

SC-CL Compressors (LBP/HBP)

R404A/R507

220-240V 50Hz

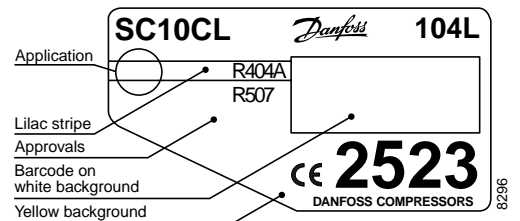
Data Sheet (Replaces CD.54.B3.02)

General

| Compressor | SC10CL | SC12CL | SC15CL |
|-------------|----------|----------|----------|
| Code number | 104L2523 | 104L2623 | 104L2853 |

Application

| Application | LBP | | |
|----------------------------------|---------------|-----------|--|
| Evaporating temperature range °C | -35 to -5 | -45 to -5 | |
| Voltage range V/Hz | 198 - 254 /50 | | |
| Motor type | CSIR | | |
| Max. ambient temperature °C | 38 | | |
| Comp. cooling at ambient temp. | 32°C | F | |
| | 38°C | F | |



- S = Static cooling normally sufficient
 O/F = Oil cooling or fan cooling 1.5 m/s norm. sufficient
 F = Fan cooling 3.0 m/s necessary

Design

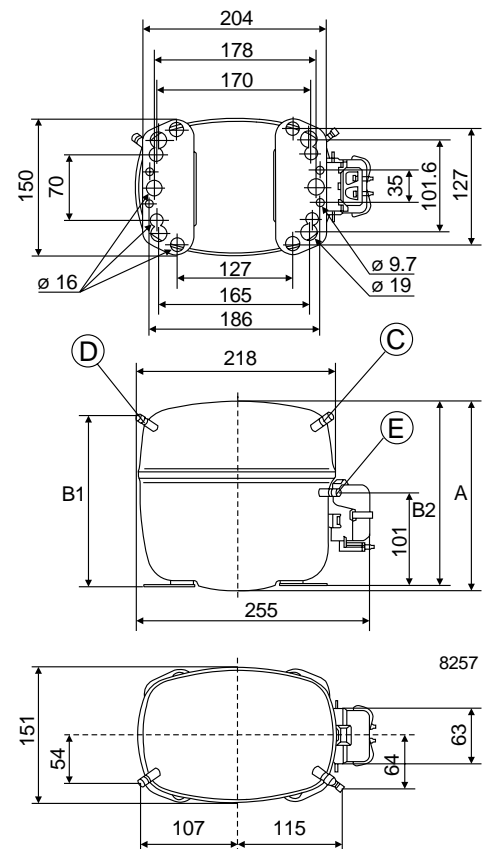
| | | | |
|-----------------------------------------------------|-------|-------|-------|
| Displacement cm ³ | 10.29 | 12.87 | 15.28 |
| Oil quantity cm ³ | 600 | | |
| Maximum refrigerant charge g | 1300 | | |
| Free gas vol. in compressor housing cm ³ | 1410 | | 1460 |
| Weight without electrical equipment kg | 13.1 | 12.5 | 13.8 |

Motor

| | | | |
|---------------------------------------------|---------------------------|--------|----------|
| Motor size watt | 315 | 385 | 495 |
| LRA (rated after 4 sec. UL984) HST A | 12.6 | 14.8 | 18.6 |
| Cut-in current HST A | 12.6 | 14.8 | 18.6 |
| Resistance, main and start winding (25°C) Ω | 6.7/11.8 | 5/13.7 | 3.7/14.1 |
| Approvals | EN60 335-1/335-2-34 §19.3 | | |

Dimensions

| | | | |
|--------------------------------------|----|-----------|------------|
| Height mm | A | 209 | 219 |
| | B | 203 | 213 |
| | B1 | 183 | 193 |
| | B2 | 100 | 110 |
| Suction connector location/l.D. mm | C | 8.2 ±0.09 | 10.2 ±0.09 |
| Process connector location/l.D. mm | D | 6.2 ±0.09 | |
| Discharge connector location/l.D. mm | E | 6.2 ±0.09 | |
| Compressors on a pallet pcs. | 80 | | |



Capacity (CECOMAF)

watt

| Comp. °C | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15 | -10 | -5 |
|----------|-----|-----|-----|-----|-----|-------|-----|-----|------|------|
| SC10CL | | | 159 | 241 | 341 | 379 | 459 | 595 | 749 | 921 |
| SC12CL | 75 | 148 | 239 | 348 | 475 | 522 | 619 | 781 | 961 | 1159 |
| SC15CL | 130 | 211 | 313 | 438 | 585 | 639 | 753 | 943 | 1155 | 1389 |

Capacity (ASHRAE)

watt

| Comp. °C | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15 | -10 | -5 |
|----------|-----|-----|-----|-----|-----|-------|-----|------|------|------|
| SC10CL | | | 185 | 280 | 397 | 442 | 535 | 694 | 875 | 1077 |
| SC12CL | 87 | 172 | 278 | 405 | 553 | 608 | 722 | 912 | 1123 | 1356 |
| SC15CL | 151 | 245 | 364 | 510 | 681 | 745 | 878 | 1101 | 1350 | 1625 |

Power consumption

watt

| Comp. °C | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15 | -10 | -5 |
|----------|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|
| SC10CL | | | 241 | 290 | 340 | 356 | 389 | 438 | 487 | 536 |
| SC12CL | 195 | 254 | 313 | 372 | 431 | 451 | 491 | 551 | 612 | 673 |
| SC15CL | 251 | 315 | 379 | 445 | 512 | 535 | 580 | 649 | 719 | 791 |

Current consumption

A

| Comp. °C | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15 | -10 | -5 |
|----------|------|------|------|------|------|-------|------|------|------|------|
| SC10CL | | | 1.84 | 1.99 | 2.15 | 2.20 | 2.32 | 2.50 | 2.70 | 2.90 |
| SC12CL | 2.02 | 2.21 | 2.38 | 2.55 | 2.72 | 2.78 | 2.91 | 3.11 | 3.36 | 3.64 |
| SC15CL | 2.39 | 2.53 | 2.69 | 2.88 | 3.09 | 3.17 | 3.33 | 3.59 | 3.87 | 4.17 |

COP (CECOMAF)

W/W

| Comp. °C | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15 | -10 | -5 |
|----------|------|------|------|------|------|-------|------|------|------|------|
| SC10CL | | | 0.66 | 0.83 | 1.00 | 1.06 | 1.18 | 1.36 | 1.54 | 1.72 |
| SC12CL | 0.38 | 0.58 | 0.77 | 0.94 | 1.10 | 1.16 | 1.26 | 1.42 | 1.57 | 1.72 |
| SC15CL | 0.52 | 0.67 | 0.83 | 0.98 | 1.14 | 1.20 | 1.30 | 1.45 | 1.61 | 1.76 |

COP (ASHRAE)

W/W

| Comp. °C | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15 | -10 | -5 |
|----------|------|------|------|------|------|-------|------|------|------|------|
| SC10CL | | | 0.77 | 0.97 | 1.17 | 1.24 | 1.37 | 1.58 | 1.80 | 2.01 |
| SC12CL | 0.45 | 0.68 | 0.89 | 1.09 | 1.28 | 1.35 | 1.47 | 1.65 | 1.84 | 2.01 |
| SC15CL | 0.60 | 0.78 | 0.96 | 1.15 | 1.33 | 1.39 | 1.51 | 1.70 | 1.88 | 2.05 |

Test conditions

Condensing temperature
Ambient and suction gas temperature
Liquid temperature
Fan cooling, 220V 50Hz

CECOMAF

45°C
32°C
45°C

ASHRAE

45°C
32°C
32°C

Accessories

| Devices | Fig. | SC10CL | SC12CL | SC15CL |
|-------------------------------|------|----------|----------|----------|
| Starting relay | a2 | 117U6003 | 117U6005 | 117U6019 |
| Starting capacitor 80 µF | c | 117U5017 | | |
| Cover | b | 103N2002 | | |
| 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 | | |

