

Model  
KLF5.6CNDS

Sales code:  
106h2603

Compressor Data

|                            |                      |
|----------------------------|----------------------|
| Refrigerant(s)             | R290                 |
| Refr. charge - tech. limit | 200g / 7.05oz        |
| Weight                     | 9.40 kg / 20.72lbs   |
| Displacement               | 5.60 cm3 / 0.34cu.in |
| Compressors on pallet      | 100                  |



General – Configurations With KLF5.6CNDS

|                         |                 |
|-------------------------|-----------------|
| -                       | Conf. 1         |
| Motor configuration     | CSIR            |
| Power supply (nominal)  | 220-240 V/50 Hz |
| Number of phases        | 1               |
| Voltage range           | 198-254 V       |
| Approvals               | VDE, CCC        |
| Starting torque         | HST             |
| Refrigerant             | R290            |
| Application             | LBP+MBP         |
| Hot gas defrost         | OK              |
| Long interval pull down | OK              |

Application Notes

- Provision for PE Grounding is located at the PE Stamp on the compressor
- Very good robustness against liquid intake.
- Ice-cube maker optimization - indirect suction intake.

Model  
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### Compressor Design

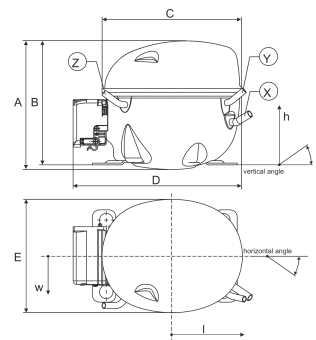
|                       |                                    |                         |               |
|-----------------------|------------------------------------|-------------------------|---------------|
| Oil type              | POE                                | Winding resistance main | 10.7 Ohm      |
| Oil viscosity         | 9,7cSt                             | Winding resistance aux  | 17 Ohm        |
| Oil quantity          | 165 / 5.58fl.oz                    | Max. winding temp.      | 125 °C        |
| Free gas volume comp. | 1,605 cm <sup>3</sup> / 54.27fl.oz | Max. discharge temp.    | 130°C / 266°F |
| Motor protection      | external                           |                         |               |

### Compressor Dimensions

#### Housing

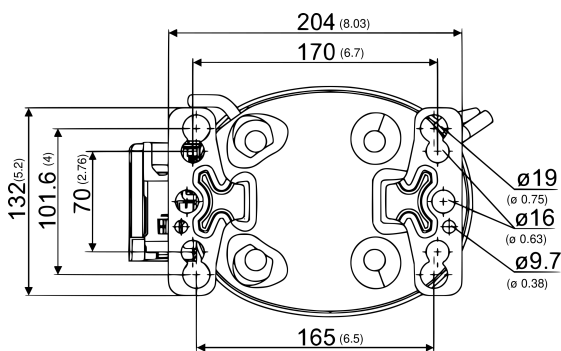
|                   |                |
|-------------------|----------------|
| A Height          | 182mm / 7.17in |
| B Height          | 175mm / 6.89in |
| C Length shell    | 198mm / 7.80in |
| D Length w. cover | 238mm / 9.37in |
| E Width           | 160mm / 6.30in |

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| Connectors            | Suction X                    | Discharge Y                   | Process Z                      |
|-----------------------|------------------------------|-------------------------------|--------------------------------|
| Diameter [mm]         | øi 8.11–8.29 / 0.32–0.33in   | øi 6.11–6.29 / 0.24–0.25in    | øi 6.11–6.29 / 0.24–0.25in     |
| 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                  |

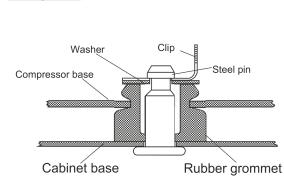
### Mounting Accessories



#### 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   |

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Configuration 1

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Configuration

|                                    |                           |
|------------------------------------|---------------------------|
| Motor configuration                | <b>CSIR</b>               |
| Power supply (nominal)             | <b>220-240 V/50 Hz 1~</b> |
| Refrigerant                        | <b>R290</b>               |
| Application                        | <b>LBP+MBP</b>            |
| Voltage range                      | <b>198-254 V</b>          |
| Starting torque                    | <b>HST</b>                |
| Approvals                          | <b>VDE, CCC</b>           |
| Starting device type               | <b>relay</b>              |
| Run capacitor                      | <b>-/-</b>                |
| Start capacitor                    | <b>80 µF</b>              |
| LRA (locked rotor amps / 4s/ U(N)) | <b>11.4 A</b>             |
| RLA (rated load amps / 1s/ U(N))   | <b>1.6 A</b>              |
| Cut in current (U(N))              | <b>10.7 A</b>             |

**Ambient/ machine room temperatures minimum /maximum**

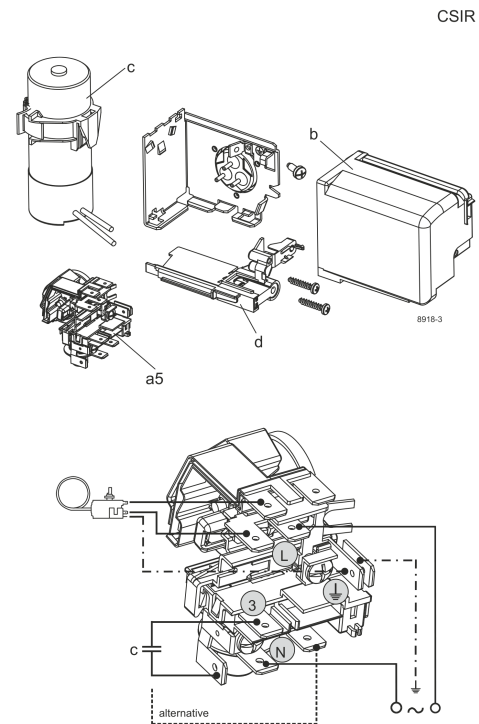
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

**System Cooling**

fan 3m/s

Electrical Accessories / Wiring Diagram



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**Components**

**a5** current relay (T0089/L6-S2) 117U7070

**c** start capacitor (80µF, 6.3mm) 117U5001

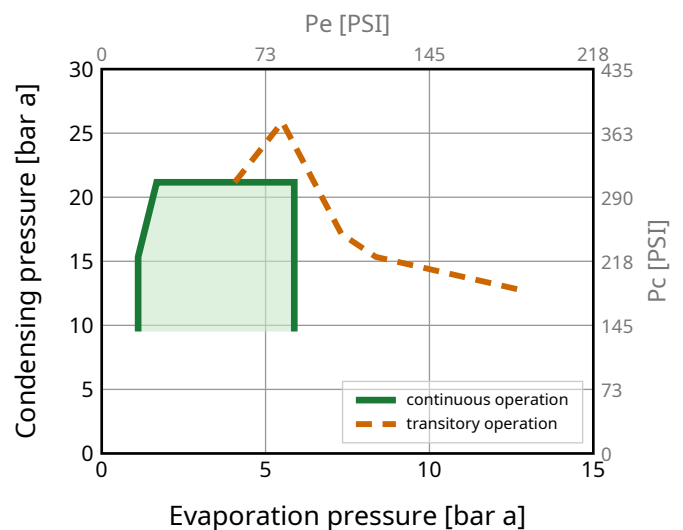
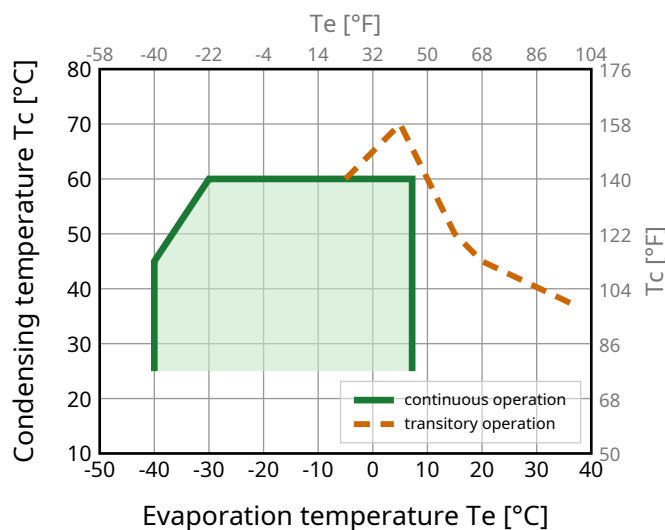
**b, d** cover + clamp + screws (5VA-compl.) 103N0600

**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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Standard Conditions

R290, 220 V/50 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] |             |
| -23.3<br>-10 | 54.4<br>129.9 | 32.2<br>90   | 32.2<br>90   | 266              | 906     | 228      | 1.51  | 5.17     | 175 | 1.21 | 2.70   | ASHRAE LBP  |
| -25<br>-13   | 55<br>131     | 32<br>89.6   | 55<br>131    | 197              | 671     | 169      | 1.16  | 3.96     | 169 | 1.19 | 2.46   | CECOMAF LBP |
| -35<br>-31   | 40<br>104     | 20<br>68     | 40<br>104    | 144              | 491     | 124      | 1.18  | 4.02     | 122 | 1.06 | 1.65   | EN12900 LBP |
| -6.7<br>20   | 54.4<br>129.9 | 35<br>95     | 46.1<br>115  | 477              | 1629    | 411      | 2.02  | 6.90     | 236 | 1.42 | 5.47   | ASHRAE MBP  |
| -10<br>14    | 55<br>131     | 32<br>89.6   | 55<br>131    | 378              | 1291    | 326      | 1.68  | 5.72     | 226 | 1.38 | 4.81   | CECOMAF MBP |
| -10<br>14    | 45<br>113     | 20<br>68     | 45<br>113    | 420              | 1434    | 362      | 2.04  | 6.97     | 206 | 1.30 | 5.17   | EN12900 MBP |

Performance Tables

R290, 220 V/50 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] |
| -40  | -40  | 109              | 371     | 93       | 0.95  | 3.23     | 115 | 1.05 | 1.22   |
| -30  | -22  | 184              | 628     | 158      | 1.27  | 4.34     | 145 | 1.12 | 2.08   |
| -20  | -4   | 290              | 990     | 249      | 1.65  | 5.61     | 176 | 1.21 | 3.30   |
| -10  | 14   | 437              | 1491    | 376      | 2.12  | 7.24     | 206 | 1.30 | 5.02   |
| 0    | 32   | 635              | 2167    | 546      | 2.77  | 9.43     | 230 | 1.39 | 7.39   |
| 7.2  | 45   | 815              | 2782    | 701      | 3.38  | 11.54    | 241 | 1.43 | 9.59   |

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

|     |     |     |      |     |      |      |     |      |      |
|-----|-----|-----|------|-----|------|------|-----|------|------|
| -40 | -40 | 73  | 250  | 63  | 0.64 | 2.18 | 115 | 1.05 | 0.91 |
| -30 | -22 | 151 | 514  | 130 | 1.00 | 3.42 | 150 | 1.13 | 1.88 |
| -20 | -4  | 249 | 850  | 214 | 1.32 | 4.51 | 188 | 1.25 | 3.13 |
| -10 | 14  | 378 | 1291 | 326 | 1.68 | 5.72 | 226 | 1.38 | 4.81 |
| 0   | 32  | 550 | 1875 | 473 | 2.12 | 7.24 | 259 | 1.50 | 7.09 |
| 7.2 | 45  | 704 | 2402 | 605 | 2.54 | 8.65 | 278 | 1.57 | 9.20 |