

Model

| | | | | |
|-------------|-------------------|------------------|-------------|-----------------|
| Designation | KLF4.0CNHS | 115-127V/60Hz 1~ | Sales code: | 106H3403 |
|-------------|-------------------|------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|-------------------------------------------------------------------------------------------------------|-----------------------|------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R290 |
| Oil viscosity | 9,7cST | Displacement | 4cm ³ / 0,24cu.in |
| Oil quantity | 170cm ³ / 5,7fl.oz | Compressors on pallet | 100 |
| Refr. charge - tech. limit | 200g / 7,1oz | | |
| Free gas volume comp. | 1630cm ³ / 55,1fl.oz | | |
| Weight | 8,3kg / 18,3lbs | | |
| Motor protection | external | | |
| Winding resistance main | 3,4Ω (at 25°C) | | |
| Winding resistance aux | 8Ω (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 KLF4.0CNHS

| | |
|------------------------|----------------------------------------------------------------------------------------------------------|
| | 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 | LRA value on compressor label and datasheet may differ due to different test conditions for UL approval. |

Applications with KLF4.0CNHS

| | |
|-------------------------|----------------|
| | 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 KLF4.0CNHS

| | |
|------------------------------|----------------|
| | Conf. 1 |
| Starting device type | relay |
| Run capacitor | -/- |
| Start capacitor | 240μF |
| LRA (locked rotor amps / 4s) | 20,5A |
| RLA (rated load amps / 1s) | 2,7A |
| Cut in current | 20,5A |

Model

Designation

KLF4.0CNHS

115-127V/60Hz 1~

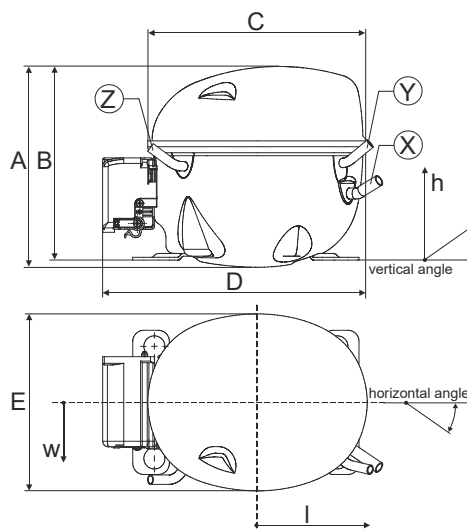
Sales code:

106H3403

Compressor dimensions

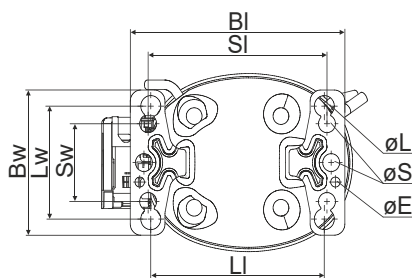
| Housing | A Height | 182mm / 7,17in |
|---------|-------------------|----------------|
| | B Height | 175mm / 6,89in |
| | C Length shell | 198mm / 7,8in |
| | D Length w. cover | 238mm / 9,37in |
| | E Width | 160mm / 6,3in |

| 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] | 120/72/62 | 112/106/62 | -97/102/70 |
| [in] | 4,7/2,8/2,4 | 4,4/4,2/2,4 | -3,8/4/2,8 |
| Straight tube l. [mm] | 14 | 14 | 14 |
| [in] | 0,5 | 0,5 | 0,5 |

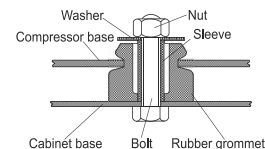


Compressor fixation

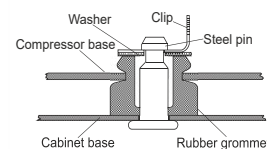
Bolt joint



| Baseplate | [mm] | [inch] |
|-------------|-------|--------|
| BI | 204 | 8.03 |
| BW | 132 | 5.2 |
| øE | ø 9.7 | ø 0.38 |
| Large holes | [mm] | [inch] |
| LI | 165 | 6.5 |
| Lw | 101.6 | 4 |
| øL | ø 19 | ø 0.75 |
| Small holes | [mm] | [inch] |
| SI | 170 | 6.7 |
| Sw | 70 | 2.76 |
| øS | ø 16 | ø 0.63 |



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

Model

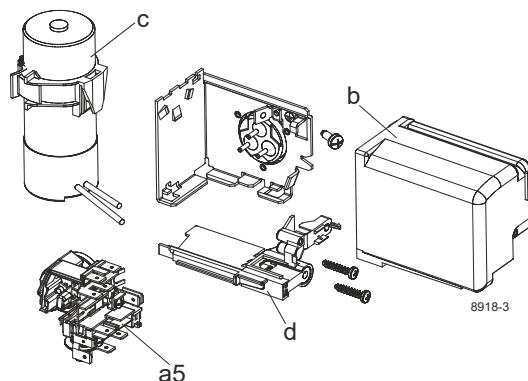
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Configuration

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

Electrical accessories / wiring diagram

CSIR

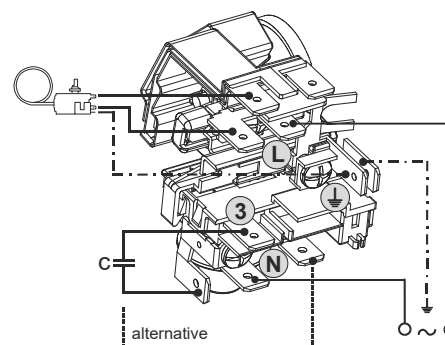
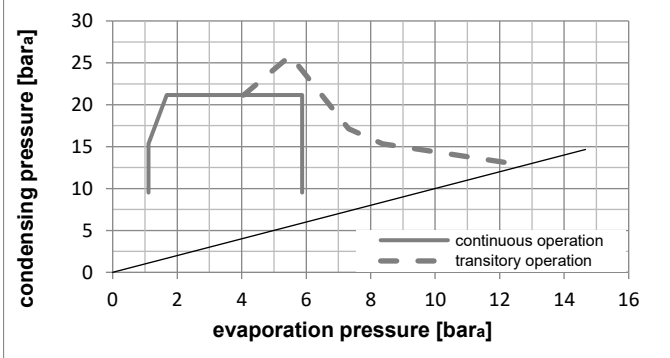
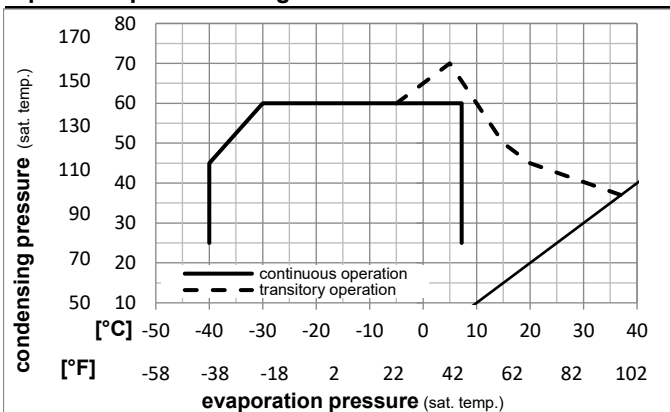


Ambient/ machine room temperatures minimum /maximum

| | |
|---------------------------------|------------------------|
| 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 Limits

Operation pressure range



Components

| | | |
|------|------------------------------------|----------|
| a5 | current relay (T1209/L6-S4) | 117U7074 |
| c | start capacitor (240µF) | 117U5002 |
| b, d | cover + clamp + screws(5VA) in bag | 103N1060 |

Alternative components

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

Model

Designation **KLF4.0CNHS 115-127V/60Hz** Conf. 1 Sales code: **106H3403**

Optimization + standard conditions

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

| | Evaporating pressure (saturation temperature) | | | | Condensing pressure (saturation temperature) | | | COP | EER | | | Power consumption | | | ASHRAE LBP |
|------|-----------------------------------------------|-----|-----|------|----------------------------------------------|---------|----------|------|-------|----------|-----------|-------------------|--------|----------------|------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | | [W/W] | [Btu/Wh] | [kcal/Wh] | P1 | I | Ref. mass flow | |
| [°C] | | | | | | | | | | | [W] | [A] | [kg/h] | | |
| [°F] | | | | | | | | | | | | | | | |
| | -23 | 54 | 32 | 32 | 220,0 | 751 | 189,3 | 1,45 | 4,96 | 1,25 | 151,5 | 1,90 | 2,23 | ASHRAE LBP | |
| | -10 | 130 | 90 | 90 | | | | | | | | | | | |
| | -25 | 55 | 32 | 55 | 163,5 | 558 | 140,7 | 1,11 | 3,80 | 0,96 | 147,0 | 1,87 | 2,04 | cecomaf LBP | |
| | -13 | 131 | 90 | 131 | | | | | | | | | | | |
| | -35 | 40 | 20 | 40 | 122,7 | 419 | 105,6 | 1,02 | 3,49 | 0,88 | 120,0 | 1,71 | 1,40 | EN12900 LBP | |
| | -31 | 104 | 68 | 104 | | | | | | | | | | | |
| | -7 | 54 | 35 | 46 | 403,8 | 1379 | 347,5 | 2,04 | 6,96 | 1,75 | 198,1 | 2,22 | 4,61 | ASHRAE MBP | |
| | 20 | 130 | 95 | 115 | | | | | | | | | | | |
| | -10 | 55 | 32 | 55 | 320,0 | 1093 | 275,4 | 1,68 | 5,73 | 1,44 | 190,6 | 2,17 | 4,05 | cecomaf MBP | |
| | 14 | 131 | 90 | 131 | | | | | | | | | | | |
| | -10 | 45 | 20 | 45 | 362,8 | 1239 | 312,2 | 2,09 | 7,12 | 1,79 | 174,0 | 2,05 | 4,45 | EN12900 MBP | |
| | 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 | 78,9 | 269 | 67,9 | 0,69 | 2,37 | 0,60 | 113,8 | 1,69 | 0,88 |
| cond. pressure | -34 | -30 | 118,4 | 404 | 101,9 | 0,97 | 3,31 | 0,83 | 122,1 | 1,73 | 1,33 |
| pc= 45/113 | -23 | -10 | 215,0 | 734 | 185,0 | 1,49 | 5,08 | 1,28 | 144,7 | 1,86 | 2,43 |
| return gas temp. | -15 | 5 | 309,4 | 1057 | 266,3 | 1,89 | 6,47 | 1,63 | 163,4 | 1,98 | 3,52 |
| RGT= 32/90 | -4 | 25 | 475,1 | 1623 | 408,9 | 2,57 | 8,76 | 2,21 | 185,2 | 2,13 | 5,48 |
| liquid temp | 0 | 32 | 546,1 | 1865 | 470,0 | 2,86 | 9,77 | 2,46 | 190,8 | 2,17 | 6,33 |
| Tliq= 45/113 | 7,2 | 45 | 698,7 | 2386 | 601,3 | 3,54 | 12,10 | 3,05 | 197,1 | 2,22 | 8,21 |
| [°C / °F] | -40 | -40 | 51,1 | 175 | 44,0 | 0,47 | 1,61 | 0,40 | 108,7 | 1,65 | 0,63 |
| cond. pressure | -34 | -30 | 89,7 | 306 | 77,2 | 0,74 | 2,53 | 0,64 | 121,2 | 1,72 | 1,11 |
| pc= 55/131 | -23 | -10 | 178,1 | 608 | 153,2 | 1,17 | 4,00 | 1,01 | 151,9 | 1,90 | 2,22 |
| return gas temp | -15 | 5 | 260,9 | 891 | 224,5 | 1,48 | 5,05 | 1,27 | 176,5 | 2,07 | 3,28 |
| RGT= 32/90 | -4 | 25 | 404,0 | 1380 | 347,7 | 1,96 | 6,70 | 1,69 | 206,0 | 2,28 | 5,16 |
| liquid temp | 0 | 32 | 465,1 | 1588 | 400,2 | 2,17 | 7,42 | 1,87 | 214,2 | 2,35 | 5,97 |
| Tliq= 55/131 | 7,2 | 45 | 596,5 | 2037 | 513,4 | 2,65 | 9,05 | 2,28 | 225,2 | 2,43 | 7,77 |