

Single Pack SCE21CNLX 208-230V 60Hz CSCR

Single pack code number: **195B4345**

| Position | Title | Code | Amount |
|----------|--|----------|--------|
| 1 | Compressor SCE21CNLX | 104H8173 | 1 |
| 2 | SC starting device (550mm) | 117-7811 | 1 |
| 3 | Bolt joint for one compressor M6 ø16mm | 118-1917 | 1 |

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Model

| | | | | |
|-------------|------------------|------------------|-------------|-----------------|
| Designation | SCE21CNLX | 208-230V/60Hz 1~ | Sales code: | 104H8173 |
|-------------|------------------|------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R290 |
| Oil viscosity | 32cSt | Displacement | 20,95cm ³ / 1,28cu.in |
| Oil quantity | 550cm ³ / 18,6fl.oz | Compressors on pallet | 80 |
| Refr. charge - tech. limit | 550g / 19,4oz | | |
| Free gas volume comp. | 1460cm ³ / 49,4fl.oz | | |
| Weight | 14,2kg / 31,3lbs | | |
| Motor protection | external | | |
| Winding resistance main | 2,76Ω (at 25°C) | | |
| Winding resistance aux | 11,08Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 140°C / 284°F | | |



General - Configurations with SCE21CNLX

| | |
|------------------------|---|
| | Conf. 1 |
| Motorconfiguration | CSCR |
| Power supply (nominal) | 208-230V/60Hz |
| Number of phases | 1 |
| Voltage range | 187-253V |
| Approvals | UL |
| Starting torque | HST |
| Note | Protector and cover are included and pre-assembled to compressor. |

Applications with SCE21CNLX

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

Electrical data - Configurations with SCE21CNLX

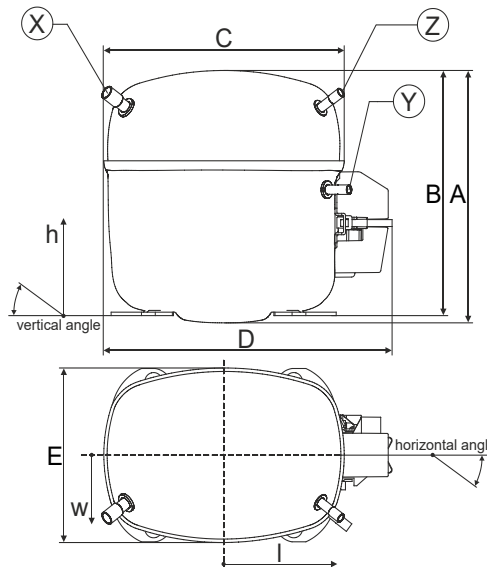
| | |
|------------------------------------|----------------|
| | Conf. 1 |
| Starting device type | relay |
| Run capacitor | 10μF |
| Start capacitor | 80μF |
| LRA (locked rotor amps / 4s/ U(N)) | 25,43A |
| RLA (rated load amps / 1s/ U(N)) | 3,86A |
| Cut in current (U(N)) | 25,43A |

Model

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

Compressor dimensions

| | | |
|----------------|-------------------|-----------------|
| Housing | A Height | 219mm / 8,62in |
| | B Height | 213mm / 8,39in |
| | C Length shell | 218mm / 8,58in |
| | D Length w. cover | 255mm / 10,04in |
| | E Width | 151mm / 5,94in |



| Connectors | | Suction | Discharge | Process |
|-----------------------|------|--------------|--------------|--------------|
| | | X | Y | Z |
| Diameter | [mm] | øi 9,54-9,72 | øi 6,41-6,59 | øi 6,41-6,59 |
| (i:inside, o:outside) | [in] | øi 0,38-0,38 | øi 0,25-0,26 | øi 0,25-0,26 |
| Material | | copper | copper | copper |
| Horizontal angle | ±2° | 37° | 37° | 143° |
| Vertical angle | ±2° | 30° | 0° | 150° |
| Position l/h/w | [mm] | 107/193/55 | 115/110/63 | -107/193/55 |
| | [in] | 4,2/7,6/2,2 | 4,5/4,3/2,5 | -4,2/7,6/2,2 |
| Straight tube l. | [mm] | 12 | 12 | 12 |
| | [in] | 0,5 | 0,5 | 0,5 |

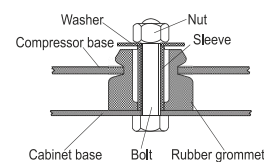
Compressor fixation

| Baseplate | [mm] | [inch] |
|-----------|-------|--------|
| BI | 204 | 8.03 |
| Bw | 150 | 5.9 |
| øE | ø 9.7 | ø 0.38 |

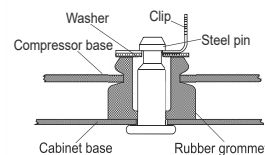
| Large holes | [mm] | [inch] |
|-------------|-------|--------|
| LI | 165 | 6.5 |
| Lw | 101.6 | 4 |
| øL | ø 19 | ø 0.75 |

| Small holes | [mm] | [inch] |
|-------------|------|--------|
| SI | 170 | 6.7 |
| Sw | 70 | 2.76 |
| øS | ø 16 | ø 0.63 |
| QI | 127 | 5 |
| Qw | 127 | 5 |

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 |

Application notes

Provision for PE Grounding is located at the PE Stamp on the compressor

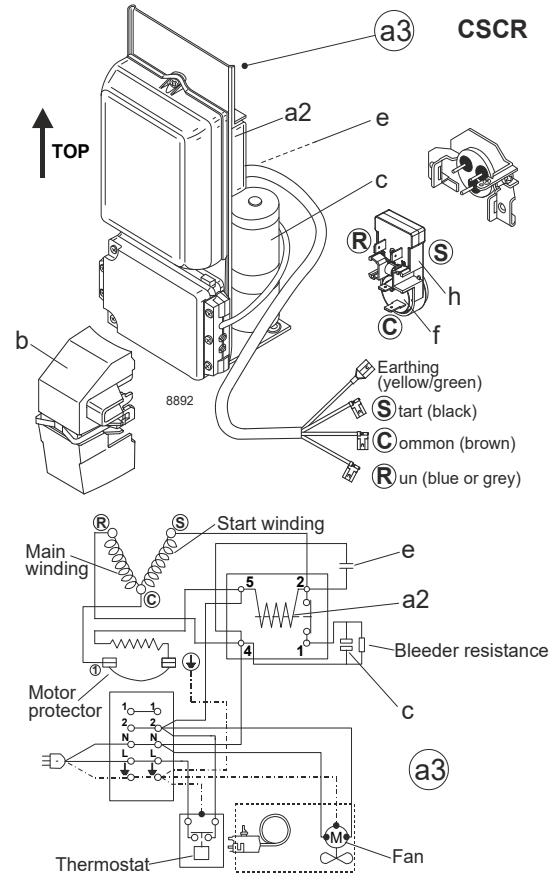
Model

| | | | | | |
|-------------|------------------|----------------------|----------------|-------------|-----------------|
| Designation | SCE21CNLX | 208-230V/60Hz | Conf. 1 | Sales code: | 104H8173 |
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Configuration

| | |
|------------------------|------------------|
| Motor configuration | CSCR |
| Power supply (nominal) | 208-230V/60Hz 1~ |
| Refrigerant | R290 |
| Application | LBP |
| Voltage range | 187-253V |
| Starting torque | HST |
| Approvals | UL |

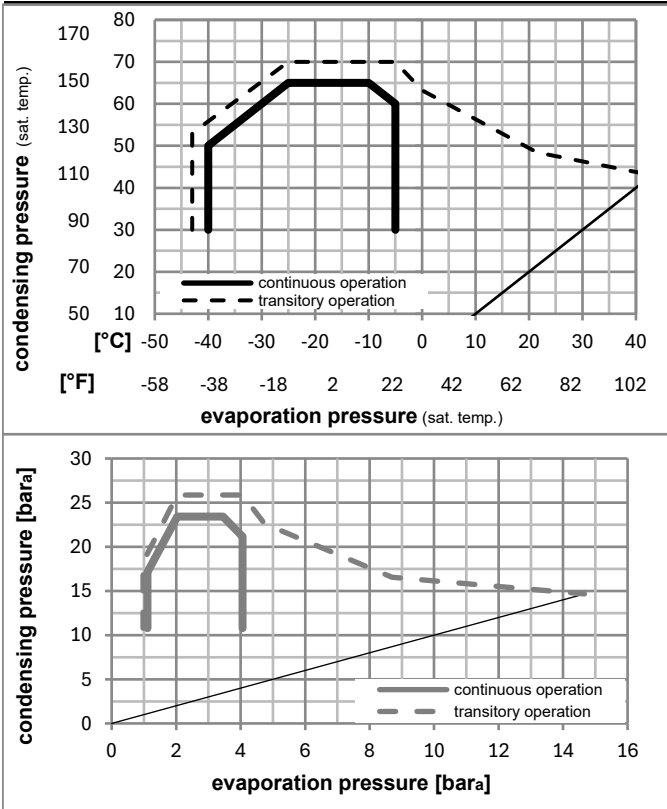
Electrical accessories / wiring diagram



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 (protector (f)+ holder (h)+ cover (b): pre assembled)

| | | |
|-------|-------------------------------|----------|
| a3 | SC starter kit (550mm) | 117-7811 |
| f / h | motor protector assy. (T1118) | 117U8006 |
| b | plastic cover + clamp | 117U1021 |

Alternative comp.

| | | |
|----|--------------------------------|----------|
| a3 | SC starter kit (1000mm) | 117-7814 |
| a2 | potential relay (RVA2AL3R A92) | 117-7603 |
| e | run capacitor (10µF, 6.3mm) | 117-7121 |
| c | start capacitor (80µF) | 117U5373 |

Noise emission

| | |
|----------------------|-------------------|
| Operation pressures: | pe: -25°C / -13°F |
| | pc: 45°C / 113°F |
| Motor speed appr.: | 3500rpm |
| Lw(A): | 58dB(A) |

Model

Designation **SCE21CNLX** **208-230V/60Hz** Conf. 1 Sales code: **104H8173**

Optimization + standard conditions

R290, 230V/60Hz, CSCR, fan 3m/s, UL

| | | Evaporating pressure (saturation temperature) | | | | Cooling capacity | | | COP | EER | Power consumption | | | | |
|------|------|---|------|------------------|--------------|------------------|---------|----------|-------|----------|-------------------|-------|------|----------------|-------------|
| | | Condensing pressure (saturation temperature) | | Return gas temp. | Liquid temp. | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | P1 | I | Ref. mass flow | |
| | | pe | pc | RGT | Tliq | | | | | | | [W] | [A] | [kg/h] | |
| [°C] | [°F] | [°C] | [°F] | [°C] | [°C] | | | | | | | | | | |
| -23 | -10 | 54 | 130 | 32 | 32 | 1099,3 | 3754 | 946,1 | 1,65 | 5,62 | 1,42 | 667,8 | 3,04 | 11,13 | ASHRAE LBP |
| -25 | -13 | 55 | 131 | 32 | 55 | 810,3 | 2767 | 697,3 | 1,28 | 4,36 | 1,10 | 634,0 | 2,90 | 10,09 | cecomaf LBP |
| -35 | -31 | 40 | 104 | 20 | 40 | 601,9 | 2055 | 518,0 | 1,25 | 4,26 | 1,07 | 482,4 | 2,33 | 6,88 | EN12900 LBP |
| -23 | -10 | 49 | 120 | 4,4 | 49 | 913,1 | 3119 | 785,9 | 1,36 | 4,65 | 1,17 | 670,4 | 3,08 | 12,65 | ARI540 LBP |
| -23 | -10 | 41 | 105 | 32 | 32 | 1232,9 | 4211 | 1061,0 | 1,88 | 6,41 | 1,61 | 657,1 | 3,01 | 12,49 | AHAM LBP |
| -35 | -31 | 45 | 113 | 32 | 45 | 559,9 | 1912 | 481,8 | 1,18 | 4,02 | 1,01 | 475,5 | 2,34 | 6,27 | opt |

Performance tables

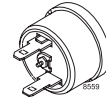
R290, 230V/60Hz, CSCR, fan 3m/s, UL

| | 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 | 394,8 | 1348 | 339,8 | 1,00 | 3,42 | 0,86 | 394,6 | 2,07 | 4,41 |
| cond. pressure | -34 | -30 | 580,1 | 1981 | 499,2 | 1,20 | 4,09 | 1,03 | 484,6 | 2,37 | 6,50 |
| pc= 45/113 | -29 | -20 | 804,7 | 2748 | 692,5 | 1,40 | 4,77 | 1,20 | 576,3 | 2,71 | 9,05 |
| return gas temp. | -23 | -10 | 1073,4 | 3666 | 923,8 | 1,61 | 5,50 | 1,39 | 666,6 | 3,07 | 12,12 |
| RGT= 32/90 | -21 | -5 | 1225,9 | 4187 | 1055,0 | 1,73 | 5,89 | 1,49 | 710,2 | 3,25 | 13,87 |
| liquid temp | -15 | 5 | 1569,7 | 5361 | 1350,9 | 1,98 | 6,77 | 1,70 | 792,4 | 3,60 | 17,86 |
| Tliq= 45/113 | -5 | 23 | 2333,3 | 7969 | 2008,0 | 2,55 | 8,71 | 2,20 | 914,7 | 4,13 | 26,86 |
| [°C / °F] | -40 | -40 | 265,6 | 907 | 228,5 | 0,76 | 2,60 | 0,66 | 348,2 | 1,85 | 3,27 |
| cond. pressure | -34 | -30 | 439,6 | 1501 | 378,3 | 0,98 | 3,34 | 0,84 | 450,0 | 2,19 | 5,44 |
| pc= 55/131 | -29 | -20 | 645,1 | 2203 | 555,2 | 1,16 | 3,95 | 1,00 | 557,3 | 2,59 | 8,01 |
| return gas temp | -23 | -10 | 886,9 | 3029 | 763,3 | 1,33 | 4,54 | 1,14 | 666,9 | 3,03 | 11,06 |
| RGT= 32/90 | -21 | -5 | 1022,9 | 3493 | 880,3 | 1,42 | 4,84 | 1,22 | 721,6 | 3,26 | 12,79 |
| liquid temp | -15 | 5 | 1328,1 | 4536 | 1143,0 | 1,60 | 5,47 | 1,38 | 828,8 | 3,72 | 16,70 |
| Tliq= 55/131 | -5 | 23 | 2002,2 | 6838 | 1723,1 | 1,99 | 6,80 | 1,71 | 1005,5 | 4,52 | 25,51 |



SCE Compressors

(External Protector)



| | S | C | R |
|------------|---------|------------|-----------------|
| ENGLISH | Black | Brown | Blue or grey |
| DEUTSCH | Schwarz | Braun | Blau od. grau |
| FRANÇAIS | Noir | Marron | Bleu ou gris |
| ESPAÑOL | Negro | Marrón | Azul o gris |
| ITALIANO | Nero | Marrone | Blu o grigio |
| NEDERLANDS | Zwart | Bruin | Blauw of grijs |
| РУССКИЙ | Чёрный | Коричневый | Синий или серый |
| 中文 | 黑色 | 棕色 | 蓝色或灰色 |

| | S | C | R |
|------------|---------|------------|-----------------|
| ENGLISH | Black | Brown | Blue or grey |
| DEUTSCH | Schwarz | Braun | Blau od. grau |
| FRANÇAIS | Noir | Marron | Bleu ou gris |
| ESPAÑOL | Negro | Marrón | Azul o gris |
| ITALIANO | Nero | Marrone | Blu o grigio |
| NEDERLANDS | Zwart | Bruin | Blauw of grijs |
| РУССКИЙ | Чёрный | Коричневый | Синий или серый |
| 中文 | 黑色 | 棕色 | 蓝色或灰色 |



SCE Compressors (External Protector)



Service/Repair – R290



8545



Brazing on Suction Connectors (Direct Intake)



! max. 350°C/662°F !
at socket
brazing solder: phosphor (LP7) or silver

8882

Refer to Product Bulletin:
Brazing on Suction Connectors
(SCE Compressors with Direct Suction Intake)

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