

Single Pack SC18CNX.2 220-240V 50Hz CSIR

Single pack code number: **195B4198**

| Position | Title | Code | Amount |
|----------|---|----------|--------|
| 1 | Compressor SC18CNX.2 | 104H8866 | 1 |
| 2 | Starting relay | 117U7011 | 1 |
| 3 | Starting capacitor (80 μ F 220V, 6.3mm) | 117U5017 | 1 |
| 4 | Cord relief | 103N1004 | 1 |
| 5 | Cover | 103N2009 | 1 |
| 6 | Bolt joint for one compressor M6 \varnothing 16mm | 118-1917 | 1 |

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Model

| | | | | |
|-------------|------------------|------------------|-------------|-----------------|
| Designation | SC18CNX.2 | 220-240V/50Hz 1~ | Sales code: | 104H8866 |
|-------------|------------------|------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R290 |
| Oil viscosity | 22cST | 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. | 1410cm ³ / 47,7fl.oz | | |
| Weight | 14kg / 30,9lbs | | |
| Motor protection | 1# internal | | |
| Winding resistance main | 4Ω (at 25°C) | | |
| Winding resistance aux | 13,1Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 130°C / 266°F | | |



General - Configurations with SC18CNX.2

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

Applications with SC18CNX.2

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

Electrical data - Configurations with SC18CNX.2

| | |
|------------------------------|----------------|
| | Conf. 1 |
| Starting device type | relay |
| Run capacitor | - / - |
| Start capacitor | 80μF |
| LRA (locked rotor amps / 4s) | 19,5A |
| RLA (rated load amps / 1s) | 3,8A |
| Cut in current | 19,5A |

Model

Designation

SC18CNX.2

220-240V/50Hz 1~

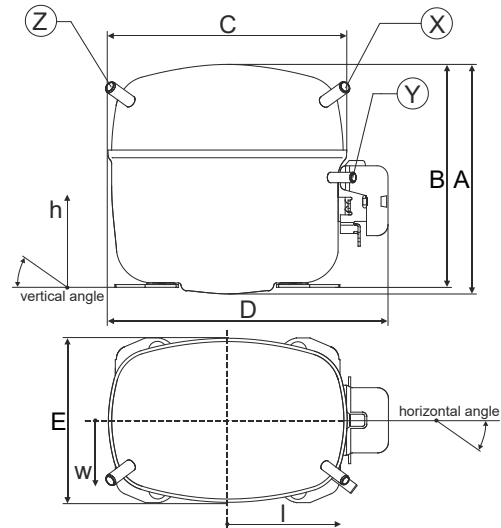
Sales code:

104H8866

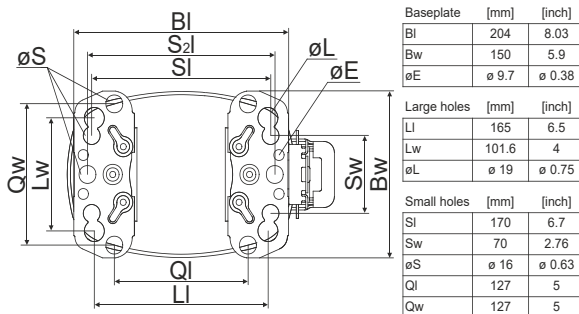
Compressor dimensions

| 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 |

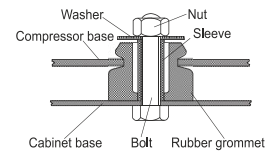
| Connectors | Suction X | Discharge Y | Process Z |
|----------------------------|----------------|----------------|--------------|
| Diameter [mm] | øi 10,11-10,29 | øi 6,11-6,29 | øi 6,11-6,29 |
| (i:inside, o:outside) [in] | øi 0,4-0,41 | øi 0,24-0,25 | øi 0,24-0,25 |
| Material | copper | copper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



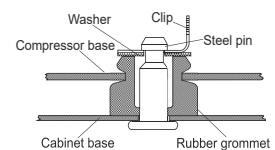
Compressor fixation



Bolt joint



Snap-on



Mounting accessories

| | 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

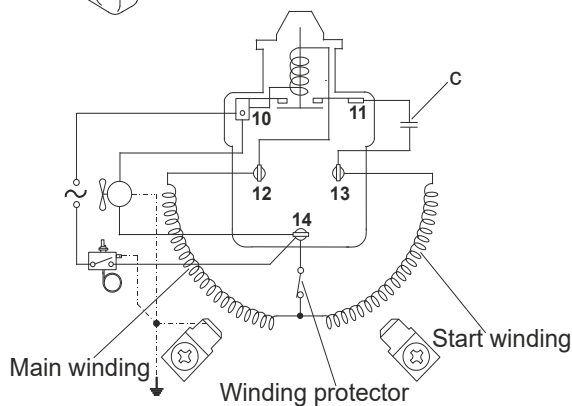
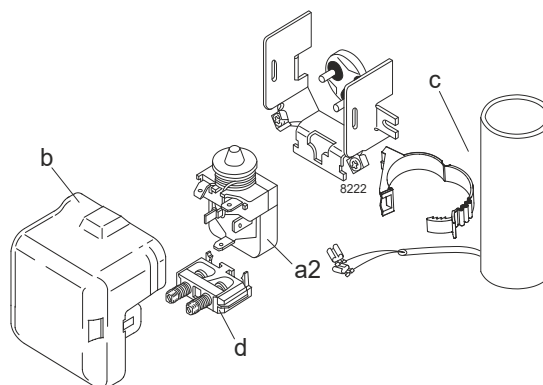
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| Designation | SC18CNX.2 | 220-240V/50Hz | Conf. 1 | Sales code: | 104H8866 |
|-------------|------------------|----------------------|----------------|-------------|-----------------|

Configuration

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

Electrical accessories / wiring diagram

CSIR



Ambient/ machine room temperatures minimum /maximum

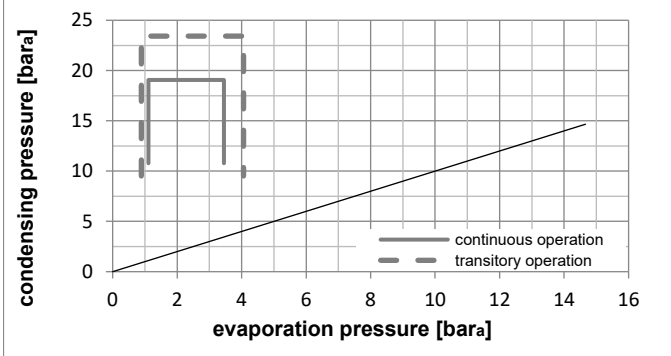
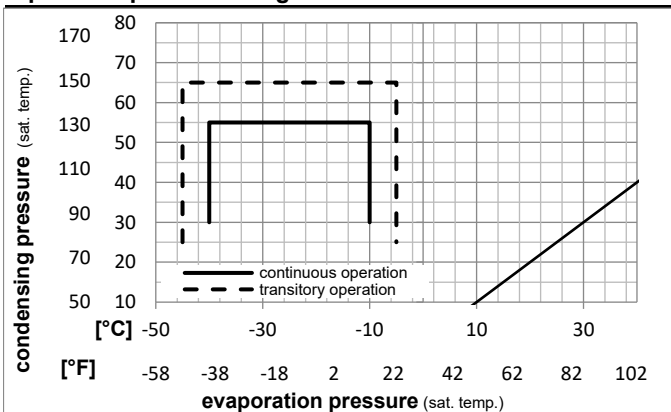
Ambient temperature range: 10 - 43°C / 50 - 110°F

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 **SC18CNX.2** **220-240V/50Hz** Conf. 1 Sales code: **104H8866**

Optimization + standard conditions

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

| | Evaporating pressure (saturation temperature) | | | | Condensing pressure (saturation temperature) | | | Return gas temp. | Liquid temp. | Cooling capacity | | | COP | EER | Power consumption | | | ASHRAE LBP |
|------|---|-----|-----|------|--|---------|----------|------------------|--------------|------------------|----------|-----------|------|-----|-------------------|---|-------------|------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | | | [W/W] | [Btu/Wh] | [kcal/Wh] | | | P1 | I | m | |
| [°C] | -23 | 54 | 32 | 32 | 795,3 | 2716 | 684,5 | 1,30 | 4,45 | 1,12 | 609,8 | 3,88 | 8,05 | | | | | |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 587,0 | 2005 | 505,2 | 1,00 | 3,41 | 0,86 | 587,5 | 3,82 | 7,31 | | | | cecomaf LBP | |
| [°F] | -13 | 131 | 90 | 131 | | | | | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 429,8 | 1468 | 369,9 | 1,01 | 3,45 | 0,87 | 425,0 | 3,20 | 4,91 | | | | EN12900 LBP | |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | | | | | |
| [°C] | -23 | 49 | 4,4 | 49 | 640,3 | 2187 | 551,0 | 1,11 | 3,79 | 0,96 | 576,7 | 3,66 | 8,87 | | | | ARI540 LBP | |
| [°F] | -10 | 120 | 40 | 120 | | | | | | | | | | | | | | |
| [°C] | -23 | 41 | 32 | 32 | 848,2 | 2897 | 729,9 | 1,57 | 5,36 | 1,35 | 540,1 | 3,54 | 8,59 | | | | AHAM LBP | |
| [°F] | -10 | 105 | 90 | 90 | | | | | | | | | | | | | | |
| [°C] | -35 | 45 | 32 | 45 | 383,6 | 1310 | 330,1 | 0,92 | 3,14 | 0,79 | 417,0 | 3,15 | 4,30 | | | | opt | |
| [°F] | -31 | 113 | 90 | 113 | | | | | | | | | | | | | | |

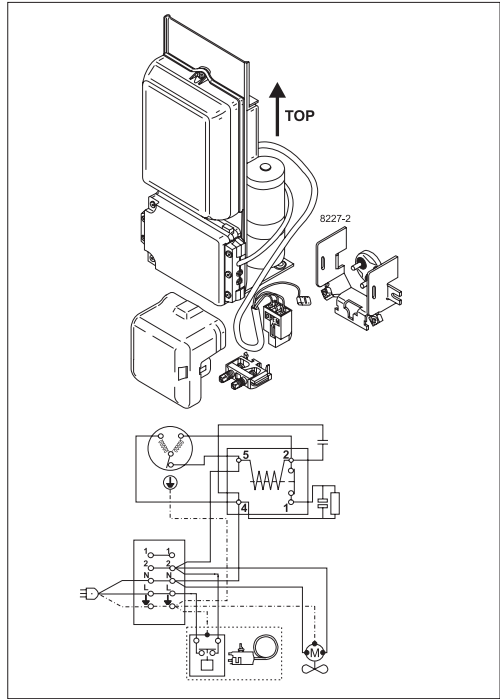
Performance tables

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

| | pe | | Cooling capacity | | | COP | EER | P1 | I | m | |
|------------------|------|------|------------------|---------|----------|-------|----------|------|-------|------|-----------|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | | | | [kcal/Wh] |
| [°C / °F] | -40 | -40 | 244,2 | 834 | 210,1 | 0,72 | 2,47 | 0,62 | 337,1 | 2,96 | 2,73 |
| cond. pressure | -35 | -31 | 383,6 | 1310 | 330,1 | 0,92 | 3,14 | 0,79 | 417,0 | 3,15 | 4,30 |
| pc= 45/113 | -30 | -22 | 530,7 | 1812 | 456,7 | 1,10 | 3,74 | 0,94 | 484,0 | 3,34 | 5,96 |
| return gas temp. | -25 | -13 | 689,4 | 2354 | 593,3 | 1,27 | 4,35 | 1,10 | 540,9 | 3,52 | 7,77 |
| RGT= 32/90 | -20 | -4 | 863,5 | 2949 | 743,1 | 1,46 | 4,99 | 1,26 | 591,0 | 3,69 | 9,78 |
| liquid temp | -15 | 5 | 1056,9 | 3609 | 909,6 | 1,66 | 5,67 | 1,43 | 637,1 | 3,85 | 12,02 |
| Tliq= 45/113 | -10 | 14 | 1273,4 | 4349 | 1095,9 | 1,87 | 6,37 | 1,61 | 682,3 | 4,01 | 14,57 |
| [°C / °F] | -40 | -40 | 135,5 | 463 | 116,6 | 0,47 | 1,60 | 0,40 | 289,9 | 3,03 | 1,67 |
| cond. pressure | -35 | -31 | 274,8 | 939 | 236,5 | 0,68 | 2,32 | 0,59 | 403,8 | 3,30 | 3,40 |
| pc= 55/131 | -30 | -22 | 424,0 | 1448 | 364,9 | 0,84 | 2,88 | 0,73 | 502,0 | 3,57 | 5,26 |
| return gas temp | -25 | -13 | 587,0 | 2005 | 505,2 | 1,00 | 3,41 | 0,86 | 587,5 | 3,82 | 7,31 |
| RGT= 32/90 | -20 | -4 | 767,6 | 2622 | 660,6 | 1,16 | 3,95 | 1,00 | 663,3 | 4,07 | 9,60 |
| liquid temp | -15 | 5 | 969,7 | 3312 | 834,5 | 1,32 | 4,52 | 1,14 | 732,4 | 4,31 | 12,19 |
| Tliq= 55/131 | -10 | 14 | 1197,1 | 4088 | 1030,3 | 1,50 | 5,12 | 1,29 | 797,8 | 4,55 | 15,14 |



SC Compressors





SC Compressors

Service/Repair – R290



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