

## Model

|             |                 |                  |             |                 |
|-------------|-----------------|------------------|-------------|-----------------|
| Designation | <b>NLE8.0CN</b> | 115-127V/60Hz 1~ | Sales code: | <b>105H6095</b> |
|-------------|-----------------|------------------|-------------|-----------------|

## Compressor design

|                            |                                 |                       |                                 |
|----------------------------|---------------------------------|-----------------------|---------------------------------|
| Oil type                   | Polyolester                     | Refrigerant(s)        | <b>R290</b>                     |
| Oil viscosity              | 32cSt                           | Displacement          | 7,96cm <sup>3</sup> / 0,49cu.in |
| Oil quantity               | 300cm <sup>3</sup> / 10,1fl.oz  | Compressors on pallet | 80                              |
| Refr. charge - tech. limit | 150g / 5,3oz                    |                       |                                 |
| Free gas volume comp.      | 2360cm <sup>3</sup> / 79,8fl.oz |                       |                                 |
| Weight                     | 10,95kg / 24,1lbs               |                       |                                 |
| Motor protection           | 1# internal                     |                       |                                 |
| Winding resistance main    | 1,99Ω (at 25°C)                 |                       |                                 |
| Winding resistance aux     | 6,22Ω (at 25°C)                 |                       |                                 |
| Max. winding temp.         | 125°C / 257°F                   |                       |                                 |
| Max. discharge temp.       | 120°C / 248°F                   |                       |                                 |



## General - Configurations with NLE8.0CN

|                        | <b>Conf. 1</b>  |
|------------------------|---|
| Motorconfiguration     | CSIR  |
| Power supply (nominal) | 115V/60Hz   |
| Number of phases       | 1   |
| Voltage range          | 95-135V   |
| Approvals              | UL  |
| Starting torque        | HST   |
| Note                   | Protector and relay are included and pre-assembled to compressor. |

## Applications with NLE8.0CN

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

## Electrical data - Configurations with NLE8.0CN

|                              | <b>Conf. 1</b> |
|------------------------------|----------------|
| Starting device type         | relay          |
| Run capacitor                | 0μF            |
| Start capacitor              | 240μF          |
| LRA (locked rotor amps / 4s) | 23,1A          |
| RLA (rated load amps / 1s)   | 4,3A           |
| Cut in current               | 23,1A          |
| IP class                     | 21             |

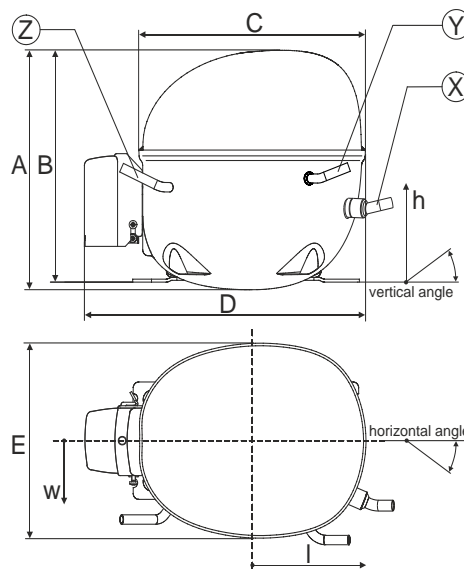
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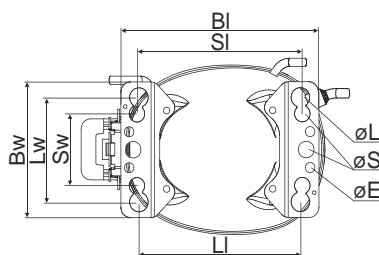
## Compressor dimensions

|                |                   |                |
|----------------|-------------------|----------------|
| <b>Housing</b> | 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°                        | 22°          | 0°           | 0            |
| Vertical angle   | ±2°                        | 45°          | 15°          | 155°         |
| Position l/h/w   | [mm]                       | 128/79/61    | 88/95/85     | -112/97/68   |
|                  | [in]                       | 5/3,1/2,4    | 3,5/3,7/3,3  | -4,4/3,8/2,7 |
| Straight tube l. | [mm]                       | 12           | 12           | 12           |
|                  | [in]                       | 0,5          | 0,5          | 0,5          |

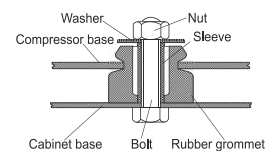


## Compressor fixation

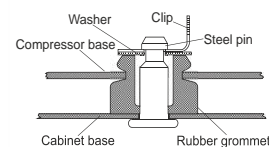


| Baseplate   | [mm]  | [inch] |
|-------------|-------|--------|
| BI          | 204   | 8.03   |
| Bw          | 132   | 5.2    |
| øE          | ø 9.7 | ø 0.38 |
| Large holes | [mm]  | [inch] |
| LI          | 165   | 6.5    |
| Lw          | 101.6 | 4      |
| øL          | ø 19  | ø 0.75 |
| Small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

### 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   |

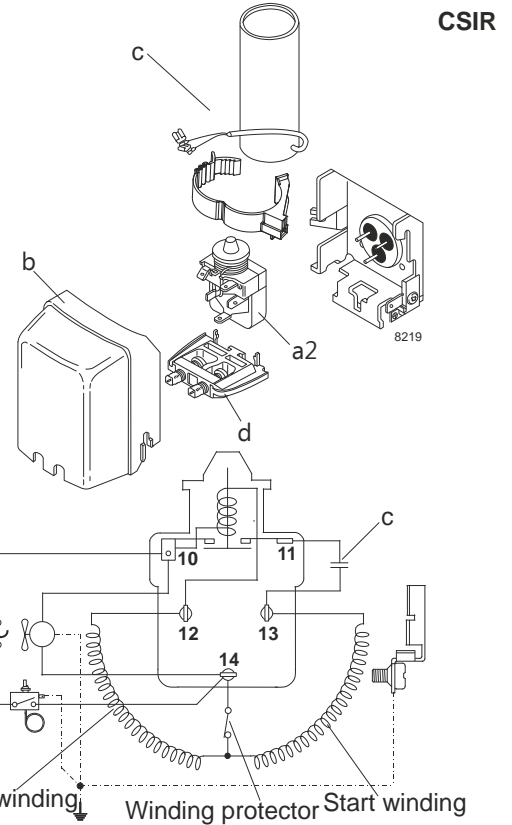
### Model

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|-------------|-----------------|------------------|----------------|-------------|-----------------|
| Designation | <b>NLE8.0CN</b> | <b>115V/60Hz</b> | <b>Conf. 1</b> | Sales code: | <b>105H6095</b> |
|-------------|-----------------|------------------|----------------|-------------|-----------------|

### Configuration

|                        |              |        |
|------------------------|--------------|--------|
| Motorconfiguration     | CSIR         |        |
| Power supply (nominal) | 115V/60Hz 1~ |        |
| Refrigerant            | R290         |        |
| Application            | LBP+MBP      |        |
| Voltage range          | 95-135V      |        |
| Starting torque        | HST          |        |
| Approvals              | UL           | SA3693 |

### Electrical accessories / wiring diagram

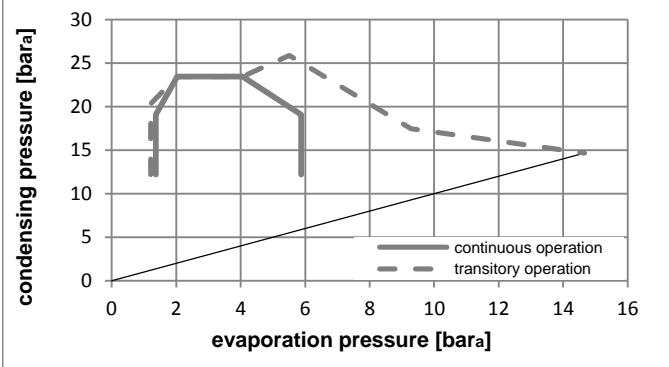
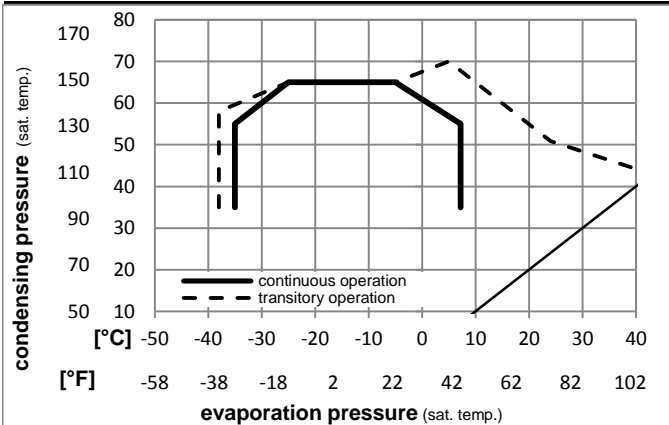


### Ambient temperatures / system cooling

|                           |              |
|---------------------------|--------------|
| Ambient temperature min.: | 10°C / 50°F  |
| Ambient temperature max.: | 43°C / 110°F |

| System cooling |          |          |     |
|----------------|----------|----------|-----|
| T ambient      | LBP      | MBP      | HBP |
| 32°C / 90°F    | fan 3m/s | fan 3m/s | n/a |
| 38°C / 100°F   | fan 3m/s | fan 3m/s | n/a |
| 43°C / 110°F   | fan 3m/s | fan 3m/s | n/a |

### Operation pressure range



### Components:

|    |                         |          |
|----|-------------------------|----------|
| a2 | relay                   | 117U7013 |
| c  | start capacitor (240μF) | 117U5023 |
| b  | plastic cover           | 103N2011 |
| d  | cord relief             | 103N1010 |

### Model

Designation **NLE8.0CN 115V/60Hz** Conf. 1 Sales code: **105H6095**

### Optimization + standard conditions

115V/60Hz 1~, CSIR, fan 3m/s, UL

| Evaporating pressure (saturation temperature) |       |      |      |      |         |          |          |          |           |           |       |        |      |             |
|---|-------|------|------|------|---------|----------|----------|----------|-----------|-----------|-------|--------|------|-------------|
| Condensing pressure (saturation temperature)  |       |      |      |      |         |          |          |          |           |           |       |        |      |             |
| Return gas temp.                              |       |      |      |      |         |          |          |          |           |           |       |        |      |             |
| Liquid temp.                                  |       |      |      |      |         |          |          |          |           |           |       |        |      |             |
| Cooling capacity                              |       |      |      |      |         |          |          |          |           |           |       |        |      |             |
| COP   |       |      |      |      |         |          |          |          |           |           |       |        |      |             |
| EER   |       |      |      |      |         |          |          |          |           |           |       |        |      |             |
| Power consumption                             |       |      |      |      |         |          |          |          |           |           |       |        |      |             |
| Current consumption                           |       |      |      |      |         |          |          |          |           |           |       |        |      |             |
| Ref. mass flow                                |       |      |      |      |         |          |          |          |           |           |       |        |      |             |
|   | pe    | pc   | RGT  | Tliq | [W]     | [Btu/h]  | [kcal/h] | [W/W]    | [Btu/Wh]  | [kcal/Wh] | P1    | I      | m    |             |
| [°C]  | [°C]  | [°C] | [°C] | [W]  | [Btu/h] | [kcal/h] | [W/W]    | [Btu/Wh] | [kcal/Wh] | [W]       | [A]   | [kg/h] |      |             |
| [°C]  | -23,3 | 54,4 | 32,2 | 32,2 | 452,8   | 1546     | 389,7    | 1,57     | 5,36      | 1,35      | 288,4 | 3,52   | 4,59 | ASHRAE LBP  |
| [°F]  | -10   | 130  | 90   | 90   |         |          |          |          |           |           |       |        |      |             |
| [°C]  | -25   | 55   | 32   | 55   | 339,0   | 1158     | 291,7    | 1,22     | 4,16      | 1,05      | 278,3 | 3,45   | 4,22 | cecomaf LBP |
| [°F]  | -13   | 131  | 89,6 | 131  |         |          |          |          |           |           |       |        |      |             |
| [°C]  | -35   | 40   | 20   | 40   | 267,8   | 915      | 230,5    | 1,24     | 4,25      | 1,07      | 215,5 | 3,11   | 3,06 | EN12900 LBP |
| [°F]  | -31   | 104  | 68   | 104  |         |          |          |          |           |           |       |        |      |             |
| [°C]  | -6,66 | 54,4 | 35   | 46,1 | 807,2   | 2757     | 694,7    | 2,07     | 7,08      | 1,78      | 389,5 | 4,26   | 9,21 | ASHRAE MBP  |
| [°F]  | 20    | 130  | 95   | 115  |         |          |          |          |           |           |       |        |      |             |
| [°C]  | -10   | 55   | 32   | 55   | 639,9   | 2185     | 550,7    | 1,72     | 5,88      | 1,48      | 371,7 | 4,12   | 8,09 | cecomaf MBP |
| [°F]  | 14    | 131  | 89,6 | 131  |         |          |          |          |           |           |       |        |      |             |
| [°C]  | -10   | 45   | 20   | 45   | 718,2   | 2453     | 618,1    | 2,10     | 7,17      | 1,81      | 342,2 | 3,92   | 8,82 | EN12900 MBP |
| [°F]  | 14    | 113  | 68   | 113  |         |          |          |          |           |           |       |        |      |             |

### Performance tables

115V/60Hz 1~, 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              | 252,3  | 861     | 217,1    | 1,16  | 3,97     | 1,00      | 216,7 | 3,12 | 2,83   |   |   |
| cond. pressure   | -23,3 | -10              | 437,5  | 1494    | 376,5    | 1,57  | 5,37     | 1,35      | 278,4 | 3,47 | 4,94   |   |   |
| pc= 45/113       | -15   | 5                | 615,8  | 2103    | 529,9    | 1,93  | 6,59     | 1,66      | 319,3 | 3,75 | 7,01   |   |   |
| return gas temp. | -9,4  | 15               | 763,6  | 2608    | 657,2    | 2,22  | 7,57     | 1,91      | 344,6 | 3,94 | 8,74   |   |   |
| RGT= 32/90       | -3,9  | 25               | 939,5  | 3208    | 808,5    | 2,55  | 8,72     | 2,20      | 368,0 | 4,12 | 10,83  |   |   |
| liquid temp      | 0     | 32               | 1081,3 | 3693    | 930,6    | 2,82  | 9,64     | 2,43      | 383,1 | 4,23 | 12,54  |   |   |
| Tliq= 45/113     | 7,2   | 45               | 1391,2 | 4751    | 1197,3   | 3,41  | 11,65    | 2,94      | 407,8 | 4,41 | 16,35  |   |   |
| [°C / °F]        | -35   | -31              | 196,1  | 670     | 168,7    | 0,92  | 3,14     | 0,79      | 213,2 | 3,07 | 2,42   |   |   |
| cond. pressure   | -23,3 | -10              | 366,3  | 1251    | 315,2    | 1,27  | 4,33     | 1,09      | 289,0 | 3,52 | 4,57   |   |   |
| pc= 55/131       | -15   | 5                | 524,1  | 1790    | 451,0    | 1,54  | 5,24     | 1,32      | 341,4 | 3,89 | 6,59   |   |   |
| return gas temp  | -9,4  | 15               | 653,9  | 2233    | 562,7    | 1,74  | 5,95     | 1,50      | 375,0 | 4,15 | 8,28   |   |   |
| RGT= 32/90       | -3,9  | 25               | 808,0  | 2760    | 695,4    | 1,98  | 6,78     | 1,71      | 407,3 | 4,40 | 10,31  |   |   |
| liquid temp      | 0     | 32               | 932,6  | 3185    | 802,6    | 2,17  | 7,43     | 1,87      | 428,8 | 4,57 | 11,98  |   |   |
| Tliq= 55/131     | 7,2   | 45               | 1205,7 | 4118    | 1037,6   | 2,59  | 8,83     | 2,22      | 466,4 | 4,87 | 15,71  |   |   |