

SC18G Universal Compressor R134a 220-240V 50/60Hz

General

| | |
|-----------------------|--------------------|
| Code number | 104G8820 |
| Approvals | EN 60335-2-34, CCC |
| Compressors on pallet | 80 |

Application

| Application | LBP/HBP | | | |
|--|---------|-----------|--|-----------|
| Frequency | Hz | 50 | | 60 |
| Evaporating temperature | °C | -25 to 15 | | -25 to -5 |
| Voltage range | V | 187 - 254 | | 198 - 254 |
| Max. condensing temperature continuous (short) | °C | 60 (70) | | 60 (70) |
| Max. winding temperature continuous (short) | °C | 125 (135) | | 125 (135) |

Cooling requirements

| Frequency | Hz | 50 | | | 60 | | |
|--|----|----------------|----------------|----------------|----------------|-----|-----|
| Application | | LBP | MBP | HBP | LBP | MBP | HBP |
| 32°C | | F ₁ | F ₂ | F ₂ | F ₁ | - | - |
| 38°C | | F ₁ | F ₂ | F ₂ | F ₁ | - | - |
| 43°C | | F ₁ | F ₂ | F ₂ | F ₁ | - | - |
| Remarks on application: HBP at 198 - 254V 50Hz only. | | | | | | | |

Motor

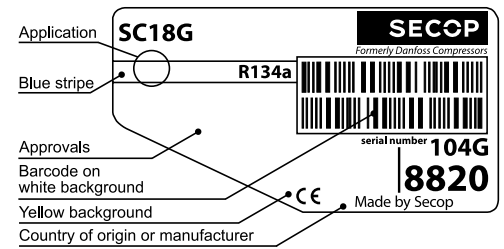
| Motor type | CSIR | | |
|---|------|------|------|
| LRA (rated after 4 sec. UL984), HST LST | A | 18.6 | - |
| Cut in Current, HST LST | A | 18.6 | - |
| Resistance, main start winding (25°C) | Ω | 3.7 | 14.1 |

Design

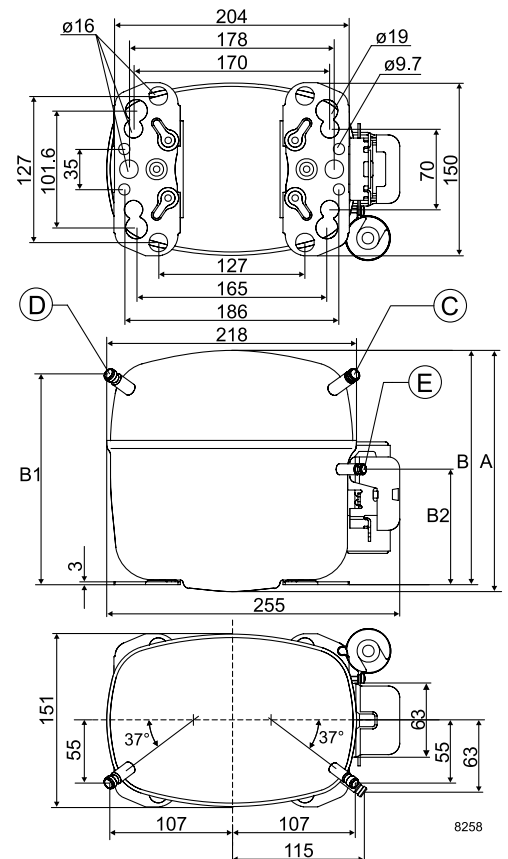
| | | |
|-------------------------------------|-----------------|-------------------|
| Displacement | cm ³ | 17.69 |
| Oil quantity (type) | cm ³ | 550 (polyolester) |
| Maximum refrigerant charge | g | 1300 |
| Free gas volume in compressor | cm ³ | 1460 |
| Weight without electrical equipment | kg | 13.7 |

Dimensions

| | | | |
|----------------------|--------------------------|--------------------------|------------|
| Height | mm | A | 219 |
| | | B | 213 |
| | | B1 | 193 |
| | | B2 | 110 |
| Suction connector | location/I.D. mm angle | C | 10.2 37° |
| | material comment | Cu-plated steel Al cap | |
| Process connector | location/I.D. mm angle | D | 6.2 37° |
| | material comment | Cu-plated steel Al cap | |
| Discharge connector | location/I.D. mm angle | E | 6.2 37° |
| | material comment | Cu-plated steel Al cap | |
| Oil cooler connector | location/I.D. mm angle | F | - |
| | material comment | - | |
| Connector tolerance | I.D. mm | ±0.09 | |
| Remarks: | | | |



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary
- SG = Suction gas cooling normally sufficient
- = not applicable in this area

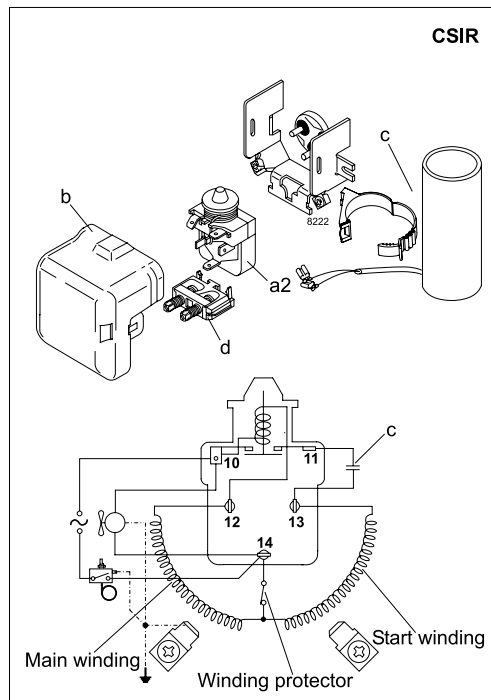


EN 12900 Household (CECOMAF) 220V, 50Hz, fan cooling F₂

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|-----|-----|------|-------|------|------|------|------|------|------|------|------|------|------|----|
| Evap. temp. in °C | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15 | -10 | -6.7 | -5 | 0 | 5 | 7.2 | 10 | 15 | 20 |
| Capacity in W | | | | | 283 | 318 | 394 | 526 | 684 | 804 | 870 | 1087 | 1337 | 1459 | 1624 | 1950 | |
| Power cons. in W | | | | | 331 | 351 | 389 | 448 | 507 | 547 | 568 | 630 | 695 | 725 | 763 | 835 | |
| Current cons. in A | | | | | 2.56 | 2.62 | 2.72 | 2.88 | 3.05 | 3.18 | 3.24 | 3.46 | 3.71 | 3.84 | 4.00 | 4.34 | |
| COP in W/W | | | | | 0.86 | 0.91 | 1.01 | 1.18 | 1.35 | 1.47 | 1.53 | 1.72 | 1.92 | 2.01 | 2.13 | 2.34 | |

ASHRAE LBP 220V, 50Hz, fan cooling F₂

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|-----|-----|------|-------|------|------|------|------|------|------|------|------|------|------|----|
| Evap. temp. in °C | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15 | -10 | -6.7 | -5 | 0 | 5 | 7.2 | 10 | 15 | 20 |
| Capacity in W | | | | | 348 | 392 | 485 | 650 | 846 | 994 | 1076 | 1346 | 1658 | 1809 | 2016 | 2425 | |
| Power cons. in W | | | | | 329 | 349 | 387 | 445 | 504 | 543 | 564 | 626 | 691 | 720 | 758 | 829 | |
| Current cons. in A | | | | | 2.56 | 2.61 | 2.71 | 2.87 | 3.04 | 3.16 | 3.23 | 3.45 | 3.70 | 3.82 | 3.98 | 4.32 | |
| COP in W/W | | | | | 1.06 | 1.12 | 1.25 | 1.46 | 1.68 | 1.83 | 1.91 | 2.15 | 2.40 | 2.51 | 2.66 | 2.92 | |



| Accessories for | SC18G | Figure | Code number | Test conditions | EN 12900/CECOMAF | ASHRAE LBP |
|---------------------------|-------------------------|--------|-------------|-----------------------------|--------------------|------------|
| PTC starting device | 6.3 mm spade connectors | a1 | - | Condensing temperature | 55°C | 54.5°C |
| | 4.8 mm spade connectors | | - | Ambient temperature | 32°C | 32°C |
| Starting relay | 6.3 mm spade connectors | a2 | 117U6019 | Suction gas temperature | 32°C | 32°C |
| Cover | | b | 103N2009 | Liquid temperature | 55°C | 32°C |
| Start. capacitor 80 µF | 6.3 mm spade connectors | c | 117U5017 | | | |
| Cord relief | | d | 103N1004 | | | |
| Protection screen for PTC | | g | - | | | |
| | | | | Mounting accessories | Code number | |
| | | | | Bolt joint for one comp. | Ø: 16 mm | 118-1917 |
| | | | | Bolt joint in quantities | Ø: 16 mm | 118-1918 |
| | | | | Snap-on in quantities | Ø: 16 mm | 118-1919 |

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