

Model

| | | | | |
|-------------|----------------|------------------|-------------|-----------------|
| Designation | SC10CNX | 220-240V/50Hz 1~ | Sales code: | 104H8065 |
|-------------|----------------|------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R290 |
| Oil viscosity | 32cSt | Displacement | 10,29cm ³ / 0,63cu.in |
| Oil quantity | 500cm ³ / 16,9fl.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 | 7,19Ω (at 25°C) | | |
| Winding resistance aux | 27,23Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 120°C / 248°F | | |



General - Configurations with SC10CNX

| | Conf. 1 |
|------------------------|----------------|
| Motorconfiguration | CSCR |
| Power supply (nominal) | 220-240V/50Hz |
| Number of phases | 1 |
| Voltage range | 198-254V |
| Approvals | VDE |
| Starting torque | HST |
| Note | - / - |

Applications with SC10CNX

| | 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 SC10CNX

| | Conf. 1 |
|------------------------------|----------------|
| Starting device type | relay |
| Run capacitor | 5μF |
| Start capacitor | 40μF |
| LRA (locked rotor amps / 4s) | 23,4A |
| RLA (rated load amps / 1s) | 4,3A |
| Cut in current | 23,4A |
| IP class | 21 |

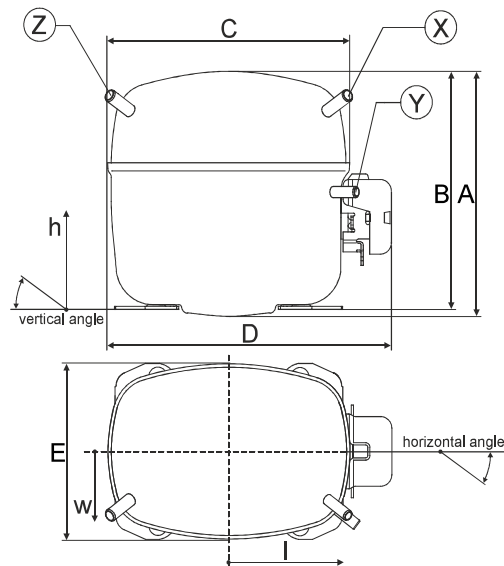
Model

| | | | | |
|-------------|----------------|------------------|-------------|-----------------|
| Designation | SC10CNX | 220-240V/50Hz 1~ | Sales code: | 104H8065 |
|-------------|----------------|------------------|-------------|-----------------|

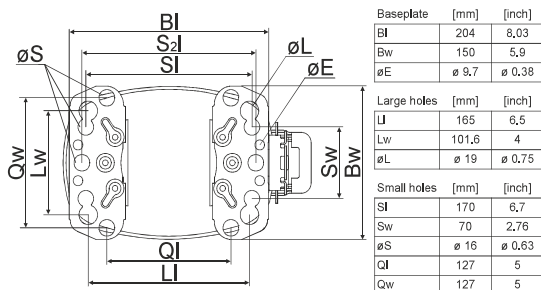
Compressor dimensions

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

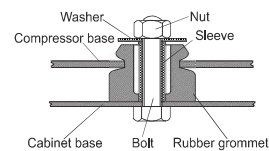
| Connectors | | Suction | Discharge | Process |
|-----------------------|------|--------------|--------------|--------------|
| | | X | Y | Z |
| Diameter | [mm] | øi 8,11-8,29 | øi 6,11-6,29 | øi 6,11-6,29 |
| (i:inside, o:outside) | [in] | øi 0,32-0,33 | øi 0,24-0,25 | øi 0,24-0,25 |
| Material | | copper | copper | copper |
| Horizontal angle | ±2° | 37° | 37° | 143° |
| Vertical angle | ±2° | 30° | 0° | 150° |
| Position l/h/w | [mm] | 107/183/55 | 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 |



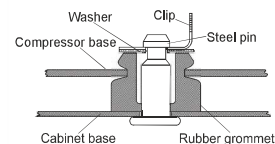
Compressor fixation



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 |

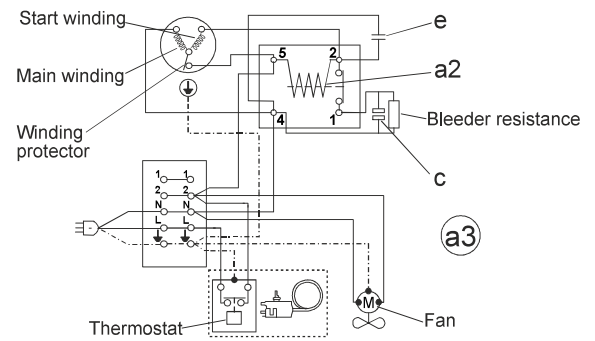
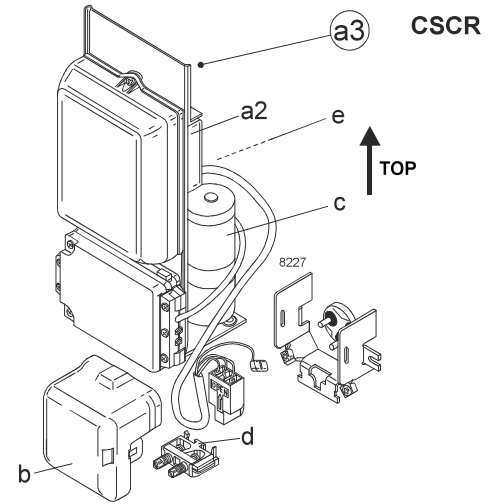
Model

| | | | | | |
|-------------|----------------|----------------------|----------------|-------------|-----------------|
| Designation | SC10CNX | 220-240V/50Hz | Conf. 1 | Sales code: | 104H8065 |
|-------------|----------------|----------------------|----------------|-------------|-----------------|

Configuration

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

Electrical accessories / wiring diagram

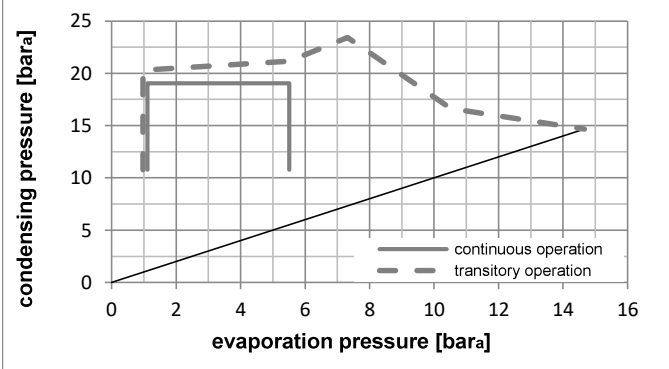
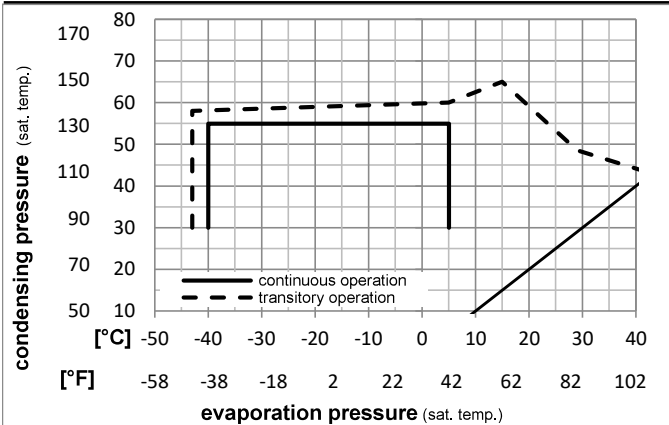


Ambient temperatures / system cooling

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

| System cooling (n/a: outside limits) | | | |
|--------------------------------------|----------|----------|-----|
| 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 | 117-7025 |
| b | plastic cover | 103N2009 |
| d | cord relief | 103N1004 |

Alternative components

| | | |
|----|--------------------------------|----------|
| a2 | potential relay (RVA 6M3R 339) | 117-7425 |
| e | run capacitor (5μF, 6.3mm) | 117-7111 |
| c | start capacitor (40μF, 6.3mm) | 117U5372 |
| b | plastic cover | 103N2009 |
| d | cord relief | 103N1004 |

Model

Designation **SC10CNX 220-240V/50Hz** Conf. 1 Sales code: **104H8065**

Optimization + standard conditions

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

| | 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 m | |
| | [°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 | 357,3 | 1220 | 307,5 | 1,26 | 4,32 | 1,09 | 282,7 | 1,50 | 3,62 | ASHRAE LBP |
| | [-10] | 130 | 90 | 90 | | | | | | | | | | |
| | -25 | 55 | 32 | 55 | 263,2 | 899 | 226,5 | 0,98 | 3,33 | 0,84 | 269,8 | 1,46 | 3,28 | cecomaf LBP |
| | [-13] | 131 | 89,6 | 131 | | | | | | | | | | |
| | -35 | 40 | 20 | 40 | 197,2 | 673 | 169,7 | 0,93 | 3,16 | 0,80 | 213,0 | 1,23 | 2,25 | EN12900 LBP |
| | [-31] | 104 | 68 | 104 | | | | | | | | | | |
| | -6,66 | 54,4 | 35 | 46,1 | 711,8 | 2431 | 612,6 | 1,79 | 6,11 | 1,54 | 398,1 | 1,96 | 8,12 | ASHRAE MBP |
| | [20] | 130 | 95 | 115 | | | | | | | | | | |
| | -10 | 55 | 32 | 55 | 555,1 | 1896 | 477,7 | 1,47 | 5,03 | 1,27 | 377,0 | 1,87 | 7,02 | cecomaf MBP |
| | [14] | 131 | 89,6 | 131 | | | | | | | | | | |
| | -10 | 45 | 20 | 45 | 634,4 | 2167 | 546,0 | 1,75 | 5,99 | 1,51 | 361,9 | 1,78 | 7,79 | EN12900 MBP |
| | [14] | 113 | 68 | 113 | | | | | | | | | | |

Performance tables

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

| | 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 | 126,1 | 431 | 108,5 | 0,72 | 2,47 | 0,62 | 174,5 | 1,12 | 1,41 | |
| cond. pressure | -35 | -31 | 179,4 | 613 | 154,4 | 0,86 | 2,94 | 0,74 | 208,3 | 1,22 | 2,01 | |
| pc= 45/113 | -30 | -22 | 245,2 | 837 | 211,0 | 1,01 | 3,46 | 0,87 | 241,8 | 1,33 | 2,76 | |
| return gas temp. | -25 | -13 | 324,7 | 1109 | 279,5 | 1,18 | 4,04 | 1,02 | 274,5 | 1,44 | 3,66 | |
| RGT= 32/90 | -15 | 5 | 531,0 | 1813 | 457,0 | 1,58 | 5,41 | 1,36 | 335,0 | 1,66 | 6,04 | |
| liquid temp | -5 | 23 | 809,4 | 2764 | 696,6 | 2,10 | 7,17 | 1,81 | 385,8 | 1,89 | 9,32 | |
| Tliq= 45/113 | 5 | 41 | 1171,5 | 4001 | 1008,2 | 2,77 | 9,47 | 2,39 | 422,5 | 2,12 | 13,71 | |
| [°C / °F] | -40 | -40 | 98,8 | 337 | 85,0 | 0,63 | 2,14 | 0,54 | 157,7 | 1,05 | 1,22 | |
| cond. pressure | -35 | -31 | 141,8 | 484 | 122,0 | 0,73 | 2,49 | 0,63 | 194,7 | 1,19 | 1,75 | |
| pc= 55/131 | -30 | -22 | 196,1 | 670 | 168,8 | 0,84 | 2,88 | 0,73 | 232,3 | 1,32 | 2,43 | |
| return gas temp | -25 | -13 | 263,2 | 899 | 226,5 | 0,98 | 3,33 | 0,84 | 269,8 | 1,46 | 3,28 | |
| RGT= 32/90 | -15 | 5 | 441,3 | 1507 | 379,8 | 1,29 | 4,40 | 1,11 | 342,7 | 1,73 | 5,55 | |
| liquid temp | -5 | 23 | 687,3 | 2347 | 591,5 | 1,68 | 5,74 | 1,45 | 409,2 | 2,02 | 8,76 | |
| Tliq= 55/131 | 5 | 41 | 1012,7 | 3458 | 871,5 | 2,18 | 7,44 | 1,87 | 465,0 | 2,30 | 13,13 | |