

Model  
KLF7.7CNH

Sales code:  
106H3812

Compressor Data

|                            |                      |
|----------------------------|----------------------|
| Refrigerant(s)             | R290                 |
| Refr. charge - tech. limit | 200g / 7.05oz        |
| Weight                     | 9.70 kg / 21.38lbs   |
| Displacement               | 7.70 cm3 / 0.47cu.in |
| Compressors on pallet      | 100                  |



General – Configurations With KLF7.7CNH

|                         |                 |
|-------------------------|-----------------|
| -                       | Conf. 1         |
| Motor configuration     | CSIR            |
| Power supply (nominal)  | 115-127 V/60 Hz |
| Number of phases        | 1               |
| Voltage range           | 95-140 V        |
| Approvals               | UL              |
| Starting torque         | HST             |
| Refrigerant             | R290            |
| Application             | LBP+MBP         |
| Hot gas defrost         | OK              |
| Long interval pull down | 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
- Compressor comes on a wooden pallet

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### Compressor Design

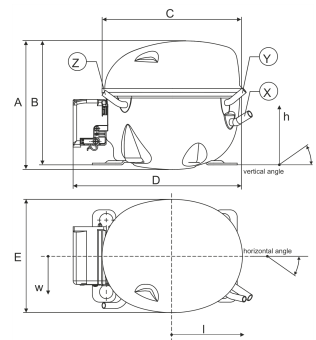
|                       |                                    |                         |               |
|-----------------------|------------------------------------|-------------------------|---------------|
| Oil type              | POE                                | Winding resistance main | 1.4 Ohm       |
| Oil viscosity         | 19,2cSt                            | Winding resistance aux  | 5.9 Ohm       |
| Oil quantity          | 170 / 5.75fl.oz                    | Max. winding temp.      | 125 °C        |
| Free gas volume comp. | 1,575 cm <sup>3</sup> / 53.26fl.oz | Max. discharge temp.    | 130°C / 266°F |
| Motor protection      | external                           |                         |               |

### Compressor Dimensions

#### Housing

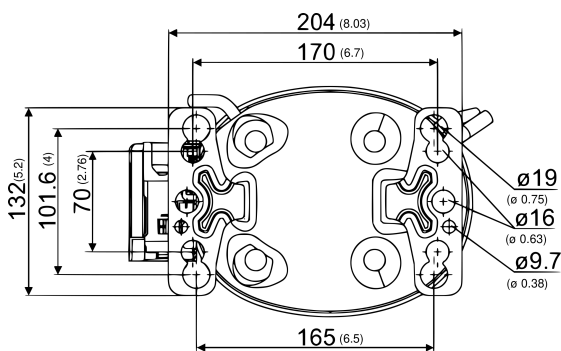
|                   |                |
|-------------------|----------------|
| A Height          | 182mm / 7.17in |
| B Height          | 175mm / 6.89in |
| C Length shell    | 198mm / 7.80in |
| D Length w. cover | 238mm / 9.37in |
| E Width           | 160mm / 6.30in |

[Find 3D Model here](#)

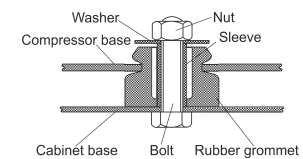


| Connectors            | Suction X                    | Discharge Y                   | Process Z                      |
|-----------------------|------------------------------|-------------------------------|--------------------------------|
| Diameter [mm]         | øi 8.11–8.29 / 0.32–0.33in   |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

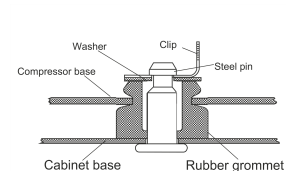
### Mounting Accessories



#### 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>115-127 V/60 Hz 1~</b> |
| Refrigerant                        | <b>R290</b>               |
| Application                        | <b>LBP+MBP</b>            |
| Voltage range                      | <b>95-140 V</b>           |
| Starting torque                    | <b>HST</b>                |
| Approvals                          | <b>UL</b>                 |
| Starting device type               | <b>relay</b>              |
| Run capacitor                      | <b>-/-</b>                |
| Start capacitor                    | <b>240 µF</b>             |
| LRA (locked rotor amps / 4s/ U(N)) | <b>35.6 A</b>             |
| RLA (rated load amps / 1s/ U(N))   | <b>4.9 A</b>              |

### Ambient/ machine room temperatures minimum /maximum

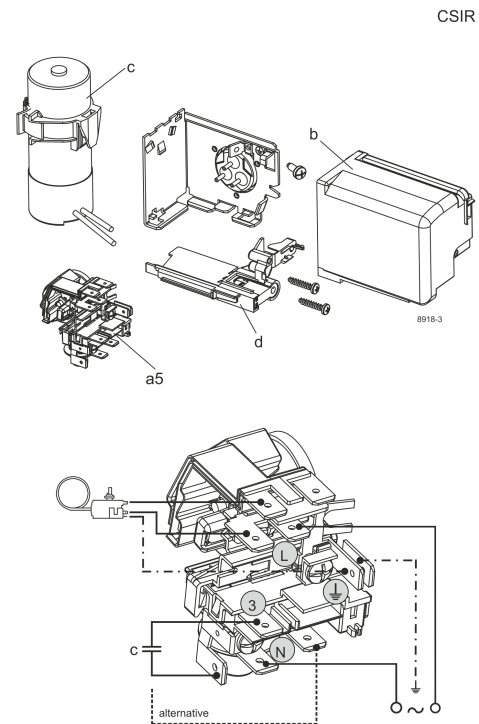
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

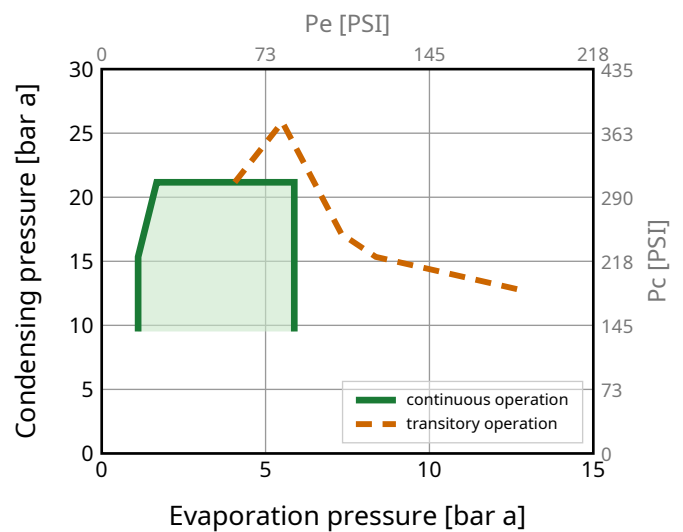
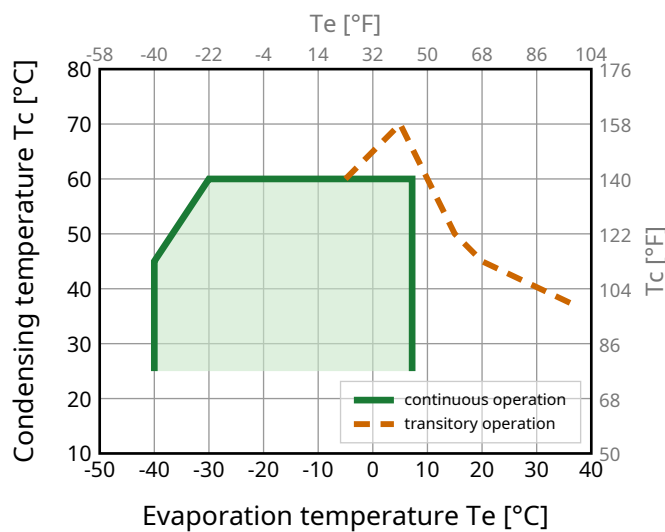
**b, d** cover + clamp + screws (5VA-compl.) 103N0600

### 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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Standard Conditions

R290, 115 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] |             |
| -23.3<br>-10 | 54.4<br>129.9 | 32.2<br>90   | 32.2<br>90   | 478              | 1630    | 411      | 1.63  | 5.55     | 294 | 3.44 | 4.85   | ASHRAE LBP  |
| -25<br>-13   | 55<br>131     | 32<br>89.6   | 55<br>131    | 357              | 1217    | 307      | 1.26  | 4.31     | 282 | 3.36 | 4.47   | CECOMAF LBP |
| -35<br>-31   | 40<br>104     | 20<br>68     | 40<br>104    | 268              | 913     | 230      | 1.23  | 4.20     | 217 | 2.94 | 3.07   | EN12900 LBP |
| -6.7<br>20   | 54.4<br>129.9 | 35<br>95     | 46.1<br>115  | 842              | 2873    | 724      | 2.06  | 7.02     | 409 | 4.31 | 9.64   | ASHRAE MBP  |
| -10<br>14    | 55<br>131     | 32<br>89.6   | 55<br>131    | 668              | 2279    | 574      | 1.72  | 5.85     | 389 | 4.15 | 8.49   | CECOMAF MBP |
| -10<br>14    | 45<br>113     | 20<br>68     | 45<br>113    | 751              | 2564    | 646      | 2.09  | 7.12     | 360 | 3.92 | 9.25   | EN12900 MBP |

Performance Tables

R290, 115 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] |
| -40  | -40  | 203              | 693     | 175      | 1.03  | 3.51     | 197 | 2.84 | 2.29   |
| -30  | -22  | 335              | 1142    | 288      | 1.34  | 4.59     | 249 | 3.13 | 3.78   |
| -20  | -4   | 524              | 1787    | 450      | 1.71  | 5.85     | 306 | 3.52 | 5.96   |
| -10  | 14   | 781              | 2665    | 672      | 2.17  | 7.40     | 360 | 3.92 | 8.97   |
| 0    | 32   | 1118             | 3816    | 962      | 2.76  | 9.43     | 405 | 4.27 | 13.01  |
| 7.2  | 45   | 1417             | 4834    | 1219     | 3.32  | 11.32    | 427 | 4.45 | 16.67  |

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

|     |     |      |      |      |      |      |     |      |       |
|-----|-----|------|------|------|------|------|-----|------|-------|
| -40 | -40 | 176  | 600  | 151  | 0.95 | 3.24 | 185 | 2.76 | 2.19  |
| -30 | -22 | 284  | 968  | 244  | 1.15 | 3.91 | 247 | 3.13 | 3.54  |
| -20 | -4  | 444  | 1515 | 382  | 1.40 | 4.77 | 318 | 3.61 | 5.59  |
| -10 | 14  | 668  | 2279 | 574  | 1.72 | 5.85 | 389 | 4.15 | 8.49  |
| 0   | 32  | 967  | 3298 | 831  | 2.13 | 7.26 | 454 | 4.67 | 12.46 |
| 7.2 | 45  | 1234 | 4211 | 1061 | 2.50 | 8.54 | 493 | 4.99 | 16.12 |