

Model

| | | | | |
|-------------|------------------|------------------|-------------|-----------------|
| Designation | SC15/15CL | 220-240V/50Hz 1~ | Sales code: | 104L4098 |
|-------------|------------------|------------------|-------------|-----------------|

Compressor design

| | | | |
|----------------------------|---------------------------------|-----------------------|----------------------------------|
| Oil type | Polyolester | Refrigerant(s) | R404A, R507 |
| Oil viscosity | 32cST | Displacement | 30,56cm ³ / 1,86cu.in |
| Oil quantity | 1233cm ³ / 41,7fl.oz | Compressors on pallet | 18 |
| Refr. charge - tech. limit | 2200g / 77,6oz | | |
| Free gas volume comp. | 2920cm ³ / 98,7fl.oz | | |
| Weight | 29,1kg / 64,2lbs | | |
| 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. | 135°C / 275°F | | |



General - Configurations with SC15/15CL

| | 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 SC15/15CL

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

Electrical data - Configurations with SC15/15CL

| | Conf. 1 |
|------------------------------|----------------|
| Starting device type | relay |
| Run capacitor | - / - |
| Start capacitor | 80μF |
| LRA (locked rotor amps / 4s) | 2x 20,43A |
| RLA (rated load amps / 1s) | 2x 3,9A |
| Cut in current | 2x 20,43A |

Model

Designation

SC15/15CL

220-240V/50Hz 1~

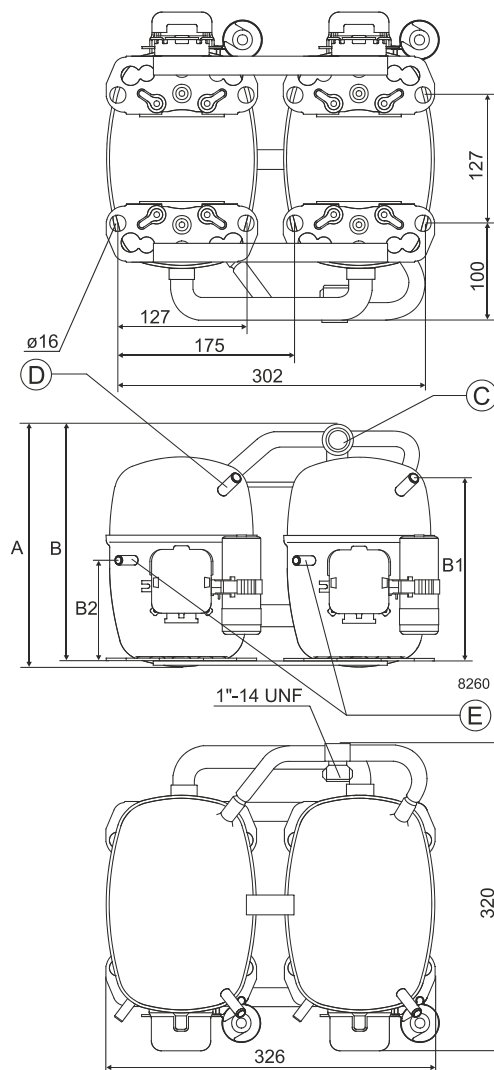
Sales code:

104L4098

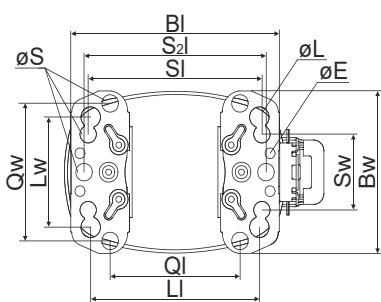
Compressor dimensions

| | | |
|----------------|----------|----------------|
| Housing | A Height | 259mm / 10,2in |
| | B Height | 254mm / 10in |
| | B1 | 193mm / 7,6in |
| | B2 | 110mm / 4,33in |

| Connectors | | Suction | Discharge | Process |
|-----------------------|------|----------------|--------------|--------------|
| | | C | E | D |
| Diameter | [mm] | øi 15,21-15,37 | øi 6,11-6,29 | øi 6,11-6,29 |
| (i:inside, o:outside) | [in] | øi 0,6-0,61 | øi 0,24-0,25 | øi 0,24-0,25 |
| Material | | steel | copper | copper |
| Horizontal angle | ±2° | 0° | 37° | 37° |
| Vertical angle | ±2° | 0° | 0° | 0° |
| Position l/h/w | [mm] | 0/0/0 | 0/0/0 | 0/0/0 |
| | [in] | 0/0/0 | 0/0/0 | 0/0/0 |
| Straight tube l. | [mm] | 10 | 12 | 12 |
| | [in] | 0,4 | 0,5 | 0,5 |



Compressor fixation



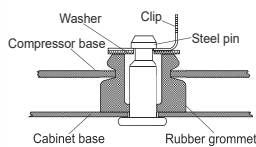
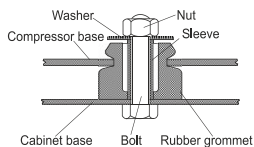
| Baseplate | [mm] | [inch] |
|-------------|-------|--------|
| BI | 204 | 8.03 |
| Bw | 150 | 5.9 |
| øE | ø 9.7 | ø 0.38 |
| Large holes | | |
| LI | 165 | 6.5 |
| Lw | 101.6 | 4 |
| øL | ø 19 | ø 0.75 |
| Small holes | | |
| SI | 170 | 6.7 |
| Sw | 70 | 2.76 |
| øS | ø 16 | ø 0.63 |
| QI | 127 | 5 |
| Qw | 127 | 5 |

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 |

Bolt joint

Snap-on



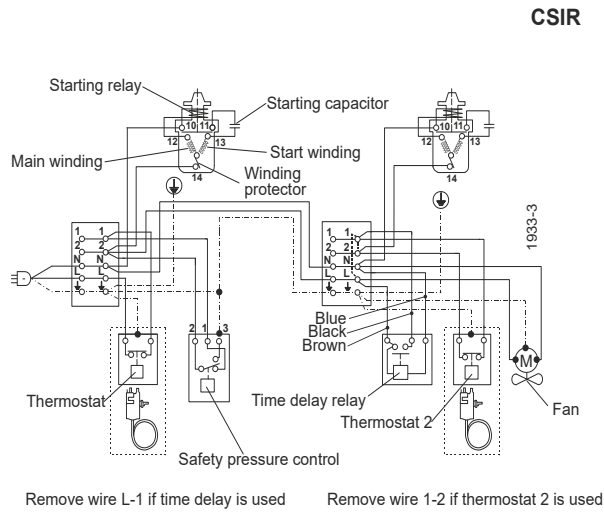
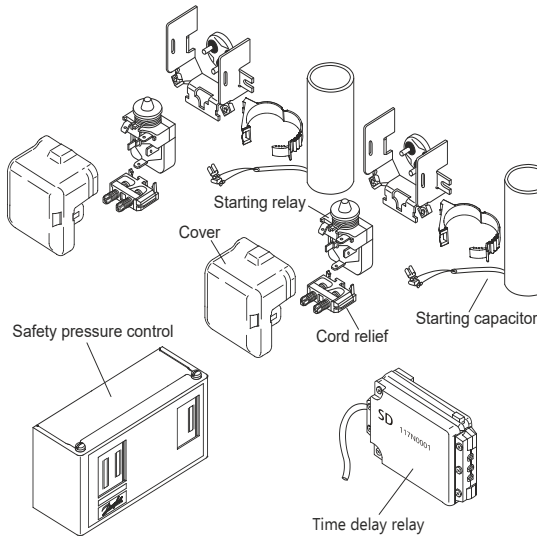
Application notes

Provision for PE Grounding is located at the PE Stamp on the compressor

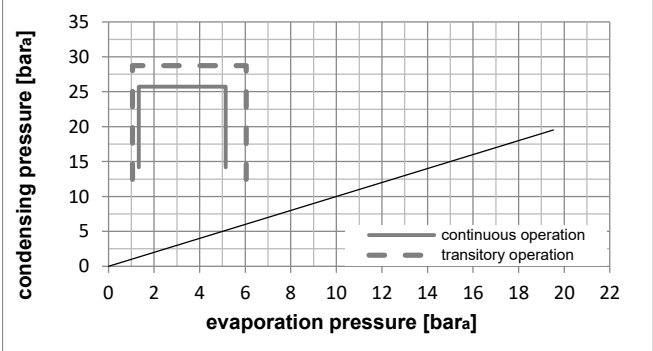
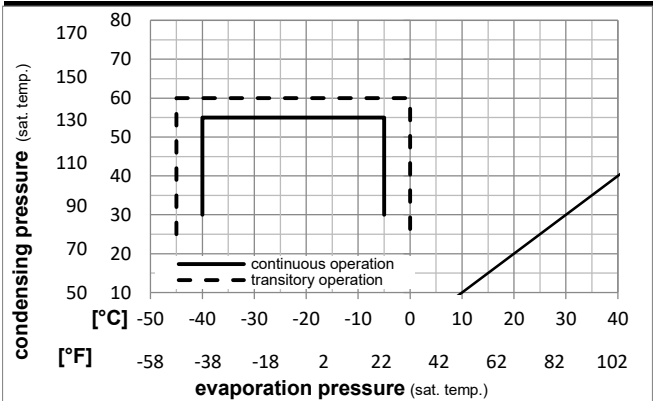
Twin should be used with a time-delay relay

| | | | | |
|--------------|------------------|----------------------|----------------|-----------------------------|
| Model | | | | |
| Designation | SC15/15CL | 220-240V/50Hz | Conf. 1 | Sales code: 104L4098 |

| | | |
|--|------------------|--|
| Configuration | | Ambient/ machine room temperatures minimum /maximum |
| Motorconfiguration | CSIR | Ambient temperature range: 10 - 38°C / 50 - 101°F |
| Power supply (nominal) | 220-240V/50Hz 1~ | Machine room temperature range: 10 - 43°C / 50 - 110°F |
| Refrigerant | R404A | Compressor cooling: fan 3m/s |
| Application | LBP+MBP | |
| Voltage range | 198-254V | |
| Starting torque | HST | |
| Approvals | CCC, VDE, | |
| Electrical accessories / wiring diagram | | |

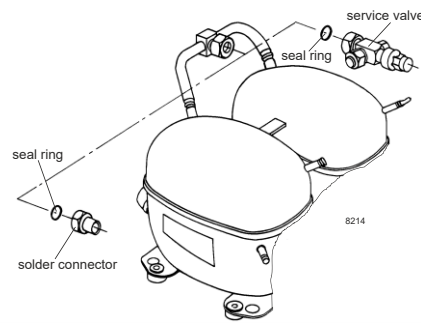


Operation pressure range



Components

- a2 relay 117U6019
- c start capacitor (80µF) 117U5017
- d cord relief 103N1004
- b plastic cover 103N2009
- . Check valve (to be used with time-delay relay) 020-1014
- . Service valve 12mm 118-7350
- . Solder connector (alternative) 12mm 104B0584
- . Seal ring for service valve and solder conn. 118-3638



Model

Designation **SC15/15CL** **220-240V/50Hz** Conf. 1 Sales code: **104L4098**

Optimization + standard conditions

R404A, 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 | | |
|------|------|---|------|------|------|--|---------|----------|------------------|----------|--------------|--------|------------------|----------------|-------------|-----|-----|-------------------|--|--|
| | | pe | pc | RGT | Tliq | [W] | [Btu/h] | [kcal/h] | [W/W] | [Btu/Wh] | [kcal/Wh] | P1 | I | Ref. mass flow | | | | | | |
| [°C] | [°F] | [°C] | [°F] | [°C] | [°C] | | | | | | | [W] | [A] | [kg/h] | | | | | | |
| -23 | -10 | 54 | 130 | 32 | 32 | 1390,6 | 4749 | 1196,7 | 1,19 | 4,08 | 1,03 | 1164,4 | 7,10 | 32,40 | ASHRAE LBP | | | | | |
| -25 | -13 | 55 | 131 | 32 | 55 | 911,6 | 3113 | 784,5 | 0,84 | 2,85 | 0,72 | 1091,2 | 6,88 | 28,49 | cecomaf LBP | | | | | |
| -35 | -31 | 40 | 104 | 20 | 40 | 708,3 | 2419 | 609,6 | 0,86 | 2,93 | 0,74 | 826,0 | 6,11 | 19,25 | EN12900 LBP | | | | | |
| -23 | -10 | 49 | 120 | 4,4 | 49 | 1060,3 | 3621 | 912,5 | 0,90 | 3,06 | 0,77 | 1183,8 | 7,22 | 37,54 | ARI540 LBP | | | | | |
| -23 | -10 | 41 | 105 | 32 | 32 | 1609,0 | 5495 | 1384,7 | 1,43 | 4,88 | 1,23 | 1125,8 | 7,11 | 37,49 | AHAM LBP | | | | | |
| -35 | -31 | 45 | 113 | 32 | 45 | 599,0 | 2046 | 515,5 | 0,75 | 2,56 | 0,64 | 800,6 | 6,10 | 16,01 | opt | | | | | |

Performance tables

R404A, 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 | 302,3 | 1032 | 260,2 | 0,51 | 1,73 | 0,44 | 596,7 | 5,66 | 8,05 | |
| cond. pressure | -35 | -31 | 599,0 | 2046 | 515,5 | 0,75 | 2,56 | 0,64 | 800,6 | 6,10 | 16,01 | |
| pc= 45/113 | -30 | -22 | 904,9 | 3091 | 778,8 | 0,93 | 3,18 | 0,80 | 970,5 | 6,56 | 24,29 | |
| return gas temp. | -25 | -13 | 1230,0 | 4201 | 1058,6 | 1,10 | 3,75 | 0,95 | 1120,0 | 7,04 | 33,18 | |
| RGT= 32/90 | -20 | -4 | 1583,9 | 5409 | 1363,1 | 1,25 | 4,28 | 1,08 | 1262,4 | 7,55 | 42,97 | |
| liquid temp | -15 | 5 | 1976,3 | 6749 | 1700,8 | 1,40 | 4,78 | 1,21 | 1411,3 | 8,08 | 53,99 | |
| Tliq= 45/113 | -5 | 23 | 2915,7 | 9958 | 2509,3 | 1,64 | 5,59 | 1,41 | 1782,0 | 9,19 | 81,06 | |
| [°C / °F] | -40 | -40 | -88,3 | -302 | -76,0 | -0,29 | -1,00 | -0,25 | 302,9 | 5,15 | -2,72 | |
| cond. pressure | -35 | -31 | 248,1 | 847 | 213,5 | 0,41 | 1,39 | 0,35 | 611,4 | 5,71 | 7,67 | |
| pc= 55/131 | -30 | -22 | 578,1 | 1974 | 497,5 | 0,66 | 2,27 | 0,57 | 869,7 | 6,28 | 17,97 | |
| return gas temp | -25 | -13 | 911,6 | 3113 | 784,5 | 0,84 | 2,85 | 0,72 | 1091,2 | 6,88 | 28,49 | |
| RGT= 32/90 | -20 | -4 | 1258,2 | 4297 | 1082,8 | 0,98 | 3,33 | 0,84 | 1289,5 | 7,50 | 39,59 | |
| liquid temp | -15 | 5 | 1627,7 | 5559 | 1400,8 | 1,10 | 3,76 | 0,95 | 1477,9 | 8,14 | 51,62 | |
| Tliq= 55/131 | -5 | 23 | 2474,3 | 8450 | 2129,4 | 1,32 | 4,50 | 1,13 | 1878,7 | 9,49 | 80,09 | |