

# SC15G

## Universal Compressor

### R134a

### 220-240V 50Hz

Data Sheet (Replaces CD.44.K3.02)

#### General

|  |              |
|--|--------------|
| Compressor                             | <b>SC15G</b> |
| Code number                            | 104G8520     |
| Code number                            | 104G8525     |
| Code number compressor with oil cooler | 104G8530     |

#### Application

|                                |                       |                       |
|--------------------------------|-----------------------|-----------------------|
| Application                    |                       | LBP/HBP               |
| Evaporating temperature range  | °C                    | -35 to 15             |
| Voltage range                  | V/Hz                  | LBP: 187 - 254 /50    |
|                                |                       | LBP: 198 - 254 /60    |
|                                |                       | HBP: 198 - 254 /50    |
| Motor type                     |                       | CSIR                  |
| Max. ambient temperature       | °C                    | 43                    |
| Comp. cooling at ambient temp. | 32°C                  | LBP: O/F <sub>1</sub> |
|                                |                       | HBP: F <sub>2</sub>   |
|                                | 38°C                  | LBP: O/F <sub>1</sub> |
|                                |                       | HBP: F <sub>2</sub>   |
| 43°C                           | LBP: O/F <sub>1</sub> |                       |
|                                | HBP: F <sub>2</sub>   |                       |

#### Design

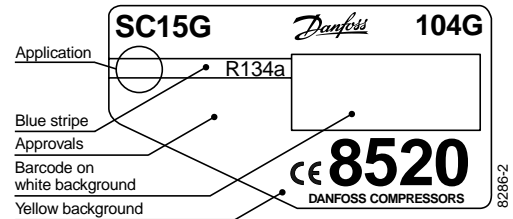
|                                     |                 |                                    |
|-------------------------------------|-----------------|------------------------------------|
| Displacement                        | cm <sup>3</sup> | 15.28                              |
| Oil quantity                        | cm <sup>3</sup> | 600 (550 on comp. with oil cooler) |
| Maximum refrigerant charge          | g               | 1300                               |
| Free gas vol. in compressor         | cm <sup>3</sup> | 1410                               |
| Weight without electrical equipment | kg              | 13.1                               |

#### Motor

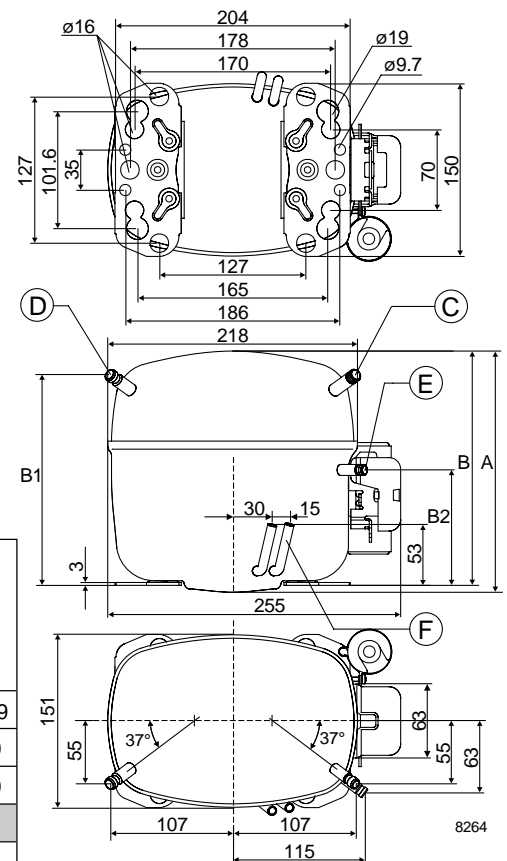
|   |      |               |
|---|------|---------------|
| Motor size                                | watt | 385           |
| LRA (rated after 4 sec. UL984) HST        | A    | 14.8          |
| Cut-in current HST                        | A    | 14.8          |
| Resistance, main and start winding (25°C) | Ω    | 5.0/13.7      |
| Approvals                                 |      | EN 60335-2-34 |

#### Dimensions

|                         |                  | 104G8530 | 104G8520   | 104G8525   |
|-------------------------|------------------|----------|------------|------------|
| Height                  | mm               | A        | 209        |            |
|                         |                  | B        | 203        |            |
|                         |                  | B1       | 183        |            |
|                         |                  | B2       | 100        |            |
| Suction connector       | location/I.D. mm | C        | 10.2 ±0.09 | 10.2 ±0.09 |
| Process connector       | location/I.D. mm | D        | 6.2 ±0.09  | 6.5 ±0.09  |
| Discharge connector     | location/I.D. mm | E        | 6.2 ±0.09  | 6.5 ±0.09  |
| Oil cooler              | location/I.D. mm | F        | 6.2 ±0.09  |            |
| Compressors on a pallet | pcs.             |          | 80         |            |



- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s  
(compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary



### Capacity (EN 12900/CECOMAF)

watt

| Comp. °C | -25 | -23.3 | -20 | -15 | -10 | -5  | 0   | 5    | 7.2  | 10   | 15   |
|----------|-----|-------|-----|-----|-----|-----|-----|------|------|------|------|
| SC15G    | 224 | 255   | 322 | 440 | 579 | 737 | 915 | 1113 | 1206 | 1330 | 1565 |

### Capacity (ASHRAE)

watt

| Comp. °C | -25 | -23.3 | -20 | -15 | -10 | -5  | 0    | 5    | 7.2  | 10   | 15   |
|----------|-----|-------|-----|-----|-----|-----|------|------|------|------|------|
| SC15G    | 275 | 314   | 396 | 542 | 714 | 910 | 1132 | 1378 | 1494 | 1649 | 1945 |

### Power consumption

watt

| Comp. °C | -25 | -23.3 | -20 | -15 | -10 | -5  | 0   | 5   | 7.2 | 10  | 15  |
|----------|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SC15G    | 270 | 287   | 321 | 373 | 428 | 484 | 540 | 595 | 620 | 650 | 703 |

### Current consumption

A

| Comp. °C | -25  | -23.3 | -20  | -15  | -10  | -5   | 0    | 5    | 7.2  | 10   | 15   |
|----------|------|-------|------|------|------|------|------|------|------|------|------|
| SC15G    | 2.18 | 2.23  | 2.32 | 2.48 | 2.64 | 2.80 | 2.95 | 3.08 | 3.13 | 3.18 | 3.24 |

### COP (EN 12900/CECOMAF)

W/W

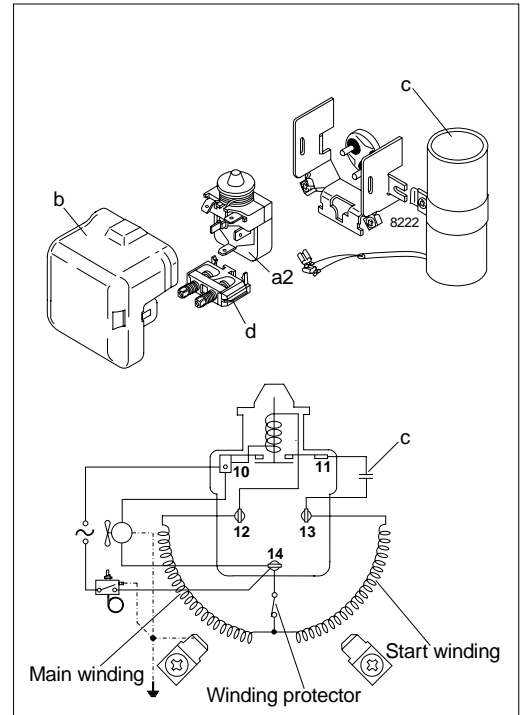
| Comp. °C | -25  | -23.3 | -20  | -15  | -10  | -5   | 0    | 5    | 7.2  | 10   | 15   |
|----------|------|-------|------|------|------|------|------|------|------|------|------|
| SC15G    | 0.83 | 0.89  | 1.00 | 1.18 | 1.35 | 1.52 | 1.70 | 1.87 | 1.95 | 2.05 | 2.23 |

### COP (ASHRAE)

W/W

| Comp. °C | -25  | -23.3 | -20  | -15  | -10  | -5   | 0    | 5    | 7.2  | 10   | 15   |
|----------|------|-------|------|------|------|------|------|------|------|------|------|
| SC15G    | 1.02 | 1.09  | 1.24 | 1.45 | 1.67 | 1.88 | 2.10 | 2.31 | 2.41 | 2.54 | 2.76 |

|                               |                  |        |
|-------------------------------|------------------|--------|
| Test conditions               | EN 12900/CECOMAF | ASHRAE |
| Condensing temperature        | 55°C             | 55°C   |
| Ambient and suction gas temp. | 32°C             | 32°C   |
| Liquid temperature            | 55°C             | 32°C   |
| Fan cooling, 220V 50Hz        |                  |        |



### Accessories

| Devices                       | Fig. | SC15G    |
|-------------------------------|------|----------|
| Starting relay                | a2   | 117U6005 |
| Cover                         | b    | 103N2009 |
| Starting capacitor 80 µF      | c    | 117U5017 |
| Cord relief                   | d    | 103N1004 |
| Mounting accessories          |      |          |
| Bolt joint for one compressor |      | 118-1917 |
| Bolt joint in quantities      |      | 118-1918 |
| Snap-on in quantities         |      | 118-1919 |

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.