

# SC12/12DL MBP/HBP Twin Compressor R407C 220-240V 50Hz

Data Sheet (Replaces CF.54.Z1.02)

## General

|             |                  |
|-------------|------------------|
| Compressor  | <b>SC12/12DL</b> |
| Code number | 104L4092         |

## Application

|                                |      |                |
|--------------------------------|------|----------------|
| Application                    |      | MBP/HBP        |
| Evaporating temperature range  | °C   | -15 to 15      |
| Voltage range                  | V/Hz | 198 - 254 /50  |
| Motor type                     |      | CSIR           |
| Max. ambient temperature       | °C   | 38             |
| Comp. cooling at ambient temp. | 32°C | F <sub>2</sub> |
|                                | 38°C | F <sub>2</sub> |

## Design

|                                     |                 |           |
|-------------------------------------|-----------------|-----------|
| Displacement                        | cm <sup>3</sup> | 2 x 12.87 |
| Oil quantity                        | cm <sup>3</sup> | 1220      |
| Maximum refrigerant charge          | g               | 2200      |
| Free gas vol. in compressor         | cm <sup>3</sup> | 2920      |
| Weight without electrical equipment | kg              | 27.8      |

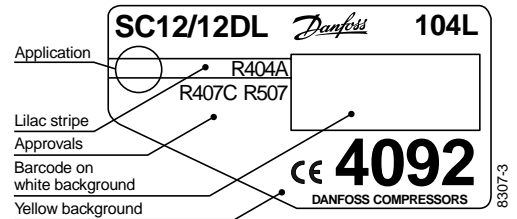
## Motor

|   |      |                |
|---|------|----------------|
| Motor size                                | watt | 2 x 495        |
| LRA (rated after 4 sec. UL984) HST*       | A    | 18.6           |
| Cut-in current HST*                       | A    | 18.6           |
| Resistance, main and start winding (25°C) | Ω    | 3.7/14.1       |
| Approvals                                 |      | EN 60 335-2-34 |

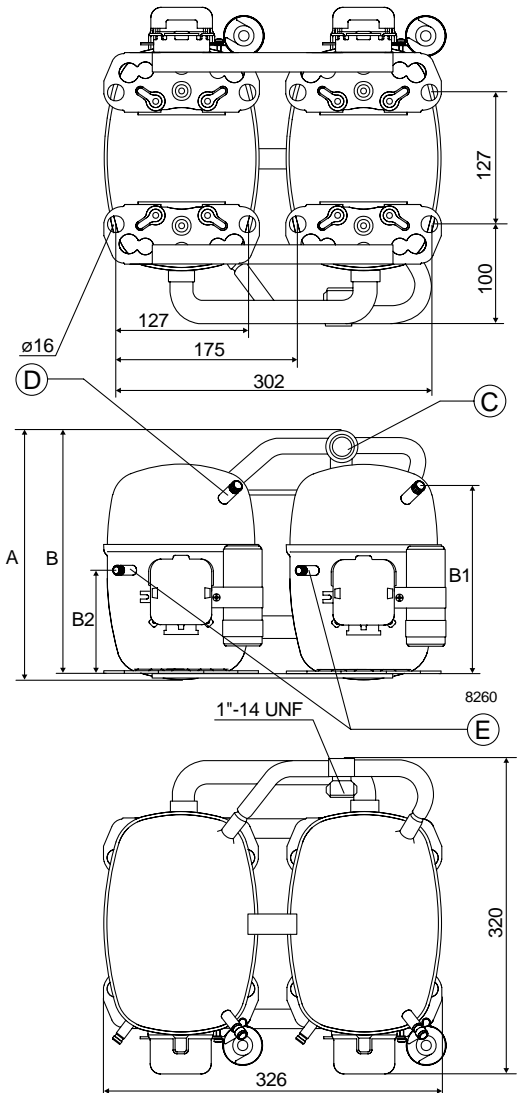
\* Operational current for the second compressor time-delayed.

## Dimensions

|                         |                  |    |           |
|-------------------------|------------------|----|-----------|
| Height                  | mm               | A  | 249       |
|                         |                  | B  | 244       |
|                         |                  | B1 | 183       |
|                         |                  | B2 | 100       |
| Suction connector       |                  |    |           |
| Service valve           | location/I.D. mm | C  | 12        |
| Solder connector        | location/I.D. mm | C  | 12        |
| Process connector       | location/I.D. mm | D  | 6.2 ±0.09 |
| Discharge connector     | location/I.D. mm | E  | 6.2 ±0.09 |
| Compressors on a pallet | pcs.             |    | 18        |



- 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  | -15  | -10  | -5   | 0    | 5    | 7.2  | 10   | 15   |
| SC12/12DL | 1263 | 1662 | 2130 | 2680 | 3321 | 3634 | 4062 | 4913 |

### Capacity (ASHRAE)

watt

|           |      |      |      |      |      |      |      |      |
|-----------|------|------|------|------|------|------|------|------|
| Comp. °C  | -15  | -10  | -5   | 0    | 5    | 7.2  | 10   | 15   |
| SC12/12DL | 1354 | 1781 | 2285 | 2876 | 3566 | 3903 | 4364 | 5284 |

### Power consumption

watt

|           |     |      |      |      |      |      |      |      |
|-----------|-----|------|------|------|------|------|------|------|
| Comp. °C  | -15 | -10  | -5   | 0    | 5    | 7.2  | 10   | 15   |
| SC12/12DL | 912 | 1025 | 1124 | 1212 | 1287 | 1316 | 1350 | 1400 |

### Current consumption

A

|           |      |      |      |      |      |      |      |      |
|-----------|------|------|------|------|------|------|------|------|
| Comp. °C  | -15  | -10  | -5   | 0    | 5    | 7.2  | 10   | 15   |
| SC12/12DL | 6.23 | 6.62 | 6.98 | 7.30 | 7.58 | 7.69 | 7.82 | 8.03 |

### COP (EN 12900/CECOMAF)

W/W

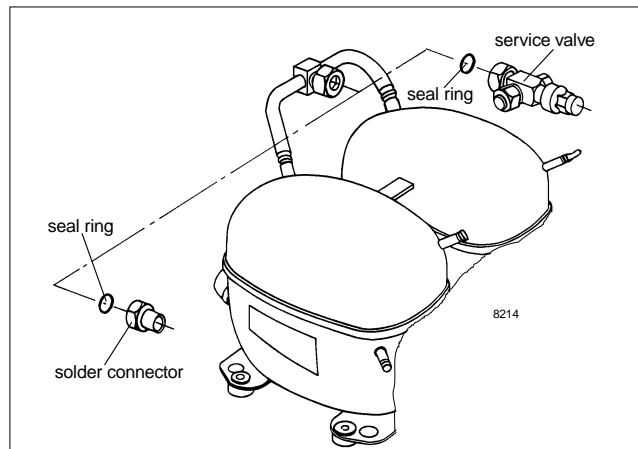
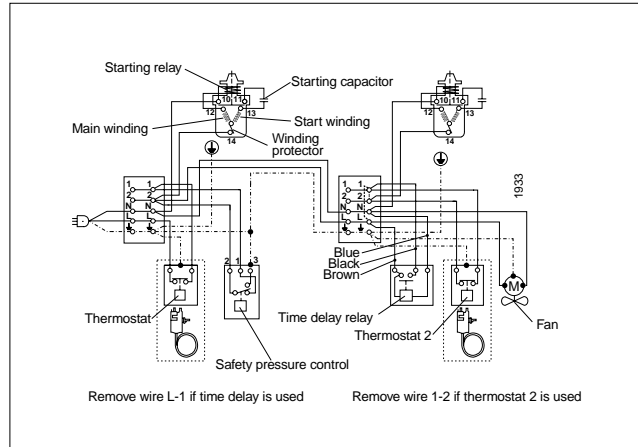
|           |      |      |      |      |      |      |      |      |
|-----------|------|------|------|------|------|------|------|------|
| Comp. °C  | -15  | -10  | -5   | 0    | 5    | 7.2  | 10   | 15   |
| SC12/12DL | 1.39 | 1.62 | 1.89 | 2.21 | 2.58 | 2.76 | 3.01 | 3.51 |

### COP (ASHRAE)

W/W

|           |      |      |      |      |      |      |      |      |
|-----------|------|------|------|------|------|------|------|------|
| Comp. °C  | -15  | -10  | -5   | 0    | 5    | 7.2  | 10   | 15   |
| SC12/12DL | 1.48 | 1.74 | 2.03 | 2.37 | 2.77 | 2.97 | 3.23 | 3.77 |

|                               |                  |        |
|-------------------------------|------------------|--------|
| Test conditions               | EN 12900/CECOMAF | ASHRAE |
| Condensing temperature        | 45°C             | 45°C   |
| Ambient and suction gas temp. | 32°C             | 32°C   |
| Liquid temperature            | no subcooling    | 32°C   |
| Fan cooling F <sub>21</sub>   | 220V 50Hz        |        |



### Accessories

| Devices   | pcs. | SC12/12DL           |
|---|------|---------------------|
| Starting relay                                      | 2    | 117U6019            |
| Starting capacitor 80 µF                            | 2    | 117U5017            |
| Cover   | 2    | 103N2009            |
| Cord relief   | 2    | 103N1004            |
| Time-delay relay                                    | 1    | 117N0001            |
| Check valve<br>(to be used with time-delay relay)   | 2    | 020-1014            |
| Service valve                                       | 1    | 118-7350<br>(12 mm) |
| Solder connector (alternative)                      | 1    | 104B0584<br>(12 mm) |
| Seal ring for service valve<br>and solder connector | 1    | 118-3638            |
| Mounting accessories                                |      |                     |
| Bolt joint for one compressor                       | 2    | 118-1917            |
| Bolt joint in quantities                            |      | 118-1918            |