | 88 | 41 | 0.34 | 0.94 | 7.18 | 1.81 | 2.10 | |
| -15 (+ 5) | 385 | 97 | 113 | 48 | 0.39 | 1.21 | 7.92 | 2.00 | 2.32 | |
| -10 (+14) | 486 | 122 | 142 | 54 | 0.44 | 1.53 | 8.90 | 2.24 | 2.61 | |

| 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) | 110 | 28 | 32 | 24 | 0.21 | 0.35 | 4.53 | 1.14 | 1.33 | |
| -30 (-22) | 152 | 38 | 45 | 29 | 0.25 | 0.48 | 5.18 | 1.30 | 1.52 | |
| -25 (-13) | 205 | 52 | 60 | 36 | 0.30 | 0.64 | 5.69 | 1.43 | 1.67 | |
| -20 (- 4) | 270 | 68 | 79 | 44 | 0.37 | 0.85 | 6.19 | 1.56 | 1.81 | |
| -15 (+ 5) | 349 | 88 | 102 | 52 | 0.44 | 1.10 | 6.77 | 1.71 | 1.98 | |
| -10 (+14) | 443 | 112 | 130 | 59 | 0.52 | 1.40 | 7.54 | 1.90 | 2.21 | |

| 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) | 161 | 41 | 47 | 28 | 0.24 | 0.50 | 5.87 | 1.48 | 1.72 | |
| -30 (-22) | 217 | 55 | 64 | 33 | 0.28 | 0.68 | 6.68 | 1.68 | 1.96 | |
| -25 (-13) | 287 | 72 | 84 | 38 | 0.32 | 0.90 | 7.57 | 1.91 | 2.22 | |
| -20 (- 4) | 373 | 94 | 109 | 43 | 0.36 | 1.17 | 8.59 | 2.17 | 2.52 | |
| -15 (+ 5) | 478 | 120 | 140 | 49 | 0.40 | 1.50 | 9.80 | 2.47 | 2.87 | |
| -10 (+14) | 603 | 152 | 177 | 54 | 0.44 | 1.90 | 11.24 | 2.83 | 3.29 | |

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) | 160 | 40 | 47 | 29 | 0.27 | 0.50 | 5.47 | 1.38 | 1.60 |
| -30 | (-22) | 212 | 53 | 62 | 35 | 0.31 | 0.67 | 6.13 | 1.55 | 1.80 |
| -25 | (-13) | 278 | 70 | 81 | 41 | 0.35 | 0.87 | 6.79 | 1.71 | 1.99 |
| -20 | (- 4) | 359 | 90 | 105 | 48 | 0.40 | 1.13 | 7.49 | 1.89 | 2.20 |
| -15 | (+ 5) | 458 | 115 | 134 | 55 | 0.44 | 1.44 | 8.30 | 2.09 | 2.43 |
| -10 | (+14) | 575 | 145 | 169 | 62 | 0.49 | 1.82 | 9.26 | 2.33 | 2.71 |

| 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) | 133 | 34 | 39 | 29 | 0.25 | 0.42 | 4.65 | 1.17 | 1.36 |
| -30 | (-22) | 187 | 47 | 55 | 35 | 0.29 | 0.59 | 5.37 | 1.35 | 1.57 |
| -25 | (-13) | 254 | 64 | 74 | 42 | 0.35 | 0.80 | 6.00 | 1.51 | 1.76 |
| -20 | (- 4) | 335 | 84 | 98 | 51 | 0.41 | 1.05 | 6.60 | 1.66 | 1.93 |
| -15 | (+ 5) | 432 | 109 | 127 | 60 | 0.48 | 1.36 | 7.22 | 1.82 | 2.11 |
| -10 | (+14) | 548 | 138 | 161 | 69 | 0.55 | 1.73 | 7.90 | 1.99 | 2.32 |

| 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) | 205 | 52 | 60 | 35 | 0.30 | 0.64 | 5.90 | 1.49 | 1.73 |
| -30 | (-22) | 282 | 71 | 83 | 42 | 0.34 | 0.88 | 6.76 | 1.70 | 1.98 |
| -25 | (-13) | 374 | 94 | 109 | 48 | 0.38 | 1.17 | 7.69 | 1.94 | 2.25 |
| -20 | (- 4) | 482 | 121 | 141 | 55 | 0.43 | 1.51 | 8.73 | 2.20 | 2.56 |
| -15 | (+ 5) | 609 | 154 | 178 | 62 | 0.49 | 1.92 | 9.90 | 2.49 | 2.90 |
| -10 | (+14) | 758 | 191 | 222 | 68 | 0.54 | 2.39 | 11.22 | 2.83 | 3.29 |

| 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) | 193 | 49 | 56 | 35 | 0.29 | 0.60 | 5.50 | 1.38 | 1.61 |
| -30 | (-22) | 265 | 67 | 78 | 43 | 0.35 | 0.83 | 6.18 | 1.56 | 1.81 |
| -25 | (-13) | 353 | 89 | 103 | 51 | 0.41 | 1.11 | 6.90 | 1.74 | 2.02 |
| -20 | (- 4) | 459 | 116 | 134 | 60 | 0.47 | 1.44 | 7.68 | 1.93 | 2.25 |
| -15 | (+ 5) | 586 | 148 | 172 | 68 | 0.54 | 1.84 | 8.55 | 2.15 | 2.50 |
| -10 | (+14) | 736 | 186 | 216 | 77 | 0.61 | 2.32 | 9.53 | 2.40 | 2.79 |

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) | 173 | 44 | 51 | 36 | 0.29 | 0.54 | 4.82 | 1.22 | 1.41 | |
| -30 (-22) | 238 | 60 | 70 | 44 | 0.36 | 0.75 | 5.45 | 1.37 | 1.60 | |
| -25 (-13) | 321 | 81 | 94 | 53 | 0.43 | 1.01 | 6.07 | 1.53 | 1.78 | |
| -20 (- 4) | 423 | 107 | 124 | 63 | 0.50 | 1.33 | 6.71 | 1.69 | 1.97 | |
| -15 (+ 5) | 548 | 138 | 161 | 74 | 0.58 | 1.72 | 7.40 | 1.86 | 2.17 | |
| -10 (+14) | 697 | 176 | 204 | 85 | 0.66 | 2.20 | 8.16 | 2.06 | 2.39 | |

| 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) | 319 | 80 | 93 | 54 | 0.42 | 1.00 | 5.95 | 1.50 | 1.74 | |
| -30 (-22) | 432 | 109 | 127 | 64 | 0.49 | 1.35 | 6.78 | 1.71 | 1.99 | |
| -25 (-13) | 569 | 143 | 167 | 75 | 0.57 | 1.79 | 7.62 | 1.92 | 2.23 | |
| -20 (- 4) | 733 | 185 | 215 | 86 | 0.66 | 2.30 | 8.51 | 2.14 | 2.49 | |
| -15 (+ 5) | 928 | 234 | 272 | 98 | 0.75 | 2.92 | 9.49 | 2.39 | 2.78 | |
| -10 (+14) | 1157 | 292 | 339 | 109 | 0.84 | 3.65 | 10.59 | 2.67 | 3.10 | |

| 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) | 291 | 73 | 85 | 54 | 0.43 | 0.91 | 5.35 | 1.35 | 1.57 | |
| -30 (-22) | 399 | 100 | 117 | 66 | 0.51 | 1.25 | 6.06 | 1.53 | 1.77 | |
| -25 (-13) | 530 | 134 | 155 | 78 | 0.61 | 1.66 | 6.76 | 1.70 | 1.98 | |
| -20 (- 4) | 690 | 174 | 202 | 92 | 0.71 | 2.17 | 7.50 | 1.89 | 2.20 | |
| -15 (+ 5) | 882 | 222 | 258 | 106 | 0.81 | 2.78 | 8.31 | 2.09 | 2.43 | |
| -10 (+14) | 1109 | 280 | 325 | 120 | 0.92 | 3.50 | 9.22 | 2.32 | 2.70 | |

| 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) | 265 | 67 | 78 | 55 | 0.43 | 0.83 | 4.84 | 1.22 | 1.42 | |
| -30 (-22) | 365 | 92 | 107 | 67 | 0.52 | 1.14 | 5.47 | 1.38 | 1.60 | |
| -25 (-13) | 491 | 124 | 144 | 81 | 0.62 | 1.54 | 6.08 | 1.53 | 1.78 | |
| -20 (- 4) | 645 | 163 | 189 | 96 | 0.74 | 2.03 | 6.71 | 1.69 | 1.97 | |
| -15 (+ 5) | 833 | 210 | 244 | 113 | 0.86 | 2.62 | 7.39 | 1.86 | 2.16 | |
| -10 (+14) | 1058 | 267 | 310 | 130 | 0.98 | 3.34 | 8.15 | 2.05 | 2.39 | |

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) | 474 | 119 | 139 | 86 | 0.67 | 1.48 | 5.51 | 1.39 | 1.62 |
| -30 | (-22) | 618 | 156 | 181 | 102 | 0.74 | 1.94 | 6.08 | 1.53 | 1.78 |
| -25 | (-13) | 793 | 200 | 232 | 117 | 0.85 | 2.49 | 6.79 | 1.71 | 1.99 |
| -20 | (- 4) | 1007 | 254 | 295 | 132 | 0.99 | 3.16 | 7.61 | 1.92 | 2.23 |
| -15 | (+ 5) | 1268 | 320 | 372 | 149 | 1.14 | 3.99 | 8.50 | 2.14 | 2.49 |
| -10 | (+14) | 1586 | 400 | 465 | 168 | 1.28 | 5.00 | 9.43 | 2.38 | 2.76 |

| 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) | 444 | 112 | 130 | 90 | 0.69 | 1.39 | 4.94 | 1.25 | 1.45 |
| -30 | (-22) | 582 | 147 | 170 | 106 | 0.79 | 1.82 | 5.48 | 1.38 | 1.61 |
| -25 | (-13) | 750 | 189 | 220 | 122 | 0.93 | 2.35 | 6.15 | 1.55 | 1.80 |
| -20 | (- 4) | 957 | 241 | 280 | 139 | 1.07 | 3.01 | 6.91 | 1.74 | 2.02 |
| -15 | (+ 5) | 1212 | 305 | 355 | 157 | 1.21 | 3.82 | 7.72 | 1.94 | 2.26 |
| -10 | (+14) | 1525 | 384 | 447 | 178 | 1.33 | 4.81 | 8.54 | 2.15 | 2.50 |

| 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) | 385 | 97 | 113 | 87 | 0.67 | 1.21 | 4.44 | 1.12 | 1.30 |
| -30 | (-22) | 525 | 132 | 154 | 104 | 0.80 | 1.65 | 5.03 | 1.27 | 1.47 |
| -25 | (-13) | 695 | 175 | 204 | 121 | 0.95 | 2.18 | 5.72 | 1.44 | 1.67 |
| -20 | (- 4) | 905 | 228 | 265 | 140 | 1.10 | 2.84 | 6.48 | 1.63 | 1.90 |
| -15 | (+ 5) | 1164 | 293 | 341 | 160 | 1.22 | 3.66 | 7.27 | 1.83 | 2.13 |
| -10 | (+14) | 1480 | 373 | 434 | 183 | 1.32 | 4.67 | 8.07 | 2.03 | 2.36 |

F - EXTERNAL CHARACTERISTICS

| | | | |
|-------------------------|------------------------------|------|--------------------------|
| 1 Base plate | European Standard VES | | |
| 2 Tray holder | Yes | | |
| 3 Connectors | | | |
| 3.1 SUCTION | 6.1 +0.10/+0.00 | [mm] | (0.240" +0.004"/+0.000") |
| 3.1.1 Material | Copper | | |
| 3.1.2 Shape | Slanted 45° up + 15° 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 +0.08/-0.08 | [mm] | (0.236" +0.003"/-0.003") |
| 3.3.1 Material | Copper(OD) | | |
| 3.3.2 Shape | Slanted 47° up + 59° to Back | | |
| 3.4 Oil cooler (Copper) | No | [mm] | |
| 3.5 Connector sealing | Rubber Plugs | | |