

Single Pack SC12G 220-240V 50/60Hz CSIR

Single pack code number: **195B4483**

| Position | Title | Code | Amount |
|----------|---|----------|--------|
| 1 | Compressor SC12G | 104G8224 | 1 |
| 2 | Starting relay | 117U6003 | 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 | SC12G | 220-240V/50Hz 1~ 220-240V/60Hz 1~ | Sales code: | 104G8224 |
|-------------|--------------|-----------------------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R134a |
| 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 | 1300g / 45,9oz | | |
| Free gas volume comp. | 1510cm ³ / 51,1fl.oz | | |
| Weight | 12,7kg / 28lbs | | |
| 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 SC12G

| | Conf. 1 | Conf. 2 | Conf. 3 | Conf. 4 |
|------------------------|----------------|----------------|----------------|----------------|
| Motorconfiguration | CSIR | CSIR | RSIR | RSIR |
| Power supply (nominal) | 220-240V/50Hz | 208-230V/60Hz | 220-240V/50Hz | 208-230V/60Hz |
| Number of phases | 1 | 1 | 1 | 1 |
| Voltage range | 187-254V | 198-254V | 187-254V | 198-254V |
| Approvals | CCC, VDE, KC | CCC, VDE, KC | CCC, VDE, KC | CCC, VDE, KC |
| Starting torque | HST | HST | LST | LST |
| Note | - / - | | | |

Applications with SC12G

| | Conf. 1 | Conf. 2 | Conf. 3 | Conf. 4 |
|-------------------------|----------------|----------------|----------------|----------------|
| Refrigerant | R134a | R134a | R134a | R134a |
| Application | LBP+MBP+HBP | LBP | LBP+MBP+HBP | LBP |
| System cooling | fan 3m/s | fan 3m/s | fan 3m/s | fan 3m/s |
| Hot gas defrost | OK | OK | OK | OK |
| Long interval pull down | OK | OK | OK | OK |

Electrical data - Configurations with SC12G

| | Conf. 1 | Conf. 2 | Conf. 3 | Conf. 4 |
|------------------------------|----------------|----------------|----------------|----------------|
| Starting device type | relay | relay | PTC | PTC |
| Run capacitor | - / - | - / - | - / - | - / - |
| Start capacitor | 80μF | 80μF | - / - | - / - |
| LRA (locked rotor amps / 4s) | 13A | 13A | 12,6A | |
| RLA (rated load amps / 1s) | 2,5A | 2,5A | 2,5A | - / A |
| Cut in current | 17A | 17A | 12,6A | |

Model

Designation

SC12G

220-240V/50Hz 1~ 220-240V/60Hz 1~

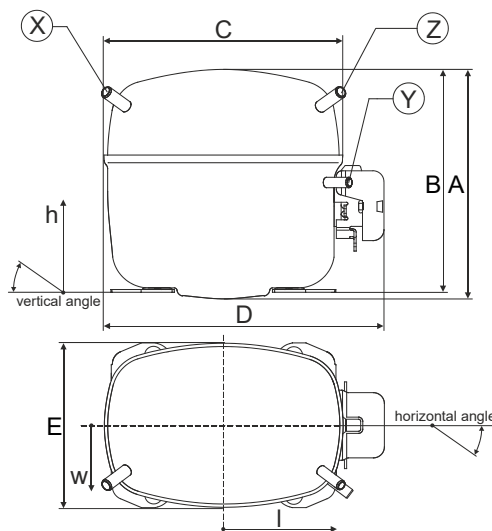
Sales code:

104G8224

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 10,11-10,29 | øi 6,41-6,59 | øi 6,41-6,59 |
| (i:inside, o:outside) [in] | øi 0,4-0,41 | øi 0,25-0,26 | øi 0,25-0,26 |
| 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 | SC12G | 220-240V/50Hz | Conf. 1 | Sales code: | 104G8224 |
|-------------|--------------|----------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|------------------|
| Motorconfiguration | CSIR |
| Power supply (nominal) | 220-240V/50Hz 1~ |
| Refrigerant | R134a |
| Application | LBP+MBP+HBP |
| Voltage range | 187-254V |
| Starting torque | HST |
| Approvals | CCC VDE KC |

Electrical accessories / wiring diagram

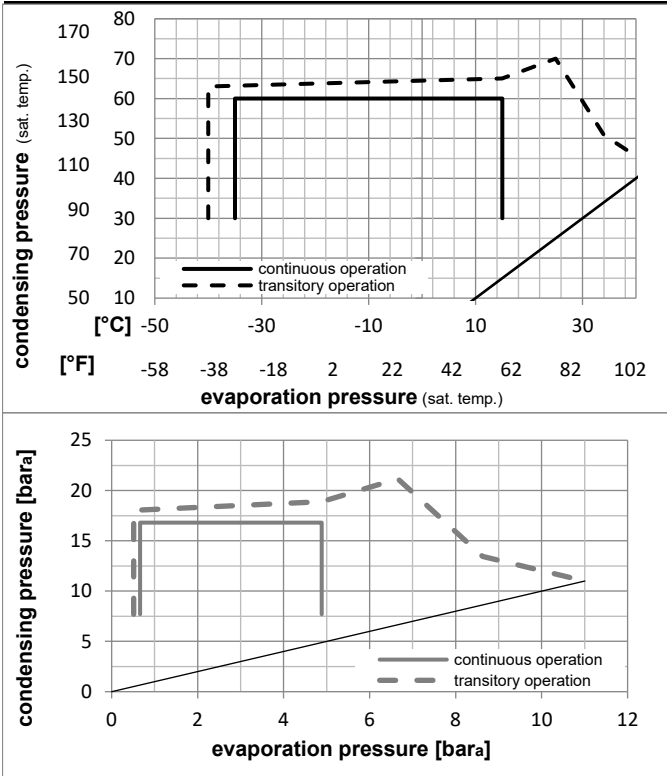


Ambient/ machine room temperatures minimum /maximum

| | |
|---------------------------------|------------------------|
| 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 | assy. relay | 117U6003 |
| c | start capacitor (80μF) | 117U5017 |
| d | cord relief | 103N1004 |
| b | plastic cover | 103N2009 |

Model

Designation **SC12G** **220-240V/50Hz** Conf. 1 Sales code: **104G8224**

Optimization + standard conditions

R134a, 220V/50Hz, CSIR, fan 3m/s, CCC, VDE, KC

| | Evaporating pressure (saturation temperature) | | | | Condensing pressure (saturation temperature) | | | Return gas temp. | Liquid temp. | Cooling capacity | COP | EER | Power consumption | | | ASHRAE |
|--|---|------|------|------|--|---------|----------|------------------|--------------|------------------|-------|------|-------------------|-------------|----------------|--------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | | | | | | P1 | I | Ref. mass flow | |
| | [°C] | [°F] | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | | | |
| | -23 | 54 | 32 | 32 | 247,5 | 845 | 213,0 | 1,03 | 3,52 | 0,89 | 240,3 | 1,87 | 4,81 | ASHRAE LBP | | |
| | -10 | 130 | 90 | 90 | | | | | | | | | | | | |
| | -7 | 54 | 35 | 46 | 615,0 | 2100 | 529,3 | 1,60 | 5,47 | 1,38 | 383,9 | 2,34 | 13,42 | ASHRAE MBP | | |
| | 20 | 130 | 95 | 115 | | | | | | | | | | | | |
| | 7,2 | 54 | 35 | 46 | 1170,4 | 3997 | 1007,3 | 2,29 | 7,81 | 1,97 | 511,8 | 2,84 | 25,97 | ASHRAE HBP | | |
| | 45 | 130 | 95 | 115 | | | | | | | | | | | | |
| | -35 | 40 | 20 | 40 | 123,3 | 421 | 106,1 | 0,75 | 2,55 | 0,64 | 165,0 | 1,73 | 2,70 | EN12900 LBP | | |
| | -31 | 104 | 68 | 104 | | | | | | | | | | | | |
| | -10 | 45 | 20 | 45 | 547,2 | 1869 | 470,9 | 1,61 | 5,51 | 1,39 | 339,2 | 2,15 | 12,81 | EN12900 MBP | | |
| | 14 | 113 | 68 | 113 | | | | | | | | | | | | |
| | 5 | 50 | 20 | 50 | 994,8 | 3397 | 856,1 | 2,10 | 7,16 | 1,80 | 474,7 | 2,67 | 25,07 | EN12900 HBP | | |
| | 41 | 122 | 68 | 122 | | | | | | | | | | | | |

Performance tables

R134a, 220V/50Hz, CSIR, fan 3m/s, CCC, VDE, KC

| | 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] | -35 | -31 | 102,6 | 350 | 88,3 | 0,65 | 2,21 | 0,56 | 158,5 | 1,69 | 2,21 |
| cond. pressure | -25 | -13 | 234,7 | 802 | 202,0 | 1,03 | 3,51 | 0,89 | 228,1 | 1,84 | 5,09 |
| pc= 45/113 | -15 | 5 | 435,5 | 1487 | 374,8 | 1,44 | 4,93 | 1,24 | 301,4 | 2,03 | 9,49 |
| return gas temp. | -10 | 14 | 567,7 | 1939 | 488,5 | 1,67 | 5,71 | 1,44 | 339,2 | 2,15 | 12,42 |
| RGT= 32/90 | 0 | 32 | 907,8 | 3100 | 781,2 | 2,18 | 7,44 | 1,88 | 416,6 | 2,42 | 20,07 |
| liquid temp | 5 | 41 | 1120,5 | 3827 | 964,3 | 2,46 | 8,39 | 2,11 | 456,0 | 2,58 | 24,95 |
| Tliq= 45/113 | 15 | 59 | 1643,6 | 5613 | 1414,5 | 3,07 | 10,48 | 2,64 | 535,5 | 2,93 | 37,23 |
| [°C / °F] | -35 | -31 | 64,6 | 221 | 55,6 | 0,44 | 1,49 | 0,38 | 147,9 | 1,63 | 1,54 |
| cond. pressure | -25 | -13 | 175,0 | 598 | 150,6 | 0,77 | 2,63 | 0,66 | 226,8 | 1,83 | 4,18 |
| pc= 55/131 | -15 | 5 | 348,0 | 1188 | 299,5 | 1,12 | 3,82 | 0,96 | 311,1 | 2,09 | 8,38 |
| return gas temp | -10 | 14 | 464,1 | 1585 | 399,4 | 1,31 | 4,46 | 1,12 | 355,1 | 2,24 | 11,22 |
| RGT= 32/90 | 0 | 32 | 767,6 | 2621 | 660,6 | 1,72 | 5,88 | 1,48 | 446,1 | 2,57 | 18,77 |
| liquid temp | 5 | 41 | 959,8 | 3278 | 826,0 | 1,95 | 6,65 | 1,68 | 493,0 | 2,76 | 23,65 |
| Tliq= 55/131 | 15 | 59 | 1437,3 | 4909 | 1237,0 | 2,44 | 8,34 | 2,10 | 588,7 | 3,17 | 36,10 |

Model

| | | | | | |
|-------------|--------------|----------------------|----------------|-------------|-----------------|
| Designation | SC12G | 208-230V/60Hz | Conf. 2 | Sales code: | 104G8224 |
|-------------|--------------|----------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|------------------|
| Motorconfiguration | CSIR |
| Power supply (nominal) | 208-230V/60Hz 1~ |
| Refrigerant | R134a |
| Application | LBP |
| Voltage range | 198-254V |
| Starting torque | HST |
| Approvals | CCC VDE KC |

Electrical accessories / wiring diagram

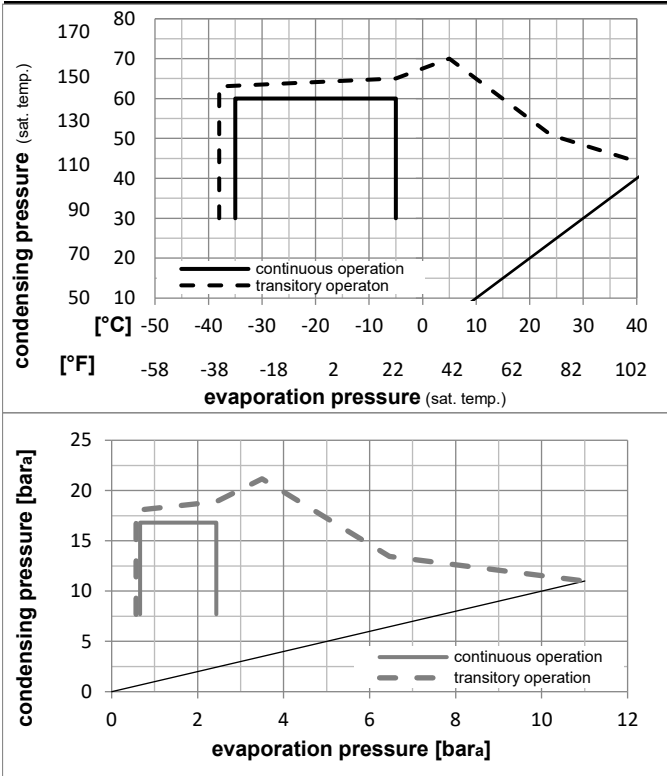


Ambient/ machine room temperatures minimum /maximum

| | |
|---------------------------------|------------------------|
| 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 | assy. relay | 117U6003 |
| c | start capacitor (80μF) | 117U5017 |
| d | cord relief | 103N1004 |
| b | plastic cover | 103N2009 |

Model

Designation **SC12G** **208-230V/60Hz** Conf. 2 Sales code: **104G8224**

Optimization + standard conditions

R134a, 230V/60Hz, CSIR, fan 3m/s, CCC, VDE, KC

| | | Evaporating pressure (saturation temperature) | | | | Condensing pressure (saturation temperature) | | | Return gas temp. | | Liquid temp. | | Cooling capacity | | | COP | EER | Power consumption | | |
|------|------|---|------|------|------|--|---------|----------|------------------|----------|--------------|-------|------------------|--------|--|-----|-----|-------------------|--|-------------|
| | | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | P1 | I | m | | | | | | |
| [°C] | [°F] | [°C] | [°F] | [°C] | [°F] | | | | | | | [W] | [A] | [kg/h] | | | | | | |
| -23 | -10 | 54 | 130 | 32 | 90 | 288,0 | 983 | 247,8 | 1,03 | 3,51 | 0,88 | 280,6 | 2,06 | 5,59 | | | | | | ASHRAE LBP |
| -7 | 20 | 54 | 130 | 35 | 95 | 718,1 | 2452 | 618,0 | 1,60 | 5,47 | 1,38 | 448,6 | 2,57 | 15,67 | | | | | | ASHRAE MBP |
| 7,2 | 45 | 54 | 130 | 35 | 95 | 1367,9 | 4671 | 1177,2 | 2,29 | 7,81 | 1,97 | 598,1 | 3,12 | 30,35 | | | | | | ASHRAE HBP |
| -35 | -31 | 40 | 104 | 20 | 68 | 142,9 | 488 | 123,0 | 0,74 | 2,54 | 0,64 | 192,4 | 1,90 | 3,14 | | | | | | EN12900 LBP |
| -10 | 14 | 45 | 113 | 20 | 68 | 638,9 | 2182 | 549,8 | 1,61 | 5,51 | 1,39 | 396,3 | 2,36 | 14,95 | | | | | | EN12900 MBP |
| 5 | 41 | 50 | 122 | 20 | 68 | 1162,6 | 3970 | 1000,5 | 2,10 | 7,16 | 1,80 | 554,8 | 2,94 | 29,30 | | | | | | EN12900 HBP |

Performance tables

R134a, 230V/60Hz, CSIR, fan 3m/s, CCC, VDE, KC

| | 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] | -35 | -31 | 118,7 | 405 | 102,2 | 0,64 | 2,19 | 0,55 | 184,8 | 1,86 | 2,56 |
| cond. pressure | -30 | -22 | 187,4 | 640 | 161,2 | 0,83 | 2,84 | 0,72 | 224,9 | 1,93 | 4,05 |
| pc= 45/113 | -25 | -13 | 273,3 | 933 | 235,2 | 1,03 | 3,51 | 0,88 | 266,3 | 2,02 | 5,92 |
| return gas temp. | -23 | -10 | 306,9 | 1048 | 264,1 | 1,09 | 3,74 | 0,94 | 280,6 | 2,05 | 6,66 |
| RGT= 32/90 | -20 | -4 | 379,3 | 1295 | 326,4 | 1,23 | 4,20 | 1,06 | 308,7 | 2,12 | 8,24 |
| liquid temp | -15 | 5 | 508,2 | 1735 | 437,3 | 1,44 | 4,93 | 1,24 | 352,1 | 2,23 | 11,08 |
| Tliq= 45/113 | -5 | 23 | 846,1 | 2889 | 728,1 | 1,92 | 6,55 | 1,65 | 441,2 | 2,51 | 18,60 |
| [°C / °F] | -35 | -31 | 74,2 | 254 | 63,9 | 0,43 | 1,47 | 0,37 | 172,4 | 1,79 | 1,77 |
| cond. pressure | -30 | -22 | 131,0 | 448 | 112,8 | 0,60 | 2,06 | 0,52 | 217,7 | 1,89 | 3,13 |
| pc= 55/131 | -25 | -13 | 203,3 | 694 | 175,0 | 0,77 | 2,62 | 0,66 | 264,7 | 2,01 | 4,86 |
| return gas temp | -23 | -10 | 232,0 | 792 | 199,6 | 0,83 | 2,82 | 0,71 | 281,0 | 2,06 | 5,55 |
| RGT= 32/90 | -20 | -4 | 294,0 | 1004 | 253,0 | 0,94 | 3,20 | 0,81 | 313,3 | 2,15 | 7,05 |
| liquid temp | -15 | 5 | 405,8 | 1386 | 349,2 | 1,12 | 3,81 | 0,96 | 363,4 | 2,30 | 9,77 |
| Tliq= 55/131 | -5 | 23 | 704,3 | 2405 | 606,1 | 1,51 | 5,14 | 1,30 | 467,5 | 2,64 | 17,12 |

Model

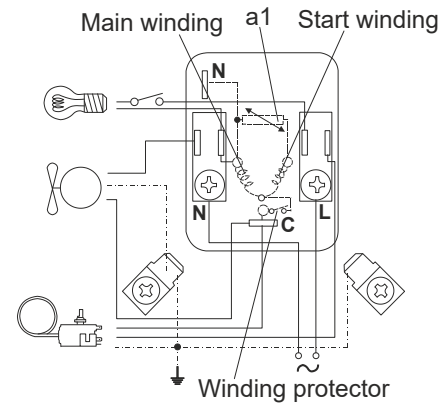
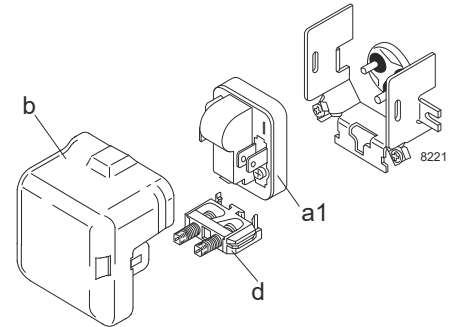
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|-------------|--------------|----------------------|----------------|-------------|-----------------|
| Designation | SC12G | 220-240V/50Hz | Conf. 3 | Sales code: | 104G8224 |
|-------------|--------------|----------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|------------------|
| Motorconfiguration | RSIR |
| Power supply (nominal) | 220-240V/50Hz 1~ |
| Refrigerant | R134a |
| Application | LBP+MBP+HBP |
| Voltage range | 187-254V |
| Starting torque | LST |
| Approvals | CCC VDE KC |

Electrical accessories / wiring diagram

RSIR

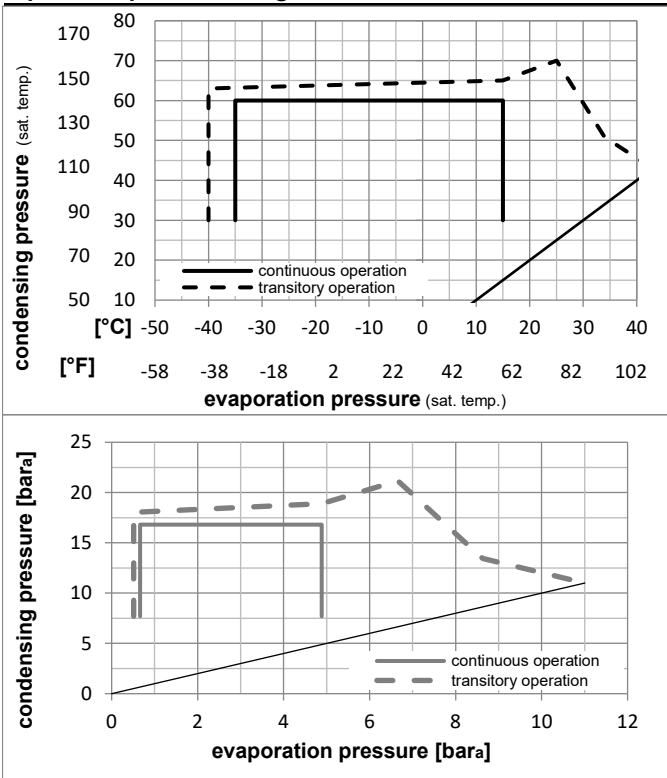


Ambient/ machine room temperatures minimum /maximum

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

| | | |
|----|----------------------------------|----------|
| a1 | PTC starter (220V, 250hm, 6.3mm) | 103N0011 |
| d | cord relief | 103N1004 |
| b | plastic cover | 103N2009 |

Model

Designation **SC12G** **220-240V/50Hz** Conf. 3 Sales code: **104G8224**

Optimization + standard conditions

R134a, 220V/50Hz, RSIR, fan 3m/s, CCC, VDE, KC

| | Evaporating pressure (saturation temperature) | | | | Cooling capacity | | | COP | EER | P1 | Power consumption | | ASHRAE | |
|------|---|-----|-----|------|------------------|---------|----------|------|------|------|-------------------|------|--------|-------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | | | | l | m | | |
| [°C] | -23 | 54 | 32 | 32 | 247,5 | 845 | 213,0 | 1,03 | 3,52 | 0,89 | 240,3 | 1,87 | 4,81 | |
| [°F] | -10 | 130 | 90 | 90 | | | | | | | | | | ASHRAE LBP |
| [°C] | -7 | 54 | 35 | 46 | 615,0 | 2100 | 529,3 | 1,60 | 5,47 | 1,38 | 383,9 | 2,34 | 13,42 | ASHRAE MBP |
| [°F] | 20 | 130 | 95 | 115 | | | | | | | | | | |
| [°C] | 7,2 | 54 | 35 | 46 | 1170,4 | 3997 | 1007,3 | 2,29 | 7,81 | 1,97 | 511,8 | 2,84 | 25,97 | ASHRAE HBP |
| [°F] | 45 | 130 | 95 | 115 | | | | | | | | | | |
| [°C] | -35 | 40 | 20 | 40 | 123,3 | 421 | 106,1 | 0,75 | 2,55 | 0,64 | 165,0 | 1,73 | 2,70 | EN12900 LBP |
| [°F] | -31 | 104 | 68 | 104 | | | | | | | | | | |
| [°C] | -10 | 45 | 20 | 45 | 547,2 | 1869 | 470,9 | 1,61 | 5,51 | 1,39 | 339,2 | 2,15 | 12,81 | EN12900 MBP |
| [°F] | 14 | 113 | 68 | 113 | | | | | | | | | | |
| [°C] | 5 | 50 | 20 | 50 | 994,8 | 3397 | 856,1 | 2,10 | 7,16 | 1,80 | 474,7 | 2,67 | 25,07 | EN12900 HBP |
| [°F] | 41 | 122 | 68 | 122 | | | | | | | | | | |

Performance tables

R134a, 220V/50Hz, RSIR, fan 3m/s, CCC, VDE, KC

| | pe | | Cooling capacity | | | COP | EER | P1 | l | m | |
|------------------|------|------|------------------|---------|----------|------|-------|------|-------|------|-------|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | | | | | | |
| [°C / °F] | -35 | -31 | 102,6 | 350 | 88,3 | 0,65 | 2,21 | 0,56 | 158,5 | 1,69 | 2,21 |
| cond. pressure | -25 | -13 | 234,7 | 802 | 202,0 | 1,03 | 3,51 | 0,89 | 228,1 | 1,84 | 5,09 |
| pc= 45/113 | -15 | 5 | 435,5 | 1487 | 374,8 | 1,44 | 4,93 | 1,24 | 301,4 | 2,03 | 9,49 |
| return gas temp. | -10 | 14 | 567,7 | 1939 | 488,5 | 1,67 | 5,71 | 1,44 | 339,2 | 2,15 | 12,42 |
| RGT= 32/90 | 0 | 32 | 907,8 | 3100 | 781,2 | 2,18 | 7,44 | 1,88 | 416,6 | 2,42 | 20,07 |
| liquid temp | 5 | 41 | 1120,5 | 3827 | 964,3 | 2,46 | 8,39 | 2,11 | 456,0 | 2,58 | 24,95 |
| Tliq= 45/113 | 15 | 59 | 1643,6 | 5613 | 1414,5 | 3,07 | 10,48 | 2,64 | 535,5 | 2,93 | 37,23 |
| [°C / °F] | -35 | -31 | 64,6 | 221 | 55,6 | 0,44 | 1,49 | 0,38 | 147,9 | 1,63 | 1,54 |
| cond. pressure | -25 | -13 | 175,0 | 598 | 150,6 | 0,77 | 2,63 | 0,66 | 226,8 | 1,83 | 4,18 |
| pc= 55/131 | -15 | 5 | 348,0 | 1188 | 299,5 | 1,12 | 3,82 | 0,96 | 311,1 | 2,09 | 8,38 |
| return gas temp | -10 | 14 | 464,1 | 1585 | 399,4 | 1,31 | 4,46 | 1,12 | 355,1 | 2,24 | 11,22 |
| RGT= 32/90 | 0 | 32 | 767,6 | 2621 | 660,6 | 1,72 | 5,88 | 1,48 | 446,1 | 2,57 | 18,77 |
| liquid temp | 5 | 41 | 959,8 | 3278 | 826,0 | 1,95 | 6,65 | 1,68 | 493,0 | 2,76 | 23,65 |
| Tliq= 55/131 | 15 | 59 | 1437,3 | 4909 | 1237,0 | 2,44 | 8,34 | 2,10 | 588,7 | 3,17 | 36,10 |

Model

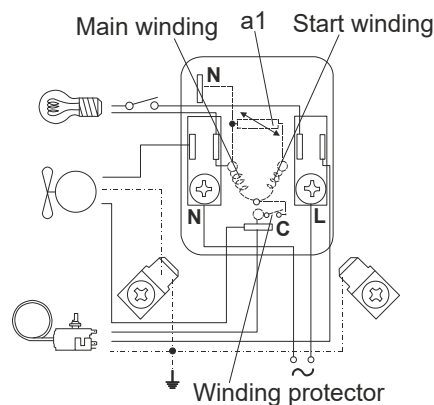
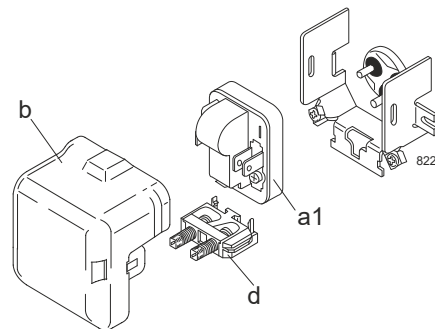
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|-------------|--------------|----------------------|----------------|-------------|-----------------|
| Designation | SC12G | 208-230V/60Hz | Conf. 4 | Sales code: | 104G8224 |
|-------------|--------------|----------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|------------------|
| Motorconfiguration | RSIR |
| Power supply (nominal) | 208-230V/60Hz 1~ |
| Refrigerant | R134a |
| Application | LBP |
| Voltage range | 198-254V |
| Starting torque | LST |
| Approvals | CCC VDE KC |

Electrical accessories / wiring diagram

RSIR

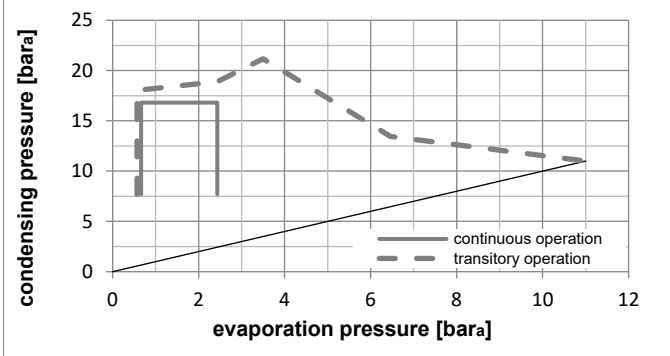
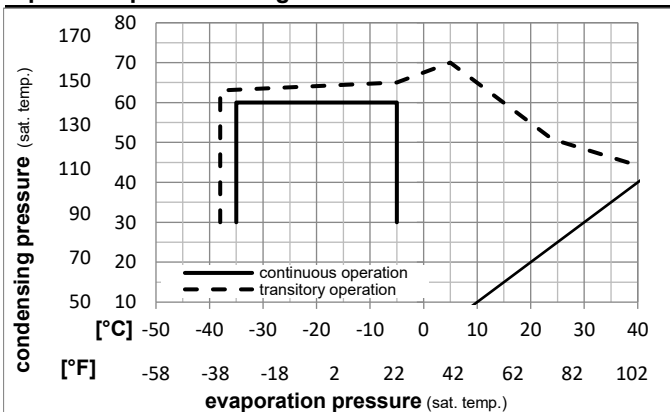


Ambient/ machine room temperatures minimum /maximum

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

| | | |
|----|----------------------------------|----------|
| a1 | PTC starter (220V, 25Ohm, 6.3mm) | 103N0011 |
| d | cord relief | 103N1004 |
| b | plastic cover | 103N2009 |

Model

Designation **SC12G** **208-230V/60Hz** Conf. 4 Sales code: **104G8224**

Optimization + standard conditions

R134a, 230V/60Hz, RSIR, fan 3m/s, CCC, VDE, KC

| | Evaporating pressure (saturation temperature) | | | | Cooling capacity | | | COP | EER | P1 | Power consumption | | | ASHRAE |
|--|---|------|------|------|------------------|---------|----------|-------|----------|-----------|-------------------|------|--------|-------------|
| | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | | | | l | m | | |
| | [°C] | [°F] | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | [W] | [A] | [kg/h] | |
| | -23 | 54 | 32 | 32 | 288,0 | 983 | 247,8 | 1,03 | 3,51 | 0,88 | 280,6 | 2,06 | 5,59 | ASHRAE LBP |
| | -10 | 130 | 90 | 90 | | | | | | | | | | |
| | -7 | 54 | 35 | 46 | 718,1 | 2452 | 618,0 | 1,60 | 5,47 | 1,38 | 448,6 | 2,57 | 15,67 | ASHRAE MBP |
| | 20 | 130 | 95 | 115 | | | | | | | | | | |
| | 7,2 | 54 | 35 | 46 | 1367,9 | 4671 | 1177,2 | 2,29 | 7,81 | 1,97 | 598,1 | 3,12 | 30,35 | ASHRAE HBP |
| | 45 | 130 | 95 | 115 | | | | | | | | | | |
| | -35 | 40 | 20 | 40 | 142,9 | 488 | 123,0 | 0,74 | 2,54 | 0,64 | 192,4 | 1,90 | 3,14 | EN12900 LBP |
| | -31 | 104 | 68 | 104 | | | | | | | | | | |
| | -10 | 45 | 20 | 45 | 638,9 | 2182 | 549,8 | 1,61 | 5,51 | 1,39 | 396,3 | 2,36 | 14,95 | EN12900 MBP |
| | 14 | 113 | 68 | 113 | | | | | | | | | | |
| | 5 | 50 | 20 | 50 | 1162,6 | 3970 | 1000,5 | 2,10 | 7,16 | 1,80 | 554,8 | 2,94 | 29,30 | EN12900 HBP |
| | 41 | 122 | 68 | 122 | | | | | | | | | | |

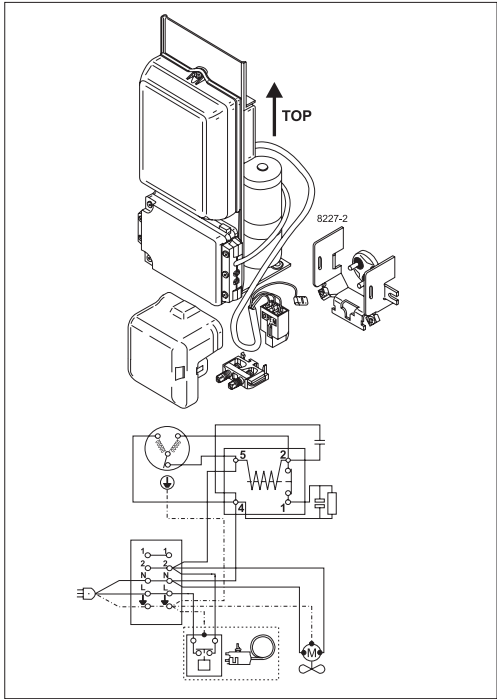
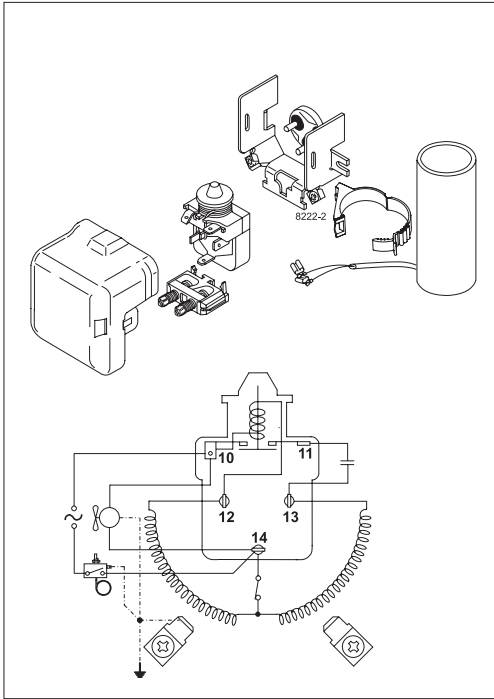
Performance tables

R134a, 230V/60Hz, RSIR, fan 3m/s, CCC, VDE, KC

| | pe | | Cooling capacity | | | COP | EER | P1 | l | m | |
|------------------|------|------|------------------|---------|----------|------|------|------|-------|------|-------|
| | [°C] | [°F] | [W] | [Btu/h] | [kcal/h] | | | | | | |
| [°C / °F] | -35 | -31 | 118,7 | 405 | 102,2 | 0,64 | 2,19 | 0,55 | 184,8 | 1,86 | 2,56 |
| cond. pressure | -30 | -22 | 187,4 | 640 | 161,2 | 0,83 | 2,84 | 0,72 | 224,9 | 1,93 | 4,05 |
| pc= 45/113 | -25 | -13 | 273,3 | 933 | 235,2 | 1,03 | 3,51 | 0,88 | 266,3 | 2,02 | 5,92 |
| return gas temp. | -23 | -10 | 306,9 | 1048 | 264,1 | 1,09 | 3,74 | 0,94 | 280,6 | 2,05 | 6,66 |
| RGT= 32/90 | -20 | -4 | 379,3 | 1295 | 326,4 | 1,23 | 4,20 | 1,06 | 308,7 | 2,12 | 8,24 |
| liquid temp | -15 | 5 | 508,2 | 1735 | 437,3 | 1,44 | 4,93 | 1,24 | 352,1 | 2,23 | 11,08 |
| Tliq= 45/113 | -5 | 23 | 846,1 | 2889 | 728,1 | 1,92 | 6,55 | 1,65 | 441,2 | 2,51 | 18,60 |
| [°C / °F] | -35 | -31 | 74,2 | 254 | 63,9 | 0,43 | 1,47 | 0,37 | 172,4 | 1,79 | 1,77 |
| cond. pressure | -30 | -22 | 131,0 | 448 | 112,8 | 0,60 | 2,06 | 0,52 | 217,7 | 1,89 | 3,13 |
| pc= 55/131 | -25 | -13 | 203,3 | 694 | 175,0 | 0,77 | 2,62 | 0,66 | 264,7 | 2,01 | 4,86 |
| return gas temp | -23 | -10 | 232,0 | 792 | 199,6 | 0,83 | 2,82 | 0,71 | 281,0 | 2,06 | 5,55 |
| RGT= 32/90 | -20 | -4 | 294,0 | 1004 | 253,0 | 0,94 | 3,20 | 0,81 | 313,3 | 2,15 | 7,05 |
| liquid temp | -15 | 5 | 405,8 | 1386 | 349,2 | 1,12 | 3,81 | 0,96 | 363,4 | 2,30 | 9,77 |
| Tliq= 55/131 | -5 | 23 | 704,3 | 2405 | 606,1 | 1,51 | 5,14 | 1,30 | 467,5 | 2,64 | 17,12 |



SC Compressors





SC Compressors

Service/Repair – R290



8545



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