

Single Pack NLE10CN 115V 60Hz CSIR

Single pack code number: **195B4308**

| Position | Title | Code | Amount |
|----------|--------------------------------------------|----------|--------|
| 1 | Compressor NLE10CN | 105H6195 | 1 |
| 2 | Bolt joint for one compressor M6 ø16mm | 118-1917 | 1 |

Model

| | | | | |
|-------------|----------------|--------------|-------------|-----------------|
| Designation | NLE10CN | 115V/60Hz 1~ | Sales code: | 105H6195 |
|-------------|----------------|--------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R290 |
| Oil viscosity | 32cSt | Displacement | 10,09cm ³ / 0,62cu.in |
| Oil quantity | 268cm ³ / 9,1fl.oz | Compressors on pallet | 80 |
| Refr. charge - tech. limit | 400g / 14,1oz | | |
| Free gas volume comp. | 2360cm ³ / 79,8fl.oz | | |
| Weight | 10,9kg / 24lbs | | |
| Motor protection | 1# internal | | |
| Winding resistance main | 1,56Ω (at 25°C) | | |
| Winding resistance aux | 4,4Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 120°C / 248°F | | |



General - Configurations with NLE10CN

| | |
|------------------------|-------------------------------------------------------------------|
| | Conf. 1 |
| Motorconfiguration | CSIR |
| Power supply (nominal) | 115V/60Hz |
| Number of phases | 1 |
| Voltage range | 103-127V |
| Approvals | UL |
| Starting torque | HST |
| Note | Electrical equipment is included and pre-assembled to compressor. |

Applications with NLE10CN

| | |
|-------------------------|----------------|
| | 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 NLE10CN

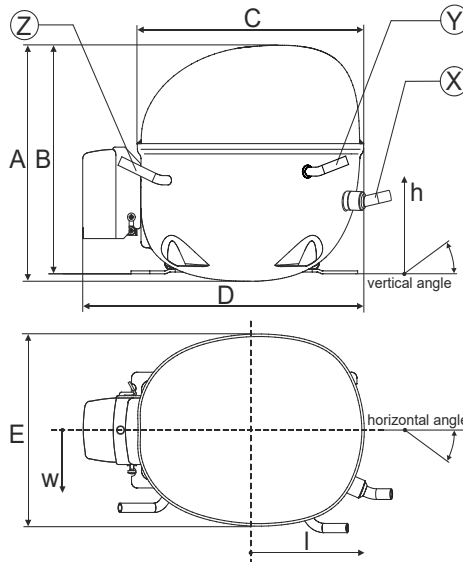
| | |
|------------------------------------|----------------|
| | Conf. 1 |
| Starting device type | relay |
| Run capacitor | -/- |
| Start capacitor | 280μF |
| LRA (locked rotor amps / 4s/ U(N)) | 34,53A |
| RLA (rated load amps / 1s/ U(N)) | 5,6A |
| Cut in current (U(N)) | 34,53A |

Model

| | | | | |
|-------------|----------------|--------------|-------------|-----------------|
| Designation | NLE10CN | 115V/60Hz 1~ | Sales code: | 105H6195 |
|-------------|----------------|--------------|-------------|-----------------|

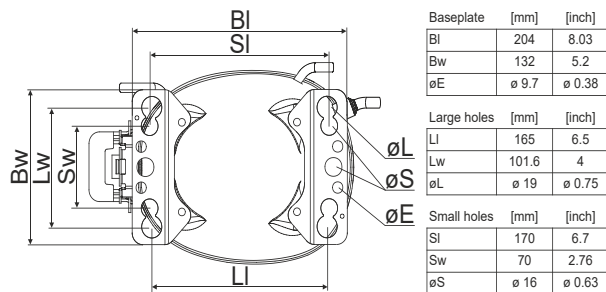
Compressor dimensions

| | | |
|----------------|-------------------|----------------|
| Housing | A Height | 203mm / 7,99in |
| | B Height | 197mm / 7,76in |
| | C Length shell | 205mm / 8,07in |
| | D Length w. cover | 254mm / 10in |
| | E Width | 166mm / 6,54in |

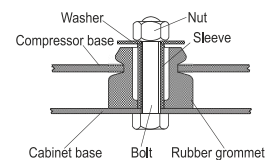


| Connectors | | Suction | Discharge | Process |
|-----------------------|------|--------------|--------------|--------------|
| | | X | Y | Z |
| Diameter | [mm] | øi 8,11-8,29 | øi 6,41-6,59 | øi 6,41-6,59 |
| (i:inside, o:outside) | [in] | øi 0,32-0,33 | øi 0,25-0,26 | øi 0,25-0,26 |
| Material | | copper | copper | copper |
| Horizontal angle | ±2° | 0° | 0° | 0° |
| Vertical angle | ±2° | 15° | 21° | 155° |
| Position l/h/w | [mm] | 132/69/57 | 94/102/81 | -109/94/72 |
| | [in] | 5,2/2,7/2,2 | 3,7/4/3,2 | -4,3/3,7/2,8 |
| Straight tube l. | [mm] | 12 | 12 | 12 |
| | [in] | 0,5 | 0,5 | 0,5 |

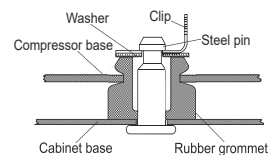
Compressor fixation



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 |

#NV

#NV

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

Model

| | | | | | |
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Configuration

| | | |
|------------------------|--------------|--------|
| Motorconfiguration | CSIR | |
| Power supply (nominal) | 115V/60Hz 1~ | |
| Refrigerant | R290 | |
| Application | LBP+MBP | |
| Voltage range | 103-127V | |
| Starting torque | HST | |
| Approvals | UL | SA3693 |

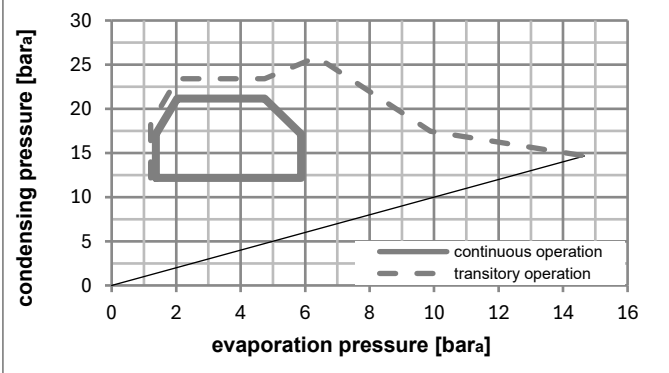
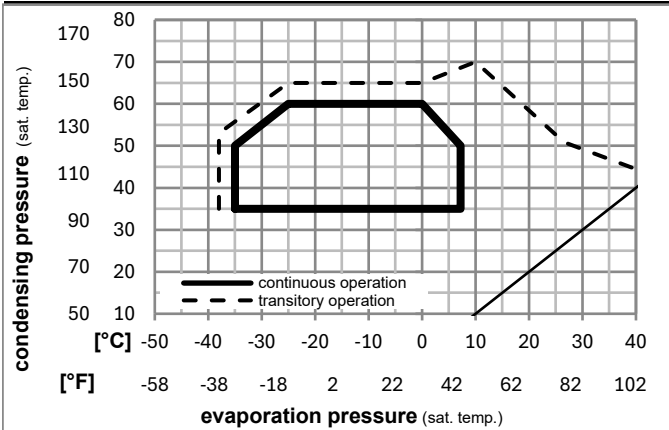
Electrical accessories / wiring diagram



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 (incl. and pre. assembl.)

| | | |
|----|-------------------------|----------|
| a2 | current relay | 117U7018 |
| c | start capacitor (280µF) | 117U5025 |
| b | plastic cover | 103N2011 |
| d | cord relief | 103N1010 |

Model

Designation **NLE10CN** **115V/60Hz** Conf. 1 Sales code: **105H6195**

Optimization + standard conditions

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

| | | Evaporating pressure (saturation temperature) | | | | Cooling capacity | | | COP | EER | Power consumption | | | | |
|------|------|-----------------------------------------------|------|------|--------|------------------|---------|----------|-------|----------|---------------------|------|-------|-------------|--|
| | | Condensing pressure (saturation temperature) | | | | Return gas temp. | | | | | Current consumption | | | | |
| | | Liquid temp. | | | | Cooling capacity | | | | | Ref. mass flow | | | | |
| | | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | P1 | I | m | |
| [°C] | [°F] | [°C] | [°F] | [°C] | [°C] | | | | | | | [W] | [A] | [kg/h] | |
| [°C] | -23 | 54 | 32 | 32 | 607,0 | 2073 | 522,4 | 1,52 | 5,20 | 1,31 | 399,0 | 5,18 | 6,15 | ASHRAE LBP | |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 456,4 | 1559 | 392,8 | 1,17 | 4,00 | 1,01 | 389,8 | 5,13 | 5,68 | cecomaf LBP | |
| [°F] | -13 | 131 | 90 | 131 | | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 361,5 | 1235 | 311,1 | 1,26 | 4,31 | 1,09 | 286,2 | 4,52 | 4,13 | EN12900 LBP | |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | | |
| [°C] | -7 | 54 | 35 | 46 | 1069,4 | 3652 | 920,3 | 2,05 | 6,99 | 1,76 | 522,8 | 5,95 | 12,20 | ASHRAE MBP | |
| [°F] | 20 | 130 | 95 | 115 | | | | | | | | | | | |
| [°C] | -10 | 55 | 32 | 55 | 854,1 | 2917 | 735,1 | 1,70 | 5,80 | 1,46 | 502,8 | 5,84 | 10,80 | cecomaf MBP | |
| [°F] | 14 | 131 | 90 | 131 | | | | | | | | | | | |
| [°C] | -10 | 45 | 20 | 45 | 934,1 | 3190 | 803,9 | 2,04 | 6,95 | 1,75 | 458,8 | 5,48 | 11,47 | EN12900 MBP | |
| [°F] | 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] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] |
| [°C / °F] | -35 | -31 | 339,2 | 1159 | 292,0 | 1,18 | 4,02 | 1,01 | 288,4 | 4,52 | 3,80 |
| cond. pressure | -23 | -10 | 575,9 | 1967 | 495,6 | 1,55 | 5,29 | 1,33 | 371,9 | 5,00 | 6,50 |
| pc= 45/113 | -15 | 5 | 807,4 | 2757 | 694,8 | 1,89 | 6,47 | 1,63 | 426,2 | 5,30 | 9,19 |
| return gas temp. | -9 | 15 | 992,1 | 3388 | 853,8 | 2,15 | 7,33 | 1,85 | 462,5 | 5,50 | 11,36 |
| RGT= 32/90 | -4 | 25 | 1202,1 | 4105 | 1034,5 | 2,40 | 8,20 | 2,07 | 500,4 | 5,71 | 13,86 |
| liquid temp | 0 | 32 | 1364,5 | 4660 | 1174,3 | 2,58 | 8,82 | 2,22 | 528,6 | 5,87 | 15,83 |
| Tliq= 45/113 | 7,2 | 45 | 1701,0 | 5809 | 1463,9 | 2,90 | 9,91 | 2,50 | 586,3 | 6,20 | 19,99 |
| [°C / °F] | -35 | -31 | 281,6 | 962 | 242,4 | 0,93 | 3,16 | 0,80 | 304,4 | 4,62 | 3,48 |
| cond. pressure | -23 | -10 | 492,3 | 1681 | 423,7 | 1,22 | 4,17 | 1,05 | 402,9 | 5,21 | 6,14 |
| pc= 55/131 | -15 | 5 | 702,7 | 2400 | 604,7 | 1,51 | 5,15 | 1,30 | 465,9 | 5,60 | 8,83 |
| return gas temp | -9 | 15 | 872,1 | 2978 | 750,6 | 1,72 | 5,88 | 1,48 | 507,0 | 5,86 | 11,04 |
| RGT= 32/90 | -4 | 25 | 1065,9 | 3640 | 917,3 | 1,94 | 6,63 | 1,67 | 548,9 | 6,15 | 13,60 |
| liquid temp | 0 | 32 | 1216,5 | 4155 | 1046,9 | 2,10 | 7,17 | 1,81 | 579,5 | 6,36 | 15,62 |
| Tliq= 55/131 | 7,2 | 45 | 1529,7 | 5224 | 1316,5 | 2,39 | 8,15 | 2,05 | 640,6 | 6,80 | 19,93 |

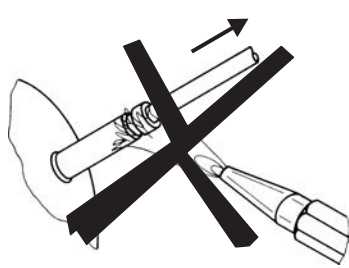


NL Compressors





Service/Repair – R600a, R290



8545

Brazing on Suction Connectors (Direct Intake)

representative image



! max. 150°C/302°F !
at socket
 brazing solder: phosphor (LP7) or silver

Refer to Product Bulletin:
Brazing on Suction Connectors
(Compressors with Direct Suction Intake)

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