

Model

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

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R600a |
| Oil viscosity | 5,8cST | Displacement | 10,09cm ³ / 0,62cu.in |
| Oil quantity | 264cm ³ / 8,9fl.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 | RSCR |
| 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 | PTC |
| Run capacitor | 2μF | 4μF |
| Start capacitor | - / - | - / - |
| LRA (locked rotor amps / 4s) | 3,2A | 3,2A |
| RLA (rated load amps / 1s) | 0,6A | 0,6A |
| Cut in current | 6A | 6A |

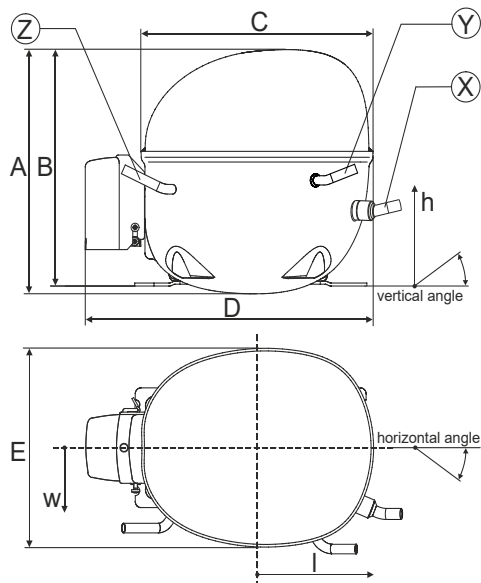
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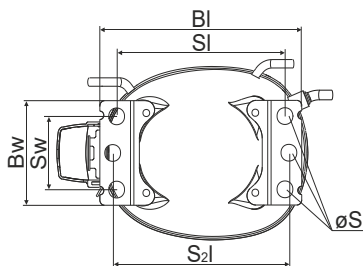
Compressor dimensions

| | | |
|----------------|-------------------|----------------|
| 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 |



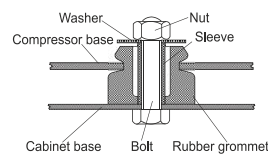
Compressor fixation



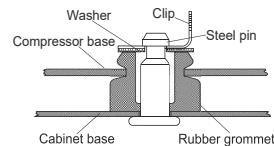
| Baseplate | [mm] | [inch] |
|-----------|------|--------|
| BI | 204 | 8.03 |
| Bw | 100 | 3.94 |

| 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

| | 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 |

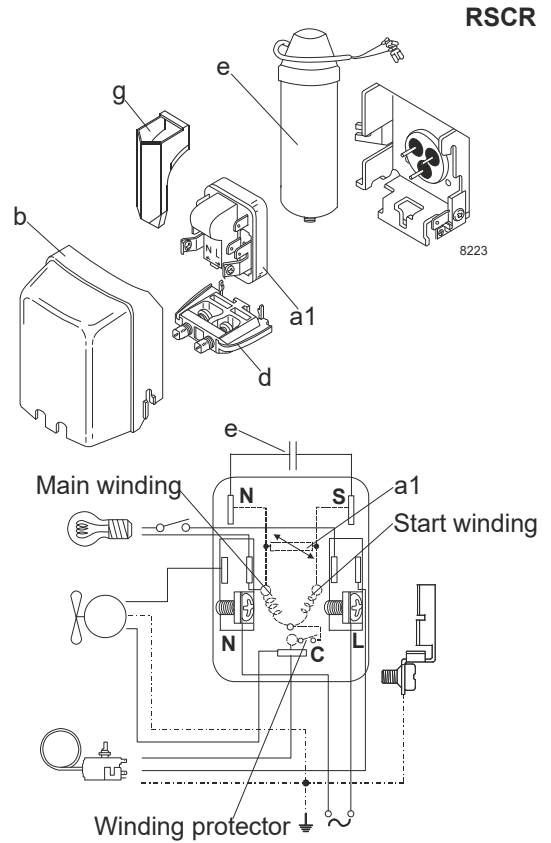
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| Designation | NLX10KK.2 | 220-240V/50Hz | Conf. 1 | Sales code: | 105H6101 |
|-------------|------------------|----------------------|----------------|-------------|-----------------|

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

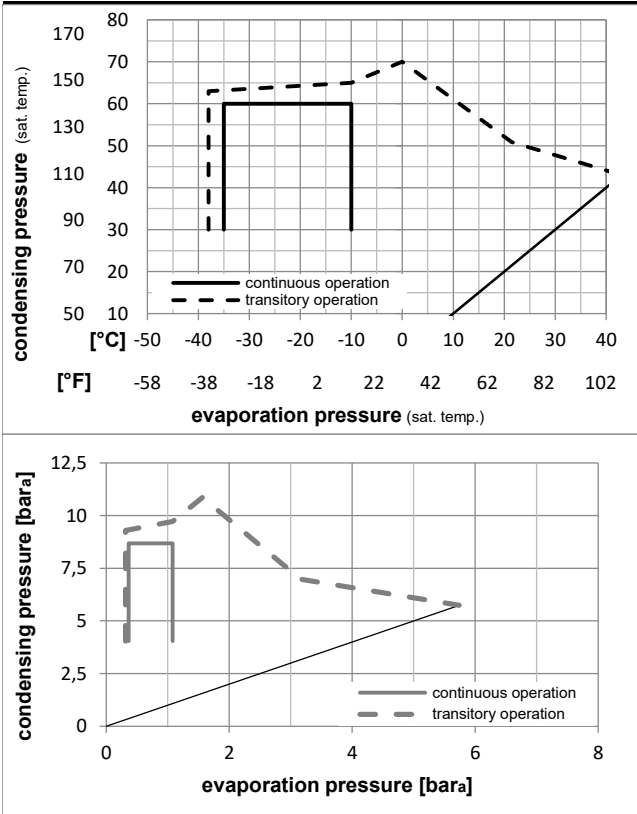


Ambient temperatures / system cooling

| | |
|---------------------------|--------------|
| 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 |

Operation pressure range



Components

| | | |
|----|-----------------------------------|----------|
| a1 | PTC starter (220V, 250ohm, 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

| | | Evaporating pressure (saturation temperature) | | | | Condensing pressure (saturation temperature) | | | | | Power consumption | | | | | | | | |
|------|-------|---|------|------|-------|--|---------|----------|-------|----------|---------------------|------|------|-------------|-----|----|---|---|--|
| | | | | | | Return gas temp. | | | | | Current consumption | | | | | | | | |
| | | | | | | Liquid temp. | | | | | Ref. mass flow | | | | | | | | |
| | | | | | | Cooling capacity | | | | | COP | | | | EER | P1 | I | m | |
| | | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | | | | | |
| [°C] | -23,3 | 54,4 | 32,2 | 32,2 | 177,1 | 605 | 152,4 | 1,89 | 6,44 | 1,62 | 93,9 | 0,46 | 1,90 | ASHRAE LBP | | | | | |
| [°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 | 89,6 | 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] | -23,3 | 48,9 | 4,44 | 48,9 | 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] | -23,3 | 40,6 | 32,2 | 32,2 | 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 | 89,6 | 113 | | | | | | | | | | | | | | | |

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. | -23,3 | -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 | -23,3 | -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 | | |

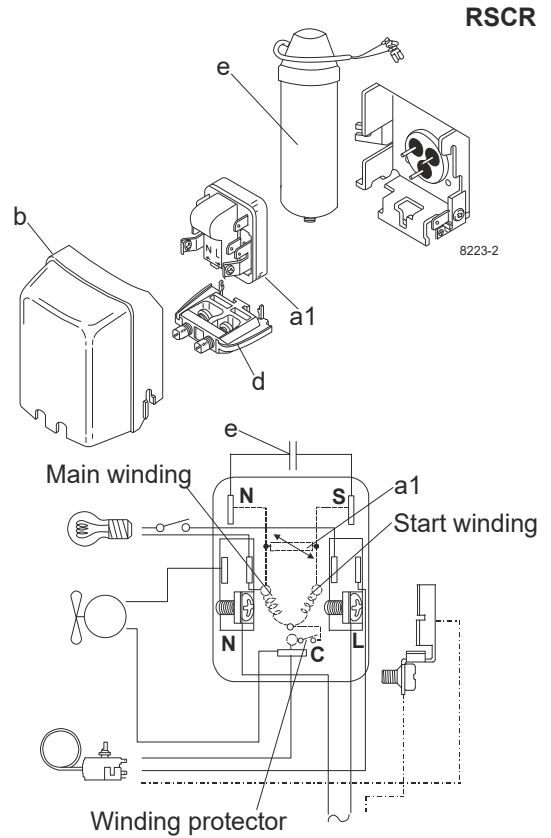
Model

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| Designation | NLX10KK.2 | 220-240V/50Hz | Conf. 2 | 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

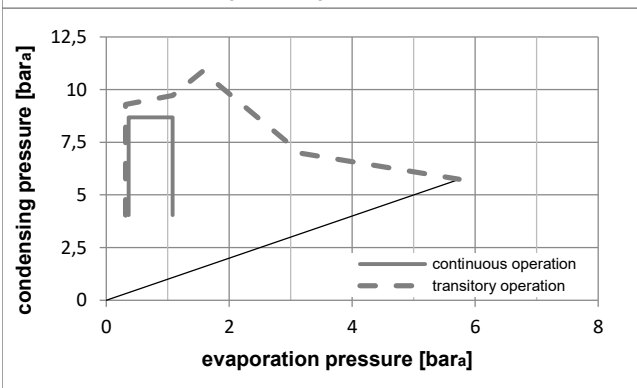
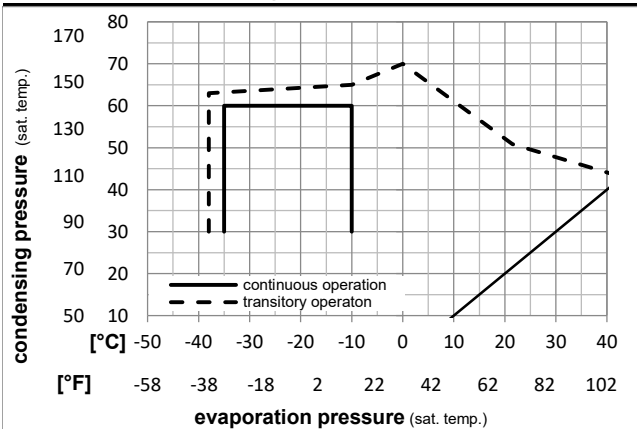


Ambient temperatures / system cooling

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| 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 |

Operation pressure range



Components

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

| Evaporating pressure (saturation temperature) | | Condensing pressure (saturation temperature) | | | | Cooling capacity | | | | | | Power consumption | | | Ref. mass flow m | |
|---|-----|--|------|--------------|---------|------------------|-------|----------|-----------|------|------|---------------------|------|--|---------------------|--|
| | | Return gas temp. | | Liquid temp. | | COP | | EER | | P1 | I | Current consumption | | | | |
| pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | | | | |
| [°C] | -23 | 54,4 | 32,2 | 32,2 | 177,1 | 605 | 152,4 | 1,89 | 6,44 | 1,62 | 93,9 | 0,46 | 1,90 | | ASHRAE LBP | |
| [°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 | 89,6 | 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 | 48,9 | 4,44 | 48,9 | 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 | 40,6 | 32,2 | 32,2 | 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 | 89,6 | 113 | | | | | | | | | | | | |

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 | |
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| 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 | |