

Single Pack SCE21CNLX 220-240V 50Hz CSIR

Single pack code number: **195B4567**

| Position | Title | Code | Amount |
|----------|---|----------|--------|
| 1 | Compressor SCE21CNLX | 104H8164 | 1 |
| 2 | Starting capacitor (80 μ F 220V, 6.3mm) | 117U5017 | 1 |
| 3 | Cord relief | 103N1004 | 1 |
| 4 | Bolt joint for one compressor M6 \varnothing 16mm | 118-1917 | 1 |

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Model

| | | | | |
|-------------|------------------|------------------|-------------|-----------------|
| Designation | SCE21CNLX | 220-240V/50Hz 1~ | Sales code: | 104H8164 |
|-------------|------------------|------------------|-------------|-----------------|

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 | 500g / 17,6oz | | |
| Free gas volume comp. | 1460cm ³ / 49,4fl.oz | | |
| Weight | 14,2kg / 31,3lbs | | |
| Motor protection | external | | |
| Winding resistance main | 3,57Ω (at 25°C) | | |
| Winding resistance aux | 18,6Ω (at 25°C) | | |
| Max. winding temp. | 135°C / 275°F | | |
| Max. discharge temp. | 140°C / 284°F | | |



General - Configurations with SCE21CNLX

| | |
|------------------------|--|
| | Conf. 1 |
| Motorconfiguration | CSIR |
| Power supply (nominal) | 220-230V/50Hz |
| Number of phases | 1 |
| Voltage range | 207-242V |
| Approvals | VDE, CCC, EAC |
| Starting torque | HST |
| Note | Protector, relay 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 | -/- |
| Start capacitor | 80μF |
| LRA (locked rotor amps / 4s/ U(N)) | 19,67A |
| RLA (rated load amps / 1s/ U(N)) | 3,76A |
| Cut in current (U(N)) | 19,67A |

Model

Designation

SCE21CNLX

220-240V/50Hz 1~

Sales code:

104H8164

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 10,11-10,29 | øi 6,11-6,29 | øi 6,11-6,29 |
| (i:inside, o:outside) | [in] | øi 0,4-0,41 | øi 0,24-0,25 | øi 0,24-0,25 |
| 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



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

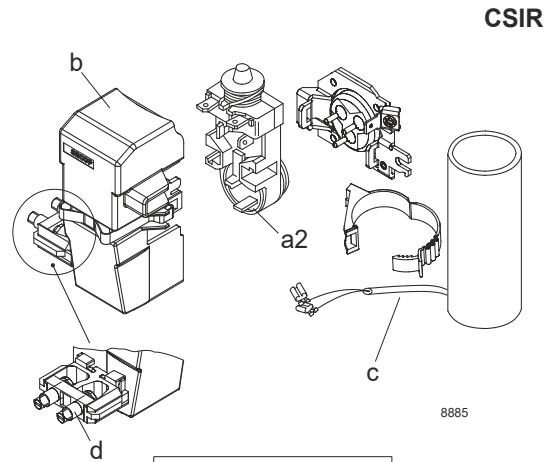
Model

| | | | | | |
|-------------|------------------|----------------------|----------------|-------------|-----------------|
| Designation | SCE21CNLX | 220-230V/50Hz | Conf. 1 | Sales code: | 104H8164 |
|-------------|------------------|----------------------|----------------|-------------|-----------------|

Configuration

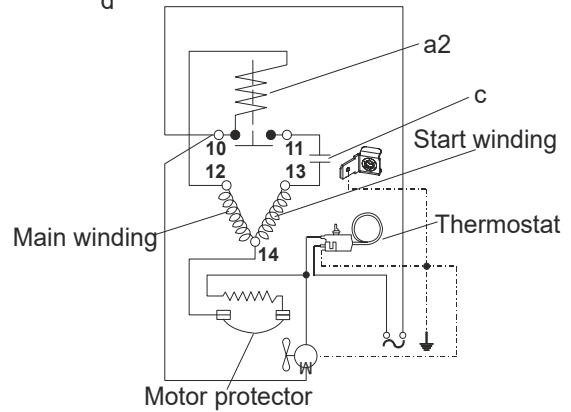
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|------------------------|------------------|
| Motor configuration | CSIR |
| Power supply (nominal) | 220-230V/50Hz 1~ |
| Refrigerant | R290 |
| Application | LBP |
| Voltage range | 207-242V |
| Starting torque | HST |
| Approvals | VDE |
| | CCC |
| | EAC |

Electrical accessories / wiring diagram

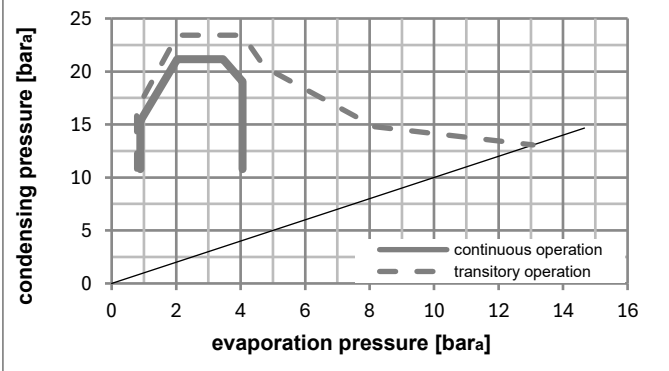
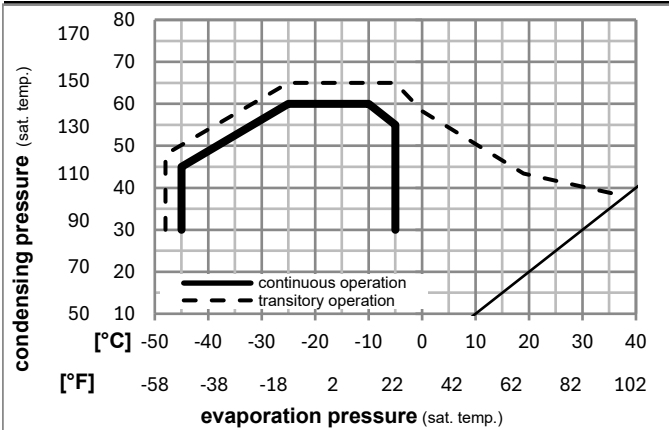


Ambient/ machine room temperatures minimum /maximum

| | |
|---------------------------------|------------------------|
| Ambient temperature range: | 10 - 38°C / 50 - 101°F |
| Machine room temperature range: | 10 - 43°C / 50 - 110°F |
| Compressor cooling: | fan 3m/s |



Operation pressure range



Components (relay (a2)+ cover (b): pre-assembled)

| | | |
|----|--------------------------------------|----------|
| a2 | assy. relay + ext. protector (T1102) | 117U7400 |
| c | start capacitor (80µF) | 117U5017 |
| d | cord relief | 103N1004 |
| b | plastic cover + clamp | 117U1033 |

Noise emission

| | |
|----------------------|-------------------|
| Operation pressures: | pe: -25°C / -13°F |
| | pc: 45°C / 113°F |
| Motor speed appr.: | 2900rpm |
| Lw(A): | 57dB(A) |

Model

Designation **SCE21CNLX 220-230V/50Hz** Conf. 1 Sales code: **104H8164**

Optimization + standard conditions

R290, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC

| | Evaporating pressure (saturation temperature) | | | | Cooling capacity | | | COP | EER | P1 | Power consumption | | ASHRAE LBP |
|------|---|------|------|--------|------------------|----------|----------|----------|-----------|-------|-------------------|--------|-------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | | | | I | m | |
| [°C] | [°C] | [°C] | [°C] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | |
| [°F] | [°F] | [°F] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | |
| -23 | 54 | 32 | 32 | 937,4 | 3201 | 806,8 | 1,49 | 5,08 | 1,28 | 629,8 | 3,70 | 9,49 | ASHRAE LBP |
| -10 | 130 | 90 | 90 | | | | | | | | | | |
| -25 | 55 | 32 | 55 | 696,7 | 2379 | 599,5 | 1,16 | 3,96 | 1,00 | 601,2 | 3,59 | 8,67 | cecomaf LBP |
| -13 | 131 | 90 | 131 | | | | | | | | | | |
| -35 | 40 | 20 | 40 | 545,5 | 1863 | 469,5 | 1,21 | 4,15 | 1,05 | 449,1 | 2,87 | 6,23 | EN12900 LBP |
| -31 | 104 | 68 | 104 | | | | | | | | | | |
| -23 | 49 | 4,4 | 49 | 783,9 | 2677 | 674,6 | 1,28 | 4,36 | 1,10 | 614,5 | 3,61 | 10,86 | ARI540 LBP |
| -10 | 120 | 40 | 120 | | | | | | | | | | |
| -23 | 41 | 32 | 32 | 1074,3 | 3669 | 924,5 | 1,84 | 6,29 | 1,58 | 583,7 | 3,36 | 10,88 | AHAM LBP |
| -10 | 105 | 90 | 90 | | | | | | | | | | |
| -35 | 45 | 32 | 45 | 506,3 | 1729 | 435,7 | 1,12 | 3,83 | 0,96 | 451,9 | 2,94 | 5,67 | opt |
| -31 | 113 | 90 | 113 | | | | | | | | | | |

Performance tables

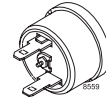
R290, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC

| | pe | | Cooling capacity | | | COP | EER | P1 | I | m | |
|------------------|------|------|------------------|---------|----------|------|------|------|-------|------|-------|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | | | | | | |
| [°C / °F] | -45 | -49 | 255,8 | 874 | 220,2 | 0,71 | 2,44 | 0,61 | 358,7 | 2,67 | 2,85 |
| cond. pressure | -35 | -31 | 506,3 | 1729 | 435,7 | 1,12 | 3,83 | 0,96 | 451,9 | 2,94 | 5,67 |
| pc= 45/113 | -30 | -22 | 670,8 | 2291 | 577,3 | 1,31 | 4,47 | 1,13 | 513,0 | 3,15 | 7,54 |
| return gas temp. | -25 | -13 | 862,5 | 2946 | 742,3 | 1,49 | 5,08 | 1,28 | 579,3 | 3,40 | 9,73 |
| RGT= 32/90 | -20 | -4 | 1082,3 | 3696 | 931,5 | 1,67 | 5,71 | 1,44 | 647,2 | 3,66 | 12,26 |
| liquid temp | -15 | 5 | 1331,0 | 4546 | 1145,5 | 1,87 | 6,37 | 1,61 | 713,3 | 3,92 | 15,14 |
| Tliq= 45/113 | -5 | 23 | 1918,3 | 6551 | 1650,9 | 2,32 | 7,93 | 2,00 | 826,3 | 4,38 | 22,09 |
| [°C / °F] | -45 | -49 | 226,9 | 775 | 195,3 | 0,71 | 2,43 | 0,61 | 318,7 | 2,68 | 2,79 |
| cond. pressure | -35 | -31 | 402,8 | 1376 | 346,7 | 0,92 | 3,15 | 0,79 | 436,5 | 3,01 | 4,98 |
| pc= 55/131 | -30 | -22 | 534,6 | 1826 | 460,1 | 1,04 | 3,55 | 0,89 | 514,7 | 3,28 | 6,63 |
| return gas temp | -25 | -13 | 696,7 | 2379 | 599,5 | 1,16 | 3,96 | 1,00 | 601,2 | 3,59 | 8,67 |
| RGT= 32/90 | -20 | -4 | 889,8 | 3039 | 765,8 | 1,28 | 4,39 | 1,11 | 692,5 | 3,92 | 11,13 |
| liquid temp | -15 | 5 | 1114,8 | 3807 | 959,4 | 1,42 | 4,85 | 1,22 | 785,2 | 4,28 | 14,02 |
| Tliq= 55/131 | -5 | 23 | 1663,7 | 5682 | 1431,8 | 1,73 | 5,91 | 1,49 | 961,0 | 4,96 | 21,19 |



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 |
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| 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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