

Model

| | | | | |
|-------------|----------------|-------------------------|-------------|-----------------|
| Designation | SC15CNX | 220-240V/50Hz 1~ | Sales code: | 104H8576 |
|-------------|----------------|-------------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R290 |
| Oil viscosity | 32cSt | Displacement | 15,28cm ³ / 0,93cu.in |
| Oil quantity | 549cm ³ / 18,6fl.oz | Compressors on pallet | 80 |
| Refr. charge - tech. limit | 150g / 5,3oz | | |
| Free gas volume comp. | 1410cm ³ / 47,7fl.oz | | |
| Weight | 13,1kg / 28,9lbs | | |
| Motor protection | 1# internal | | |
| Winding resistance main | 5,13Ω (at 25°C) | | |
| Winding resistance aux | 13,51Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 135°C / 275°F | | |



General - Configurations with SC15CNX

| | 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 | - / - |

Applications with SC15CNX

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

Electrical data - Configurations with SC15CNX

| | Conf. 1 |
|------------------------------|----------------|
| Starting device type | relay |
| Run capacitor | 5μF |
| Start capacitor | 40μF |
| LRA (locked rotor amps / 4s) | 16,2A |
| RLA (rated load amps / 1s) | 3,1A |
| Cut in current | 16,2A |
| IP class | 21 |

Model

Designation

SC15CNX

220-240V/50Hz 1~

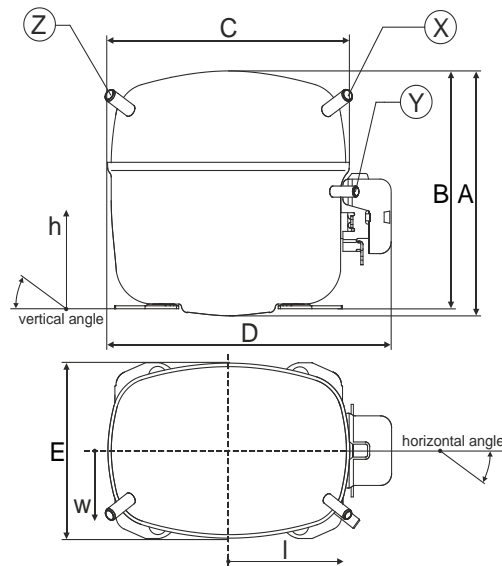
Sales code:

104H8576

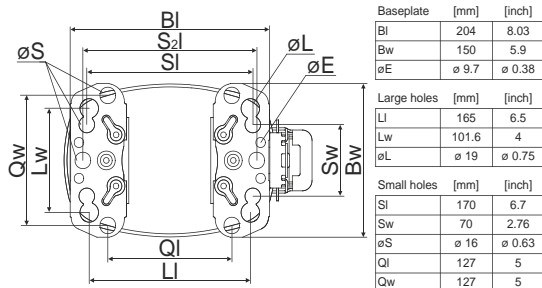
Compressor dimensions

| Housing | A Height | 209mm / 8,23in |
|---------|-------------------|-----------------|
| | B Height | 203mm / 7,99in |
| | C Length shell | 218mm / 8,58in |
| | D Length w. cover | 255mm / 10,04in |
| | E Width | 151mm / 5,94in |

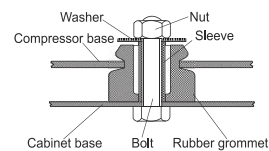
| Connectors | | Suction | Discharge | Process |
|------------------|----------------------------|--------------|--------------|--------------|
| | | X | Y | Z |
| Diameter | [mm] | øi 9,54-9,72 | øi 6,41-6,59 | øi 6,41-6,59 |
| | (i:inside, o:outside) [in] | øi 0,38-0,38 | øi 0,25-0,26 | øi 0,25-0,26 |
| Material | | copper | copper | copper |
| Horizontal angle | ±2° | 37° | 37° | 143 |
| Vertical angle | ±2° | 30° | 0° | 150° |
| Position l/h/w | [mm] | 107/183/55 | 115/100/63 | -107/183/55 |
| | [in] | 4,2/7,2/2,2 | 4,5/3,9/2,5 | -4,2/7,2/2,2 |
| Straight tube l. | [mm] | 12 | 12 | 12 |
| | [in] | 0,5 | 0,5 | 0,5 |



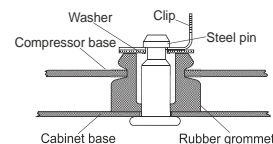
Compressor fixation



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 |

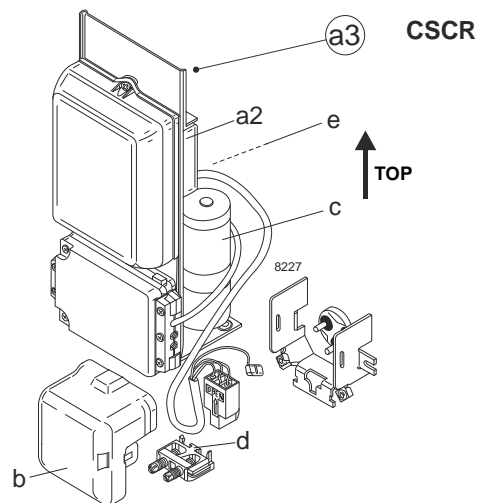
Model

Designation **SC15CNX 220-240V/50Hz** Conf. 1 Sales code: **104H8576**

Configuration

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

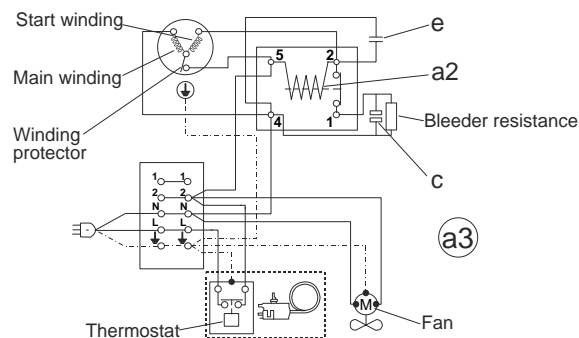
Electrical accessories / wiring diagram



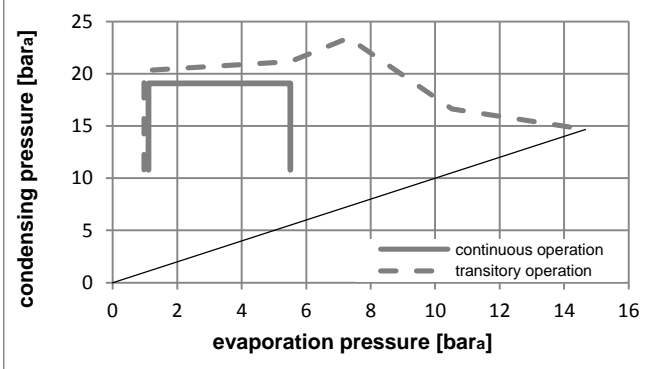
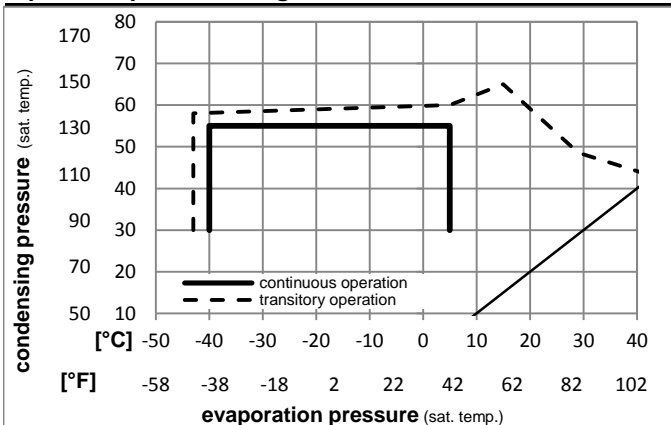
Ambient temperatures / system cooling

Ambient temperature min.: **10°C / 50°F**
 Ambient temperature max.: **43°C / 110°F**

| System cooling | | | |
|----------------|----------|----------|-----|
| T ambient | LBP | MBP | HBP |
| 32°C / 90°F | fan 3m/s | fan 3m/s | n/a |
| 38°C / 100°F | fan 3m/s | fan 3m/s | n/a |
| 43°C / 110°F | fan 3m/s | fan 3m/s | n/a |



Operation pressure range



Components:

- a3 SC starter kit 117-7031
- b plastic cover 103N2009
- d cord relief 103N1004

Alternative components:

- a2 potential relay (RVA 413340) 117-7426
- e run capacitor (10µF, 6.3mm) 117-7112
- c start capacitor (80µF) 117U5373
- b plastic cover 103N2009
- d cord relief 103N1004

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Optimization + standard conditions

220-240V/50Hz 1~, CSCR, fan 3m/s, VDE, CCC, EAC

| | Evaporating pressure (saturation temperature) | | | | Condensing pressure (saturation temperature) | | | | | | Power consumption | | | ASHRAE LBP |
|--|---|------|------|------|--|---------|----------|-------|----------|-----------|-------------------|----------------|--------|-------------|
| | pe | pc | RGT | Tliq | Cooling capacity | | | COP | EER | P1 | I | Ref. mass flow | | |
| | [°C] | [°C] | [°C] | [°C] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | |
| | -23,3 | 54,4 | 32,2 | 32,2 | 595,0 | 2032 | 512,0 | 1,35 | 4,61 | 1,16 | 440,7 | 2,15 | 6,03 | ASHRAE LBP |
| | [°F] | -10 | 130 | 90 | | | | | | | | | | |
| | -25 | 55 | 32 | 55 | 434,2 | 1483 | 373,6 | 1,04 | 3,54 | 0,89 | 418,4 | 2,04 | 5,41 | cecomaf LBP |
| | [°F] | -13 | 131 | 89,6 | | | | | | | | | | |
| | -35 | 40 | 20 | 40 | 334,7 | 1143 | 288,1 | 1,03 | 3,52 | 0,89 | 325,0 | 1,60 | 3,82 | EN12900 LBP |
| | [°F] | -31 | 104 | 68 | | | | | | | | | | |
| | -6,66 | 54,4 | 35 | 46,1 | 1184,2 | 4044 | 1019,2 | 1,83 | 6,25 | 1,57 | 647,3 | 3,23 | 13,51 | ASHRAE MBP |
| | [°F] | 20 | 130 | 95 | | | | | | | | | | |
| | -10 | 55 | 32 | 55 | 928,2 | 3170 | 798,8 | 1,52 | 5,21 | 1,31 | 608,7 | 3,03 | 11,74 | cecomaf MBP |
| | [°F] | 14 | 131 | 89,6 | | | | | | | | | | |
| | -10 | 45 | 20 | 45 | 1050,0 | 3586 | 903,6 | 1,87 | 6,40 | 1,61 | 560,3 | 2,82 | 12,89 | EN12900 MBP |
| | [°F] | 14 | 113 | 68 | | | | | | | | | | |

Performance tables

220-240V/50Hz 1~, CSCR, fan 3m/s, VDE, CCC, EAC

| | 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 | 195,0 | 666 | 167,9 | 0,76 | 2,61 | 0,66 | 255,5 | 1,28 | 2,18 |
| cond. pressure | -35 | -31 | 297,0 | 1014 | 255,6 | 0,94 | 3,22 | 0,81 | 315,3 | 1,55 | 3,33 |
| pc= 45/113 | -30 | -22 | 414,6 | 1416 | 356,8 | 1,12 | 3,83 | 0,97 | 369,6 | 1,82 | 4,66 |
| return gas temp. | -25 | -13 | 550,3 | 1879 | 473,6 | 1,31 | 4,48 | 1,13 | 419,8 | 2,08 | 6,21 |
| RGT= 32/90 | -15 | 5 | 886,9 | 3029 | 763,3 | 1,73 | 5,90 | 1,49 | 513,8 | 2,58 | 10,09 |
| liquid temp | -5 | 23 | 1327,9 | 4535 | 1142,8 | 2,18 | 7,46 | 1,88 | 608,3 | 3,05 | 15,29 |
| Tliq= 45/113 | 5 | 41 | 1894,1 | 6469 | 1630,1 | 2,65 | 9,05 | 2,28 | 714,5 | 3,49 | 22,16 |
| [°C / °F] | -40 | -40 | 103,6 | 354 | 89,2 | 0,53 | 1,82 | 0,46 | 194,9 | 0,98 | 1,28 |
| cond. pressure | -35 | -31 | 200,0 | 683 | 172,1 | 0,73 | 2,48 | 0,62 | 275,4 | 1,34 | 2,47 |
| pc= 55/131 | -30 | -22 | 309,3 | 1056 | 266,2 | 0,89 | 3,02 | 0,76 | 349,5 | 1,69 | 3,84 |
| return gas temp | -25 | -13 | 434,2 | 1483 | 373,6 | 1,04 | 3,54 | 0,89 | 418,4 | 2,04 | 5,41 |
| RGT= 32/90 | -15 | 5 | 741,0 | 2531 | 637,7 | 1,36 | 4,63 | 1,17 | 546,6 | 2,70 | 9,32 |
| liquid temp | -5 | 23 | 1141,4 | 3898 | 982,3 | 1,70 | 5,81 | 1,46 | 671,2 | 3,34 | 14,54 |
| Tliq= 55/131 | 5 | 41 | 1656,4 | 5657 | 1425,5 | 2,06 | 7,04 | 1,77 | 803,3 | 3,95 | 21,48 |