

## Single Pack NLE13LNDX 220-240V 50Hz CSCR

Single pack code number: **195B4832**

| Position | Title                                      | Code     | Amount |
|----------|--------------------------------------------|----------|--------|
| 1        | Compressor NLE13LNDX                       | 105H7301 | 1      |
| 2        | Start equipment NLE                        | 117U8200 | 1      |
| 3        | Starting capacitor (80µF 260V)             | 117U5353 | 1      |
| 4        | Run Capacitor (10µF 450V, 6.3mm)           | 117-7166 | 1      |
| 5        | Run capacitor bracket                      | 117-0314 | 1      |
| 6        | Cover NLE                                  | 117U1038 | 1      |
| 7        | Cord relief                                | 103N1007 | 1      |
| 8        | Screw for bracket M4x8mm                   | 117-0301 | 1      |
| 9        | Bolt joint for one compressor   M6   ø16mm | 118-1917 | 1      |

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## Model

|             |                  |                         |             |                 |
|-------------|------------------|-------------------------|-------------|-----------------|
| Designation | <b>NLE13LNDX</b> | <b>220-240V/50Hz 1~</b> | Sales code: | <b>105H7301</b> |
|-------------|------------------|-------------------------|-------------|-----------------|

## Compressor design

|                            |                                 |                       |                                 |
|----------------------------|---------------------------------|-----------------------|---------------------------------|
| Oil type                   | Polyolester                     | Refrigerant(s)        | <b>R290</b>                     |
| Oil viscosity              | 32cSt                           | Displacement          | 12,6cm <sup>3</sup> / 0,77cu.in |
| Oil quantity               | 298cm <sup>3</sup> / 10,1fl.oz  | Compressors on pallet |                                 |
| Refr. charge - tech. limit | 300g / 10,6oz                   |                       |                                 |
| Free gas volume comp.      | 2360cm <sup>3</sup> / 79,8fl.oz |                       |                                 |
| Weight                     | 11,8kg / 26lbs                  |                       |                                 |
| Motor protection           | external                        |                       |                                 |
| Winding resistance main    | 8,67Ω (at 25°C)                 |                       |                                 |
| Winding resistance aux     | 15,1Ω (at 25°C)                 |                       |                                 |
| Max. winding temp.         | 125°C / 257°F                   |                       |                                 |
| Max. discharge temp.       | 130°C / 266°F                   |                       |                                 |



## General - Configurations with NLE13LNDX

### Conf. 1

|                        |               |
|------------------------|---------------|
| Motor configuration    | CSCR          |
| Power supply (nominal) | 220-240V/50Hz |
| Number of phases       | 1             |
| Voltage range          | 198-254V      |
| Approvals              | VDE           |
| Starting torque        | HST           |
| Note                   | - / -         |

## Applications with NLE13LNDX

### Conf. 1

|                         |          |
|-------------------------|----------|
| Refrigerant             | R290     |
| Application             | LBP      |
| System cooling          | fan 3m/s |
| Hot gas defrost         | OK       |
| Long interval pull down | OK       |

## Electrical data - Configurations with NLE13LNDX

### Conf. 1

|                                    |       |
|------------------------------------|-------|
| Starting device type               | relay |
| Run capacitor                      | 10μF  |
| Start capacitor                    | 80μF  |
| LRA (locked rotor amps / 4s/ U(N)) | 15,1A |
| RLA (rated load amps / 1s/ U(N))   | 1,95A |
| Cut in current (U(N))              |       |

## Model

Designation

**NLE13LNDX**

220-240V/50Hz 1~

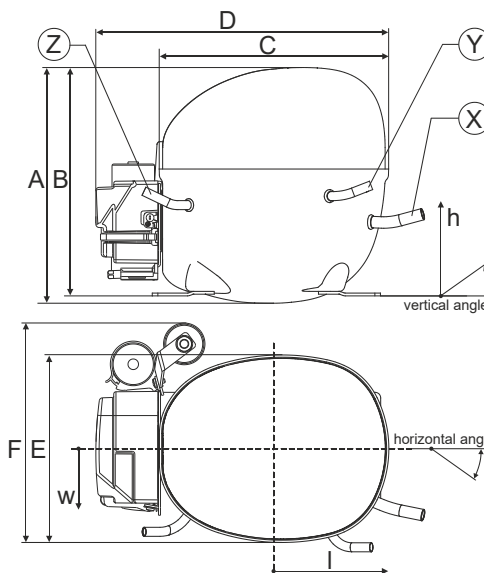
Sales code:

**105H7301**

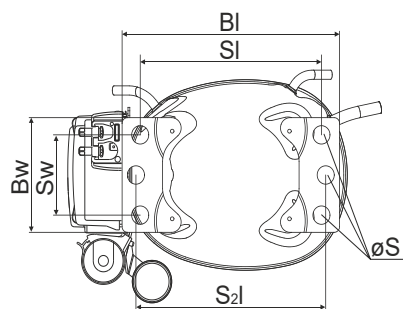
## Compressor dimensions

|                |                   |                 |
|----------------|-------------------|-----------------|
| <b>Housing</b> | A Height          | 209mm / 8,23in  |
|                | B Height          | 203mm / 7,99in  |
|                | C Length shell    | 205mm / 8,07in  |
|                | D Length w. cover | 262mm / 10,31in |
|                | E Width           | 166mm / 6,54in  |

| Connectors                 | Suction<br>X     | Discharge<br>Y | Process<br>Z |
|----------------------------|------------------|----------------|--------------|
| Diameter [mm]              | øi 8,11-8,29     | øi 6,11-6,29   | øi 6,11-6,29 |
| (i:inside, o:outside) [in] | øi 0,32-0,33     | øi 0,24-0,25   | øi 0,24-0,25 |
| Material                   | copper           | copper         | copper       |
| Horizontal angle           | ±2° 11°          | 0°             | 0°           |
| Vertical angle             | ±2° 15°          | 21°            | 25°          |
| Position l/h/w [mm]        | 140/72/59        | 94/98/87       | -109/93/74   |
|                            | [in] 5,5/2,8/2,3 | 3,7/3,9/3,4    | -4,3/3,7/2,9 |
| Straight tube l.           | [mm] 12          | 12             | 12           |
|                            | [in] 0,5         | 0,5            | 0,5          |

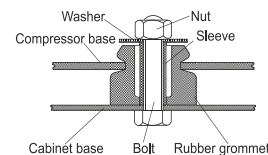


## Compressor fixation

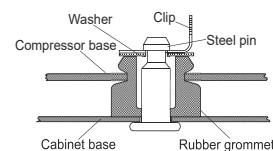


| Baseplate   | [mm] | [inch] |
|-------------|------|--------|
| BI          | 204  | 8.03   |
| Bw          | 100  | 3.94   |
| Small holes | [mm] | [inch] |
| SI          | 170  | 6.7    |
| Sw          | 70   | 2.76   |
| S2l         | 178  | 7      |
| øS          | ø 16 | ø 0.63 |

### 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  |            |
| Snap-on   ø7,3   ø16mm     | 118-1947  | 118-1919   |

## Application notes

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

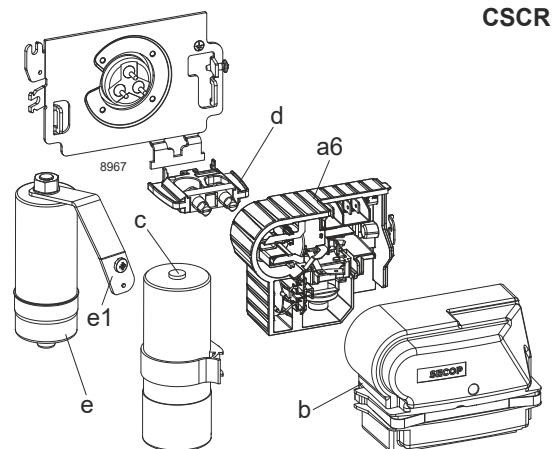
## Model

|             |                  |                      |         |             |                 |
|-------------|------------------|----------------------|---------|-------------|-----------------|
| Designation | <b>NLE13LNDX</b> | <b>220-240V/50Hz</b> | Conf. 1 | Sales code: | <b>105H7301</b> |
|-------------|------------------|----------------------|---------|-------------|-----------------|

## Configuration

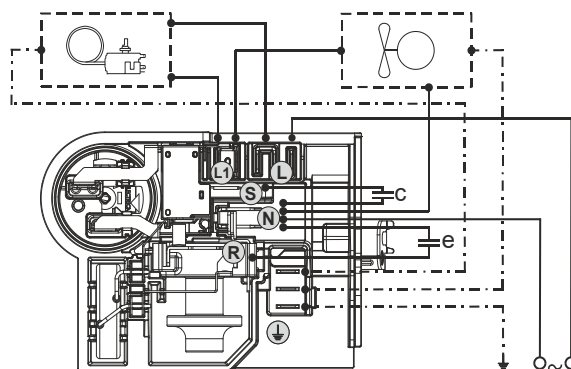
|                        |                  |
|------------------------|------------------|
| Motor configuration    | CSCR             |
| Power supply (nominal) | 220-240V/50Hz 1~ |
| Refrigerant            | R290             |
| Application            | LBP              |
| Voltage range          | 198-254V         |
| Starting torque        | HST              |
| Approvals              | VDE              |

## Electrical accessories / wiring diagram

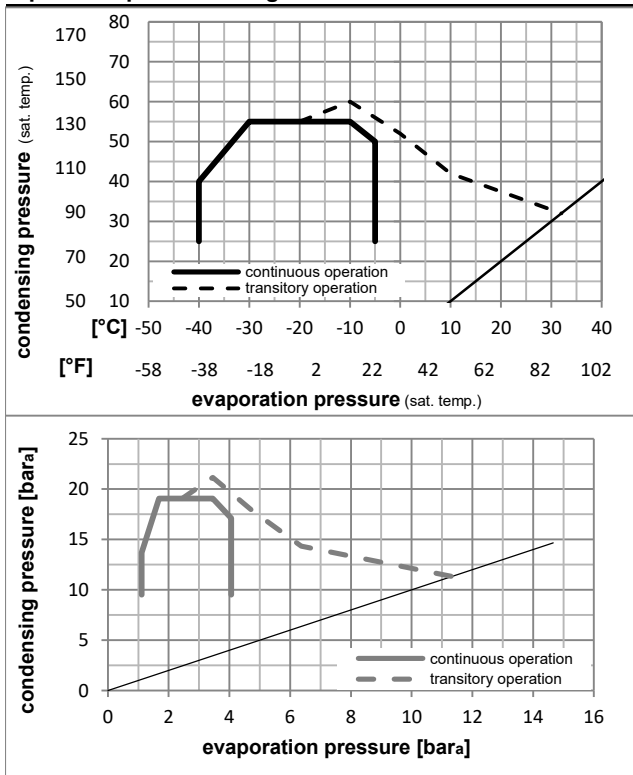


**Ambient/ machine room temperatures minimum /maximum**

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



### Operation pressure range



## Components

|    |                                      |          |
|----|--------------------------------------|----------|
| a6 | NL starter kit                       | 117U8200 |
| c  | start capacitor (80μF)               | 117U5353 |
| e  | run cap (10μF, 6.3mm,c.length 280mm) | 117-7166 |
| b  | cover terminal board + clamp         | 117U1038 |
| e1 | retaining clamp                      | 117-0314 |
|    | screw M4x8mm                         | 117-0301 |
| d  | cord relief                          | 103N1007 |

## Model

Designation **NLE13LNDX** **220-240V/50Hz** Conf. 1 Sales code: **105H7301**

## Optimization + standard conditions

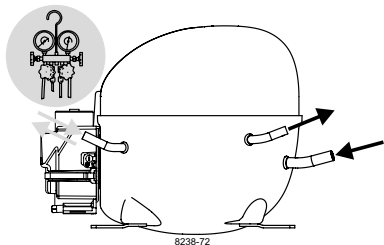
R290, 220V/50Hz, CSCR, fan 3m/s, VDE

| Evaporating pressure (saturation temperature) |     |     |      |     | Condensing pressure (saturation temperature) |          |       |          |           |      | Power consumption   |        |                |             |
|-----------------------------------------------|-----|-----|------|-----|----------------------------------------------|----------|-------|----------|-----------|------|---------------------|--------|----------------|-------------|
| Return gas temp.                              |     |     |      |     | Liquid temp.                                 |          |       |          |           |      | Current consumption |        |                |             |
| Cooling capacity                              |     |     |      |     | COP                                          |          | EER   |          | P1        |      | I                   |        | Ref. mass flow |             |
| pe                                            | pc  | RGT | Tliq | [W] | [Btu/h]                                      | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W]  | [A]                 | [kg/h] |                |             |
| [°C]                                          | -23 | 54  | 32   | 32  | 610,7                                        | 2086     | 525,5 | 1,69     | 5,77      | 1,45 | 361,2               | 1,97   | 6,18           | ASHRAE LBP  |
| [°F]                                          | -10 | 130 | 90   | 90  |                                              |          |       |          |           |      |                     |        |                |             |
|                                               |     |     |      |     |                                              |          |       |          |           |      |                     |        |                |             |
| [°C]                                          | -25 | 55  | 32   | 55  | 460,4                                        | 1572     | 396,2 | 1,32     | 4,51      | 1,14 | 348,5               | 1,93   | 5,73           | cecomaf LBP |
| [°F]                                          | -13 | 131 | 90   | 131 |                                              |          |       |          |           |      |                     |        |                |             |
|                                               |     |     |      |     |                                              |          |       |          |           |      |                     |        |                |             |
| [°C]                                          | -35 | 40  | 20   | 40  | 354,5                                        | 1211     | 305,1 | 1,38     | 4,72      | 1,19 | 256,4               | 1,64   | 4,05           | EN12900 LBP |
| [°F]                                          | -31 | 104 | 68   | 104 |                                              |          |       |          |           |      |                     |        |                |             |
|                                               |     |     |      |     |                                              |          |       |          |           |      |                     |        |                |             |
| [°C]                                          | -23 | 49  | 4,4  | 49  | 494,3                                        | 1688     | 425,4 | 1,41     | 4,83      | 1,22 | 349,5               | 1,93   | 6,85           | ARI540 LBP  |
| [°F]                                          | -10 | 120 | 40   | 120 |                                              |          |       |          |           |      |                     |        |                |             |
|                                               |     |     |      |     |                                              |          |       |          |           |      |                     |        |                |             |
| [°C]                                          | -23 | 41  | 32   | 32  | 660,5                                        | 2256     | 568,5 | 1,99     | 6,79      | 1,71 | 332,3               | 1,87   | 6,69           | AHAM LBP    |
| [°F]                                          | -10 | 105 | 90   | 90  |                                              |          |       |          |           |      |                     |        |                |             |
|                                               |     |     |      |     |                                              |          |       |          |           |      |                     |        |                |             |
| [°C]                                          | -35 | 45  | 32   | 45  | 339,2                                        | 1159     | 292,0 | 1,30     | 4,44      | 1,12 | 260,9               | 1,65   | 3,80           | opt         |
| [°F]                                          | -31 | 113 | 90   | 113 |                                              |          |       |          |           |      |                     |        |                |             |

## Performance tables

R290, 220V/50Hz, CSCR, fan 3m/s, VDE

|                  | 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  | 259,0            | 885     | 222,9    | 1,15  | 3,91     | 0,99      | 226,0 | 1,55 | 2,90   |
| cond. pressure   | -35  | -31  | 339,2            | 1159    | 292,0    | 1,30  | 4,44     | 1,12      | 260,9 | 1,65 | 3,80   |
| pc= 45/113       | -30  | -22  | 430,7            | 1471    | 370,6    | 1,46  | 4,98     | 1,26      | 295,1 | 1,75 | 4,84   |
| return gas temp. | -25  | -13  | 537,1            | 1834    | 462,2    | 1,63  | 5,57     | 1,40      | 329,3 | 1,86 | 6,06   |
| RGT= 32/90       | -20  | -4   | 662,4            | 2262    | 570,1    | 1,82  | 6,21     | 1,56      | 364,3 | 1,98 | 7,50   |
| liquid temp      | -15  | 5    | 810,5            | 2768    | 697,6    | 2,02  | 6,90     | 1,74      | 400,9 | 2,12 | 9,22   |
| Tliq= 45/113     | -5   | 23   | 1190,5           | 4066    | 1024,6   | 2,47  | 8,43     | 2,13      | 482,1 | 2,43 | 13,71  |
| [°C / °F]        | -40  | -40  | 216,0            | 738     | 185,9    | 0,94  | 3,21     | 0,81      | 229,8 | 1,56 | 2,66   |
| cond. pressure   | -35  | -31  | 287,7            | 982     | 247,6    | 1,07  | 3,65     | 0,92      | 269,0 | 1,67 | 3,56   |
| pc= 55/131       | -30  | -22  | 367,8            | 1256    | 316,6    | 1,19  | 4,07     | 1,03      | 308,4 | 1,80 | 4,56   |
| return gas temp  | -25  | -13  | 460,4            | 1572    | 396,2    | 1,32  | 4,51     | 1,14      | 348,5 | 1,93 | 5,73   |
| RGT= 32/90       | -20  | -4   | 569,1            | 1944    | 489,8    | 1,46  | 4,98     | 1,25      | 390,3 | 2,08 | 7,12   |
| liquid temp      | -15  | 5    | 698,0            | 2384    | 600,7    | 1,61  | 5,49     | 1,38      | 434,5 | 2,25 | 8,78   |
| Tliq= 55/131     | -5   | 23   | 1031,5           | 3523    | 887,7    | 1,93  | 6,61     | 1,66      | 533,2 | 2,64 | 13,14  |



# NLE Plus Compressors

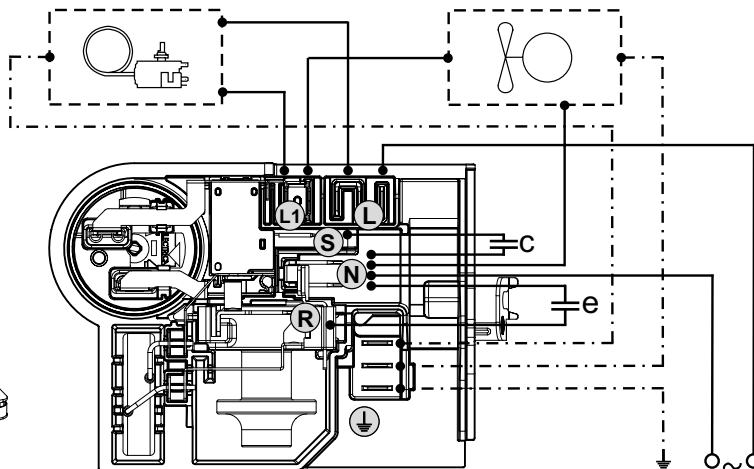
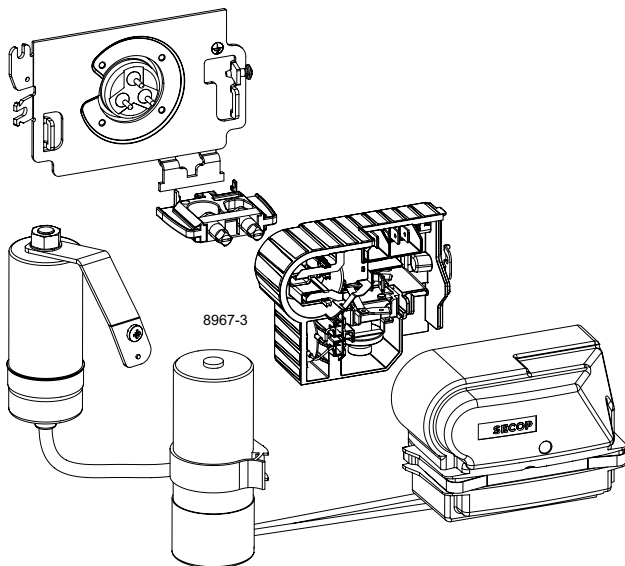
**SECCP**

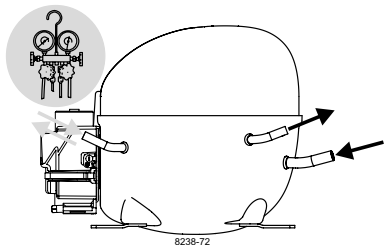
Keep electrical equipment clear from oil, chemicals, and water



When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

## CSCR





# NLE Plus Compressors

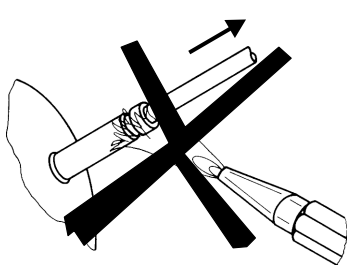
**SECCP**

Keep electrical equipment clear from oil, chemicals, and water

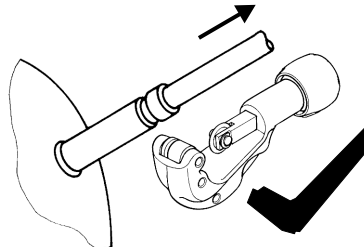


When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

## Service/Repair – R290, R600a, R170, R1270, R1234yf (applies to all flammable refrigerants)



8545



**Dismantling, recycling, disposal:** At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be released into the environment and should be recovered by qualified operators. Compressor oil must also be collected separately. The compressor should be disposed of at specialized disposal centers in accordance with the applicable regulations. **Subject to modifications/alterations. [www.seccp.com](http://www.seccp.com)**