

Model

| | | | | |
|-------------|-------------------|------------------|-------------|-----------------|
| Designation | KLF7.7CNHS | 115-127V/60Hz 1~ | Sales code: | 106H3803 |
|-------------|-------------------|------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---|-----------------------|--------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R290 |
| Oil viscosity | 19,2cSt | Displacement | 7,7cm ³ / 0,47cu.in |
| Oil quantity | 162cm ³ / 5,5fl.oz | Compressors on pallet | 100 |
| Refr. charge - tech. limit | 200g / 7,1oz | | |
| Free gas volume comp. | 1575cm ³ / 53,3fl.oz | | |
| Weight | 9,7kg / 21,4lbs | | |
| Motor protection | external | | |
| Winding resistance main | 1,4Ω (at 25°C) | | |
| Winding resistance aux | 5,9Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 130°C / 266°F | | |
| Additional note | Very good robustness against liquid intake. Ice-cube maker optimization - indirect suction intake. | | |



General - Configurations with KLF7.7CNHS

| | |
|------------------------|----------------|
| | Conf. 1 |
| Motorconfiguration | CSIR |
| Power supply (nominal) | 115-127V/60Hz |
| Number of phases | 1 |
| Voltage range | 95-140V |
| Approvals | UL |
| Starting torque | HST |
| Note | - / - |

Applications with KLF7.7CNHS

| | |
|-------------------------|----------------|
| | 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 KLF7.7CNHS

| | |
|------------------------------------|----------------|
| | Conf. 1 |
| Starting device type | relay |
| Run capacitor | -/- |
| Start capacitor | 240μF |
| LRA (locked rotor amps / 4s/ U(N)) | 35,6A |
| RLA (rated load amps / 1s/ U(N)) | 4,9A |
| Cut in current (U(N)) | |

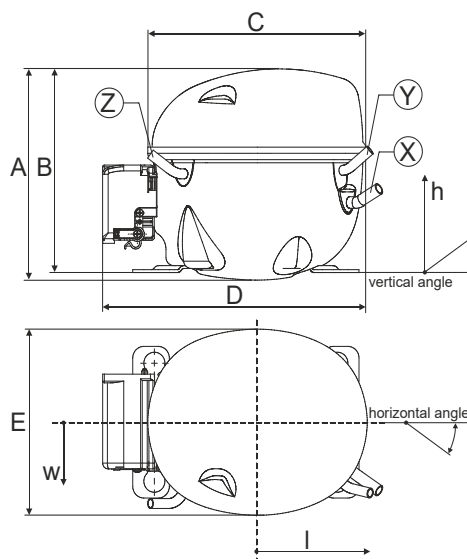
Model

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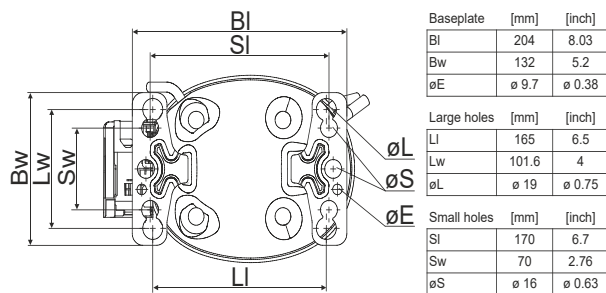
Compressor dimensions

| | | |
|----------------|-------------------|----------------|
| 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 |

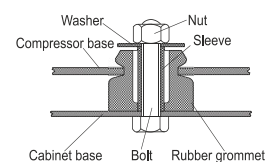
| Connectors | | Suction | Discharge | Process |
|-----------------------|------|--------------|--------------|--------------|
| | | X | Y | Z |
| Diameter | [mm] | øi 8,11-8,29 | øi 6,41-6,59 | øi 6,41-6,59 |
| (i:inside, o:outside) | [in] | øi 0,32-0,33 | øi 0,25-0,26 | øi 0,25-0,26 |
| Material | | 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 |



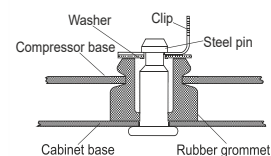
Compressor fixation



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

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

Compressor comes on a wooden pallet

Model

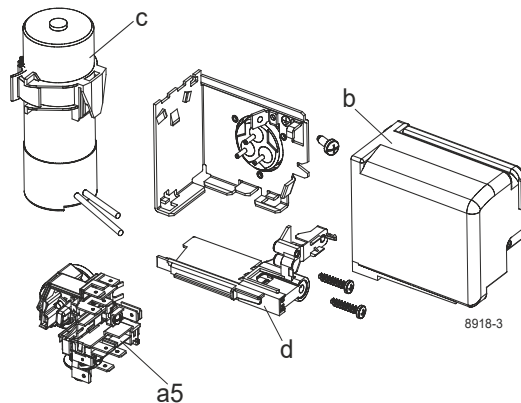
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Configuration

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

Electrical accessories / wiring diagram

CSIR

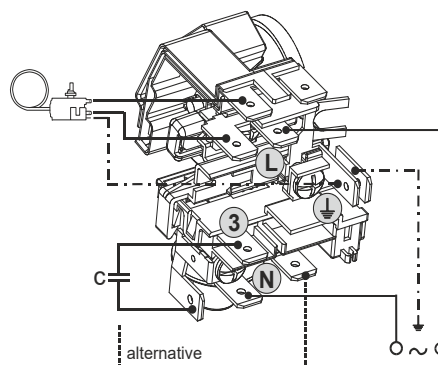


Ambient/ machine room temperatures minimum /maximum

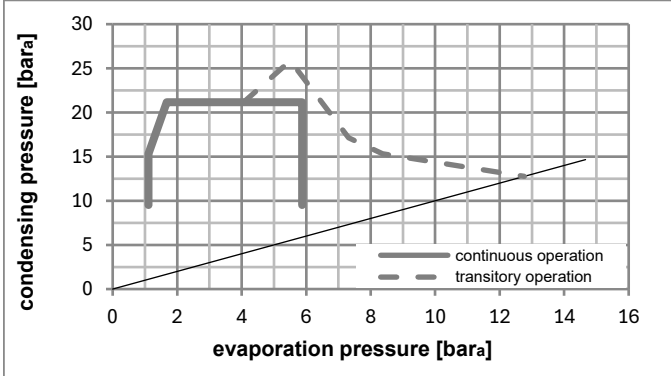
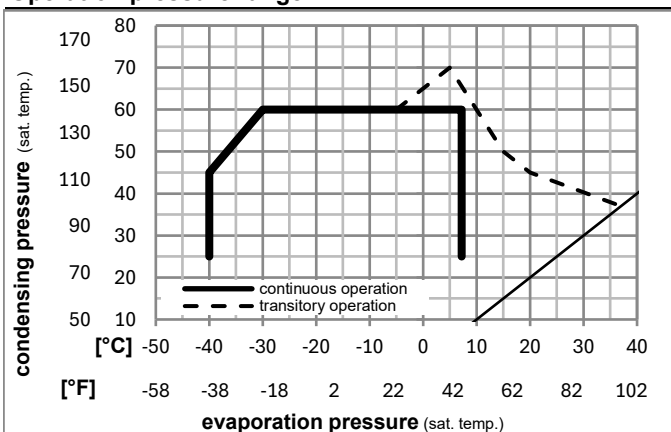
Ambient temperature range: 10 - 43°C / 50 - 110°F

Machine room temperature range: 10 - 48°C / 50 - 119°F

Compressor cooling: fan 3m/s



Operation pressure range



Components

| | | |
|------|------------------------------------|----------|
| a5 | current relay (T1141/L6-S6) | 117U7078 |
| c | start capacitor (240µF) | 117U5002 |
| b, d | cover + clamp + screws(5VA) in bag | 103N1060 |

Alternative components

| | | |
|------|------------------------------------|----------|
| b, d | 100x cover + clamp + screws(5VA) | 103N2060 |
| b, d | cover + clamp + screws(5VA-compl.) | 103N0600 |

Model

Designation **KLF7.7CNHS 115-127V/60Hz** Conf. 1 Sales code: **106H3803**

Optimization + standard conditions

R290, 115V/60Hz, CSIR, fan 3m/s, UL

| | Evaporating pressure (saturation temperature) | | | | Cooling capacity | | | COP | EER | P1 | Power consumption | | ASHRAE | |
|--|---|------|------|------|------------------|---------|----------|-------|----------|-----------|-------------------|------|--------|-------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | | | | I | m | | |
| | [°C] | [°F] | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | |
| | -23 | 54 | 32 | 32 | 442,5 | 1511 | 380,8 | 1,49 | 5,10 | 1,28 | 296,6 | 3,46 | 4,48 | ASHRAE LBP |
| | -10 | 130 | 90 | 90 | | | | | | | | | | |
| | -25 | 55 | 32 | 55 | 333,5 | 1139 | 287,0 | 1,16 | 3,98 | 1,00 | 286,5 | 3,39 | 4,15 | cecomaf LBP |
| | -13 | 131 | 90 | 131 | | | | | | | | | | |
| | -35 | 40 | 20 | 40 | 256,7 | 877 | 220,9 | 1,24 | 4,22 | 1,06 | 207,7 | 2,89 | 2,93 | EN12900 LBP |
| | -31 | 104 | 68 | 104 | | | | | | | | | | |
| | -7 | 54 | 35 | 46 | 785,5 | 2683 | 676,0 | 1,95 | 6,64 | 1,67 | 403,8 | 4,26 | 8,96 | ASHRAE MBP |
| | 20 | 130 | 95 | 115 | | | | | | | | | | |
| | -10 | 55 | 32 | 55 | 624,0 | 2131 | 537,0 | 1,61 | 5,51 | 1,39 | 386,5 | 4,13 | 7,89 | cecomaf MBP |
| | 14 | 131 | 90 | 131 | | | | | | | | | | |
| | -10 | 45 | 20 | 45 | 719,5 | 2457 | 619,2 | 1,97 | 6,74 | 1,70 | 364,5 | 3,96 | 8,83 | EN12900 MBP |
| | 14 | 113 | 68 | 113 | | | | | | | | | | |

Performance tables

R290, 115V/60Hz, CSIR, fan 3m/s, UL

| | pe | | Cooling capacity | | | COP | EER | P1 | I | m | |
|------------------|------|------|------------------|---------|----------|------|-------|------|-------|------|-------|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | | | | | | |
| [°C / °F] | -40 | -40 | 174,5 | 596 | 150,1 | 1,00 | 3,43 | 0,86 | 173,9 | 2,69 | 1,95 |
| cond. pressure | -34 | -30 | 246,5 | 842 | 212,1 | 1,16 | 3,97 | 1,00 | 212,0 | 2,91 | 2,76 |
| pc= 45/113 | -23 | -10 | 432,0 | 1475 | 371,8 | 1,51 | 5,15 | 1,30 | 286,4 | 3,39 | 4,88 |
| return gas temp. | -15 | 5 | 616,3 | 2105 | 530,4 | 1,83 | 6,24 | 1,57 | 337,4 | 3,76 | 7,01 |
| RGT= 32/90 | -4 | 25 | 936,7 | 3199 | 806,1 | 2,38 | 8,14 | 2,05 | 393,1 | 4,18 | 10,80 |
| liquid temp | 0 | 32 | 1071,9 | 3661 | 922,5 | 2,63 | 8,97 | 2,26 | 408,1 | 4,30 | 12,43 |
| Tliq= 45/113 | 7,2 | 45 | 1358,9 | 4641 | 1169,5 | 3,17 | 10,84 | 2,73 | 428,2 | 4,46 | 15,97 |
| [°C / °F] | -40 | -40 | 154,6 | 528 | 133,0 | 0,86 | 2,94 | 0,74 | 179,7 | 2,72 | 1,91 |
| cond. pressure | -34 | -30 | 210,7 | 719 | 181,3 | 0,96 | 3,29 | 0,83 | 219,0 | 2,95 | 2,61 |
| pc= 55/131 | -23 | -10 | 359,5 | 1228 | 309,4 | 1,21 | 4,12 | 1,04 | 298,3 | 3,47 | 4,48 |
| return gas temp | -15 | 5 | 512,0 | 1749 | 440,7 | 1,44 | 4,93 | 1,24 | 355,0 | 3,89 | 6,44 |
| RGT= 32/90 | -4 | 25 | 784,5 | 2679 | 675,1 | 1,86 | 6,36 | 1,60 | 421,2 | 4,40 | 10,01 |
| liquid temp | 0 | 32 | 901,5 | 3079 | 775,8 | 2,05 | 6,99 | 1,76 | 440,7 | 4,56 | 11,58 |
| Tliq= 55/131 | 7,2 | 45 | 1152,3 | 3935 | 991,7 | 2,45 | 8,37 | 2,11 | 470,2 | 4,80 | 15,01 |