

SC18CNX.2 LBP Compressor R290 220-240V 50Hz

General

| | |
|-----------------------|--------------------|
| Code number | 104H8866 |
| Approvals | EN 60335-2-34, CCC |
| Compressors on pallet | 80 |

Application

| Application | LBP | | |
|--|-----|------------|----|
| Frequency | Hz | 50 | 60 |
| Evaporating temperature | °C | -40 to -10 | - |
| Voltage range | V | 198 - 254 | - |
| Max. condensing temperature continuous (short) | °C | 55 (65) | - |
| Max. winding temperature continuous (short) | °C | 125 (135) | - |

Cooling requirements

| Frequency | Hz | 50 | | | 60 | | |
|-------------------------|----|----------------|-----|-----|-----|-----|-----|
| Application | | LBP | MBP | HBP | LBP | MBP | HBP |
| 32°C | | F ₂ | - | - | - | - | - |
| 38°C | | F ₂ | - | - | - | - | - |
| 43°C | | F ₂ | - | - | - | - | - |
| Remarks on application: | | | | | | | |

Motor

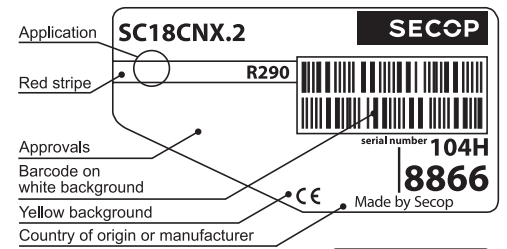
| Motor type | CSIR | | |
|---|------|------|------|
| LRA (rated after 4 sec. UL984), HST LST | A | 19.4 | - |
| Cut in Current, HST LST | A | 19.4 | - |
| Resistance, main start winding (25°C) | Ω | 4.0 | 12.5 |

Design

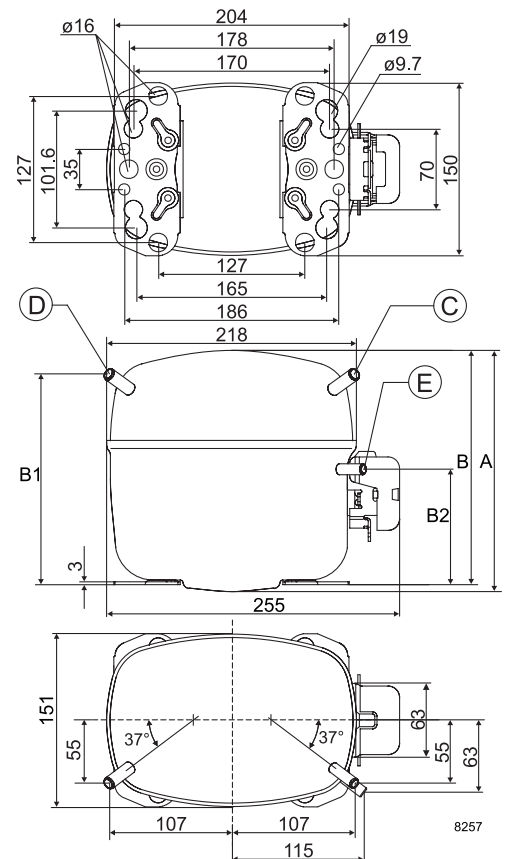
| | | |
|-------------------------------------|-----------------|-------------------|
| Displacement | cm ³ | 17.69 |
| Oil quantity (type) | cm ³ | 600 (polyolester) |
| Maximum refrigerant charge | g | 150 |
| Free gas volume in compressor | cm ³ | 1410 |
| Weight without electrical equipment | kg | 13.1 |

Dimensions

| | | | |
|----------------------|--------------------------|----|----------------------|
| Height | mm | A | 209 |
| | | B | 203 |
| | | B1 | 183 |
| | | B2 | 100 |
| Suction connector | location/I.D. mm angle | C | 10.2 37° |
| | material comment | | Copper Rubber plug |
| Process connector | location/I.D. mm angle | D | 6.2 37° |
| | material comment | | Copper Rubber plug |
| Discharge connector | location/I.D. mm angle | E | 6.2 37° |
| | material comment | | Copper Rubber plug |
| 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)* $t_c = 45^\circ\text{C}$, 220V, 50Hz, fan cooling F_2

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|------|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| 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 | | 244 | 384 | 531 | 689 | 747 | 863 | 1057 | 1273 | | | | | | | | |
| Power cons. in W | | 337 | 417 | 484 | 541 | 559 | 591 | 637 | 682 | | | | | | | | |
| Current cons. in A | | 2.96 | 3.15 | 3.34 | 3.52 | 3.58 | 3.69 | 3.85 | 4.01 | | | | | | | | |
| COP in W/W | | 0.72 | 0.92 | 1.10 | 1.27 | 1.34 | 1.46 | 1.66 | 1.87 | | | | | | | | |

ASHRAE LBP* $t_c = 43.3^\circ\text{C}$, 220V, 50Hz, fan cooling F_2

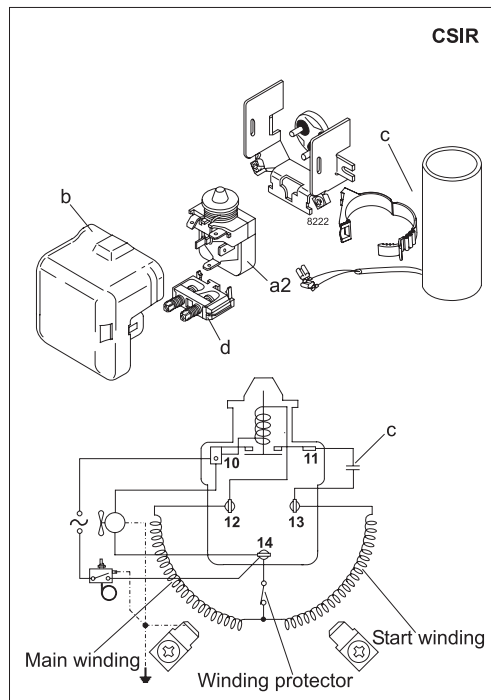
| | | | | | | | | | | | | | | | | | |
|--------------------|-----|------|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| Evap. temp. in °C | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15 | -10 | -6.7 | -5 | 0 | 5 | 7.2 | 10 | 15 | 20 |
| Capacity in W | | 291 | 443 | 603 | 776 | 839 | 966 | 1176 | 1412 | | | | | | | | |
| Power cons. in W | | 345 | 420 | 482 | 535 | 551 | 581 | 624 | 667 | | | | | | | | |
| Current cons. in A | | 2.98 | 3.16 | 3.33 | 3.50 | 3.55 | 3.66 | 3.81 | 3.95 | | | | | | | | |
| COP in W/W | | 0.84 | 1.06 | 1.25 | 1.45 | 1.52 | 1.66 | 1.88 | 2.12 | | | | | | | | |

EN 12900 Household (CECOMAF) $t_c = 55^\circ\text{C}$, 220V, 50Hz, fan cooling F_2

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| 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 | | | 275 | 424 | 587 | 646 | 768 | 970 | 1197 | | | | | | | | |
| Power cons. in W | | | 404 | 502 | 588 | 614 | 663 | 732 | 798 | | | | | | | | |
| Current cons. in A | | | 3.30 | 3.57 | 3.82 | 3.91 | 4.07 | 4.31 | 4.55 | | | | | | | | |
| COP in W/W | | | 0.68 | 0.84 | 1.00 | 1.05 | 1.16 | 1.32 | 1.50 | | | | | | | | |

ASHRAE LBP $t_c = 54.4^\circ\text{C}$, 220V, 50Hz, fan cooling F_2

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| 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 | | | 342 | 525 | 724 | 797 | 945 | 1193 | 1472 | | | | | | | | |
| Power cons. in W | | | 404 | 500 | 584 | 610 | 658 | 726 | 790 | | | | | | | | |
| Current cons. in A | | | 3.28 | 3.54 | 3.80 | 3.88 | 4.04 | 4.28 | 4.50 | | | | | | | | |
| COP in W/W | | | 0.85 | 1.05 | 1.24 | 1.31 | 1.44 | 1.64 | 1.86 | | | | | | | | |



| Accessories for | SC18CNX.2 | Figure | Code number | Test conditions | EN 12900/ CECOMAF(*) | ASHRAE LBP(*) |
|---------------------------|-------------------------|--------|-------------|-----------------------------|-------------------------|------------------|
| PTC starting device | 6.3 mm spade connectors | - | - | Condensing temperature | 55°C (*45°C) | 54.4 (*43.3°C) |
| | 4.8 mm spade connectors | | | Ambient temperature | 32°C | 32°C |
| Starting relay | 6.3 mm spade connectors | a2 | 117U7011 | Suction gas temperature | 32°C | 32°C |
| Cover | | b | 103N2009 | Liquid temperature | no subcooling | 32°C |
| Start. capacitor 80 µF | 6.3 mm spade connectors | c | 117U5017 | | | |
| Cord relief | | d | 103N1004 | | | |
| Protection screen for PTC | | - | - | | | |
| | | | | 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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