**Model**
**KLE7.7CFHX**

Sales code:
**106G6803**

## Compressor Data

| | |
|---|---|
| Refrigerant(s) | **R134a / R513A** |
| Refr. charge - tech. limit | **300g / 10.58oz** |
| Weight | **9.60 kg / 21.16lbs** |
| Displacement | **7.70 cm3 / 0.47cu.in** |
| Compressors on pallet | **100** |

## General – Configurations With KLE7.7CFHX

| – | **Conf. 1** | **Conf. 2** |
|---|---|---|
| Motor configuration | CSIR | CSIR |
| Power supply (nominal) | 115-127 V/60 Hz | 115-127 V/60 Hz |
| Number of phases | 1 | 1 |
| Voltage range | 95-140 V | 95-140 V |
| Approvals | UL | UL |
| Starting torque | HST | HST |
| Refrigerant | R134a | R513A |
| Application | LBP+MBP | LBP+MBP |
| Hot gas defrost | OK | OK |
| Long interval pull down | OK | OK |

## Application Notes

- Provision for PE Grounding is located at the PE Stamp on the compressor
- Suctiongas connector and Process connector can be switched (minor loss of cooling capacity)
- Good robustness against liquid intake.
- Ice-cube maker optimization - indirect suction intake.

**Model**
**KLE7.7CFHX**

Sales code:
**106G6803**

## Compressor Design

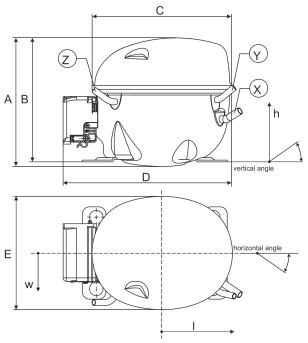
| | | | |
|---|---|---|---|
| Oil type | **POE** | Winding resistance main | **2 Ohm** |
| Oil viscosity | **19,2cSt** | Winding resistance aux | **5.3 Ohm** |
| Oil quantity | **200 cm3 / 6.76fl.oz** | Max. winding temp. | **125 °C** |
| Free gas volume comp. | **1,575 cm3 / 53.26fl.oz** | Max. discharge temp. | **130°C / 266°F** |
| Motor protection | **external** | | |

## Compressor Dimensions

**Housing**

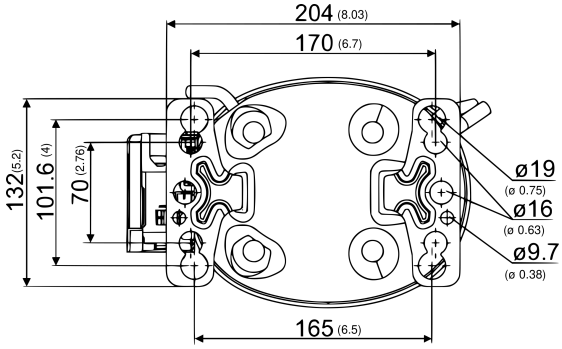
| | |
|---|---|
| A Height | **182mm / 7.17in** |
| B Height | **175mm / 6.89in** |
| C Length shell | **198mm / 7.80in** |
| D Length w. cover | **238mm / 9.37in** |
| E Width | **160mm / 6.30in** |

Find 3D Model here



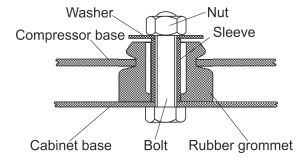

| Connectors | Suction X | Discharge Y | Process Z |
|---|---|---|---|
| Diameter [mm] | øi 8.11–8.29 / 0.32–0.33in | øi 6.41–6.59 / 0.25–0.26in | øi 6.41–6.59 / 0.25–0.26in |
| Material | CU | CU | CU |
| Horizontal angle ±2° | 35° | 13° | 0° |
| Vertical angle ±2° | 30° | 40° | 145° |
| Position l/h/w [mm] | 119/73/59 / 4.69/2.87/2.32in | 117/107/66 / 4.61/4.21/2.60in | -88/101/71 / -3.46/3.98/2.80in |
| Straight tube l. [mm] | 13.5 / 0.53in | 13.5 / 0.53in | 13.5 / 0.53in |

## Mounting Accessories

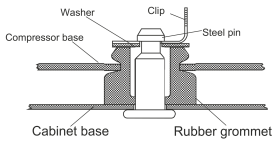



Dimensions in mm [in]

Bolt joint




Snap-on




| | one comp. | multi pack |
|---|---|---|
| Bolt joint \| M6 \| ø16mm | 118-1917 | 118-1918 |
| Bolt joint \| ø1/4" \| ø16mm | 118-1946 | – |
| Bolt joint \| ø1/4" \| ø19mm | 118-1949 | – |
| Snap-on \| ø7,3 \| ø16mm | 118-1947 | 118-1919 |

**Model**
**KLE7.7CFHX** Configuration 1

Sales code:
**106G6803**

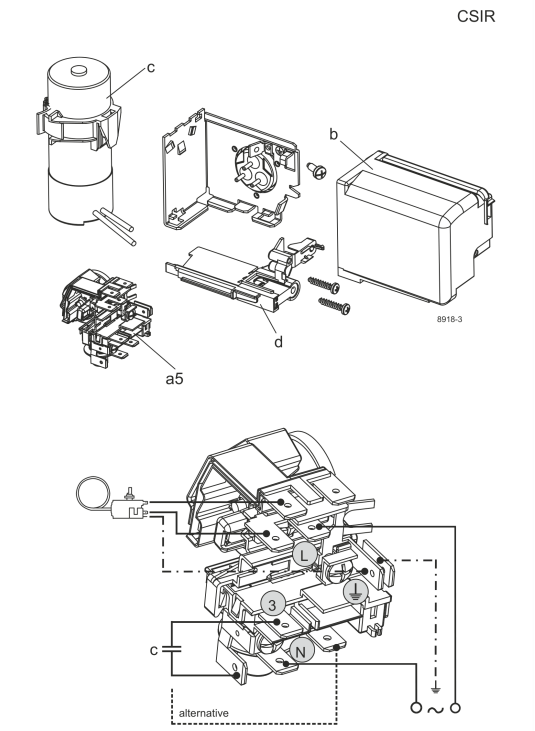
## Configuration

| | |
|---|---|
| Motor configuration | **CSIR** |
| Power supply (nominal) | **115-127 V/60 Hz 1~** |
| Refrigerant | **R134a** |
| Application | **LBP+MBP** |
| Voltage range | **95-140 V** |
| Starting torque | **HST** |
| Approvals | **UL** |
| Starting device type | **relay** |
| Run capacitor | **-/-** |
| Start capacitor | **240 µF** |
| LRA (locked rotor amps / 4s/ U(N)) | **31.1 A** |
| RLA (rated load amps / 1s/ U(N)) | **4.3 A** |
| Cut in current (U(N)) | **31.5 A** |

**Ambient/ machine room temperatures minimum /maximum**
Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

**System Cooling**
fan 3m/s

## Electrical Accessories / Wiring Diagram

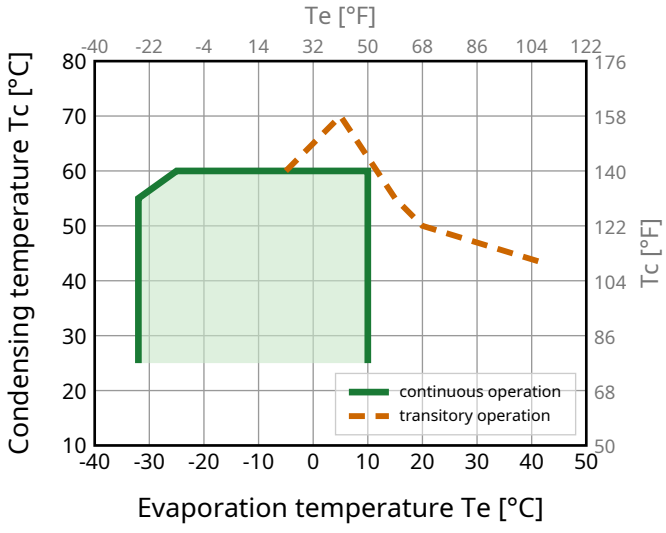


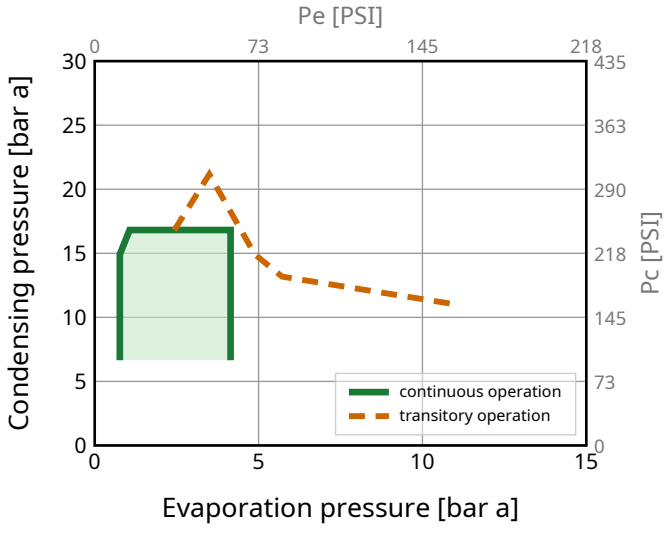

View full size

**Components**
**a5** current relay (T1217/L6-S5) 117U7075
**c** start capacitor (240µF) 117U5002
**b, d** cover + clamp + screws (5VA-compl.) 103N0600

**Alternative components**
**b, d** 100x cover + clamp + screws (5VA) 103N2060
**b, d** cover + clamp + screws (5VA) in bag 103N1060

## Operation Pressure Range



**Model**
**KLE7.7CFHX** Configuration 1

Sales code:
**106G6803**

## Standard Conditions

**R134a**, 120 V/60 Hz, CSIR, fan 3m/s

| pe | pc | RGT | Tliq | Cooling capacity | | | COP | EER | P | I | ṁ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [°C] [°F] | [°C] [°F] | [°C] [°F] | [°C] [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A] | [kg/h] | |
| -23.3 -10 | 54.4 129.9 | 32.2 90 | 32.2 90 | **266** | 909 | 229 | **1.33** | 4.55 | 200 | 2.74 | 5.17 | **ASHRAE LBP** |
| -25 -13 | 55 131 | 32 89.6 | 55 131 | **196** | 668 | 168 | **1.02** | 3.48 | 192 | 2.69 | 4.67 | **CECOMAF LBP** |
| -35 -31 | 40 104 | 20 68 | 40 104 | **133** | 455 | 115 | **0.97** | 3.32 | 137 | 2.38 | 2.92 | **EN12900 LBP** |
| -6.7 20 | 54.4 129.9 | 35 95 | 46.1 115 | **542** | 1849 | 466 | **1.81** | 6.18 | 299 | 3.46 | 11.80 | **ASHRAE MBP** |
| -10 14 | 55 131 | 32 89.6 | 55 131 | **423** | 1442 | 363 | **1.51** | 5.16 | 280 | 3.31 | 10.19 | **CECOMAF MBP** |
| -10 14 | 45 113 | 20 68 | 45 113 | **468** | 1596 | 402 | **1.78** | 6.08 | 262 | 3.18 | 10.91 | **EN12900 MBP** |

## Performance Tables

**R134a**, 120 V/60 Hz, CSIR, fan 3m/s

**pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F**

| pe | | Cooling capacity | | | COP | EER | P | I | ṁ |
|---|---|---|---|---|---|---|---|---|---|
| [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A] | [kg/h] |
| -32 | -26 | **153** | 521 | 131 | **1.04** | 3.54 | 147 | 2.41 | 3.29 |
| -30 | -22 | **172** | 585 | 147 | **1.09** | 3.73 | 157 | 2.46 | 3.70 |
| -20 | -4 | **297** | 1014 | 256 | **1.43** | 4.88 | 208 | 2.79 | 6.44 |
| -10 | 14 | **484** | 1653 | 417 | **1.85** | 6.30 | 262 | 3.18 | 10.58 |
| 0 | 32 | **745** | 2542 | 641 | **2.33** | 7.93 | 320 | 3.64 | 16.43 |
| 10 | 50 | **1090** | 3719 | 937 | **2.85** | 9.72 | 383 | 4.16 | 24.40 |

**pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| -32 | -26 | **127** | 435 | 110 | **0.82** | 2.80 | 155 | 2.48 | 3.03 |
| -30 | -22 | **145** | 494 | 125 | **0.88** | 2.99 | 166 | 2.54 | 3.45 |
| -20 | -4 | **258** | 880 | 222 | **1.17** | 4.00 | 220 | 2.87 | 6.17 |
| -10 | 14 | **423** | 1442 | 363 | **1.51** | 5.16 | 280 | 3.31 | 10.19 |
| 0 | 32 | **650** | 2219 | 559 | **1.88** | 6.42 | 345 | 3.84 | 15.86 |
| 10 | 50 | **953** | 3251 | 819 | **2.28** | 7.79 | 418 | 4.45 | 23.61 |

**Model**
**KLE7.7CFHX** Configuration 2

Sales code:
**106G6803**

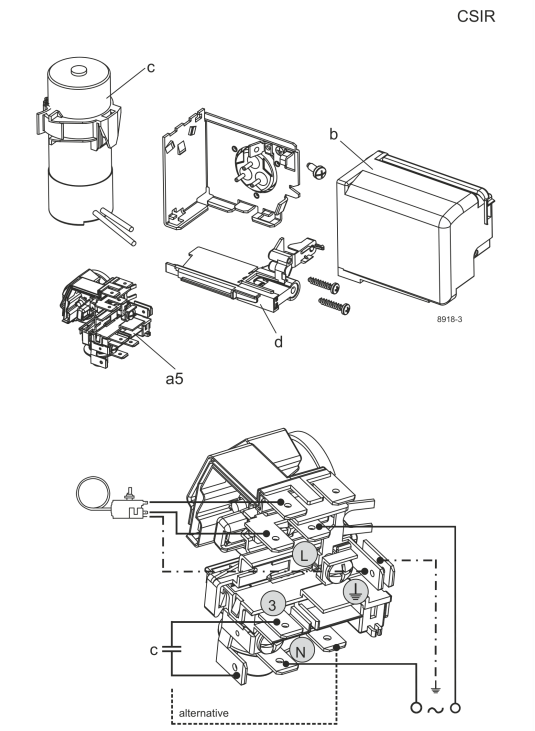
## Configuration

| | |
|---|---|
| Motor configuration | **CSIR** |
| Power supply (nominal) | **115-127 V/60 Hz 1~** |
| Refrigerant | **R513A** |
| Application | **LBP+MBP** |
| Voltage range | **95-140 V** |
| Starting torque | **HST** |
| Approvals | **UL** |
| Starting device type | **relay** |
| Run capacitor | **-/-** |
| Start capacitor | **240 µF** |
| LRA (locked rotor amps / 4s/ U(N)) | **31.1 A** |
| RLA (rated load amps / 1s/ U(N)) | **4.3 A** |
| Cut in current (U(N)) | **31.5 A** |

**Ambient/ machine room temperatures minimum /maximum**
Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

**System Cooling**
fan 3m/s

## Electrical Accessories / Wiring Diagram

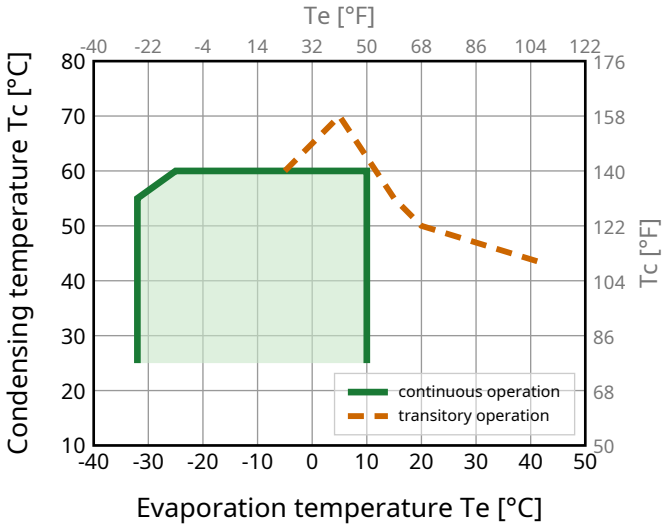


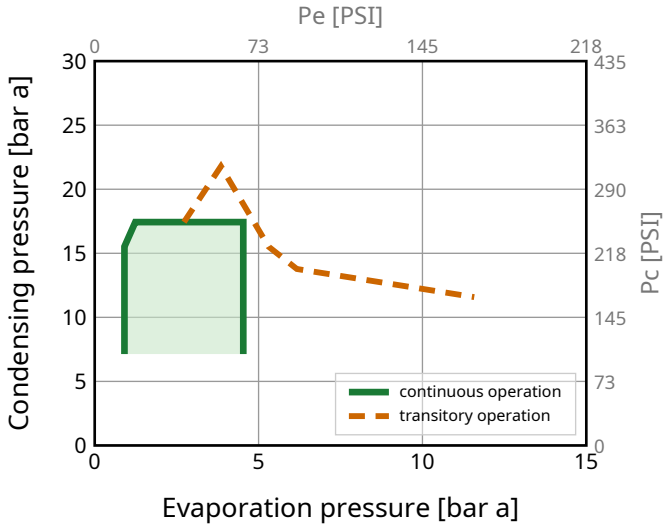

View full size

**Components**
**a5** current relay (T1217/L6-S5) 117U7075
**c** start capacitor (240µF) 117U5002
**b, d** cover + clamp + screws (5VA-compl.) 103N0600

**Alternative components**
**b, d** 100x cover + clamp + screws (5VA) 103N2060
**b, d** cover + clamp + screws (5VA) in bag 103N1060

## Operation Pressure Range



**Model**
**KLE7.7CFHX** Configuration 2

Sales code:
**106G6803**

## Standard Conditions

**R513A**, 120 V/60 Hz, CSIR, fan 3m/s

| pe | pc | RGT | Tliq | Cooling capacity | | | COP | EER | P | I | ṁ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [°C] [°F] | [°C] [°F] | [°C] [°F] | [°C] [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A] | [kg/h] | |
| -23.3 -10 | 54.4 129.9 | 32.2 90 | 32.2 90 | **294** | 1003 | 253 | **1.35** | 4.60 | 218 | 2.86 | 6.43 | **ASHRAE LBP** |
| -25 -13 | 55 131 | 32 89.6 | 55 131 | **211** | 719 | 181 | **1.00** | 3.41 | 211 | 2.82 | 5.84 | **CECOMAF LBP** |
| -35 -31 | 40 104 | 20 68 | 40 104 | **147** | 500 | 126 | **0.93** | 3.16 | 158 | 2.48 | 3.69 | **EN12900 LBP** |
| -6.7 20 | 54.4 129.9 | 35 95 | 46.1 115 | **567** | 1935 | 488 | **1.79** | 6.12 | 316 | 3.60 | 14.14 | **ASHRAE MBP** |
| -10 14 | 55 131 | 32 89.6 | 55 131 | **438** | 1493 | 376 | **1.47** | 5.02 | 297 | 3.45 | 12.28 | **CECOMAF MBP** |
| -10 14 | 45 113 | 20 68 | 45 113 | **485** | 1656 | 417 | **1.72** | 5.87 | 282 | 3.33 | 13.14 | **EN12900 MBP** |

## Performance Tables

**R513A**, 120 V/60 Hz, CSIR, fan 3m/s

**pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F**

| pe | | Cooling capacity | | | COP | EER | P | I | ṁ |
|---|---|---|---|---|---|---|---|---|---|
| [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A] | [kg/h] |
| -32 | -26 | **169** | 577 | 145 | **1.02** | 3.49 | 165 | 2.51 | 4.17 |
| -30 | -22 | **189** | 646 | 163 | **1.08** | 3.69 | 175 | 2.57 | 4.67 |
| -20 | -4 | **320** | 1092 | 275 | **1.41** | 4.82 | 226 | 2.92 | 7.94 |
| -10 | 14 | **509** | 1738 | 438 | **1.81** | 6.16 | 282 | 3.33 | 12.75 |
| 0 | 32 | **770** | 2628 | 662 | **2.25** | 7.68 | 342 | 3.81 | 19.51 |
| 10 | 50 | **1116** | 3807 | 960 | **2.73** | 9.32 | 408 | 4.37 | 28.74 |

**pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| -32 | -26 | **139** | 475 | 120 | **0.80** | 2.73 | 174 | 2.58 | 3.84 |
| -30 | -22 | **158** | 539 | 136 | **0.86** | 2.92 | 184 | 2.64 | 4.36 |
| -20 | -4 | **274** | 935 | 236 | **1.15** | 3.92 | 238 | 3.01 | 7.62 |
| -10 | 14 | **438** | 1493 | 376 | **1.47** | 5.02 | 297 | 3.45 | 12.28 |
| 0 | 32 | **662** | 2259 | 569 | **1.83** | 6.25 | 362 | 3.97 | 18.83 |
| 10 | 50 | **961** | 3278 | 826 | **2.22** | 7.58 | 432 | 4.59 | 27.83 |