

Single Pack SC18MNX 220-240V 50Hz CSIR

Single pack code number: **195B4053**

| Position | Title | Code | Amount |
|----------|---|----------|--------|
| 1 | Compressor SC18MNX | 104H8875 | 1 |
| 2 | Starting relay | 117U7011 | 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 | SC18MNX | 220-240V/50Hz 1~ | Sales code: | 104H8875 |
|-------------|----------------|------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R290 |
| Oil viscosity | 32cST | Displacement | 17,69cm ³ / 1,08cu.in |
| Oil quantity | 550cm ³ / 18,6fl.oz | Compressors on pallet | 80 |
| Refr. charge - tech. limit | 150g / 5,3oz | | |
| Free gas volume comp. | 1460cm ³ / 49,4fl.oz | | |
| Weight | 14kg / 30,9lbs | | |
| Motor protection | 1# internal | | |
| Winding resistance main | 3,4Ω (at 25°C) | | |
| Winding resistance aux | 14,4Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 135°C / 275°F | | |



General - Configurations with SC18MNX

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

Applications with SC18MNX

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

Electrical data - Configurations with SC18MNX

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

Model

Designation

SC18MNX

220-240V/50Hz 1~

Sales code:

104H8875

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 X | Discharge Y | Process Z |
|----------------------------|--------------|----------------|--------------|
| Diameter [mm] | ø 8,11-8,29 | ø 6,11-6,29 | ø 6,11-6,29 |
| (i:inside, o:outside) [in] | ø 0,32-0,33 | ø 0,24-0,25 | ø 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 |



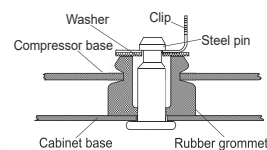
Compressor fixation



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 | SC18MNX | 220-240V/50Hz | Conf. 1 | Sales code: | 104H8875 |
|-------------|----------------|----------------------|----------------|-------------|-----------------|

Configuration

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

Electrical accessories / wiring diagram

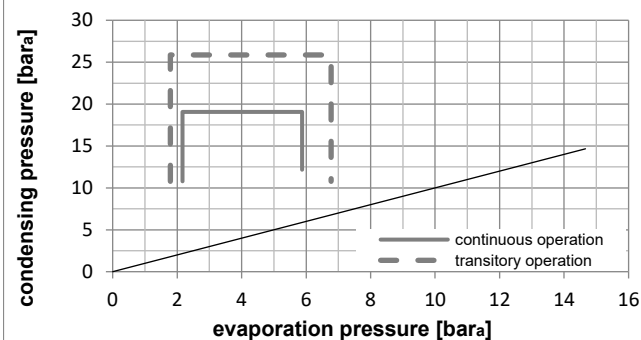
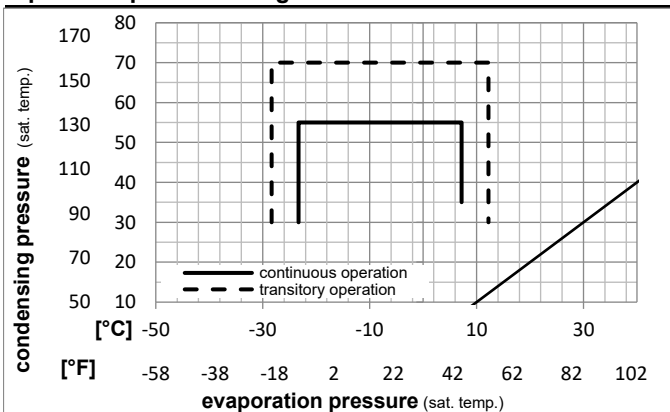


Ambient/ machine room temperatures minimum /maximum

| | |
|---------------------------------|------------------------|
| 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 | relay | 117U7011 |
| c | start capacitor (80μF) | 117U5017 |
| d | cord relief | 103N1004 |
| b | plastic cover | 103N2009 |

Alternative components

| | | |
|---|---------------|----------|
| b | plastic cover | 103N2008 |
|---|---------------|----------|

Model

Designation **SC18MNX** **220-240V/50Hz** Conf. 1 Sales code: **104H8875**

Optimization + standard conditions

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

| Evaporating pressure (saturation temperature) | | | | | Condensing pressure (saturation temperature) | | | | | | Power consumption | | | |
|---|-----|-----|-----|------|--|---------|----------|--------------|----------|-----------|---------------------|------|--------|----------------|
| | | | | | Return gas temp. | | | Liquid temp. | | | Current consumption | | | Ref. mass flow |
| | | | | | Cooling capacity | | | COP | EER | | P1 | I | m | |
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | |
| [°C] | -7 | 54 | 35 | 46 | 1365,6 | 4664 | 1175,3 | 1,71 | 5,83 | 1,47 | 799,9 | 4,74 | 15,58 | ASHRAE MBP |
| [°F] | 20 | 130 | 95 | 115 | | | | | | | | | | |
| [°C] | -10 | 55 | 32 | 55 | 1087,8 | 3715 | 936,2 | 1,42 | 4,86 | 1,22 | 764,5 | 4,61 | 13,76 | cecomaf MBP |
| [°F] | 14 | 131 | 90 | 131 | | | | | | | | | | |
| [°C] | -10 | 45 | 20 | 45 | 1204,1 | 4112 | 1036,3 | 1,69 | 5,77 | 1,45 | 712,9 | 4,41 | 14,78 | EN12900 MBP |
| [°F] | 14 | 113 | 68 | 113 | | | | | | | | | | |
| [°C] | -7 | 49 | 18 | 49 | 1280,4 | 4373 | 1101,9 | 1,67 | 5,70 | 1,44 | 766,9 | 4,61 | 16,63 | ARI540 MBP |
| [°F] | 20 | 120 | 65 | 120 | | | | | | | | | | |
| [°C] | -10 | 45 | 32 | 45 | 1253,6 | 4281 | 1078,8 | 1,76 | 6,01 | 1,51 | 712,9 | 4,41 | 14,34 | opt |
| [°F] | 14 | 113 | 90 | 113 | | | | | | | | | | |
| [°C] | -25 | 45 | 32 | 45 | 675,0 | 2305 | 580,9 | 1,22 | 4,17 | 1,05 | 552,2 | 3,90 | 7,61 | opt |
| [°F] | -13 | 113 | 90 | 113 | | | | | | | | | | |

Performance tables

R290, 220V/50Hz, CSIR, fan 3m/s, CCC, EAC, 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] | -23 | -10 | 730,5 | 2495 | 628,7 | 1,27 | 4,35 | 1,10 | 573,7 | 3,97 | 8,25 |
| cond. pressure | -20 | -4 | 844,3 | 2883 | 726,6 | 1,38 | 4,71 | 1,19 | 612,5 | 4,08 | 9,56 |
| pc= 45/113 | -15 | 5 | 1035,1 | 3535 | 890,8 | 1,56 | 5,31 | 1,34 | 665,4 | 4,25 | 11,78 |
| return gas temp. | -10 | 14 | 1253,6 | 4281 | 1078,8 | 1,76 | 6,01 | 1,51 | 712,9 | 4,41 | 14,34 |
| RGT= 32/90 | -5 | 23 | 1505,9 | 5143 | 1296,0 | 1,99 | 6,79 | 1,71 | 756,9 | 4,56 | 17,34 |
| liquid temp | 0 | 32 | 1798,3 | 6142 | 1547,7 | 2,25 | 7,68 | 1,94 | 799,2 | 4,71 | 20,86 |
| Tliq= 45/113 | 7,2 | 45 | 2302,2 | 7862 | 1981,3 | 2,67 | 9,13 | 2,30 | 861,1 | 4,95 | 27,05 |
| [°C / °F] | -23 | -10 | 628,4 | 2146 | 540,8 | 1,06 | 3,61 | 0,91 | 594,9 | 4,02 | 7,84 |
| cond. pressure | -20 | -4 | 729,1 | 2490 | 627,4 | 1,14 | 3,89 | 0,98 | 640,4 | 4,17 | 9,12 |
| pc= 55/131 | -15 | 5 | 896,6 | 3062 | 771,6 | 1,27 | 4,35 | 1,10 | 704,5 | 4,39 | 11,27 |
| return gas temp | -10 | 14 | 1087,8 | 3715 | 936,2 | 1,42 | 4,86 | 1,22 | 764,5 | 4,61 | 13,76 |
| RGT= 32/90 | -5 | 23 | 1308,8 | 4470 | 1126,4 | 1,59 | 5,44 | 1,37 | 822,4 | 4,83 | 16,67 |
| liquid temp | 0 | 32 | 1565,9 | 5348 | 1347,6 | 1,78 | 6,08 | 1,53 | 879,9 | 5,05 | 20,11 |
| Tliq= 55/131 | 7,2 | 45 | 2011,7 | 6870 | 1731,3 | 2,08 | 7,11 | 1,79 | 966,0 | 5,39 | 26,21 |



SC Compressors





SC Compressors

Service/Repair – R290



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