

# SC21CL LBP Compressor R404A/R507 220-240V 50Hz

Data Sheet (Replaces CF.54.E1.02)

## General

|             |               |
|-------------|---------------|
| Compressor  | <b>SC21CL</b> |
| Code number | 104L2322      |

## Application

|                                |      |                |
|--------------------------------|------|----------------|
| Application                    | LBP  |                |
| Evaporating temperature range  | °C   | -45 to -10     |
| Voltage range                  | V/Hz | 198 - 254 /50  |
| Motor type                     | CSR  |                |
| Max. ambient temperature       | °C   | 38             |
| Comp. cooling at ambient temp. | 32°C | F <sub>2</sub> |
|                                | 38°C | F <sub>2</sub> |

## Design

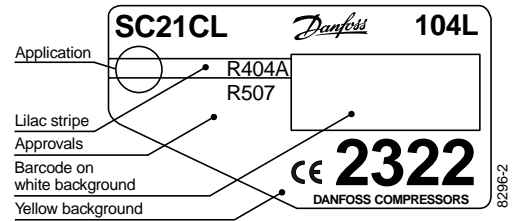
|                                     |                 |       |
|-------------------------------------|-----------------|-------|
| Displacement                        | cm <sup>3</sup> | 20.95 |
| Oil quantity                        | cm <sup>3</sup> | 600   |
| Maximum refrigerant charge          | g               | 1300  |
| Free gas vol. in compressor         | cm <sup>3</sup> | 1460  |
| Weight without electrical equipment | kg              | 14.0  |

## Motor

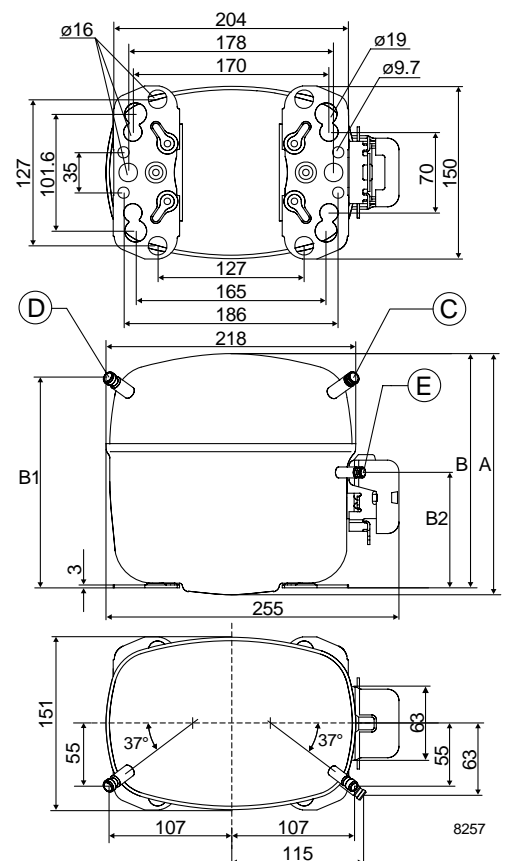
|                                           |               |          |
|-------------------------------------------|---------------|----------|
| Motor size                                | watt          | 590      |
| LRA (rated after 4 sec. UL984) HST        | A             | 23.4     |
| Cut-in current HST                        | A             | 23.4     |
| Resistance, main and start winding (25°C) | Ω             | 3.4/14.4 |
| Approvals                                 | EN 60335-2-34 |          |

## Dimensions

|                         |                  |    |            |
|-------------------------|------------------|----|------------|
| Height                  | mm               | A  | 219        |
|                         |                  | B  | 213        |
|                         |                  | B1 | 193        |
|                         |                  | B2 | 110        |
| Suction connector       | location/I.D. mm | C  | 10.2 ±0.09 |
| 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.             | 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 | -45 | -40 | -35 | -30 | -25 | -23.3 | -20  | -15  | -10  |
| SC21CL   | 226 | 325 | 455 | 617 | 813 | 887   | 1042 | 1306 | 1606 |

**Capacity (ASHRAE)**

**watt**

|          |     |     |     |     |     |       |      |      |      |
|----------|-----|-----|-----|-----|-----|-------|------|------|------|
| Comp. °C | -45 | -40 | -35 | -30 | -25 | -23.3 | -20  | -15  | -10  |
| SC21CL   | 263 | 378 | 529 | 719 | 947 | 1033  | 1215 | 1524 | 1876 |

**Power consumption**

**watt**

|          |     |     |     |     |     |       |     |     |     |
|----------|-----|-----|-----|-----|-----|-------|-----|-----|-----|
| Comp. °C | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15 | -10 |
| SC21CL   | 400 | 462 | 534 | 615 | 702 | 733   | 795 | 891 | 989 |

**Current consumption**

**A**

|          |      |      |      |      |      |       |      |      |      |
|----------|------|------|------|------|------|-------|------|------|------|
| Comp. °C | -45  | -40  | -35  | -30  | -25  | -23.3 | -20  | -15  | -10  |
| SC21CL   | 2.40 | 2.63 | 2.94 | 3.31 | 3.71 | 3.86  | 4.14 | 4.58 | 5.00 |

**COP (EN 12900/CECOMAF)**

**W/W**

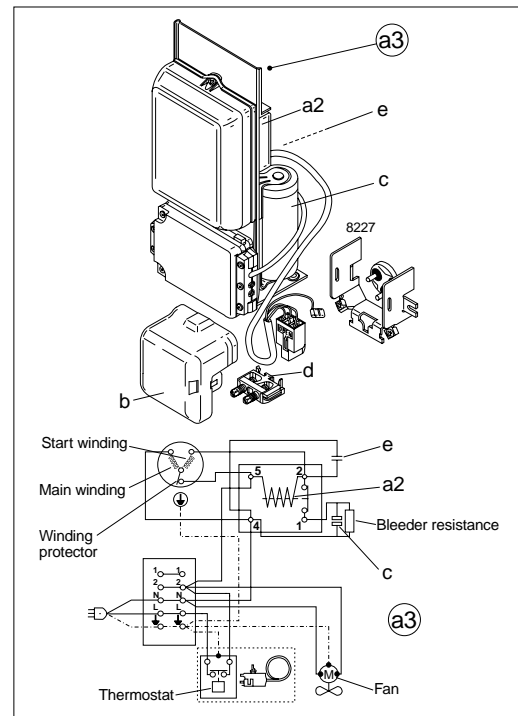
|          |      |      |      |      |      |       |      |      |      |
|----------|------|------|------|------|------|-------|------|------|------|
| Comp. °C | -45  | -40  | -35  | -30  | -25  | -23.3 | -20  | -15  | -10  |
| SC21CL   | 0.57 | 0.70 | 0.85 | 1.00 | 1.16 | 1.21  | 1.31 | 1.47 | 1.62 |

**COP (ASHRAE)**

**W/W**

|          |      |      |      |      |      |       |      |      |      |
|----------|------|------|------|------|------|-------|------|------|------|
| Comp. °C | -45  | -40  | -35  | -30  | -25  | -23.3 | -20  | -15  | -10  |
| SC21CL   | 0.66 | 0.82 | 0.99 | 1.17 | 1.35 | 1.41  | 1.53 | 1.71 | 1.90 |

|                                         |                  |        |
|-----------------------------------------|------------------|--------|
| Test conditions                         | EN 12900/CECOMAF | ASHRAE |
| Condensing temperature                  | 45°C             | 45°C   |
| Ambient and suction gas temp.           | 32°C             | 32°C   |
| Liquid temperature                      | 45°C             | 32°C   |
| Fan cooling F <sub>21</sub> , 220V 50Hz |                  |        |



**Accessories**

| Devices                       | Fig. | SC21CL                                                                                              |
|-------------------------------|------|-----------------------------------------------------------------------------------------------------|
| Starting device               | a3   | 117-7012 (470 mm cable length)<br>117-7027 (550 mm cable length)<br>117-7040 (1000 mm cable length) |
| Cover                         | b    | 103N2009                                                                                            |
| Starting relay                | a2   | Components<br>of<br>starting device                                                                 |
| Starting capacitor 80 µF      | c    |                                                                                                     |
| Run capacitor                 | e    |                                                                                                     |
| 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                                                                                            |