

## Single Pack NLU10KK.1 220-240V 50Hz RSCR

Single pack code number: **195B4822**

| Position | Title                                      | Code     | Amount |
|----------|--------------------------------------------|----------|--------|
| 1        | Compressor NLU10KK.1                       | 105H6193 | 1      |
| 2        | e-PTC starting device (220V, 380hm, 4.8mm) | 103N0055 | 1      |
| 3        | Run capacitor (2.5µF 320V, 4.8mm)          | 117-7139 | 1      |
| 4        | Run capacitor bracket                      | 117-0300 | 1      |
| 5        | Screw for bracket M4x8mm                   | 117-0301 | 1      |
| 6        | Cord relief                                | 103n1010 | 1      |
| 7        | Cover                                      | 103n2010 | 1      |
| 8        | Bolt joint for one compressor   M6   ø16mm | 118-1917 | 1      |

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## Model

|             |                  |                  |             |                 |
|-------------|------------------|------------------|-------------|-----------------|
| Designation | <b>NLU10KK.1</b> | 220-240V/50Hz 1~ | Sales code: | <b>105H6193</b> |
|-------------|------------------|------------------|-------------|-----------------|

## Compressor design

|                            |                                 |                       |                                  |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type                   | Mineral                         | Refrigerant(s)        | <b>R600a</b>                     |
| Oil viscosity              | 4,6cST                          | Displacement          | 10,09cm <sup>3</sup> / 0,62cu.in |
| Oil quantity               | 264cm <sup>3</sup> / 8,9fl.oz   | Compressors on pallet | 80                               |
| Refr. charge - tech. limit | 150g / 5,3oz                    |                       |                                  |
| Free gas volume comp.      | 2360cm <sup>3</sup> / 79,8fl.oz |                       |                                  |
| Weight                     | 12,1kg / 26,7lbs                |                       |                                  |
| Motor protection           | 1# internal                     |                       |                                  |
| Winding resistance main    | 19,39Ω (at 25°C)                |                       |                                  |
| Winding resistance aux     | 22,46Ω (at 25°C)                |                       |                                  |
| Max. winding temp.         | 105°C / 221°F                   |                       |                                  |
| Max. discharge temp.       | 130°C / 266°F                   |                       |                                  |



## General - Configurations with NLU10KK.1

|                        |                |
|------------------------|----------------|
|                        | <b>Conf. 1</b> |
| Motorconfiguration     | RSCR           |
| Power supply (nominal) | 220-240V/50Hz  |
| Number of phases       | 1              |
| Voltage range          | 198-254V       |
| Approvals              | VDE, CB        |
| Starting torque        | LST            |
| Note                   | - / -          |

## Applications with NLU10KK.1

|                         |                |
|-------------------------|----------------|
|                         | <b>Conf. 1</b> |
| Refrigerant             | R600a          |
| Application             | LBP            |
| System cooling          | static         |
| Hot gas defrost         | -/-            |
| Long interval pull down | -/-            |

## Electrical data - Configurations with NLU10KK.1

|                              |                |
|------------------------------|----------------|
|                              | <b>Conf. 1</b> |
| Starting device type         | PTC            |
| Run capacitor                | 2,5μF          |
| Start capacitor              | -/-            |
| LRA (locked rotor amps / 4s) | 3,1A           |
| RLA (rated load amps / 1s)   | 0,5A           |
| Cut in current               | 6A             |

## Model

Designation

**NLU10KK.1**

220-240V/50Hz 1~

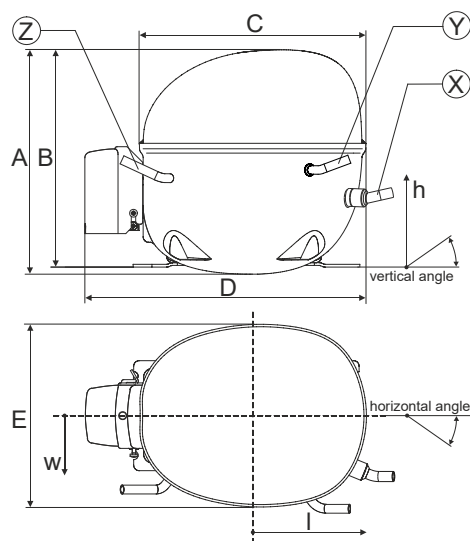
Sales code:

**105H6193**

## Compressor dimensions

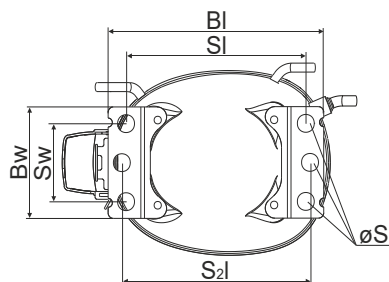
|                |                   |                |
|----------------|-------------------|----------------|
| <b>Housing</b> | A Height          | 203mm / 7,99in |
|                | B Height          | 197mm / 7,76in |
|                | C Length shell    | 205mm / 8,07in |
|                | D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

| Connectors                 | Suction<br>X | Discharge<br>Y | Process<br>Z |
|----------------------------|--------------|----------------|--------------|
| Diameter [mm]              | øi 6,11-6,29 | øi 5,12-5,22   | øi 6,11-6,29 |
| (i:inside, o:outside) [in] | øi 0,24-0,25 | øi 0,2-0,21    | øi 0,24-0,25 |
| Material                   | copper       | copper         | copper       |
| Horizontal angle ±2°       | 0°           | 0°             | 0°           |
| Vertical angle ±2°         | 15°          | 21°            | 155°         |
| Position l/h/w [mm]        | 133/71/57    | 91/103/81      | -107/94/72   |
| [in]                       | 5,2/2,8/2,2  | 3,6/4/3,2      | -4,2/3,7/2,8 |
| Straight tube l. [mm]      | 12           | 12             | 12           |
| [in]                       | 0,5          | 0,5            | 0,5          |

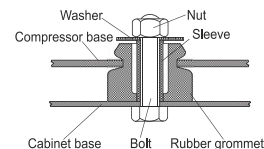


## Compressor fixation

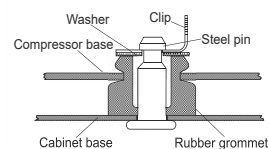
### Bolt joint



| 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 |



### Snap-on



## Mounting accessories

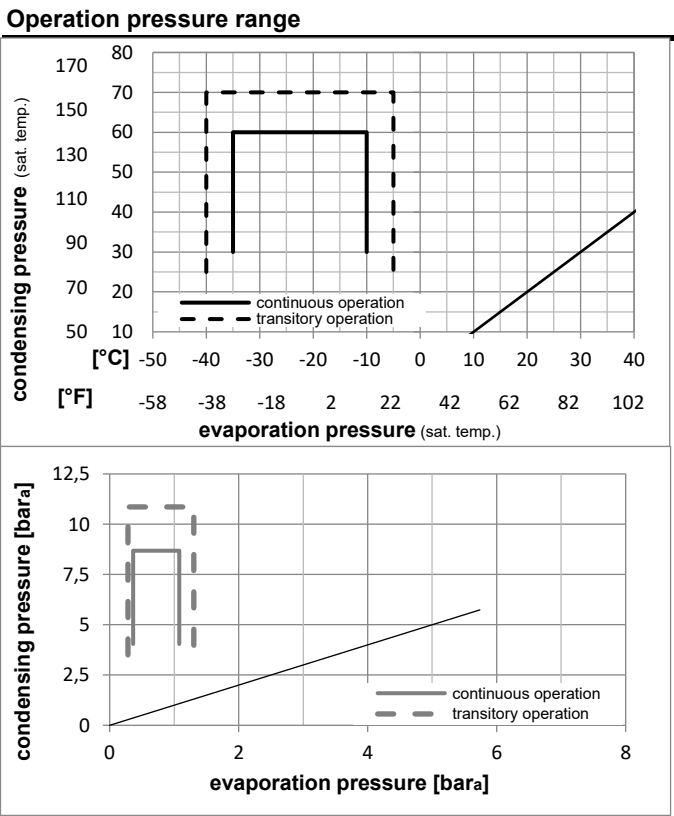
|                            | one comp. | multi pack |
|----------------------------|-----------|------------|
| Bolt joint   M6   ø16mm    | 118-1917  | 118-1918   |
| Bolt joint   ø1/4"   ø16mm | 118-1946  |            |
| Snap-on   ø7,3   ø16mm     | 118-1947  | 118-1919   |

|             |           |               |         |                      |
|-------------|-----------|---------------|---------|----------------------|
| Model       |           |               |         |                      |
| Designation | NLU10KK.1 | 220-240V/50Hz | Conf. 1 | Sales code: 105H6193 |

| Configuration          |                  | Electrical accessories / wiring diagram |  |  |
|------------------------|------------------|-----------------------------------------|--|--|
| Motorconfiguration     | RSCR             |                                         |  |  |
| Power supply (nominal) | 220-240V/50Hz 1~ |                                         |  |  |
| Refrigerant            | R600a            |                                         |  |  |
| Application            | LBP              |                                         |  |  |
| Voltage range          | 198-254V         |                                         |  |  |
| Starting torque        | LST              |                                         |  |  |
| Approvals              | VDE<br>CB        |                                         |  |  |

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

| System cooling (n/a: outside limits) |        |     |     |
|--------------------------------------|--------|-----|-----|
| T ambient                            | LBP    | MBP | HBP |
| 32°C / 90°F                          | static | n/a | n/a |
| 38°C / 100°F                         | static | n/a | n/a |
| 43°C / 110°F                         | static | n/a | n/a |



| Components             |                                    |          |
|------------------------|------------------------------------|----------|
| a1                     | e-PTC starter (220V, 38Ohm, 4.8mm) | 103N0055 |
| e                      | run capacitor (2.5μF, 4.8mm)       | 117-7139 |
| b                      | plastic cover                      | 103N2010 |
| d                      | cord relief                        | 103N1010 |
|                        | bracket for run capacitor          | 117-0300 |
|                        | screw M4x8mm                       | 117-0301 |
| Alternative components |                                    |          |
| a1                     | PTC starter (220V, 25Ohm, 4.8mm)   | 103N0021 |
| e                      | run capacitor (2.5μF, 4.8mm)       | 117-7139 |
| b                      | plastic cover                      | 103N2011 |
| d                      | cord relief                        | 103N1010 |
| g                      | protection screen for PTC          | 103N0476 |
|                        | bracket for run capacitor          | 117-0300 |

## Model

Designation

NLU10KK.1

220-240V/50Hz

Conf. 1

Sales code:

105H6193

## Optimization + standard conditions

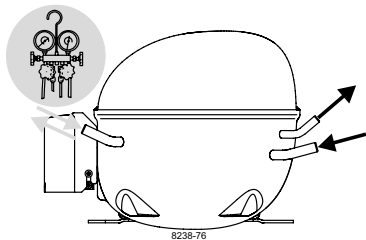
R600a, 220V/50Hz, RSCR, static, VDE, CB

| 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    | [W] | [A]               | [kg/h] |                     |  |                |  |             |
| [°C]                                          | [°F] |                                              |      |                  |         |              |       |                  |           |      |      |      |     |                   |        |                     |  |                |  | ASHRAE LBP  |
| -23                                           | 54   | 32                                           | 32   | 175,7            | 600     | 151,2        | 1,98  | 6,75             | 1,70      | 88,8 | 0,40 | 1,89 |     |                   |        |                     |  |                |  |             |
| -10                                           | 130  | 90                                           | 90   |                  |         |              |       |                  |           |      |      |      |     |                   |        |                     |  |                |  |             |
|                                               |      |                                              |      |                  |         |              |       |                  |           |      |      |      |     |                   |        |                     |  |                |  |             |
| -25                                           | 55   | 32                                           | 55   | 131,5            | 449     | 113,2        | 1,55  | 5,30             | 1,34      | 84,7 | 0,38 | 1,72 |     |                   |        |                     |  |                |  | cecomaf LBP |
| -13                                           | 131  | 90                                           | 131  |                  |         |              |       |                  |           |      |      |      |     |                   |        |                     |  |                |  |             |
|                                               |      |                                              |      |                  |         |              |       |                  |           |      |      |      |     |                   |        |                     |  |                |  |             |
| -35                                           | 40   | 20                                           | 40   | 91,9             | 314     | 79,1         | 1,58  | 5,39             | 1,36      | 58,3 | 0,26 | 1,12 |     |                   |        |                     |  |                |  | EN12900 LBP |
| -31                                           | 104  | 68                                           | 104  |                  |         |              |       |                  |           |      |      |      |     |                   |        |                     |  |                |  |             |
|                                               |      |                                              |      |                  |         |              |       |                  |           |      |      |      |     |                   |        |                     |  |                |  |             |
| -23                                           | 49   | 4,4                                          | 49   | 143,8            | 491     | 123,8        | 1,67  | 5,71             | 1,44      | 86,1 | 0,39 | 2,10 |     |                   |        |                     |  |                |  | ARI540 LBP  |
| -10                                           | 120  | 40                                           | 120  |                  |         |              |       |                  |           |      |      |      |     |                   |        |                     |  |                |  |             |
|                                               |      |                                              |      |                  |         |              |       |                  |           |      |      |      |     |                   |        |                     |  |                |  |             |
| -23                                           | 41   | 32                                           | 32   | 190,3            | 650     | 163,8        | 2,33  | 7,96             | 2,01      | 81,7 | 0,37 | 2,04 |     |                   |        |                     |  |                |  | AHAM LBP    |
| -10                                           | 105  | 90                                           | 90   |                  |         |              |       |                  |           |      |      |      |     |                   |        |                     |  |                |  |             |
|                                               |      |                                              |      |                  |         |              |       |                  |           |      |      |      |     |                   |        |                     |  |                |  |             |
| -35                                           | 45   | 32                                           | 45   | 87,2             | 298     | 75,1         | 1,48  | 5,06             | 1,28      | 58,9 | 0,26 | 1,04 |     |                   |        |                     |  |                |  | opt         |
| -31                                           | 113  | 90                                           | 113  |                  |         |              |       |                  |           |      |      |      |     |                   |        |                     |  |                |  |             |
|                                               |      |                                              |      |                  |         |              |       |                  |           |      |      |      |     |                   |        |                     |  |                |  |             |

## Performance tables

R600a, 220V/50Hz, RSCR, static, VDE, CB

|                  | 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  | 87,2             | 298     | 75,1     | 1,48  | 5,06     | 1,28      | 58,9  | 0,26 | 1,04   |   |  |   |  |
| cond. pressure   | -30  | -22  | 117,6            | 401     | 101,2    | 1,69  | 5,78     | 1,46      | 69,5  | 0,31 | 1,40   |   |  |   |  |
| pc= 45/113       | -25  | -13  | 154,1            | 526     | 132,6    | 1,92  | 6,55     | 1,65      | 80,3  | 0,36 | 1,83   |   |  |   |  |
| return gas temp. | -23  | -10  | 168,2            | 574     | 144,7    | 2,00  | 6,83     | 1,72      | 84,1  | 0,38 | 2,00   |   |  |   |  |
| RGT= 32/90       | -20  | -4   | 197,9            | 676     | 170,3    | 2,16  | 7,37     | 1,86      | 91,7  | 0,41 | 2,36   |   |  |   |  |
| liquid temp      | -15  | 5    | 249,8            | 853     | 215,0    | 2,41  | 8,21     | 2,07      | 103,8 | 0,47 | 2,98   |   |  |   |  |
| Tliq= 45/113     | -10  | 14   | 310,7            | 1061    | 267,4    | 2,65  | 9,06     | 2,28      | 117,1 | 0,53 | 3,72   |   |  |   |  |
| [°C / °F]        | -35  | -31  | 70,5             | 241     | 60,7     | 1,21  | 4,12     | 1,04      | 58,4  | 0,26 | 0,92   |   |  |   |  |
| cond. pressure   | -30  | -22  | 98,2             | 335     | 84,5     | 1,37  | 4,69     | 1,18      | 71,6  | 0,32 | 1,28   |   |  |   |  |
| pc= 55/131       | -25  | -13  | 131,5            | 449     | 113,2    | 1,55  | 5,30     | 1,34      | 84,7  | 0,38 | 1,72   |   |  |   |  |
| return gas temp  | -23  | -10  | 144,2            | 493     | 124,1    | 1,62  | 5,52     | 1,39      | 89,2  | 0,40 | 1,88   |   |  |   |  |
| RGT= 32/90       | -20  | -4   | 171,3            | 585     | 147,4    | 1,75  | 5,97     | 1,50      | 98,1  | 0,44 | 2,24   |   |  |   |  |
| liquid temp      | -15  | 5    | 218,5            | 746     | 188,1    | 1,95  | 6,66     | 1,68      | 112,0 | 0,50 | 2,86   |   |  |   |  |
| Tliq= 55/131     | -10  | 14   | 274,1            | 936     | 235,9    | 2,16  | 7,38     | 1,86      | 126,8 | 0,57 | 3,60   |   |  |   |  |



# NL Compressors

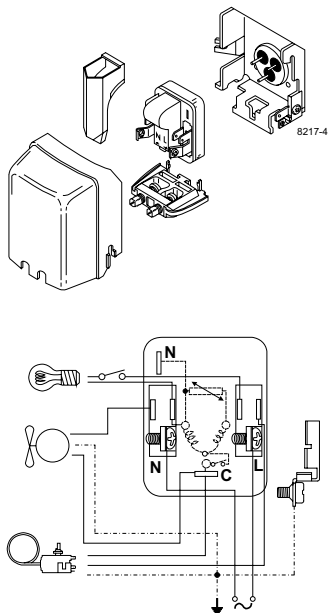
**SECCP**

Keep electrical equipment clear from oil, chemicals, and water

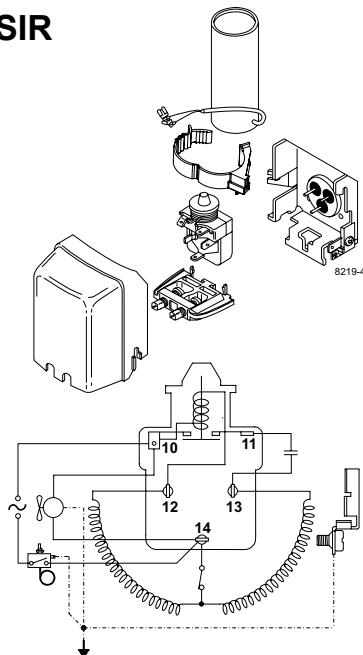


When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

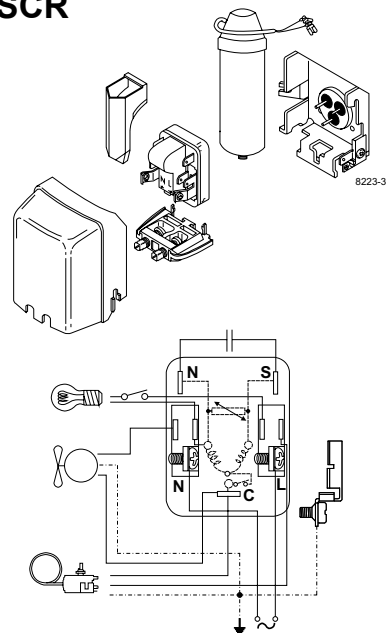
## RSIR

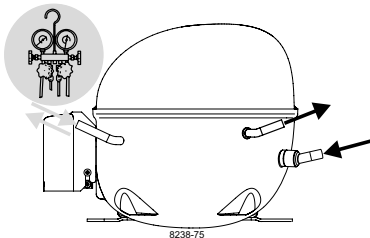


## CSIR



## RSCR





# NL Compressors

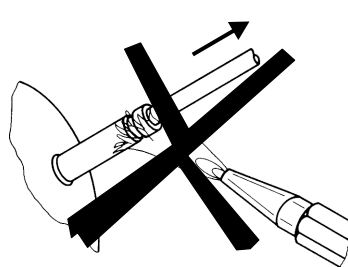
**SECOP**

Keep electrical equipment clear from oil, chemicals, and water

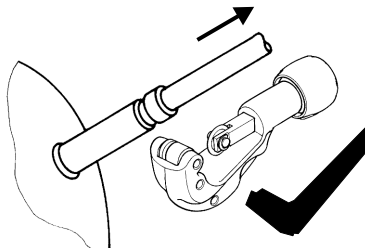


When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

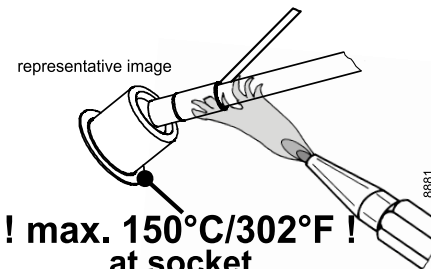
## Service/Repair – R290, R600a, R170, R1270, R1234yf (applies to all flammable refrigerants)



8545



## Brazing on Suction Connectors (Direct Intake)



**! 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)**

**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.secop.com](http://www.secop.com)**