

Single Pack SC12CNX.2 220-240V 50Hz CSIR

Single pack code number: **195B4168**

| Position | Title | Code | Amount |
|----------|---|----------|--------|
| 1 | Compressor SC12CNX.2 | 104H8266 | 1 |
| 2 | Starting relay | 117U7003 | 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 | SC12CNX.2 | 220-240V/50Hz 1~ | Sales code: | 104H8266 |
|-------------|------------------|------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R290 |
| Oil viscosity | 22cST | Displacement | 12,87cm ³ / 0,79cu.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 | 6,9Ω (at 25°C) | | |
| Winding resistance aux | 11Ω (at 25°C) | | |
| Max. winding temp. | 125°C / 257°F | | |
| Max. discharge temp. | 135°C / 275°F | | |



General - Configurations with SC12CNX.2

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

Applications with SC12CNX.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 SC12CNX.2

| | Conf. 1 |
|------------------------------|----------------|
| Starting device type | relay |
| Run capacitor | -/- |
| Start capacitor | 80μF |
| LRA (locked rotor amps / 4s) | 23,4A |
| RLA (rated load amps / 1s) | 4,3A |
| Cut in current | 23,4A |

Model

Designation

SC12CNX.2

220-240V/50Hz 1~

Sales code:

104H8266

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 |

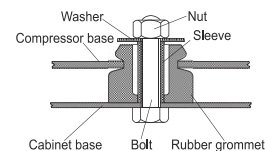
| Connectors | Suction X | Discharge Y | Process Z |
|----------------------------|--------------|----------------|--------------|
| Diameter [mm] | øi 8,11-8,29 | øi 6,11-6,29 | øi 6,11-6,29 |
| (i:inside, o:outside) [in] | øi 0,32-0,33 | øi 0,24-0,25 | øi 0,24-0,25 |
| Material | copper | copper |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



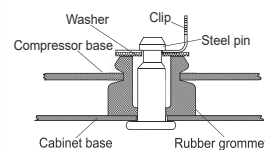
Compressor fixation



Bolt joint



Snap-on



Mounting accessories

| 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

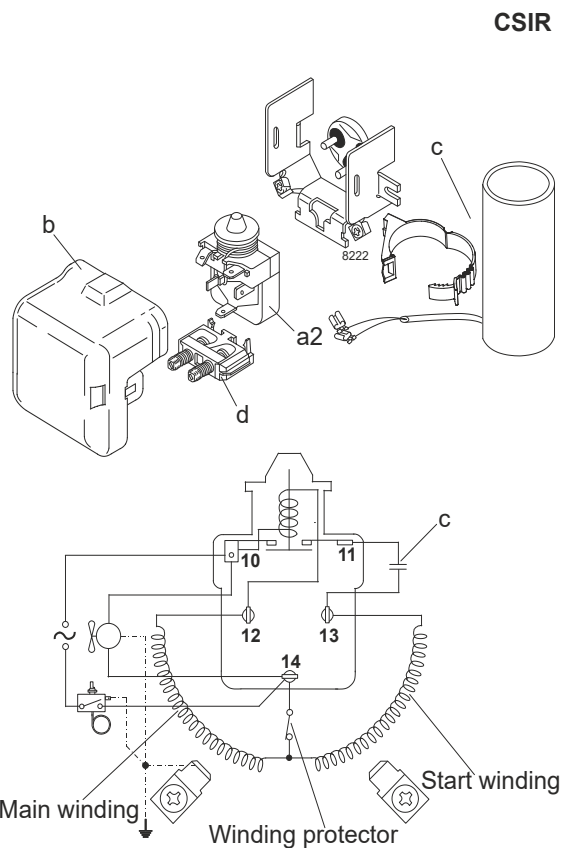
Model

| | | | | | |
|-------------|------------------|----------------------|----------------|-------------|-----------------|
| Designation | SC12CNX.2 | 220-240V/50Hz | Conf. 1 | Sales code: | 104H8266 |
|-------------|------------------|----------------------|----------------|-------------|-----------------|

Configuration

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

Electrical accessories / wiring diagram

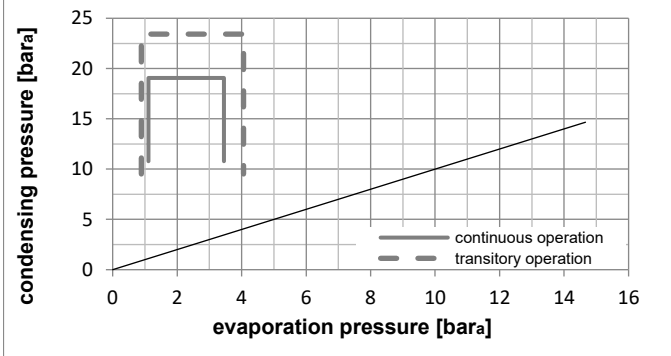
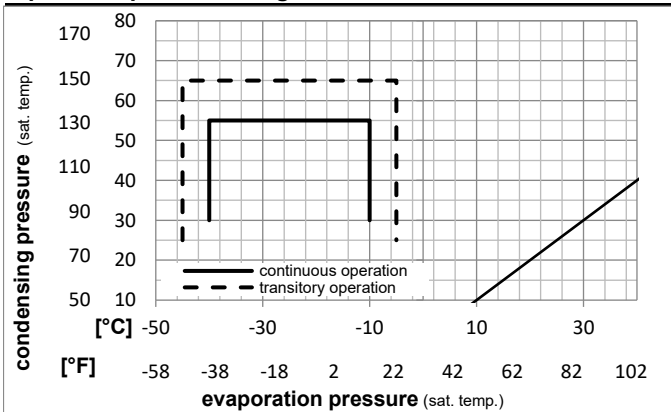


Ambient/ machine room temperatures minimum /maximum

| | |
|---------------------------------|------------------------|
| 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 | 117U7003 |
| c | start capacitor (80μF) | 117U5017 |
| d | cord relief | 103N1004 |
| b | plastic cover | 103N2009 |

Model

Designation **SC12CNX.2** **220-240V/50Hz** Conf. 1 Sales code: **104H8266**

Optimization + standard conditions

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

| | Evaporating pressure (saturation temperature) | | | | Condensing pressure (saturation temperature) | | | Return gas temp. | Liquid temp. | Cooling capacity | | | COP | EER | Power consumption | | | Ref. mass flow |
|------|---|-----|-----|------|--|---------|----------|------------------|--------------|------------------|----------|-----------|------|-------------|-------------------|---|---|----------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | | | [W/W] | [Btu/Wh] | [kcal/Wh] | | | P1 | I | m | |
| [°C] | -23 | 54 | 32 | 32 | 489,6 | 1672 | 421,4 | 1,19 | 4,08 | 1,03 | 409,8 | 2,43 | 4,96 | ASHRAE LBP | | | | |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | | | | | |
| [°C] | -25 | 55 | 32 | 55 | 359,3 | 1227 | 309,2 | 0,91 | 3,12 | 0,79 | 393,7 | 2,37 | 4,47 | cecomaf LBP | | | | |
| [°F] | -13 | 131 | 90 | 131 | | | | | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 279,4 | 954 | 240,4 | 0,96 | 3,26 | 0,82 | 292,5 | 2,06 | 3,19 | EN12900 LBP | | | | |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | | | | | |
| [°C] | -23 | 49 | 4,4 | 49 | 414,2 | 1415 | 356,5 | 1,03 | 3,52 | 0,89 | 401,5 | 2,42 | 5,74 | ARI540 LBP | | | | |
| [°F] | -10 | 120 | 40 | 120 | | | | | | | | | | | | | | |
| [°C] | -23 | 41 | 32 | 32 | 569,6 | 1945 | 490,2 | 1,50 | 5,13 | 1,29 | 379,2 | 2,35 | 5,77 | AHAM LBP | | | | |
| [°F] | -10 | 105 | 90 | 90 | | | | | | | | | | | | | | |
| [°C] | -35 | 45 | 32 | 45 | 258,1 | 882 | 222,1 | 0,87 | 2,95 | 0,74 | 298,3 | 2,09 | 2,89 | opt | | | | |
| [°F] | -31 | 113 | 90 | 113 | | | | | | | | | | | | | | |

Performance tables

R290, 220V/50Hz, CSIR, fan 3m/s, CCC, 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 | 186,3 | 636 | 160,3 | 0,72 | 2,47 | 0,62 | 257,4 | 1,99 | 2,08 |
| cond. pressure | -35 | -31 | 258,1 | 882 | 222,1 | 0,87 | 2,95 | 0,74 | 298,3 | 2,09 | 2,89 |
| pc= 45/113 | -30 | -22 | 346,3 | 1183 | 298,1 | 1,02 | 3,49 | 0,88 | 338,7 | 2,21 | 3,89 |
| return gas temp. | -25 | -13 | 452,5 | 1545 | 389,4 | 1,19 | 4,08 | 1,03 | 378,8 | 2,35 | 5,10 |
| RGT= 32/90 | -20 | -4 | 578,3 | 1975 | 497,6 | 1,38 | 4,71 | 1,19 | 419,2 | 2,50 | 6,55 |
| liquid temp | -15 | 5 | 725,1 | 2476 | 624,0 | 1,58 | 5,38 | 1,36 | 460,2 | 2,67 | 8,25 |
| Tliq= 45/113 | -10 | 14 | 894,6 | 3055 | 769,9 | 1,78 | 6,08 | 1,53 | 502,4 | 2,86 | 10,23 |
| [°C / °F] | -40 | -40 | 115,1 | 393 | 99,0 | 0,49 | 1,66 | 0,42 | 236,3 | 1,94 | 1,42 |
| cond. pressure | -35 | -31 | 183,5 | 627 | 157,9 | 0,63 | 2,15 | 0,54 | 291,0 | 2,07 | 2,27 |
| pc= 55/131 | -30 | -22 | 264,4 | 903 | 227,5 | 0,77 | 2,63 | 0,66 | 343,3 | 2,21 | 3,28 |
| return gas temp | -25 | -13 | 359,3 | 1227 | 309,2 | 0,91 | 3,12 | 0,79 | 393,7 | 2,37 | 4,47 |
| RGT= 32/90 | -20 | -4 | 469,8 | 1605 | 404,3 | 1,06 | 3,62 | 0,91 | 442,7 | 2,55 | 5,88 |
| liquid temp | -15 | 5 | 597,5 | 2041 | 514,2 | 1,22 | 4,16 | 1,05 | 490,5 | 2,75 | 7,51 |
| Tliq= 55/131 | -10 | 14 | 743,9 | 2541 | 640,2 | 1,38 | 4,73 | 1,19 | 537,7 | 2,96 | 9,41 |



SC Compressors





SC Compressors

Service/Repair – R290



8545



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