

Model

| | | | |
|-------------|------------------------------------|-------------|-----------------|
| Designation | NLE12.6CNL 220-240V/50Hz 1~ | Sales code: | 105H6376 |
|-------------|------------------------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R290 |
| Oil viscosity | 32cST | Displacement | 12,55cm ³ / 0,77cu.in |
| Oil quantity | 294cm ³ / 10fl.oz | Compressors on pallet | 80 |
| Refr. charge - tech. limit | 150g / 5,3oz | | |
| Free gas volume comp. | 2360cm ³ / 79,8fl.oz | | |
| Weight | 11,8kg / 26lbs | | |
| Motor protection | 1# internal | | |
| Winding resistance main | 5,64Ω (at 25°C) | | |
| Winding resistance aux | 8,49Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 130°C / 266°F | | |



General - Configurations with NLE12.6CNL

| | |
|------------------------|---|
| | Conf. 1 |
| Motorconfiguration | CSIR |
| Power supply (nominal) | 220-240V/50Hz |
| Number of phases | 1 |
| Voltage range | 198-254V |
| Approvals | VDE, CCC |
| Starting torque | HST |
| Note | Electrical equipment is included and pre-assembled to compressor. |

Applications with NLE12.6CNL

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

Electrical data - Configurations with NLE12.6CNL

| | |
|------------------------------|----------------|
| | Conf. 1 |
| Starting device type | relay |
| Run capacitor | -/- |
| Start capacitor | 80μF |
| LRA (locked rotor amps / 4s) | 12,5A |
| RLA (rated load amps / 1s) | 2,56A |
| Cut in current | 12,5A |
| IP class | 21 |

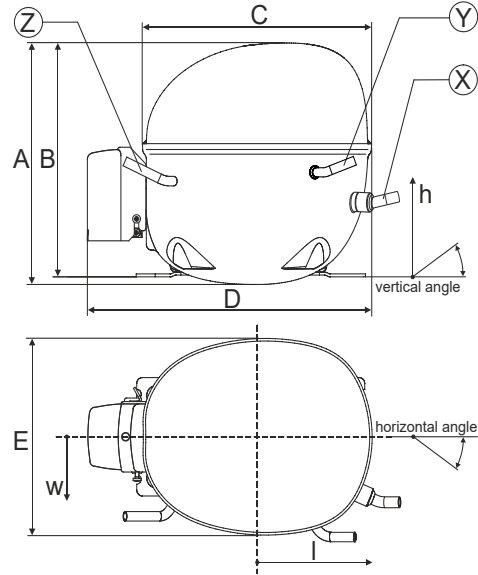
Model

Designation **NLE12.6CNL** 220-240V/50Hz 1~ Sales code: **105H6376**

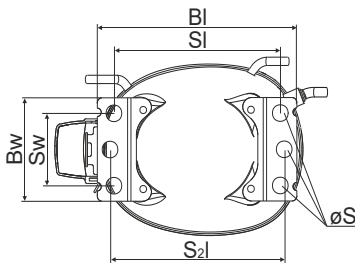
Compressor dimensions

| | | |
|----------------|-------------------|----------------|
| 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 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° | 0° | 0° | 0° |
| Vertical angle | ±2° | 15° | 15° | 155° |
| Position l/h/w | [mm] | 132/69/56 | 94/99/86 | -111/92/72 |
| | [in] | 5,2/2,7/2,2 | 3,7/3,9/3,4 | -4,4/3,6/2,8 |
| Straight tube l. | [mm] | 12 | 12 | 12 |
| | [in] | 0,5 | 0,5 | 0,5 |

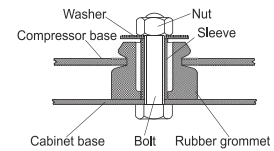


Compressor fixation

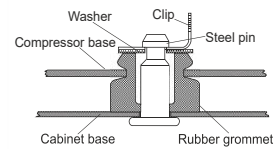


| Baseplate | [mm] | [inch] |
|-------------|------|--------|
| Bi | 204 | 8.03 |
| Bw | 100 | 3.94 |
| Small holes | [mm] | [inch] |
| Si | 170 | 6.7 |
| Sw | 70 | 2.76 |
| S2l | 178 | 7 |
| øS | ø 16 | ø 0.63 |

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

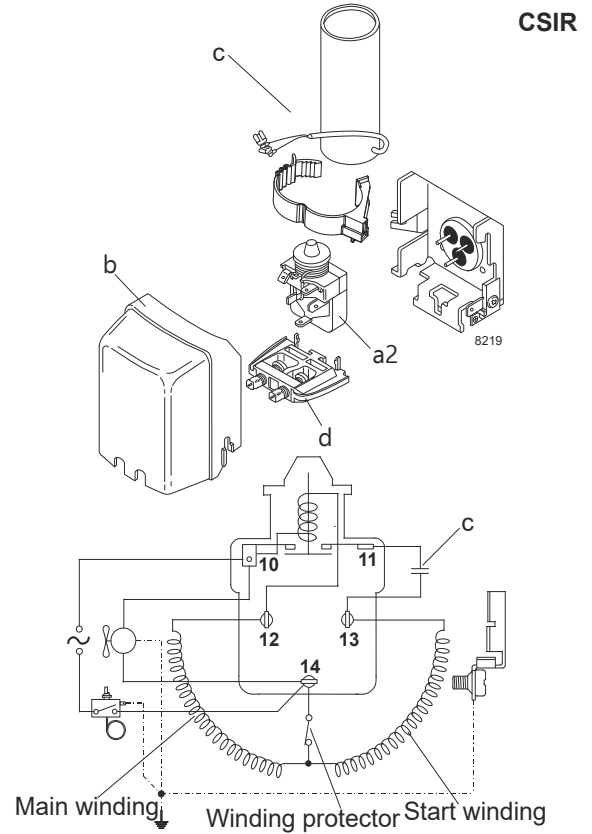
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Configuration

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

Electrical accessories / wiring diagram

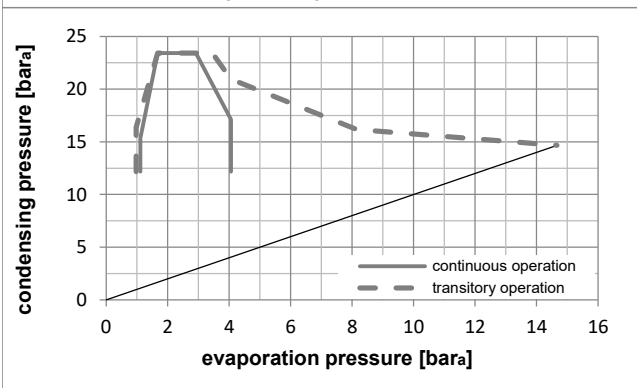
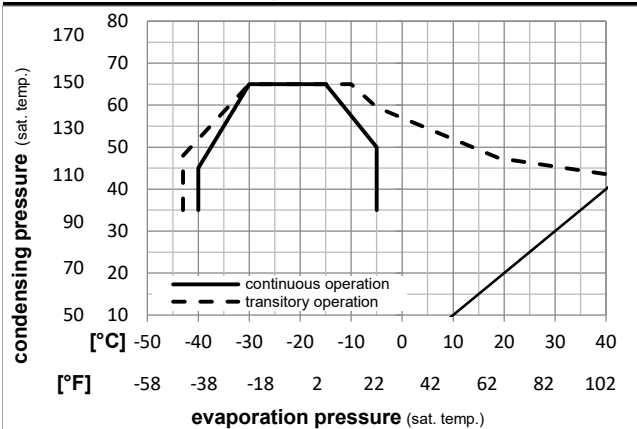


Ambient temperatures / system cooling

| | |
|---------------------------|--------------|
| 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 | fan 3m/s | n/a | n/a |
| 38°C / 100°F | fan 3m/s | n/a | n/a |
| 43°C / 110°F | fan 3m/s | n/a | n/a |

Operation pressure range



Components (already pre-assembled)

| | | |
|----|------------------------|----------|
| a2 | relay | 117U7003 |
| c | start capacitor (80µF) | 117U5015 |
| b | plastic cover | 103N2010 |
| d | cord relief | 103N1010 |

Alternative components

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

Model

Designation **NLE12.6CNL 220-240V/50Hz** Conf. 1 Sales code: **105H6376**

Optimization + standard conditions

220V/50Hz, CSIR, fan 3m/s, VDE, CCC

| | | 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 | 609,8 | 2083 | 524,8 | 1,62 | 5,55 | 1,40 | 375,5 | 2,24 | 6,18 | ASHRAE LBP | | | | | |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 459,7 | 1570 | 395,6 | 1,27 | 4,33 | 1,09 | 362,2 | 2,19 | 5,72 | cecomaf LBP | | | | | |
| [°F] | -13 | 131 | 89,6 | 131 | | | | | | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 354,2 | 1210 | 304,8 | 1,33 | 4,55 | 1,15 | 265,6 | 1,87 | 4,05 | EN12900 LBP | | | | | |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | | | | | | |
| [°C] | -23,3 | 48,9 | 4,44 | 48,9 | 493,6 | 1686 | 424,8 | 1,36 | 4,64 | 1,17 | 363,1 | 2,20 | 6,84 | ARI540 LBP | | | | | |
| [°F] | -10 | 120 | 40 | 120 | | | | | | | | | | | | | | | |
| [°C] | -23,3 | 40,6 | 32,2 | 32,2 | 659,7 | 2253 | 567,8 | 1,91 | 6,53 | 1,65 | 345,0 | 2,13 | 6,68 | AHAM LBP | | | | | |
| [°F] | -10 | 105 | 90 | 90 | | | | | | | | | | | | | | | |
| [°C] | -35 | 45 | 32 | 45 | 338,9 | 1157 | 291,6 | 1,25 | 4,28 | 1,08 | 270,4 | 1,89 | 3,80 | opt | | | | | |
| [°F] | -31 | 113 | 89,6 | 113 | | | | | | | | | | | | | | | |

Performance tables

220V/50Hz, CSIR, fan 3m/s, VDE, CCC

| | 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 | 1867,7 | 6378 | 1607,3 | 1,29 | 4,42 | 1,11 | 1442,6 | 3,18 | 13,95 | | | |
| cond. pressure | -35 | -31 | 2104,5 | 7187 | 1811,1 | 1,40 | 4,77 | 1,20 | 1506,2 | 3,37 | 15,75 | | | |
| pc= -25/-13 | -30 | -22 | 2371,0 | 8098 | 2040,5 | 1,52 | 5,18 | 1,31 | 1562,6 | 3,54 | 17,78 | | | |
| return gas temp. | -25 | -13 | 2671,0 | 9122 | 2298,6 | 1,66 | 5,66 | 1,43 | 1612,4 | 3,70 | 20,09 | | | |
| RGT= 20/68 | -20 | -4 | 3007,8 | 10272 | 2588,6 | 1,82 | 6,20 | 1,56 | 1656,7 | 3,85 | 22,69 | | | |
| liquid temp | -15 | 5 | 3385,2 | 11561 | 2913,4 | 2,00 | 6,82 | 1,72 | 1696,3 | 3,99 | 25,63 | | | |
| Tliq= -25/-13 | -5 | 23 | 4275,5 | 14601 | 3679,5 | 2,42 | 8,27 | 2,08 | 1764,8 | 4,27 | 32,66 | | | |
| [°C / °F] | -40 | -40 | 2549,5 | 8707 | 2194,2 | 1,24 | 4,23 | 1,07 | 2056,0 | 4,01 | 18,18 | | | |
| cond. pressure | -35 | -31 | 2823,6 | 9643 | 2430,0 | 1,32 | 4,52 | 1,14 | 2131,8 | 4,24 | 20,17 | | | |
| pc= -35/-31 | -30 | -22 | 3130,1 | 10690 | 2693,8 | 1,42 | 4,86 | 1,22 | 2199,4 | 4,46 | 22,40 | | | |
| return gas temp | -25 | -13 | 3472,7 | 11860 | 2988,6 | 1,54 | 5,25 | 1,32 | 2259,6 | 4,66 | 24,92 | | | |
| RGT= 20/68 | -20 | -4 | 3854,9 | 13165 | 3317,6 | 1,67 | 5,69 | 1,43 | 2313,3 | 4,84 | 27,74 | | | |
| liquid temp | -15 | 5 | 4280,4 | 14618 | 3683,7 | 1,81 | 6,19 | 1,56 | 2361,4 | 5,02 | 30,91 | | | |
| Tliq= -35/-31 | -5 | 23 | 5274,8 | 18014 | 4539,5 | 2,16 | 7,37 | 1,86 | 2444,0 | 5,35 | 38,41 | | | |