

Single Pack SCE21CNLX 220-240V 50Hz CSCR

Single pack code number: **195B4284**

| Position | Title | Code | Amount |
|----------|--|----------|--------|
| 1 | Compressor SCE21CNLX | 104H8163 | 1 |
| 2 | SC starting device (550mm) | 117-7806 | 1 |
| 3 | Bolt joint for one compressor M6 ø16mm | 118-1917 | 1 |

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Model

| | | | | |
|-------------|------------------|------------------|-------------|-----------------|
| Designation | SCE21CNLX | 220-240V/50Hz 1~ | Sales code: | 104H8163 |
|-------------|------------------|------------------|-------------|-----------------|

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 | 4,09Ω (at 25°C) | | |
| Winding resistance aux | 13,46Ω (at 25°C) | | |
| Max. winding temp. | 135°C / 275°F | | |
| Max. discharge temp. | 140°C / 284°F | | |



General - Configurations with SCE21CNLX

| | |
|------------------------|---|
| | Conf. 1 |
| Motorconfiguration | CSCR |
| Power supply (nominal) | 220-240V/50Hz |
| Number of phases | 1 |
| Voltage range | 198-254V |
| Approvals | VDE, CCC, EAC |
| 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)) | 18,29A |
| RLA (rated load amps / 1s/ U(N)) | 2,95A |
| Cut in current (U(N)) | 18,29A |

Model

Designation

SCE21CNLX

220-240V/50Hz 1~

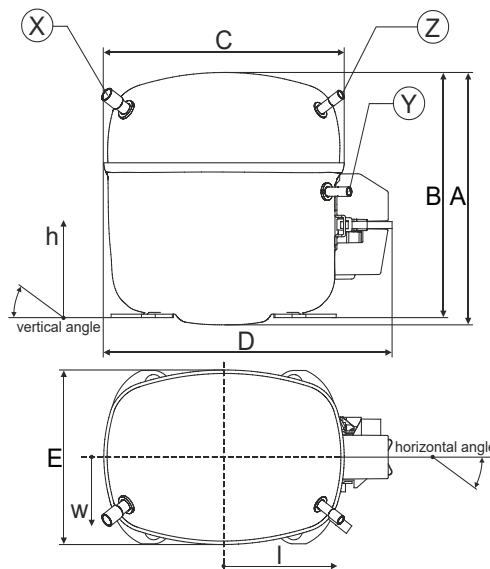
Sales code:

104H8163

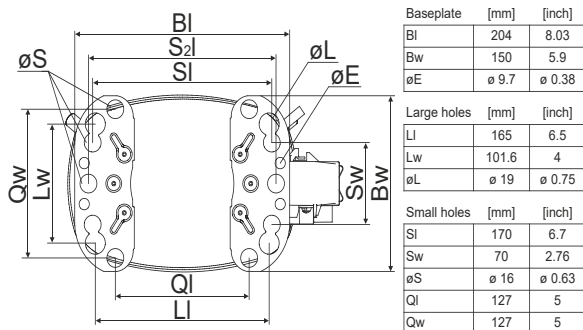
Compressor dimensions

| 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 |

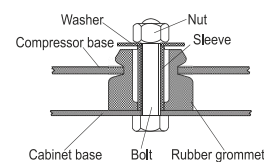
| Connectors | | Suction | Discharge | Process |
|-----------------------|------|----------------|--------------|--------------|
| | | X | Y | Z |
| Diameter | [mm] | øi 10,11-10,29 | øi 6,11-6,29 | øi 6,11-6,29 |
| (i:inside, o:outside) | [in] | øi 0,4-0,41 | øi 0,24-0,25 | øi 0,24-0,25 |
| Material | | 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 |



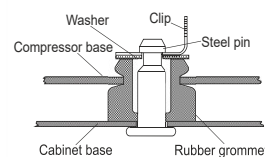
Compressor fixation



Bolt joint



Snap-on



Mounting accessories

| 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

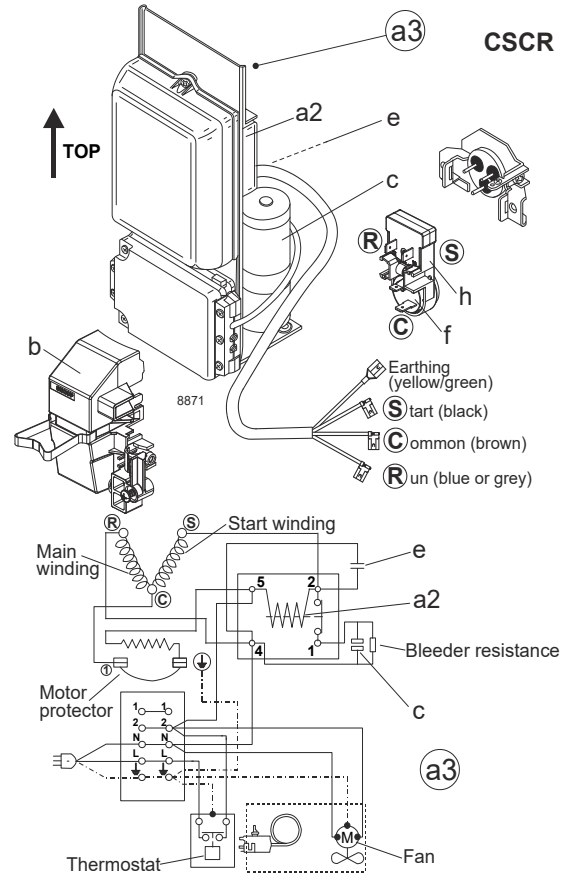
Model

| | | | | | |
|-------------|------------------|----------------------|----------------|-------------|-----------------|
| Designation | SCE21CNLX | 220-240V/50Hz | Conf. 1 | Sales code: | 104H8163 |
|-------------|------------------|----------------------|----------------|-------------|-----------------|

Configuration

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

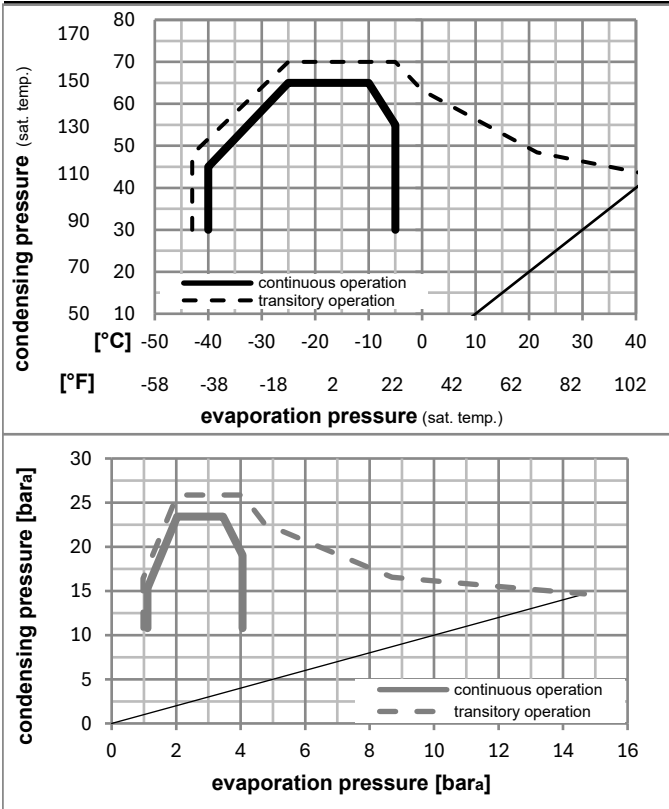
Electrical accessories / wiring diagram



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) | 117-7806 |
| f / h | motor protector assy. (T1102) | 117U8001 |
| b | plastic cover + clamp | 117U1028 |

Alternative comp.

| | | |
|----|--------------------------------|----------|
| a3 | SC starter kit (1000mm) | 117-7813 |
| a2 | potential relay (RVA 4I3R A57) | 117-7600 |
| e | run capacitor (10µF, 6.3mm) | 117-7112 |
| c | start capacitor (80µF) | 117U5373 |

Model

Designation **SCE21CNLX 220-240V/50Hz** Conf. 1 Sales code: **104H8163**

Optimization + standard conditions

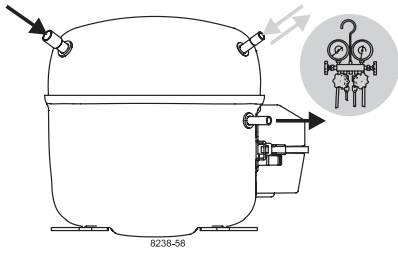
R290, 220V/50Hz, CSCR, fan 3m/s, VDE, CCC, EAC

| | Evaporating pressure (saturation temperature) | | | | Cooling capacity | | | COP | EER | Power consumption | | | ASHRAE LBP | |
|------|---|-----|-----|------|------------------|---------|----------|------|------|-------------------|-------|------|------------|-------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | | | P1 | I | m | | |
| [°C] | -23 | 54 | 32 | 32 | 954,0 | 3258 | 821,0 | 1,61 | 5,49 | 1,38 | 593,5 | 2,81 | 9,66 | |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 710,5 | 2427 | 611,5 | 1,25 | 4,26 | 1,07 | 570,0 | 2,70 | 8,85 | cecomaf LBP |
| [°F] | -13 | 131 | 90 | 131 | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 543,1 | 1855 | 467,4 | 1,29 | 4,40 | 1,11 | 421,1 | 2,03 | 6,21 | EN12900 LBP |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | |
| [°C] | -23 | 49 | 4,4 | 49 | 791,5 | 2703 | 681,2 | 1,37 | 4,69 | 1,18 | 576,2 | 2,74 | 10,96 | ARI540 LBP |
| [°F] | -10 | 120 | 40 | 120 | | | | | | | | | | |
| [°C] | -23 | 41 | 32 | 32 | 1075,6 | 3673 | 925,6 | 1,99 | 6,79 | 1,71 | 541,0 | 2,57 | 10,89 | AHAM LBP |
| [°F] | -10 | 105 | 90 | 90 | | | | | | | | | | |
| [°C] | -35 | 45 | 32 | 45 | 508,0 | 1735 | 437,2 | 1,18 | 4,03 | 1,01 | 430,9 | 2,10 | 5,69 | opt |
| [°F] | -31 | 113 | 90 | 113 | | | | | | | | | | |

Performance tables

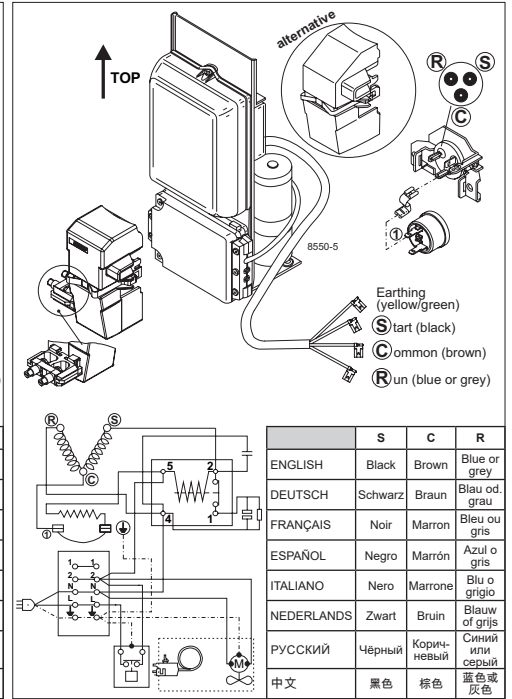
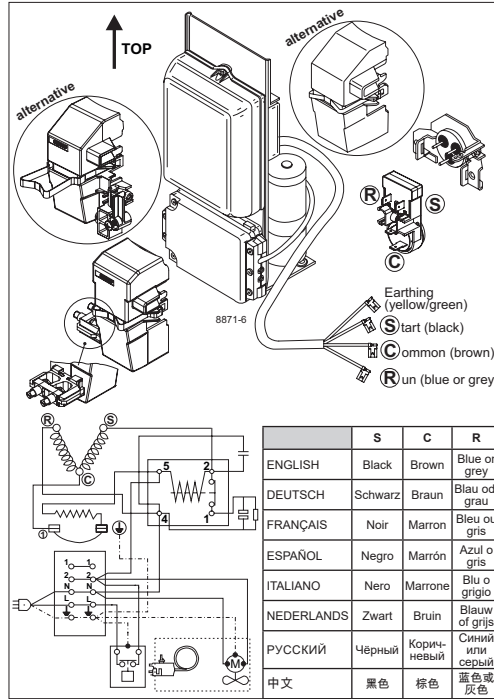
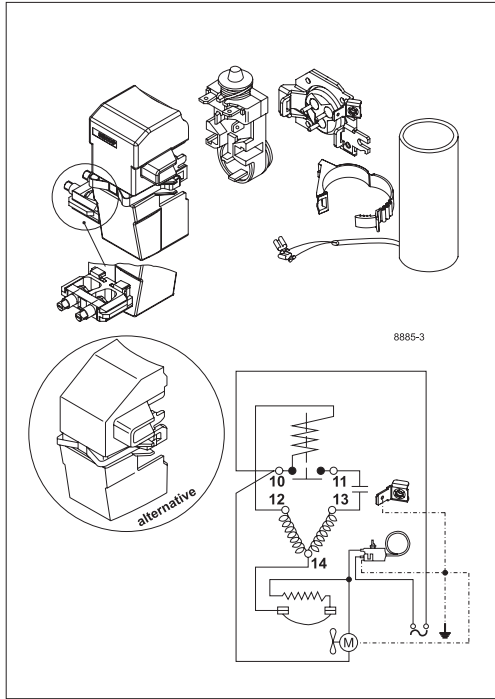
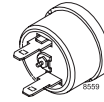
R290, 220V/50Hz, CSCR, fan 3m/s, VDE, CCC, EAC

| | pe | | Cooling capacity | | | COP | EER | P1 | I | m | |
|------------------|------|------|------------------|---------|----------|------|------|------|-------|------|-------|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | | | | | | |
| [°C / °F] | -40 | -40 | 367,3 | 1254 | 316,1 | 0,96 | 3,27 | 0,82 | 383,3 | 1,92 | 4,11 |
| cond. pressure | -35 | -31 | 508,0 | 1735 | 437,2 | 1,18 | 4,03 | 1,01 | 430,9 | 2,10 | 5,69 |
| pc= 45/113 | -30 | -22 | 673,9 | 2302 | 580,0 | 1,39 | 4,75 | 1,20 | 484,4 | 2,33 | 7,57 |
| return gas temp. | -25 | -13 | 866,4 | 2959 | 745,6 | 1,60 | 5,47 | 1,38 | 541,3 | 2,58 | 9,77 |
| RGT= 32/90 | -20 | -4 | 1086,5 | 3710 | 935,0 | 1,81 | 6,19 | 1,56 | 599,0 | 2,85 | 12,30 |
| liquid temp | -15 | 5 | 1335,5 | 4561 | 1149,4 | 2,04 | 6,96 | 1,75 | 655,1 | 3,11 | 15,19 |
| Tliq= 45/113 | -5 | 23 | 1925,4 | 6576 | 1657,0 | 2,56 | 8,74 | 2,20 | 752,1 | 3,54 | 22,17 |
| [°C / °F] | -40 | -40 | 311,5 | 1064 | 268,1 | 0,82 | 2,81 | 0,71 | 378,7 | 1,88 | 3,84 |
| cond. pressure | -35 | -31 | 415,8 | 1420 | 357,8 | 0,96 | 3,27 | 0,82 | 434,0 | 2,10 | 5,14 |
| pc= 55/131 | -30 | -22 | 548,3 | 1873 | 471,9 | 1,10 | 3,76 | 0,95 | 498,6 | 2,38 | 6,80 |
| return gas temp | -25 | -13 | 710,5 | 2427 | 611,5 | 1,25 | 4,26 | 1,07 | 570,0 | 2,70 | 8,85 |
| RGT= 32/90 | -20 | -4 | 903,5 | 3085 | 777,5 | 1,40 | 4,78 | 1,20 | 645,5 | 3,05 | 11,30 |
| liquid temp | -15 | 5 | 1128,5 | 3854 | 971,2 | 1,56 | 5,33 | 1,34 | 722,7 | 3,40 | 14,19 |
| Tliq= 55/131 | -5 | 23 | 1679,6 | 5736 | 1445,5 | 1,93 | 6,58 | 1,66 | 872,0 | 4,09 | 21,40 |



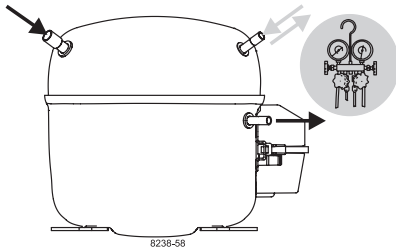
SCE Compressors

(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 |

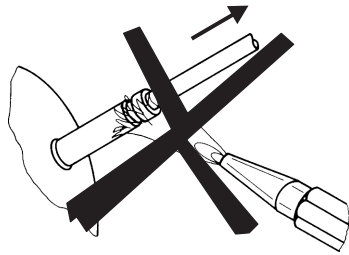
| | S | C | R |
|------------|---------|------------|-----------------|
| ENGLISH | Black | Brown | Blue or grey |
| DEUTSCH | Schwarz | Braun | Blau od. grau |
| FRANÇAIS | Noir | Marron | Bleu ou gris |
| ESPAÑOL | Negro | Marrón | Azul o gris |
| ITALIANO | Nero | Marrone | Blu o grigio |
| NEDERLANDS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



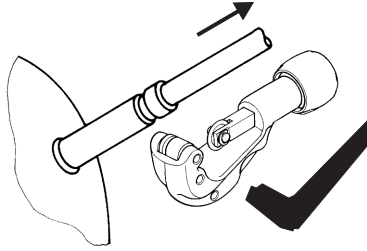
SCE Compressors (External Protector)



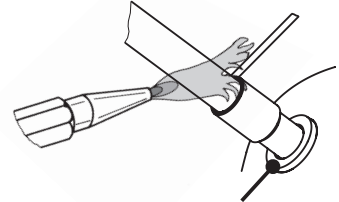
Service/Repair – R290



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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