

Single Pack SC15MNX 220-240V 50Hz CSIR

Single pack code number: **195B4197**

| Position | Title | Code | Amount |
|----------|---|----------|--------|
| 1 | Compressor SC15MNX | 104H8575 | 1 |
| 2 | Starting relay | 117U7019 | 1 |
| 3 | Starting capacitor (80 μ F 220V, 6.3mm) | 117U5017 | 1 |
| 4 | Cord relief | 103N1004 | 1 |
| 5 | Cover | 103N2008 | 1 |
| 6 | Bolt joint for one compressor M6 \varnothing 16mm | 118-1917 | 1 |

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Model

| | | | | |
|-------------|----------------|------------------|-------------|-----------------|
| Designation | SC15MNX | 220-240V/50Hz 1~ | Sales code: | 104H8575 |
|-------------|----------------|------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R290 |
| Oil viscosity | 22cST | Displacement | 15,28cm ³ / 0,93cu.in |
| Oil quantity | 554cm ³ / 18,7fl.oz | Compressors on pallet | 80 |
| Refr. charge - tech. limit | 150g / 5,3oz | | |
| Free gas volume comp. | 1510cm ³ / 51,1fl.oz | | |
| Weight | 13,5kg / 29,8lbs | | |
| Motor protection | 1# internal | | |
| Winding resistance main | 3,7Ω (at 25°C) | | |
| Winding resistance aux | 14Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 135°C / 275°F | | |



General - Configurations with SC15MNX

Conf. 1

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

Applications with SC15MNX

Conf. 1

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

Electrical data - Configurations with SC15MNX

Conf. 1

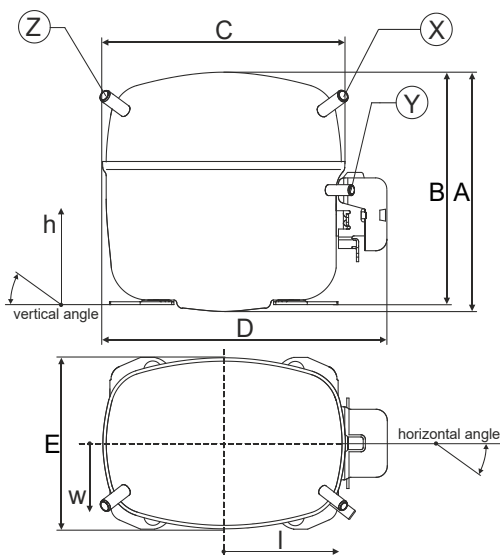
| | |
|------------------------------|--------|
| Starting device type | relay |
| Run capacitor | -/- |
| Start capacitor | 80μF |
| LRA (locked rotor amps / 4s) | 20,43A |
| RLA (rated load amps / 1s) | 3,9A |
| Cut in current | 20,43A |

Model

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

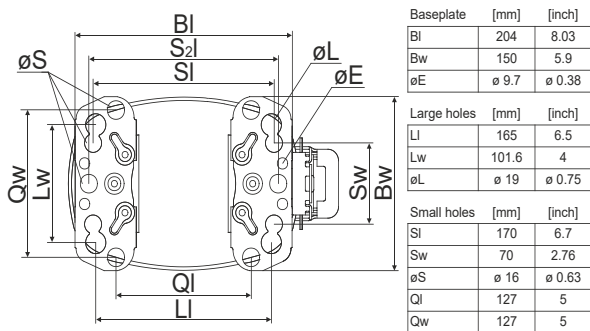
Compressor dimensions

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

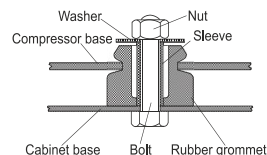


| Connectors | | Suction | Discharge | Process |
|-----------------------|------|--------------|--------------|--------------|
| | | X | Y | Z |
| Diameter | [mm] | øi 8,11-8,29 | øi 6,11-6,29 | øi 6,11-6,29 |
| (i:inside, o:outside) | [in] | øi 0,32-0,33 | øi 0,24-0,25 | øi 0,24-0,25 |
| Material | | copper | copper | copper |
| Horizontal angle | ±2° | 37° | 37° | 143° |
| Vertical angle | ±2° | 30° | 0° | 150° |
| Position l/h/w | [mm] | 107/193/55 | 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 |

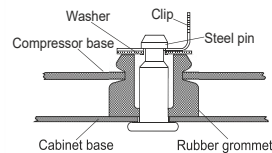
Compressor fixation



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

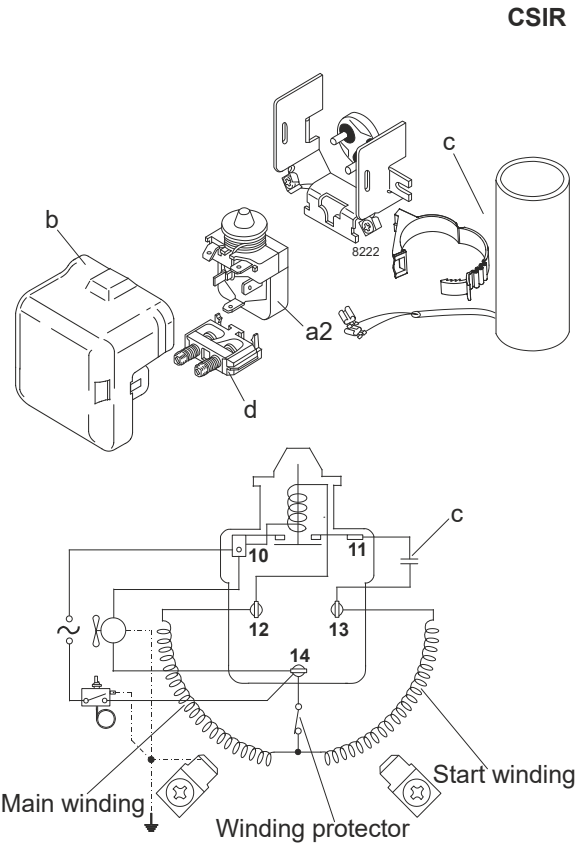
Model

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| Designation | SC15MNX | 220-240V/50Hz | Conf. 1 | Sales code: | 104H8575 |
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Configuration

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

Electrical accessories / wiring diagram



Ambient/ machine room temperatures minimum /maximum

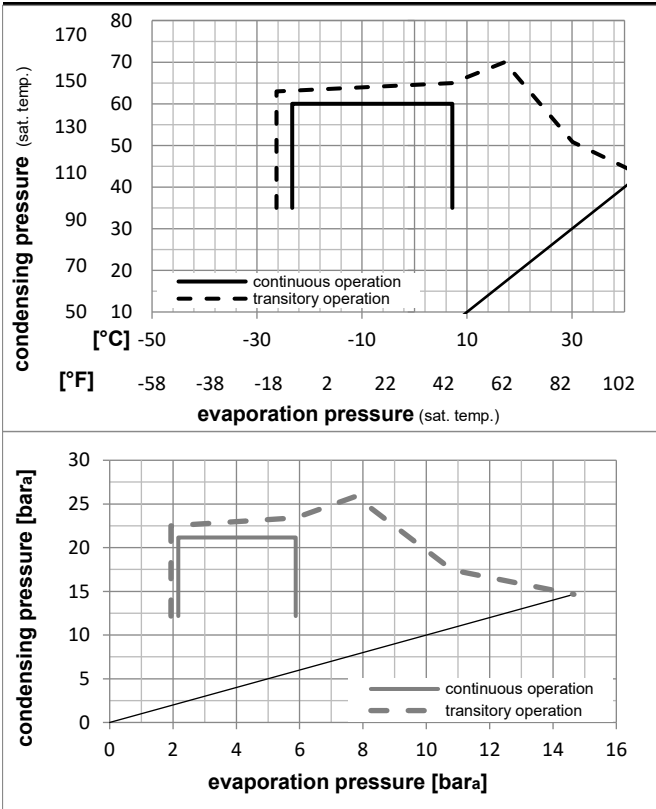
Ambient temperature range: 10 - 43°C / 50 - 110°F

Machine room temperature range: 10 - 48°C / 50 - 119°F

Compressor cooling: fan 3m/s

Operation Limits

Operation pressure range



Components

| | | |
|----|------------------------|----------|
| a2 | current relay | 117U7019 |
| c | start capacitor (80μF) | 117U5017 |
| d | cord relief | 103N1004 |
| b | plastic cover | 103N2008 |

Model

Designation **SC15MNX** **220-240V/50Hz** Conf. 1 Sales code: **104H8575**

Optimization + standard conditions

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

| Evaporating pressure (saturation temperature) | | | | | Condensing pressure (saturation temperature) | | | | | Power consumption | | | | |
|---|-----|-----|--------------|------------------|--|----------|--------|----------|-----------|---------------------|-------|----------------|-------|-------------|
| | | | | Return gas temp. | | | | | | Current consumption | | | | |
| | | | Liquid temp. | Cooling capacity | COP | EER | | | | P1 | I | Ref. mass flow | | |
| pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | | |
| [°C] | -7 | 54 | 35 | 46 | 1188,0 | 4057 | 1022,4 | 1,75 | 5,97 | 1,50 | 680,0 | 3,96 | 13,55 | ASHRAE MBP |
| [°F] | 20 | 130 | 95 | 115 | | | | | | | | | | |
| [°C] | -10 | 55 | 32 | 55 | 949,7 | 3243 | 817,3 | 1,45 | 4,96 | 1,25 | 653,8 | 3,84 | 12,01 | cecomaf MBP |
| [°F] | 14 | 131 | 90 | 131 | | | | | | | | | | |
| [°C] | -10 | 45 | 20 | 45 | 1046,5 | 3574 | 900,6 | 1,77 | 6,04 | 1,52 | 591,5 | 3,65 | 12,85 | EN12900 MBP |
| [°F] | 14 | 113 | 68 | 113 | | | | | | | | | | |
| [°C] | -7 | 49 | 18 | 49 | 1112,6 | 3800 | 957,5 | 1,74 | 5,94 | 1,50 | 639,8 | 3,84 | 14,45 | ARI540 MBP |
| [°F] | 20 | 120 | 65 | 120 | | | | | | | | | | |
| [°C] | -10 | 45 | 32 | 45 | 1089,5 | 3721 | 937,6 | 1,84 | 6,29 | 1,59 | 591,5 | 3,65 | 12,46 | opt |
| [°F] | 14 | 113 | 90 | 113 | | | | | | | | | | |
| [°C] | -25 | 45 | 32 | 45 | 556,9 | 1902 | 479,2 | 1,43 | 4,90 | 1,23 | 388,4 | 3,15 | 6,28 | opt |
| [°F] | -13 | 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] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] |
| [°C / °F] | -23 | -10 | 606,4 | 2071 | 521,9 | 1,43 | 4,88 | 1,23 | 424,3 | 3,21 | 6,85 |
| cond. pressure | -20 | -4 | 709,9 | 2424 | 610,9 | 1,47 | 5,02 | 1,27 | 482,9 | 3,33 | 8,04 |
| pc= 45/113 | -15 | 5 | 886,5 | 3028 | 762,9 | 1,62 | 5,53 | 1,39 | 547,9 | 3,50 | 10,09 |
| return gas temp. | -10 | 14 | 1089,5 | 3721 | 937,6 | 1,84 | 6,29 | 1,59 | 591,5 | 3,65 | 12,46 |
| RGT= 32/90 | -5 | 23 | 1321,7 | 4514 | 1137,4 | 2,13 | 7,26 | 1,83 | 621,4 | 3,80 | 15,22 |
| liquid temp | 0 | 32 | 1585,8 | 5416 | 1364,8 | 2,46 | 8,39 | 2,11 | 645,5 | 3,93 | 18,39 |
| Tliq= 45/113 | 7,2 | 45 | 2028,2 | 6927 | 1745,4 | 2,96 | 10,10 | 2,54 | 685,9 | 4,10 | 23,83 |
| [°C / °F] | -23 | -10 | 554,4 | 1893 | 477,1 | 1,22 | 4,16 | 1,05 | 455,1 | 3,25 | 6,91 |
| cond. pressure | -20 | -4 | 640,0 | 2186 | 550,8 | 1,23 | 4,20 | 1,06 | 520,7 | 3,40 | 8,00 |
| pc= 55/131 | -15 | 5 | 784,6 | 2680 | 675,2 | 1,31 | 4,49 | 1,13 | 597,4 | 3,63 | 9,86 |
| return gas temp | -10 | 14 | 949,7 | 3243 | 817,3 | 1,45 | 4,96 | 1,25 | 653,8 | 3,84 | 12,01 |
| RGT= 32/90 | -5 | 23 | 1138,1 | 3887 | 979,5 | 1,63 | 5,57 | 1,40 | 697,8 | 4,04 | 14,50 |
| liquid temp | 0 | 32 | 1352,7 | 4620 | 1164,1 | 1,83 | 6,27 | 1,58 | 737,2 | 4,22 | 17,37 |
| Tliq= 55/131 | 7,2 | 45 | 1713,1 | 5851 | 1474,3 | 2,14 | 7,30 | 1,84 | 801,8 | 4,47 | 22,32 |



SC Compressors





SC Compressors

Service/Repair – R290



8545



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