# Technical Data Compressor

SECOP

**Model**

| Designation | **KLF6.6CNH** | **115-127V/60Hz 1~** | Sales code: | **106H3710** |
|---|---|---|---|---|

**Compressor design**

| | | | |
|---|---|---|---|
| Oil type | Polyolester | Refrigerant(s) | **R290** |
| Oil viscosity | 10,4cSt | Displacement | 6,6cm³ / 0,4cu.in |
| Oil quantity | 174cm³ / 5,9fl.oz | Compressors on pallet | 100 |
| Refr. charge - tech. limit | 200g / 7,1oz | | |
| Free gas volume comp. | 1580cm³ / 53,4fl.oz | | |
| Weight | 9,5kg / 20,9lbs | | |
| Motor protection | external | | |
| Winding resistance main | 2Ω (at 25°C) | | |
| Winding resistance aux | 5,3Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 130°C / 266°F | | |


**General - Configurations with KLF6.6CNH**

| | **Conf. 1** |
|---|---|
| Motorconfiguration | CSIR |
| Power supply (nominal) | 115-127V/60Hz |
| Number of phases | 1 |
| Voltage range | 95-140V |
| Approvals | UL, CCC |
| Starting torque | HST |
| Note | Electrical equipment is included and pre-assembled to compressor. |

**Applications with KLF6.6CNH**

| | **Conf. 1** |
|---|---|
| Refrigerant | R290 |
| Application | LBP+MBP |
| System cooling | fan 3m/s |
| Hot gas defrost | OK |
| Long interval pull down | OK |

**Electrical data - Configurations with KLF6.6CNH**

| | **Conf. 1** |
|---|---|
| Starting device type | relay |
| Run capacitor | -/- |
| Start capacitor | 240µF |
| LRA (locked rotor amps / 4s/ $U_{(N)}$) | 31,1A |
| RLA (rated load amps / 1s/ $U_{(N)}$) | 4,3A |
| Cut in current ($U_{(N)}$) | 27,8A |

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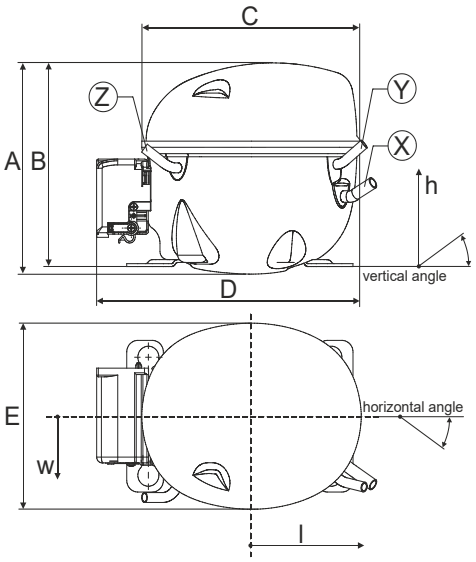
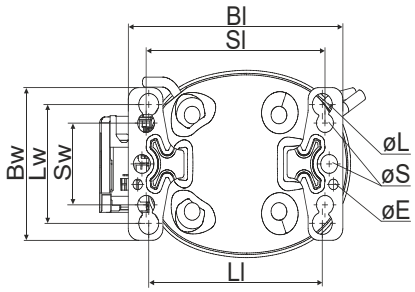
## Compressor dimensions

| | | |
|---|---|---|
| **Housing** | A Height | 182mm / 7,17in |
| | B Height | 175mm / 6,89in |
| | C Length shell | 198mm / 7,8in |
| | D Length w. cover | 238mm / 9,37in |
| | E Width | 160mm / 6,3in |

| **Connectors** | | **Suction X** | **Discharge Y** | **Process Z** |
|---|---|---|---|---|
| Diameter | [mm] | øi 8,11-8,29 | øi 6,41-6,59 | øi 6,41-6,59 |
| (i:inside, o:outside) | [in] | øi 0,32-0,33 | øi 0,25-0,26 | øi 0,25-0,26 |
| Material | | copper | copper | copper |
| Horizontal angle | ±2° | 35° | 13° | 0° |
| Vertical angle | ±2° | 30° | 40° | 145° |
| Position l/h/w | [mm] | 119/73/59 | 117/107/66 | -88/101/71 |
| | [in] | 4,7/2,9/2,3 | 4,6/4,2/2,6 | -3,5/4/2,8 |
| Straight tube l. | [mm] | 14 | 14 | 14 |
| | [in] | 0,5 | 0,5 | 0,5 |




## Compressor fixation

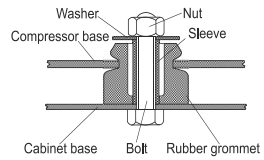



| Baseplate | [mm] | [inch] |
|---|---|---|
| Bl | 204 | 8.03 |
| Bw | 132 | 5.2 |
| øE | ø 9.7 | ø 0.38 |

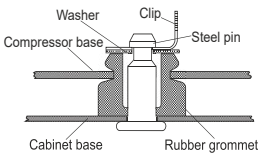
| Large holes | [mm] | [inch] |
|---|---|---|
| Ll | 165 | 6.5 |
| Lw | 101.6 | 4 |
| øL | ø 19 | ø 0.75 |

| Small holes | [mm] | [inch] |
|---|---|---|
| Sl | 170 | 6.7 |
| Sw | 70 | 2.76 |
| øS | ø 16 | ø 0.63 |

Bolt joint




Snap-on




| **Mounting accessories** | 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 |

## Application notes

Operation possible until tilted up to 3 degrees

Provision for PE Grounding is located at the PE Stamp on the compressor

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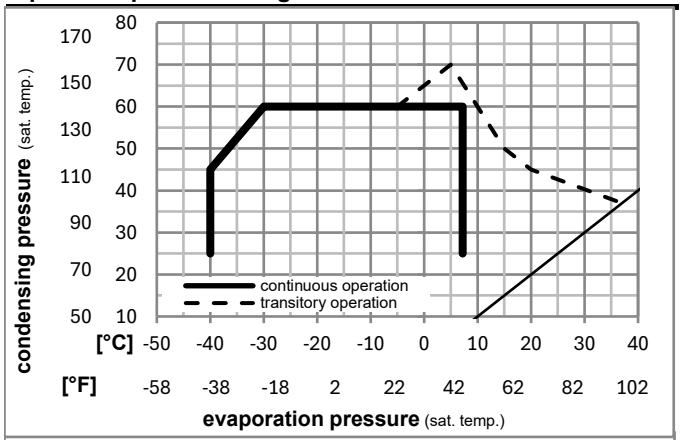
**Configuration**

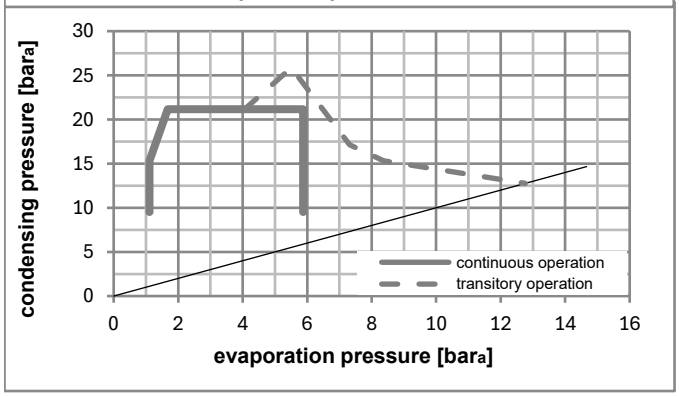
| | |
|---|---|
| Motorconfiguration | CSIR |
| Power supply (nominal) | 115-127V/60Hz 1~ |
| Refrigerant | R290 |
| Application | LBP+MBP |
| Voltage range | 95-140V |
| Starting torque | HST |
| Approvals | UL |
| | CCC |

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

| | |
|---|---|
| Ambient temperature range: | 10 - 43°C / 50 - 110°F |
| Machine room temperature range: | 10 - 48°C / 50 - 119°F |
| **Compressor cooling:** | fan 3m/s |

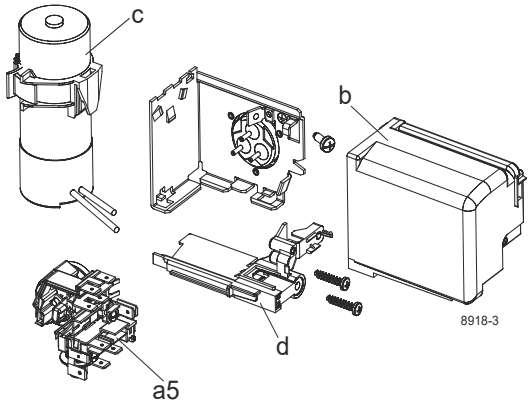
**Operation pressure range**

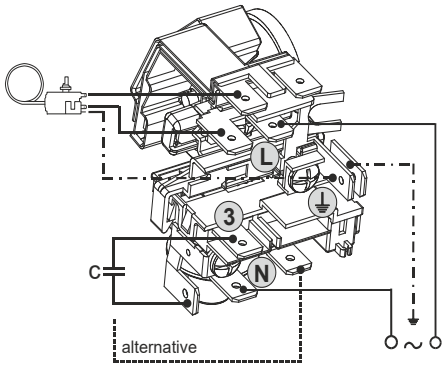



**Electrical accessories / wiring diagram**

**CSIR**




Components (already pre-assembled)

| | | |
|---|---|---|
| a5 | current relay (T1141/L6-S6) | 117U7076 |
| c | start capacitor (240µF) | 117U5002 |
| . | cable clamp | 16058100 |
| b | cover terminal board | 10636401 |
| . | screw uni en iso 4757 | 10641201 |
| . | screw - uni6954 | 10636000 |

Alternative comp. (already pre-assembled)

| | | |
|---|---|---|
| . | screw - uni6954 | 10636200 |

**Model**

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**Optimization + standard conditions** R290, 115V/60Hz, CSIR, fan 3m/s, UL, CCC

| | Evaporating pressure (saturation temperature) pe | Condensing pressure (saturation temperature) pc | Return gas temp. RGT | Liquid temp. Tliq | Cooling capacity [W] | Cooling capacity [Btu/h] | Cooling capacity [kcal/h] | COP [W/W] | EER [Btu/Wh] | EER [kcal/Wh] | Power consumption P1 [W] | Current consumption I [A] | Ref. mass flow ṁ [kg/h] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [°C] | -23 | 54 | 32 | 32 | 396,9 | 1355 | 341,6 | 1,61 | 5,51 | 1,39 | 246,0 | 3,18 | 4,02 | **ASHRAE LBP** |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 297,2 | 1015 | 255,8 | 1,26 | 4,30 | 1,08 | 236,1 | 3,13 | 3,70 | **cecomaf LBP** |
| [°F] | -13 | 131 | 90 | 131 | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 224,4 | 766 | 193,1 | 1,20 | 4,11 | 1,04 | 186,5 | 2,89 | 2,56 | **EN12900 LBP** |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | |
| [°C] | -7 | 54 | 35 | 46 | 717,6 | 2451 | 617,6 | 2,08 | 7,09 | 1,79 | 345,8 | 3,84 | 8,19 | **ASHRAE MBP** |
| [°F] | 20 | 130 | 95 | 115 | | | | | | | | | | |
| [°C] | -10 | 55 | 32 | 55 | 567,9 | 1940 | 488,8 | 1,73 | 5,90 | 1,49 | 328,5 | 3,72 | 7,18 | **cecomaf MBP** |
| [°F] | 14 | 131 | 90 | 131 | | | | | | | | | | |
| [°C] | -10 | 45 | 20 | 45 | 639,3 | 2183 | 550,2 | 2,06 | 7,02 | 1,77 | 311,0 | 3,60 | 7,85 | **EN12900 MBP** |
| [°F] | 14 | 113 | 68 | 113 | | | | | | | | | | |

**Performance tables** R290, 115V/60Hz, CSIR, fan 3m/s, UL, CCC

| | pe | | Cooling capacity | | | COP | EER | | P1 | I | m |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] |
| [°C / °F] | -40 | -40 | 161,8 | 553 | 139,2 | 0,99 | 3,37 | 0,85 | 163,8 | 2,80 | 1,81 |
| cond. pressure | -34 | -30 | 220,5 | 753 | 189,8 | 1,17 | 4,00 | 1,01 | 188,3 | 2,89 | 2,47 |
| pc= 45/113 | -23 | -10 | 381,3 | 1302 | 328,2 | 1,56 | 5,33 | 1,34 | 244,5 | 3,18 | 4,31 |
| return gas temp. | -15 | 5 | 546,0 | 1865 | 469,9 | 1,90 | 6,49 | 1,64 | 287,3 | 3,44 | 6,21 |
| RGT= 32/90 | -4 | 25 | 834,7 | 2851 | 718,3 | 2,48 | 8,48 | 2,14 | 336,2 | 3,77 | 9,62 |
| liquid temp | 0 | 32 | 956,4 | 3266 | 823,1 | 2,74 | 9,35 | 2,36 | 349,3 | 3,87 | 11,09 |
| Tliq= 45/113 | 7,2 | 45 | 1213,8 | 4145 | 1044,6 | 3,32 | 11,34 | 2,86 | 365,7 | 3,99 | 14,26 |
| [°C / °F] | -40 | -40 | 139,9 | 478 | 120,4 | 0,92 | 3,14 | 0,79 | 152,3 | 2,74 | 1,73 |
| cond. pressure | -34 | -30 | 186,9 | 638 | 160,9 | 1,04 | 3,54 | 0,89 | 180,6 | 2,84 | 2,31 |
| pc= 55/131 | -23 | -10 | 321,1 | 1097 | 276,3 | 1,30 | 4,45 | 1,12 | 246,4 | 3,19 | 4,00 |
| return gas temp | -15 | 5 | 463,1 | 1582 | 398,6 | 1,55 | 5,30 | 1,34 | 298,4 | 3,52 | 5,82 |
| RGT= 32/90 | -4 | 25 | 717,9 | 2452 | 617,9 | 1,98 | 6,77 | 1,71 | 362,3 | 3,97 | 9,16 |
| liquid temp | 0 | 32 | 826,9 | 2824 | 711,6 | 2,17 | 7,40 | 1,87 | 381,3 | 4,11 | 10,62 |
| Tliq= 55/131 | 7,2 | 45 | 1059,1 | 3617 | 911,5 | 2,58 | 8,83 | 2,22 | 409,7 | 4,33 | 13,80 |