

Single Pack SC12DL 220-240V 50Hz CSIR

Single pack code number: **195B4042**

| Position | Title | Code | Amount |
|----------|---|----------|--------|
| 1 | Compressor SC12DL | 104L2625 | 1 |
| 2 | Starting relay | 117U6019 | 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 | SC12DL | 220-240V/50Hz 1~ | Sales code: | 104L2625 |
|-------------|---------------|------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R404A, R507, R407C |
| Oil viscosity | 32cST | Displacement | 12,87cm ³ / 0,79cu.in |
| Oil quantity | 550cm ³ / 18,6fl.oz | Compressors on pallet | 80 |
| Refr. charge - tech. limit | 1300g / 45,9oz | | |
| Free gas volume comp. | 1460cm ³ / 49,4fl.oz | | |
| Weight | 13,6kg / 30lbs | | |
| 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. | 130°C / 266°F | | |



General - Configurations with SC12DL

| | 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 SC12DL

| | Conf. 1 |
|-------------------------|----------------|
| Refrigerant | R404A |
| Application | HBP |
| System cooling | fan 3m/s |
| Hot gas defrost | OK |
| Long interval pull down | OK |

Electrical data - Configurations with SC12DL

| | 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

Designation

SC12DL

220-240V/50Hz 1~

Sales code:

104L2625

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

| 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

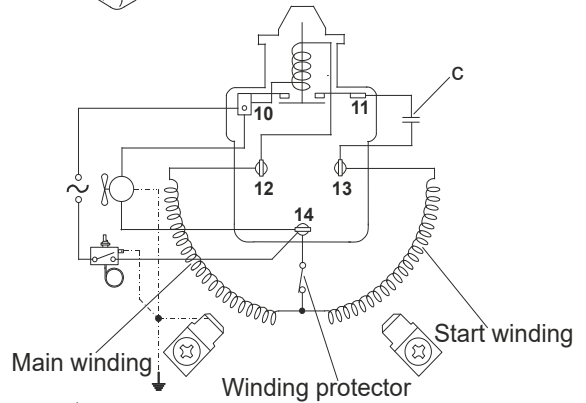
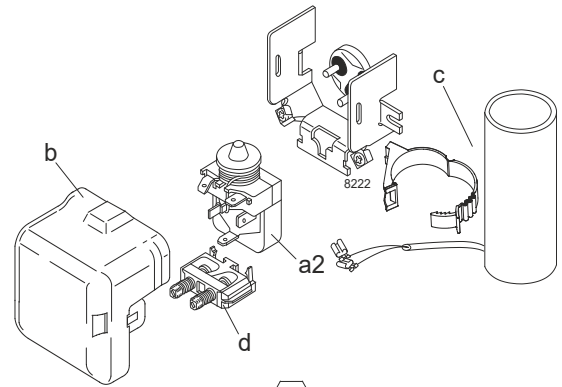
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|-------------|---------------|----------------------|----------------|-------------|-----------------|
| Designation | SC12DL | 220-240V/50Hz | Conf. 1 | Sales code: | 104L2625 |
|-------------|---------------|----------------------|----------------|-------------|-----------------|

Configuration

| | |
|------------------------|-------------------|
| Motorconfiguration | CSIR |
| Power supply (nominal) | 220-240V/50Hz 1~ |
| Refrigerant | R404A |
| Application | HBP |
| Voltage range | 198-254V |
| Starting torque | HST |
| Approvals | CCC EAC VDE |

Electrical accessories / wiring diagram

CSIR

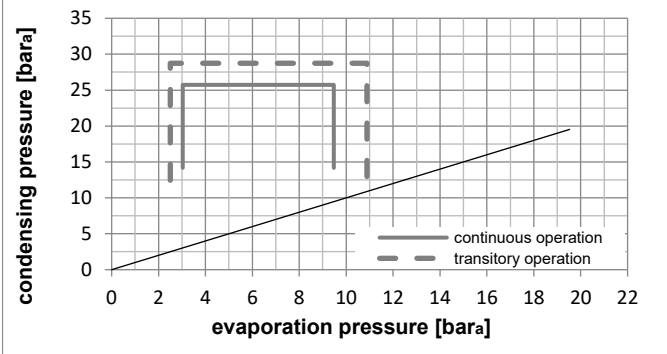
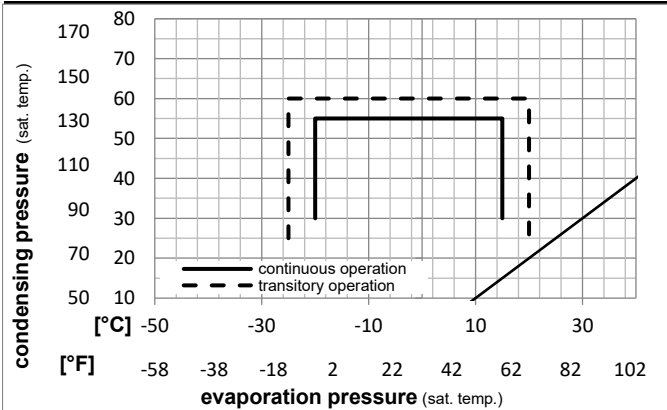


Ambient/ machine room temperatures minimum /maximum

| | |
|---------------------------------|------------------------|
| Ambient temperature range: | 10 - 38°C / 50 - 101°F |
| Machine room temperature range: | 10 - 43°C / 50 - 110°F |
| Compressor cooling: | fan 3m/s |

Operation Limits

Operation pressure range



Components

| | | |
|----|------------------------|----------|
| a2 | relay | 117U6019 |
| c | start capacitor (80μF) | 117U5017 |
| d | cord relief | 103N1004 |
| b | plastic cover | 103N2009 |

Model

Designation **SC12DL** **220-240V/50Hz** Conf. 1 Sales code: **104L2625**

Optimization + standard conditions

R404A, 220V/50Hz, CSIR, fan 3m/s, CCC, EAC, VDE

| | | 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 | Ref. mass flow | | | | | | | | | |
| [°C] | [°F] | | | | | | | | | | | [W] | [A] | [kg/h] | | | | | | | | | |
| 7,2 | 45 | 54 | 35 | 46 | 1942,9 | 6635 | 1672,1 | 2,26 | 7,71 | 1,94 | 860,4 | 4,92 | 55,24 | ASHRAE HBP | | | | | | | | | |
| 5 | 41 | 55 | 32 | 55 | 1525,8 | 5211 | 1313,1 | 1,80 | 6,15 | 1,55 | 847,7 | 4,85 | 50,81 | cecomaf HBP | | | | | | | | | |
| 5 | 41 | 50 | 20 | 50 | 1583,4 | 5408 | 1362,7 | 1,99 | 6,78 | 1,71 | 797,5 | 4,64 | 54,00 | EN12900 HBP | | | | | | | | | |
| -7 | 20 | 54 | 35 | 46 | 1123,7 | 3838 | 967,1 | 1,57 | 5,37 | 1,35 | 714,7 | 4,26 | 30,92 | ASHRAE MBP | | | | | | | | | |
| -10 | 14 | 55 | 32 | 55 | 826,6 | 2823 | 711,4 | 1,23 | 4,21 | 1,06 | 670,5 | 4,08 | 26,46 | cecomaf MBP | | | | | | | | | |
| -10 | 14 | 45 | 20 | 45 | 968,4 | 3307 | 833,4 | 1,55 | 5,30 | 1,34 | 623,9 | 3,89 | 29,17 | EN12900 MBP | | | | | | | | | |

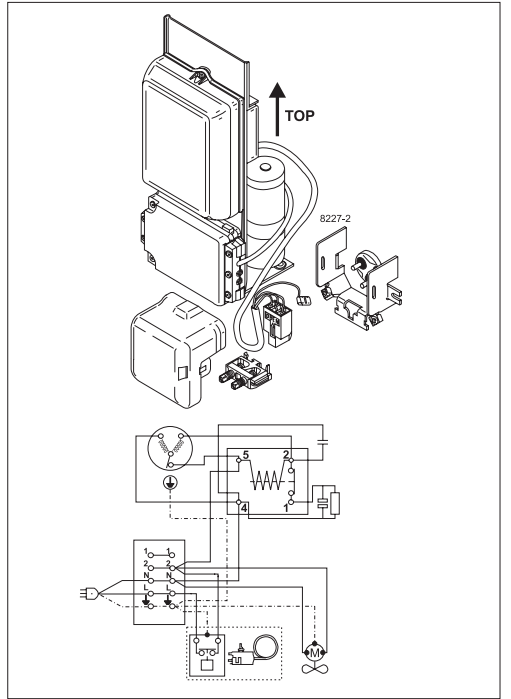
Performance tables

R404A, 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] | -20 | -4 | 608,7 | 2079 | 523,9 | 1,24 | 4,25 | 1,07 | 489,3 | 3,37 | 16,52 |
| cond. pressure | -15 | 5 | 805,8 | 2752 | 693,4 | 1,43 | 4,89 | 1,23 | 562,5 | 3,65 | 22,01 |
| pc= 45/113 | -10 | 14 | 1027,7 | 3510 | 884,5 | 1,65 | 5,63 | 1,42 | 623,9 | 3,89 | 28,30 |
| return gas temp. | -5 | 23 | 1279,4 | 4369 | 1101,0 | 1,90 | 6,47 | 1,63 | 674,8 | 4,11 | 35,57 |
| RGT= 32/90 | 0 | 32 | 1565,2 | 5345 | 1347,0 | 2,18 | 7,46 | 1,88 | 716,5 | 4,29 | 44,00 |
| liquid temp | 5 | 41 | 1889,8 | 6454 | 1626,4 | 2,52 | 8,60 | 2,17 | 750,4 | 4,44 | 53,84 |
| Tliq= 45/113 | 15 | 59 | 2674,2 | 9133 | 2301,4 | 3,34 | 11,41 | 2,88 | 800,2 | 4,66 | 78,86 |
| [°C / °F] | -20 | -4 | 465,8 | 1591 | 400,9 | 0,95 | 3,23 | 0,81 | 492,6 | 3,41 | 14,66 |
| cond. pressure | -15 | 5 | 638,7 | 2181 | 549,7 | 1,09 | 3,71 | 0,93 | 588,4 | 3,76 | 20,26 |
| pc= 55/131 | -10 | 14 | 826,6 | 2823 | 711,4 | 1,23 | 4,21 | 1,06 | 670,5 | 4,08 | 26,46 |
| return gas temp | -5 | 23 | 1034,0 | 3531 | 889,8 | 1,40 | 4,77 | 1,20 | 740,2 | 4,37 | 33,47 |
| RGT= 32/90 | 0 | 32 | 1265,5 | 4322 | 1089,1 | 1,58 | 5,41 | 1,36 | 798,8 | 4,62 | 41,50 |
| liquid temp | 5 | 41 | 1525,8 | 5211 | 1313,1 | 1,80 | 6,15 | 1,55 | 847,7 | 4,85 | 50,81 |
| Tliq= 55/131 | 15 | 59 | 2151,3 | 7347 | 1851,4 | 2,33 | 7,97 | 2,01 | 921,8 | 5,22 | 74,60 |



SC Compressors





SC Compressors

Service/Repair – R290



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