

Model  
KLE8.6GFHX

Sales code:  
106G6913

Compressor Data

|                            |                      |
|----------------------------|----------------------|
| Refrigerant(s)             | R134a / R513A        |
| Refr. charge - tech. limit | 300g / 10.58oz       |
| Weight                     | 9.40 kg / 20.72lbs   |
| Displacement               | 8.60 cm3 / 0.52cu.in |
| Compressors on pallet      | 100                  |



General – Configurations With KLE8.6GFHX

| -                       | Conf. 1     | Conf. 2     |
|-------------------------|-------------|-------------|
| Motor configuration     | CSIR        | CSIR        |
| Power supply (nominal)  | 115 V/60 Hz | 115 V/60 Hz |
| Number of phases        | 1           | 1           |
| Voltage range           | 95-140 V    | 103-127 V   |
| Approvals               | UL          | UL          |
| Refrigerant             | R134a       | R513A       |
| Application             | LBP+MBP+HBP | LBP+MBP+HBP |
| Hot gas defrost         | OK          | OK          |
| Long interval pull down | OK          | OK          |

Application Notes

- Electrical equipment is included and pre-assembled to compressor.
- 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.

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### Compressor Design

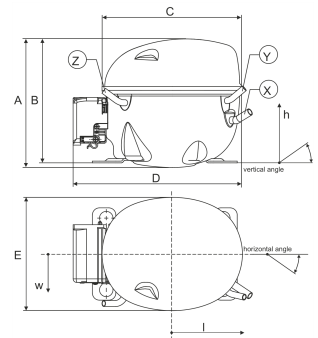
|                       |                               |                         |                      |
|-----------------------|-------------------------------|-------------------------|----------------------|
| Oil type              | <b>POE</b>                    | Winding resistance main | <b>1.970 Ohm</b>     |
| Oil viscosity         | <b>19,2cSt</b>                | Winding resistance aux  | <b>4.25 Ohm</b>      |
| Oil quantity          | <b>200 / 6.76fl.oz</b>        | Max. winding temp.      | <b>125 °C</b>        |
| Free gas volume comp. | <b>1,575 cm3 / 53.26fl.oz</b> | Max. discharge temp.    | <b>130°C / 266°F</b> |
| Motor protection      | <b>external</b>               |                         |                      |

### Compressor Dimensions

#### Housing

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

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| 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



#### Bolt joint



#### Snap-on



Dimensions in mm [in]

|                            | 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

KLE8.6GFHX

Configuration 1

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## Configuration

|                                  |                       |
|----------------------------------|-----------------------|
| Motor configuration              | <b>CSIR</b>           |
| Power supply (nominal)           | <b>115 V/60 Hz 1~</b> |
| Refrigerant                      | <b>R134a</b>          |
| Application                      | <b>LBP+MBP+HBP</b>    |
| Voltage range                    | <b>95-140 V</b>       |
| Approvals                        | <b>UL</b>             |
| Starting device type             | <b>relay</b>          |
| Run capacitor                    | <b>-/-</b>            |
| Start capacitor                  | <b>240 µF</b>         |
| RLA (rated load amps / 1s/ U(N)) | <b>-/-A</b>           |

## 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


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## Components (already pre-assembled)

a5 current relay (T1141/L6-S6) 117U7078

c start capacitor (240µF) 117U5002

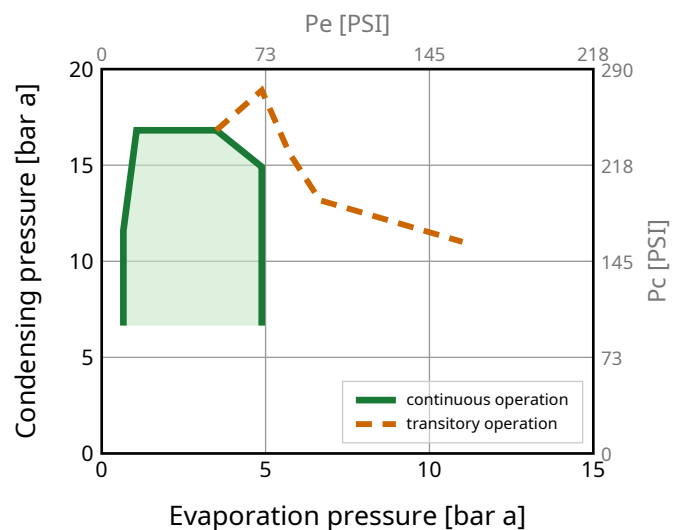
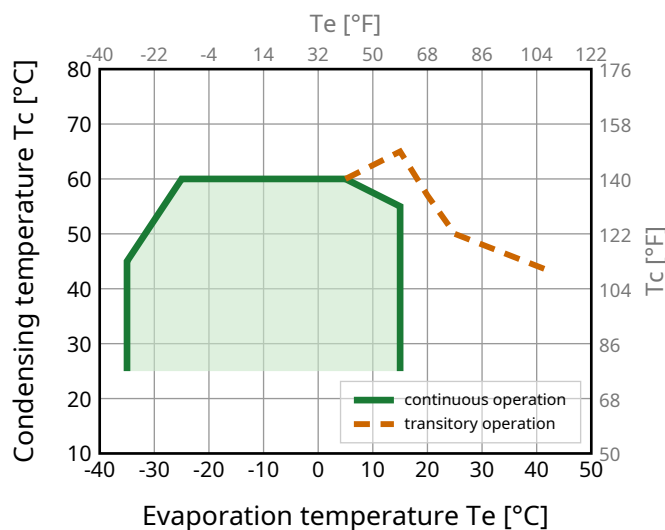
b, d cover + clamp + screws (5VA-compl.) 103N0600

## Alternative components

b, d 100x cover + clamp + screws (5VA) 103N2060

b, d cover + clamp + screws (5VA) in bag 103N1060

## Operation Pressure Range



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Configuration 1

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Standard Conditions

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

| pe           | pc           | RGT          | Tliq         | Cooling capacity |         |          | COP   | EER      | P   | I    | m      |             |
|--------------|--------------|--------------|--------------|------------------|---------|----------|-------|----------|-----|------|--------|-------------|
| [°C]<br>[°F] | [°C]<br>[°F] | [°C]<br>[°F] | [°C]<br>[°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A]  | [kg/h] |             |
| -25<br>-13   | 55<br>131    | 32<br>89.6   | 55<br>131    | 225              | 767     | 193      | 1.04  | 3.56     | 215 | 2.74 | 5.36   | CECOMAF LBP |
| -35<br>-31   | 40<br>104    | 20<br>68     | 40<br>104    | 152              | 520     | 131      | 1.04  | 3.55     | 147 | 2.13 | 3.33   | EN12900 LBP |
| -10<br>14    | 55<br>131    | 32<br>89.6   | 55<br>131    | 480              | 1637    | 413      | 1.49  | 5.07     | 322 | 3.60 | 11.57  | CECOMAF MBP |
| -10<br>14    | 45<br>113    | 20<br>68     | 45<br>113    | 527              | 1798    | 453      | 1.77  | 6.03     | 298 | 3.40 | 12.29  | EN12900 MBP |
| 5<br>41      | 55<br>131    | 32<br>89.6   | 55<br>131    | 882              | 3009    | 758      | 2.04  | 6.97     | 431 | 4.46 | 21.66  | CECOMAF HBP |
| 5<br>41      | 50<br>122    | 20<br>68     | 50<br>122    | 900              | 3073    | 774      | 2.22  | 7.57     | 406 | 4.25 | 22.59  | EN12900 HBP |

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    | m      |
|------|------|------------------|---------|----------|-------|----------|-----|------|--------|
| [°C] | [°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A]  | [kg/h] |
| -35  | -31  | 140              | 479     | 121      | 0.94  | 3.19     | 150 | 2.16 | 3.02   |
| -30  | -22  | 198              | 674     | 170      | 1.11  | 3.80     | 177 | 2.41 | 4.26   |
| -20  | -4   | 343              | 1171    | 295      | 1.45  | 4.94     | 237 | 2.92 | 7.44   |
| -10  | 14   | 546              | 1862    | 469      | 1.83  | 6.25     | 298 | 3.40 | 11.92  |
| 0    | 32   | 824              | 2811    | 709      | 2.33  | 7.95     | 354 | 3.84 | 18.18  |
| 10   | 50   | 1196             | 4081    | 1029     | 3.02  | 10.29    | 397 | 4.19 | 26.78  |
| 15   | 59   | 1423             | 4857    | 1224     | 3.46  | 11.81    | 411 | 4.32 | 32.16  |

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

|     |     |      |      |      |      |      |     |      |       |
|-----|-----|------|------|------|------|------|-----|------|-------|
| -35 | -31 | 105  | 360  | 91   | 0.67 | 2.30 | 157 | 2.23 | 2.50  |
| -30 | -22 | 162  | 551  | 139  | 0.88 | 2.99 | 184 | 2.48 | 3.84  |
| -20 | -4  | 297  | 1014 | 256  | 1.19 | 4.07 | 249 | 3.02 | 7.11  |
| -10 | 14  | 480  | 1637 | 413  | 1.49 | 5.07 | 322 | 3.60 | 11.57 |
| 0   | 32  | 728  | 2483 | 626  | 1.84 | 6.26 | 396 | 4.18 | 17.74 |
| 10  | 50  | 1059 | 3615 | 911  | 2.28 | 7.79 | 464 | 4.74 | 26.25 |
| 15  | 59  | 1262 | 4308 | 1086 | 2.56 | 8.74 | 493 | 4.99 | 31.60 |

Model

KLE8.6GFHX

Configuration 2

Sales code:

106G6913

Configuration

|                                  |                       |
|----------------------------------|-----------------------|
| Motor configuration              | <b>CSIR</b>           |
| Power supply (nominal)           | <b>115 V/60 Hz 1~</b> |
| Refrigerant                      | <b>R513A</b>          |
| Application                      | <b>LBP+MBP+HBP</b>    |
| Voltage range                    | <b>103-127 V</b>      |
| Approvals                        | <b>UL</b>             |
| Starting device type             | <b>relay</b>          |
| Run capacitor                    | <b>-/-</b>            |
| Start capacitor                  | <b>240 µF</b>         |
| RLA (rated load amps / 1s/ U(N)) | <b>-/-A</b>           |

Ambient/ machine room temperatures minimum /maximum

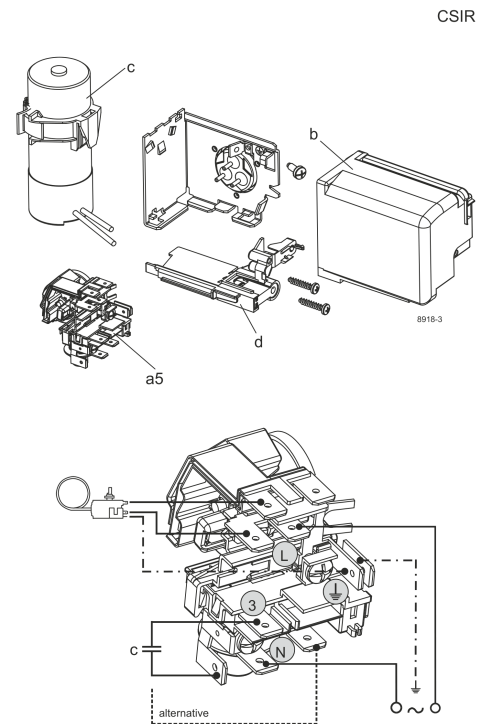
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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Components (already pre-assembled)

**a5** current relay (T1141/L6-S6) 117U7078

**c** start capacitor (240µF) 117U5002

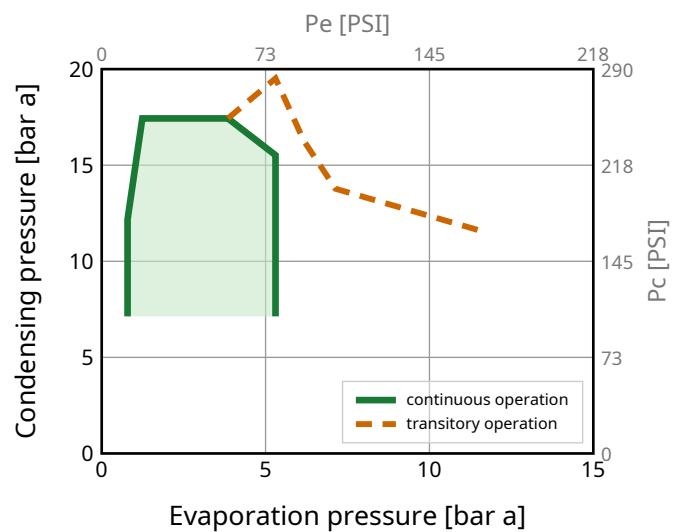
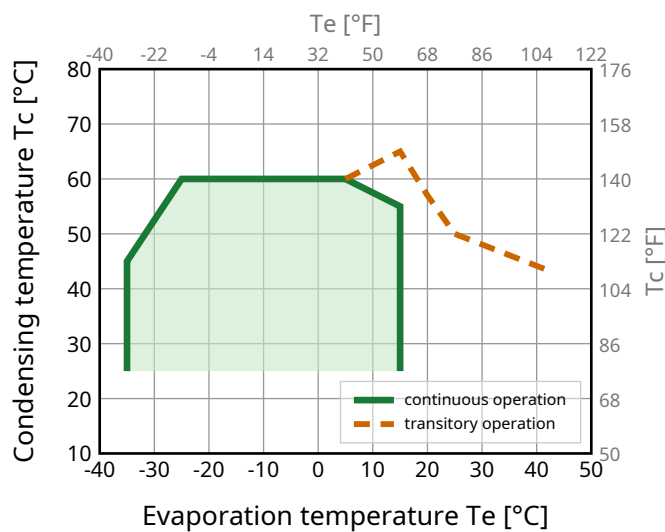
**b, d** cover + clamp + screws (5VA-compl.) 103N0600

Alternative components

**b, d** 100x cover + clamp + screws (5VA) 103N2060

**b, d** cover + clamp + screws (5VA) in bag 103N1060

Operation Pressure Range



Model

KLE8.6GFHX

Configuration 2

Sales code:

106G6913

Standard Conditions

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

| pe           | pc           | RGT          | Tliq         | Cooling capacity |         |          | COP   | EER      | P   | I    | m      |             |
|--------------|--------------|--------------|--------------|------------------|---------|----------|-------|----------|-----|------|--------|-------------|
| [°C]<br>[°F] | [°C]<br>[°F] | [°C]<br>[°F] | [°C]<br>[°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A]  | [kg/h] |             |
| -25<br>-13   | 55<br>131    | 32<br>89.6   | 55<br>131    | 243              | 828     | 209      | 1.04  | 3.54     | 234 | 2.89 | 6.72   | CECOMAF LBP |
| -35<br>-31   | 40<br>104    | 20<br>68     | 40<br>104    | 171              | 583     | 147      | 1.05  | 3.59     | 162 | 2.28 | 4.29   | EN12900 LBP |
| -10<br>14    | 55<br>131    | 32<br>89.6   | 55<br>131    | 497              | 1696    | 428      | 1.45  | 4.94     | 344 | 3.76 | 13.95  | CECOMAF MBP |
| -10<br>14    | 45<br>113    | 20<br>68     | 45<br>113    | 548              | 1868    | 471      | 1.72  | 5.88     | 318 | 3.56 | 14.82  | EN12900 MBP |
| 5<br>41      | 55<br>131    | 32<br>89.6   | 55<br>131    | 892              | 3045    | 767      | 1.97  | 6.71     | 454 | 4.65 | 25.59  | CECOMAF HBP |
| 5<br>41      | 50<br>122    | 20<br>68     | 50<br>122    | 906              | 3091    | 779      | 2.12  | 7.25     | 426 | 4.42 | 26.71  | EN12900 HBP |

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    | m      |
|------|------|------------------|---------|----------|-------|----------|-----|------|--------|
| [°C] | [°F] | [W]              | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [W] | [A]  | [kg/h] |
| -35  | -31  | 160              | 545     | 137      | 0.96  | 3.27     | 167 | 2.32 | 3.93   |
| -30  | -22  | 219              | 747     | 188      | 1.13  | 3.85     | 194 | 2.56 | 5.40   |
| -20  | -4   | 369              | 1258    | 317      | 1.45  | 4.93     | 255 | 3.06 | 9.15   |
| -10  | 14   | 574              | 1960    | 494      | 1.81  | 6.17     | 318 | 3.56 | 14.38  |
| 0    | 32   | 854              | 2914    | 734      | 2.28  | 7.79     | 374 | 4.00 | 21.63  |
| 10   | 50   | 1225             | 4178    | 1053     | 2.95  | 10.08    | 415 | 4.33 | 31.54  |
| 15   | 59   | 1450             | 4946    | 1247     | 3.40  | 11.59    | 427 | 4.45 | 37.73  |

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

|     |     |      |      |      |      |      |     |      |       |
|-----|-----|------|------|------|------|------|-----|------|-------|
| -35 | -31 | 122  | 416  | 105  | 0.69 | 2.37 | 175 | 2.40 | 3.36  |
| -30 | -22 | 179  | 610  | 154  | 0.88 | 3.01 | 203 | 2.63 | 4.94  |
| -20 | -4  | 316  | 1076 | 271  | 1.17 | 4.01 | 269 | 3.17 | 8.77  |
| -10 | 14  | 497  | 1696 | 428  | 1.45 | 4.94 | 344 | 3.76 | 13.95 |
| 0   | 32  | 741  | 2530 | 638  | 1.77 | 6.04 | 419 | 4.36 | 21.08 |
| 10  | 50  | 1066 | 3636 | 916  | 2.19 | 7.49 | 486 | 4.92 | 30.87 |
| 15  | 59  | 1263 | 4310 | 1086 | 2.46 | 8.40 | 513 | 5.17 | 37.03 |