

Single Pack NLX10KK.2 220-240V 50Hz RSCR

Single pack code number: **195B4423**

| Position | Title | Code | Amount |
|----------|--|----------|--------|
| 1 | Compressor NLX10KK.2 | 105H6101 | 1 |
| 2 | PTC starting device (220V, 250hm, 4.8mm) | 103N0021 | 1 |
| 3 | Protection screen for PTC | 103N0476 | 1 |
| 4 | Run capacitor holder | 117-0300 | 1 |
| 5 | Screw for bracket M4x8mm | 117-0301 | 1 |
| 6 | Run capacitor (2μF 320V, 4.8mm) | 117-7136 | 1 |
| 7 | Cord relief | 103N1010 | 1 |
| 8 | Cover | 103N2011 | 1 |
| 9 | Bolt joint for one compressor M6 ø16mm | 118-1917 | 1 |

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Model

| | | | | |
|-------------|------------------|------------------|-------------|-----------------|
| Designation | NLX10KK.2 | 220-240V/50Hz 1~ | Sales code: | 105H6101 |
|-------------|------------------|------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R600a |
| Oil viscosity | 10,4cST | Displacement | 10,09cm ³ / 0,62cu.in |
| Oil quantity | 265cm ³ / 9fl.oz | Compressors on pallet | 80 |
| Refr. charge - tech. limit | 150g / 5,3oz | | |
| Free gas volume comp. | 2360cm ³ / 79,8fl.oz | | |
| Weight | 10,7kg / 23,6lbs | | |
| Motor protection | 1# internal | | |
| Winding resistance main | 19,4Ω (at 25°C) | | |
| Winding resistance aux | 35Ω (at 25°C) | | |
| Max. winding temp. | 95°C / 203°F | | |
| Max. discharge temp. | 125°C / 257°F | | |



General - Configurations with NLX10KK.2

| | Conf. 1 | Conf. 2 |
|------------------------|----------------|----------------|
| Motorconfiguration | RSCR | eRSCR |
| Power supply (nominal) | 220-240V/50Hz | 220-240V/50Hz |
| Number of phases | 1 | 1 |
| Voltage range | 198-254V | 198-254V |
| Approvals | VDE, CCC, EAC | VDE, CCC, EAC |
| Starting torque | LST | LST |
| Note | - / - | |

Applications with NLX10KK.2

| | Conf. 1 | Conf. 2 |
|-------------------------|----------------|----------------|
| Refrigerant | R600a | R600a |
| Application | LBP | LBP |
| System cooling | static | static |
| Hot gas defrost | - / - | - / - |
| Long interval pull down | - / - | - / - |

Electrical data - Configurations with NLX10KK.2

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

Model

Designation

NLX10KK.2

220-240V/50Hz 1~

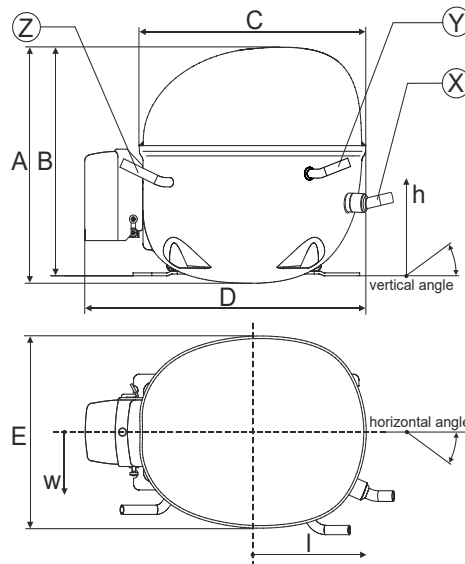
Sales code:

105H6101

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 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

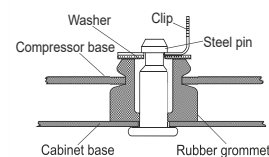


| Baseplate | [mm] | [inch] |
|-------------|------|--------|
| BI | 204 | 8.03 |
| Bw | 100 | 3.94 |
| Small holes | | |
| | [mm] | [inch] |
| SI | 170 | 6.7 |
| Sw | 70 | 2.76 |
| S2l | 178 | 7 |
| øS | ø 16 | ø 0.63 |

Bolt joint



Snap-on



Mounting accessories

| 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

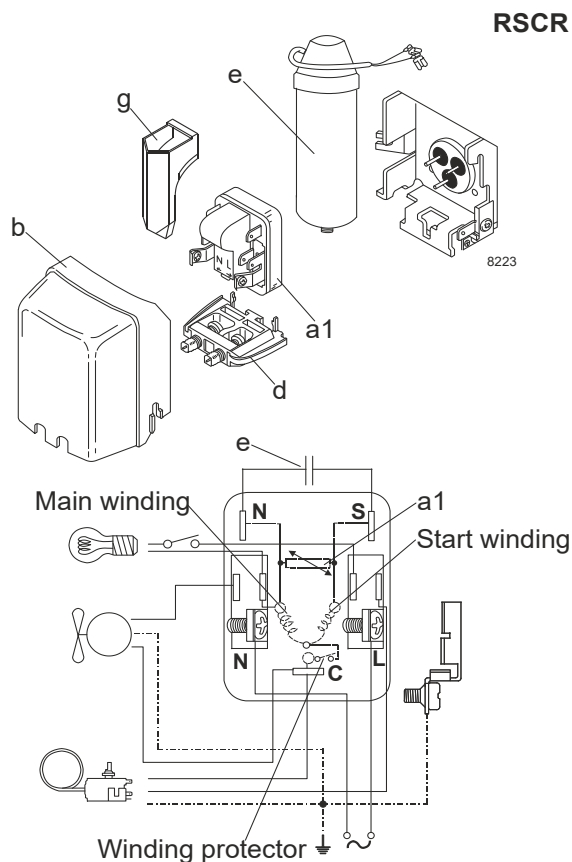
Model

| | | | | | |
|-------------|------------------|----------------------|----------------|-------------|-----------------|
| Designation | NLX10KK.2 | 220-240V/50Hz | Conf. 1 | Sales code: | 105H6101 |
|-------------|------------------|----------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|------------------|
| Motorconfiguration | RSCR |
| Power supply (nominal) | 220-240V/50Hz 1~ |
| Refrigerant | R600a |
| Application | LBP |
| Voltage range | 198-254V |
| Starting torque | LST |
| Approvals | VDE |
| | CCC |
| | EAC |

Electrical accessories / wiring diagram



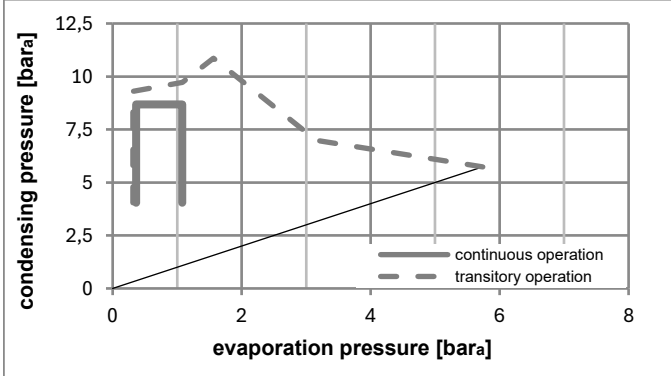
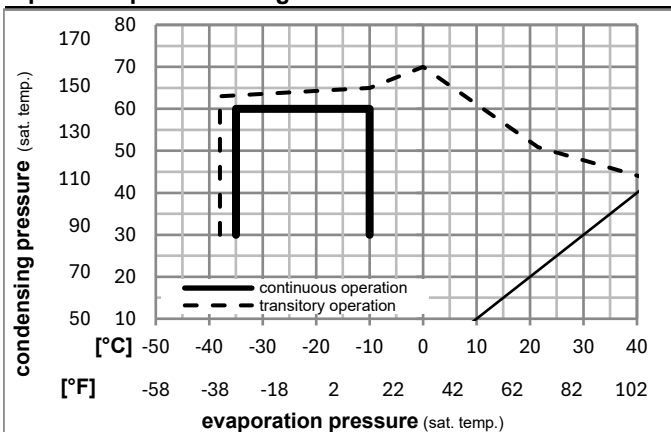
Ambient/ machine room temperatures minimum /maximum

Ambient temperature range: 10 - 43°C / 50 - 110°F

Machine room temperature range: 10 - 48°C / 50 - 119°F

Compressor cooling: static

Operation pressure range



Components

| | | |
|----|----------------------------------|----------|
| a1 | PTC starter (220V, 25Ohm, 4.8mm) | 103N0021 |
| e | run capacitor (2μF, 4.8mm) | 117-7136 |
| b | plastic cover | 103N2010 |
| d | cord relief | 103N1010 |
| g | protection screen for PTC | 103N0476 |
| | bracket for run capacitor | 117-0300 |

Alternative components

| | | |
|---|---------------|----------|
| b | plastic cover | 103N2011 |
| | screw M4x8mm | 117-0301 |

Model

Designation **NLX10KK.2** **220-240V/50Hz** Conf. 1 Sales code: **105H6101**

Optimization + standard conditions

R600a, 220V/50Hz, RSCR, static, VDE, CCC, EAC

| | pe | pc | RGT | Tliq | Cooling capacity | COP | EER | P1 | I | Ref. mass flow | |
|-------------|------|------|------|------|------------------|----------|-----------|------|------|----------------|--|
| | [°C] | [°C] | [°C] | [°C] | [W] | [W/W] | [Btu/Wh] | [W] | [A] | [kg/h] | |
| ASHRAE LBP | -23 | 54 | 32 | 32 | 177,1 | 1,89 | 6,44 | 93,9 | 0,46 | 1,90 | |
| | [°F] | | | | [Btu/h] | [kcal/h] | [kcal/Wh] | | | | |
| cecomaf LBP | -25 | 55 | 32 | 55 | 133,0 | 1,49 | 5,08 | 89,5 | 0,44 | 1,74 | |
| | [°F] | | | | | | | | | | |
| EN12900 LBP | -35 | 40 | 20 | 40 | 95,4 | 1,53 | 5,23 | 62,3 | 0,32 | 1,16 | |
| | [°F] | | | | | | | | | | |
| ARI540 LBP | -23 | 49 | 4,4 | 49 | 145,3 | 1,59 | 5,44 | 91,2 | 0,45 | 2,12 | |
| | [°F] | | | | | | | | | | |
| AHAM LBP | -23 | 41 | 32 | 32 | 192,6 | 2,25 | 7,68 | 85,7 | 0,42 | 2,07 | |
| | [°F] | | | | | | | | | | |
| opt | -35 | 45 | 32 | 45 | 91,0 | 1,43 | 4,89 | 63,5 | 0,32 | 1,08 | |
| | [°F] | | | | | | | | | | |

Performance tables

R600a, 220V/50Hz, RSCR, static, VDE, CCC, EAC

| | 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 | 91,0 | 311 | 78,3 | 1,43 | 4,89 | 1,23 | 63,5 | 0,32 | 1,08 |
| cond. pressure | -30 | -22 | 120,6 | 412 | 103,8 | 1,63 | 5,57 | 1,40 | 74,0 | 0,37 | 1,43 |
| pc= 45/113 | -25 | -13 | 156,4 | 534 | 134,6 | 1,84 | 6,28 | 1,58 | 85,0 | 0,42 | 1,86 |
| return gas temp. | -23 | -10 | 170,1 | 581 | 146,4 | 1,91 | 6,54 | 1,65 | 88,9 | 0,44 | 2,03 |
| RGT= 32/90 | -20 | -4 | 199,2 | 680 | 171,4 | 2,06 | 7,04 | 1,77 | 96,7 | 0,47 | 2,38 |
| liquid temp | -15 | 5 | 250,0 | 854 | 215,2 | 2,29 | 7,82 | 1,97 | 109,2 | 0,53 | 2,99 |
| Tliq= 45/113 | -10 | 14 | 309,7 | 1058 | 266,5 | 2,52 | 8,62 | 2,17 | 122,7 | 0,59 | 3,71 |
| [°C / °F] | -35 | -31 | 74,5 | 254 | 64,1 | 1,17 | 4,01 | 1,01 | 63,5 | 0,32 | 0,97 |
| cond. pressure | -30 | -22 | 101,0 | 345 | 87,0 | 1,33 | 4,53 | 1,14 | 76,2 | 0,38 | 1,32 |
| pc= 55/131 | -25 | -13 | 133,0 | 454 | 114,5 | 1,49 | 5,08 | 1,28 | 89,5 | 0,44 | 1,74 |
| return gas temp | -23 | -10 | 145,3 | 496 | 125,1 | 1,54 | 5,27 | 1,33 | 94,2 | 0,46 | 1,90 |
| RGT= 32/90 | -20 | -4 | 171,4 | 585 | 147,5 | 1,65 | 5,65 | 1,42 | 103,6 | 0,51 | 2,24 |
| liquid temp | -15 | 5 | 217,0 | 741 | 186,7 | 1,83 | 6,25 | 1,58 | 118,5 | 0,58 | 2,84 |
| Tliq= 55/131 | -10 | 14 | 270,7 | 924 | 232,9 | 2,01 | 6,87 | 1,73 | 134,5 | 0,65 | 3,55 |

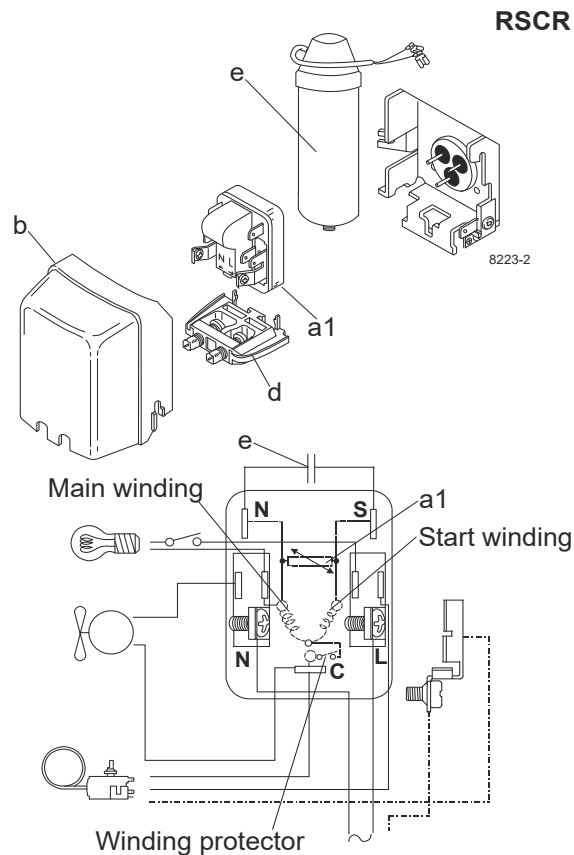
Model

| | | | | | |
|-------------|------------------|----------------------|----------------|-------------|-----------------|
| Designation | NLX10KK.2 | 220-240V/50Hz | Conf. 2 | Sales code: | 105H6101 |
|-------------|------------------|----------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|------------------|
| Motorconfiguration | eRSCR |
| Power supply (nominal) | 220-240V/50Hz 1~ |
| Refrigerant | R600a |
| Application | LBP |
| Voltage range | 198-254V |
| Starting torque | LST |
| Approvals | VDE |
| | CCC |
| | EAC |

Electrical accessories / wiring diagram



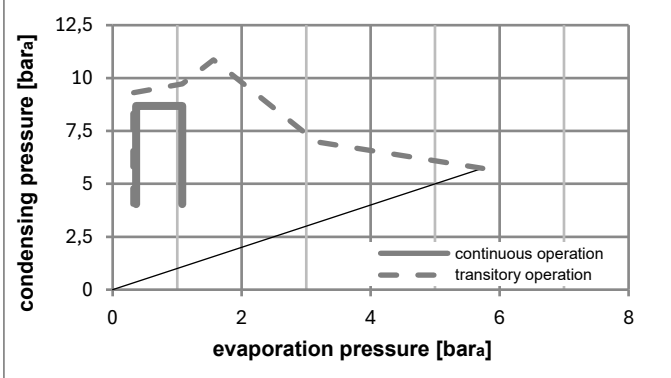
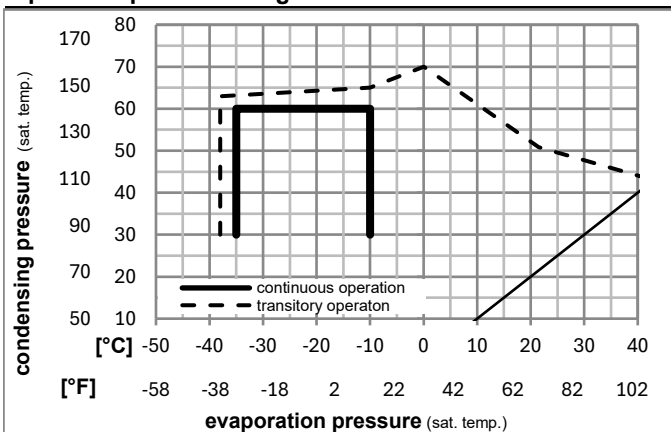
Ambient/ machine room temperatures minimum /maximum

Ambient temperature range: 10 - 43°C / 50 - 110°F

Machine room temperature range: 10 - 48°C / 50 - 119°F

Compressor cooling: static

Operation pressure range



Components

| | | |
|----|---------------------------------------|----------|
| a1 | e-PTC starter (220V, 250hm, 4.8mm) | 103N0050 |
| e | run capacitor (4μF, 4.8mm) | 117-7119 |
| b | plastic cover | 103N2010 |
| d | cord relief bracket for run capacitor | 103N1010 |
| | screw M4x8mm | 117-0300 |
| | | 117-0301 |

Alternative components

| | | |
|---|---------------|----------|
| b | plastic cover | 103N2011 |
|---|---------------|----------|

Model

Designation **NLX10KK.2** **220-240V/50Hz** Conf. 2 Sales code: **105H6101**

Optimization + standard conditions

R600a, 220V/50Hz, eRSCR, static, VDE, CCC, EAC

| | Evaporating pressure (saturation temperature) | | | | Cooling capacity | | | COP | EER | | | Power consumption | | | ASHRAE LBP |
|------|---|-----|-----|------|------------------|---------|----------|------|-------|----------|-----------|-------------------|------|-------------|------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | | [W/W] | [Btu/Wh] | [kcal/Wh] | P1 | I | m | |
| [°C] | -23 | 54 | 32 | 32 | 177,1 | 605 | 152,4 | 1,89 | 6,44 | 1,62 | 93,9 | 0,46 | 1,90 | | |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 133,0 | 454 | 114,5 | 1,49 | 5,08 | 1,28 | 89,5 | 0,44 | 1,74 | cecomaf LBP | |
| [°F] | -13 | 131 | 90 | 131 | | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 95,4 | 326 | 82,1 | 1,53 | 5,23 | 1,32 | 62,3 | 0,32 | 1,16 | EN12900 LBP | |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | | |
| [°C] | -23 | 49 | 4,4 | 49 | 145,3 | 496 | 125,1 | 1,59 | 5,44 | 1,37 | 91,2 | 0,45 | 2,12 | ARI540 LBP | |
| [°F] | -10 | 120 | 40 | 120 | | | | | | | | | | | |
| [°C] | -23 | 41 | 32 | 32 | 192,6 | 658 | 165,8 | 2,25 | 7,68 | 1,93 | 85,7 | 0,42 | 2,07 | AHAM LBP | |
| [°F] | -10 | 105 | 90 | 90 | | | | | | | | | | | |
| [°C] | -35 | 45 | 32 | 45 | 91,0 | 311 | 78,3 | 1,43 | 4,89 | 1,23 | 63,5 | 0,32 | 1,08 | opt | |
| [°F] | -31 | 113 | 90 | 113 | | | | | | | | | | | |

Performance tables

R600a, 220V/50Hz, eRSCR, static, VDE, CCC, EAC

| | pe | | Cooling capacity | | | COP | EER | | P1 | I | m |
|------------------|------|------|------------------|---------|----------|------|-------|----------|-------|------|------|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | | [W/W] | [Btu/Wh] | | | |
| [°C / °F] | -35 | -31 | 91,0 | 311 | 78,3 | 1,43 | 4,89 | 1,23 | 63,5 | 0,32 | 1,08 |
| cond. pressure | -30 | -22 | 120,6 | 412 | 103,8 | 1,63 | 5,57 | 1,40 | 74,0 | 0,37 | 1,43 |
| pc= 45/113 | -25 | -13 | 156,4 | 534 | 134,6 | 1,84 | 6,28 | 1,58 | 85,0 | 0,42 | 1,86 |
| return gas temp. | -23 | -10 | 170,1 | 581 | 146,4 | 1,91 | 6,54 | 1,65 | 88,9 | 0,44 | 2,03 |
| RGT= 32/90 | -20 | -4 | 199,2 | 680 | 171,4 | 2,06 | 7,04 | 1,77 | 96,7 | 0,47 | 2,38 |
| liquid temp | -15 | 5 | 250,0 | 854 | 215,2 | 2,29 | 7,82 | 1,97 | 109,2 | 0,53 | 2,99 |
| Tliq= 45/113 | -10 | 14 | 309,7 | 1058 | 266,5 | 2,52 | 8,62 | 2,17 | 122,7 | 0,59 | 3,71 |
| [°C / °F] | -35 | -31 | 74,5 | 254 | 64,1 | 1,17 | 4,01 | 1,01 | 63,5 | 0,32 | 0,97 |
| cond. pressure | -30 | -22 | 101,0 | 345 | 87,0 | 1,33 | 4,53 | 1,14 | 76,2 | 0,38 | 1,32 |
| pc= 55/131 | -25 | -13 | 133,0 | 454 | 114,5 | 1,49 | 5,08 | 1,28 | 89,5 | 0,44 | 1,74 |
| return gas temp | -23 | -10 | 145,3 | 496 | 125,1 | 1,54 | 5,27 | 1,33 | 94,2 | 0,46 | 1,90 |
| RGT= 32/90 | -20 | -4 | 171,4 | 585 | 147,5 | 1,65 | 5,65 | 1,42 | 103,6 | 0,51 | 2,24 |
| liquid temp | -15 | 5 | 217,0 | 741 | 186,7 | 1,83 | 6,25 | 1,58 | 118,5 | 0,58 | 2,84 |
| Tliq= 55/131 | -10 | 14 | 270,7 | 924 | 232,9 | 2,01 | 6,87 | 1,73 | 134,5 | 0,65 | 3,55 |



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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