

## Model

|             |                  |                  |             |                 |
|-------------|------------------|------------------|-------------|-----------------|
| Designation | <b>SCE23LNDX</b> | 220-240V/50Hz 1~ | Sales code: | <b>104H8320</b> |
|-------------|------------------|------------------|-------------|-----------------|

## Compressor design

|                            |                                  |                       |                              |
|----------------------------|----------------------------------|-----------------------|------------------------------|
| Oil type                   | Polyolester                      | Refrigerant(s)        | <b>R290</b>                  |
| Oil viscosity              | 32cSt                            | Displacement          | 23cm <sup>3</sup> / 1,4cu.in |
| Oil quantity               | 500cm <sup>3</sup> / 16,9fl.oz   | Compressors on pallet | 48                           |
| Refr. charge - tech. limit | 500g / 17,6oz                    |                       |                              |
| Free gas volume comp.      | 3150cm <sup>3</sup> / 106,5fl.oz |                       |                              |
| Weight                     | 14,9kg / 32,8lbs                 |                       |                              |
| Motor protection           | 1# internal                      |                       |                              |
| Winding resistance main    | 3,3Ω (at 25°C)                   |                       |                              |
| Winding resistance aux     | 10,8Ω (at 25°C)                  |                       |                              |
| Max. winding temp.         | 125°C / 257°F                    |                       |                              |
| Max. discharge temp.       | 140°C / 284°F                    |                       |                              |



## General - Configurations with SCE23LNDX

|                        |   |
|------------------------|---|
|                        | <b>Conf. 1</b>  |
| Motorconfiguration     | CSCR  |
| Power supply (nominal) | 220-240V/50Hz   |
| Number of phases       | 1   |
| Voltage range          | 198-254V  |
| Approvals              | VDE, CCC, CB  |
| Starting torque        | HST   |
| Note                   | Starter kit(relay), cover and cord relief are included and pre-assembled. |

## Applications with SCE23LNDX

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

## Electrical data - Configurations with SCE23LNDX

|                                    |                |
|------------------------------------|----------------|
|                                    | <b>Conf. 1</b> |
| Starting device type               | relay          |
| Run capacitor                      | 10μF           |
| Start capacitor                    | 60μF           |
| LRA (locked rotor amps / 4s/ U(N)) | 20,7A          |
| RLA (rated load amps / 1s/ U(N))   | 3,7A           |
| Cut in current (U(N))              | 20,7A          |

## Model

Designation

**SCE23LNDX**

220-240V/50Hz 1~

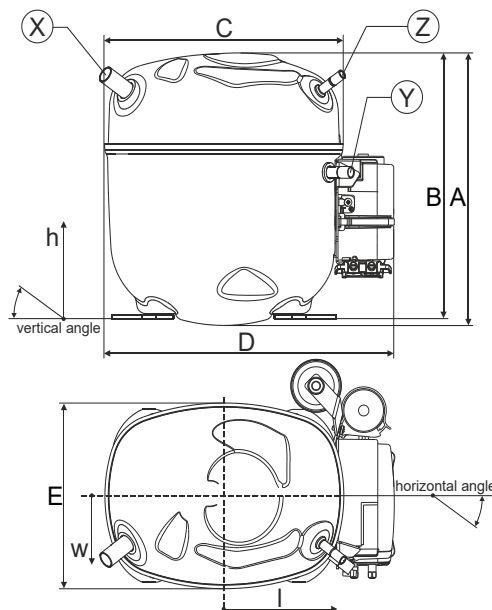
Sales code:

**104H8320**

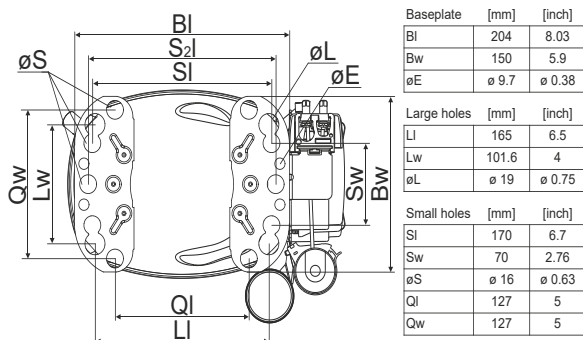
## Compressor dimensions

| Housing | A Height               | 236,4mm / 9,31in  |
|---------|------------------------|-------------------|
|         | B Height               | 230,6mm / 9,08in  |
|         | C Length shell         | 217mm / 8,54in    |
|         | D Length w. cover      | 263,4mm / 10,37in |
|         | E Width                | 161,1mm / 6,34in  |
|         | F Width with equipment | 199mm / 7,83in    |

| Connectors                 | Suction        |  | Discharge    |  | Process      |  |
|----------------------------|----------------|--|--------------|--|--------------|--|
|                            | X              |  | Y            |  | Z            |  |
| Diameter [mm]              | øi 12,81-12,99 |  | øi 8,11-8,29 |  | øi 6,11-6,29 |  |
| (i:inside, o:outside) [in] | øi 0,5-0,51    |  | øi 0,32-0,33 |  | øi 0,24-0,25 |  |
| Material                   | steel/CU       |  | copper       |  | copper       |  |
| Horizontal angle ±2°       | 37°            |  | 37°          |  | 37°          |  |
| Vertical angle ±2°         | 36°            |  | 0°           |  | 36°          |  |
| Position l/h/w [mm]        | -111/212/57    |  | 116/127/81   |  | 110/94/72    |  |
|                            | -4,4/8,3/2,2   |  | 4,5/5/3,2    |  | 4,3/3,7/2,8  |  |
| Straight tube l. [mm]      | 12             |  | 12           |  | 12           |  |
|                            | 0,5            |  | 0,5          |  | 0,5          |  |



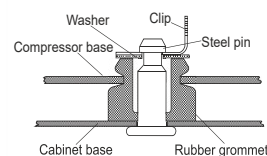
## Compressor fixation



## 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

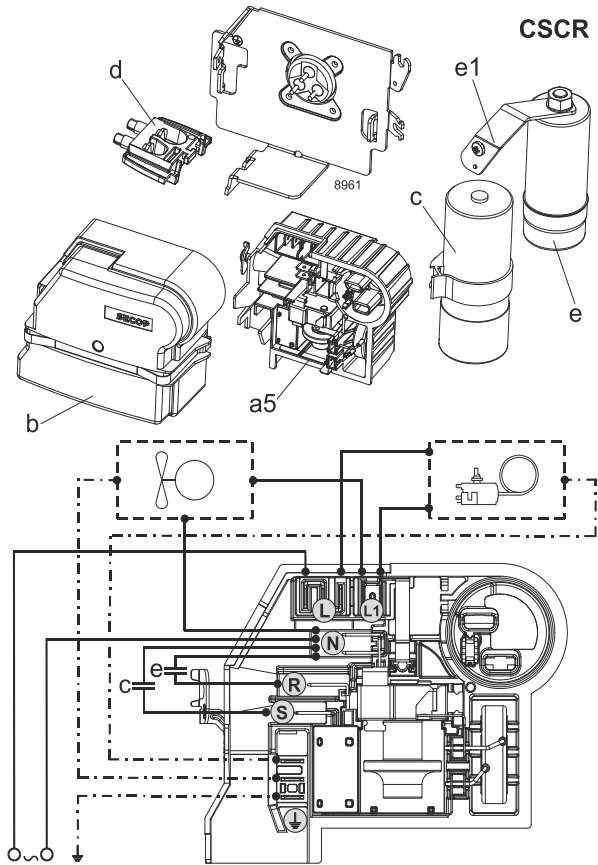
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## Configuration

|                        |                  |
|------------------------|------------------|
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| Refrigerant            | R290             |
| Application            | LBP              |
| Voltage range          | 198-254V         |
| Starting torque        | HST              |
| Approvals              | VDE              |
|                        | CCC              |
|                        | CB               |

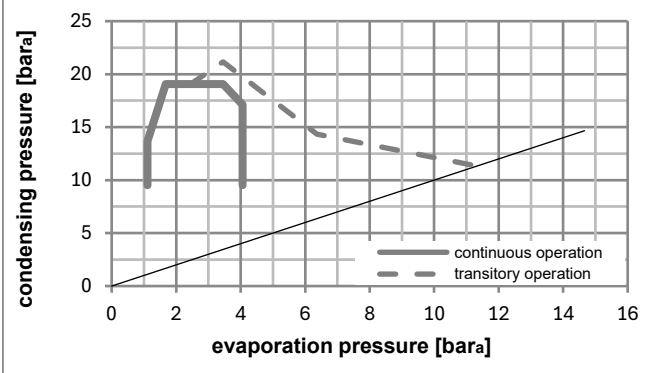
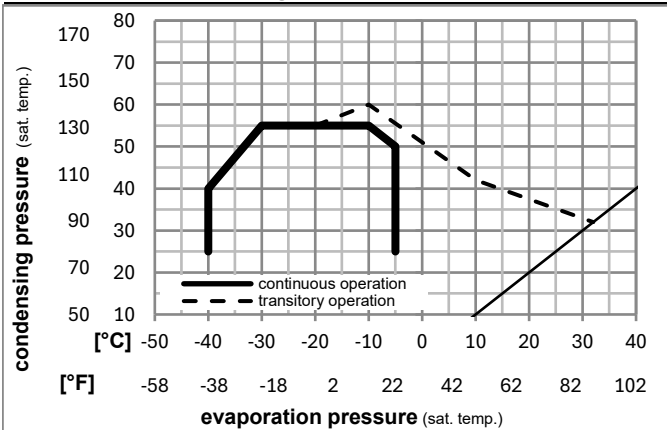
## Electrical accessories / wiring diagram



## 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:             | fan 3m/s               |

## Operation pressure range



## Components (Starter kit (a5)+cover (b) +cord relief (d): pre assembled)

|    |                              |          |
|----|------------------------------|----------|
| a5 | SC starter kit               | 117U8101 |
| b  | cover terminal board + clamp | 117U1036 |
| c  | start capacitor (60μF)       | 117U5351 |
| e  | run capacitor (10μF, 6.3mm)  | 117-7166 |
| e1 | retaining clamp screw M4x8mm | 117-0313 |
|    |                              | 117-0301 |
| d  | cord relief                  | 103N1007 |

## Model

Designation **SCE23LNDX 220-240V/50Hz** Conf. 1 Sales code: **104H8320**

## Optimization + standard conditions

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

|      |      | Evaporating pressure (saturation temperature) |     |     |      | Condensing pressure (saturation temperature) |         |          | Return gas temp. |          |           | Liquid temp. |      | Cooling capacity    |  |                | COP         | EER | Power consumption |  |  |
|------|------|---|-----|-----|------|--|---------|----------|------------------|----------|-----------|--------------|------|---------------------|--|----------------|-------------|-----|-------------------|--|--|
|      |      | pe  | pc  | RGT | Tliq | [W]  | [Btu/h] | [kcal/h] | [W/W]            | [Btu/Wh] | [kcal/Wh] | P1           | I    | Current consumption |  | Ref. mass flow |             |     |                   |  |  |
| [°C] | [°F] |   |     |     |      |  |         |          |                  |          |           | [W]          | [A]  | [kg/h]              |  |                |             |     |                   |  |  |
| -23  | -10  | 54  | 130 | 32  | 90   | 1038,5                                       | 3546    | 893,7    | 1,57             | 5,37     | 1,35      | 660,3        | 3,27 | 10,52               |  |                | ASHRAE LBP  |     |                   |  |  |
| -25  | -13  | 55  | 131 | 32  | 131  | 772,7  | 2639    | 665,0    | 1,22             | 4,16     | 1,05      | 633,9        | 3,16 | 9,62                |  |                | cecomaf LBP |     |                   |  |  |
| -35  | -31  | 40  | 104 | 20  | 104  | 615,1  | 2101    | 529,4    | 1,29             | 4,41     | 1,11      | 475,9        | 2,50 | 7,03                |  |                | EN12900 LBP |     |                   |  |  |
| -23  | -10  | 49  | 120 | 4,4 | 120  | 872,9  | 2981    | 751,2    | 1,35             | 4,63     | 1,17      | 644,2        | 3,20 | 12,09               |  |                | ARI540 LBP  |     |                   |  |  |
| -23  | -10  | 41  | 105 | 32  | 90   | 1204,0                                       | 4112    | 1036,2   | 1,96             | 6,70     | 1,69      | 613,7        | 3,07 | 12,19               |  |                | AHAM LBP    |     |                   |  |  |
| -35  | -31  | 45  | 113 | 32  | 113  | 580,2  | 1982    | 499,3    | 1,19             | 4,07     | 1,02      | 487,4        | 2,55 | 6,50                |  |                | opt         |     |                   |  |  |

## Performance tables

R290, 220V/50Hz, CSCR, fan 3m/s, VDE, CCC, 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]        | -40  | -40  | 441,4            | 1507    | 379,9    | 1,01  | 3,44     | 0,87      | 438,5 | 2,36 | 4,93   |
| cond. pressure   | -35  | -31  | 580,2            | 1982    | 499,3    | 1,19  | 4,07     | 1,02      | 487,4 | 2,55 | 6,50   |
| pc= 45/113       | -30  | -22  | 754,7            | 2577    | 649,5    | 1,38  | 4,73     | 1,19      | 545,2 | 2,78 | 8,48   |
| return gas temp. | -25  | -13  | 963,9            | 3292    | 829,5    | 1,58  | 5,41     | 1,36      | 608,5 | 3,04 | 10,87  |
| RGT= 32/90       | -20  | -4   | 1207,1           | 4122    | 1038,8   | 1,79  | 6,12     | 1,54      | 673,9 | 3,33 | 13,67  |
| liquid temp      | -15  | 5    | 1483,4           | 5066    | 1276,6   | 2,01  | 6,86     | 1,73      | 738,2 | 3,61 | 16,88  |
| Tliq= 45/113     | -5   | 23   | 2131,9           | 7281    | 1834,7   | 2,51  | 8,57     | 2,16      | 849,6 | 4,10 | 24,55  |
| [°C / °F]        | -40  | -40  | 377,6            | 1289    | 324,9    | 0,86  | 2,93     | 0,74      | 439,9 | 2,36 | 4,66   |
| cond. pressure   | -35  | -31  | 469,2            | 1602    | 403,8    | 0,96  | 3,26     | 0,82      | 491,0 | 2,56 | 5,80   |
| pc= 55/131       | -30  | -22  | 601,2            | 2053    | 517,4    | 1,08  | 3,69     | 0,93      | 556,8 | 2,83 | 7,46   |
| return gas temp  | -25  | -13  | 772,7            | 2639    | 665,0    | 1,22  | 4,16     | 1,05      | 633,9 | 3,16 | 9,62   |
| RGT= 32/90       | -20  | -4   | 982,9            | 3357    | 845,9    | 1,37  | 4,67     | 1,18      | 718,9 | 3,53 | 12,29  |
| liquid temp      | -15  | 5    | 1231,0           | 4204    | 1059,4   | 1,52  | 5,20     | 1,31      | 808,5 | 3,93 | 15,48  |
| Tliq= 55/131     | -5   | 23   | 1837,1           | 6274    | 1581,0   | 1,86  | 6,35     | 1,60      | 987,8 | 4,74 | 23,40  |