



**SECOP**

# SC12CLX.2

## LBP Compressor

### R404A/R507

### 220-240V 50/60Hz

#### General

|                       |  |
|-----------------------|--|
| Code number           | 104L2697   |
| Approvals             | EN 60335-2-34, UL984, CCC<br>GB4706.1, GB4706.17 |
| Compressors on pallet | 80   |

#### Application

| Application                                    | LBP |            |            |
|--|-----|------------|------------|
| Frequency                                      | Hz  | 50         | 60         |
| Evaporating temperature                        | °C  | -45 to -10 | -45 to -10 |
| Voltage range                                  | V   | 198 - 254  | 198 - 254  |
| Max. condensing temperature continuous (short) | °C  | 55 (60)    | 55 (60)    |
| 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 <sub>2</sub> | -   | -   | F <sub>2</sub> | -   | -   |
| 38°C                    |    | F <sub>2</sub> | -   | -   | F <sub>2</sub> | -   | -   |
| 43°C                    |    | -              | -   | -   | -              | -   | -   |
| Remarks on application: |    |                |     |     |                |     |     |

#### Motor

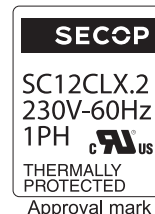
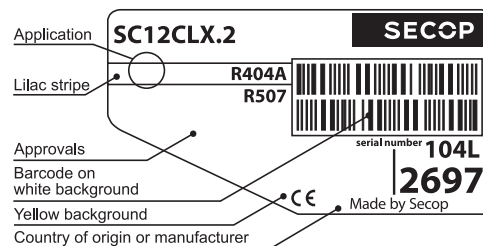
| Motor type                                | CSIR |      |      |
|---|------|------|------|
| LRA (rated after 4 sec. UL984), HST   LST | A    | 19.6 | -    |
| Cut in Current, HST   LST                 | A    | 19.6 | -    |
| Resistance, main   start winding (25°C)   | Ω    | 3.8  | 13.7 |

#### Design

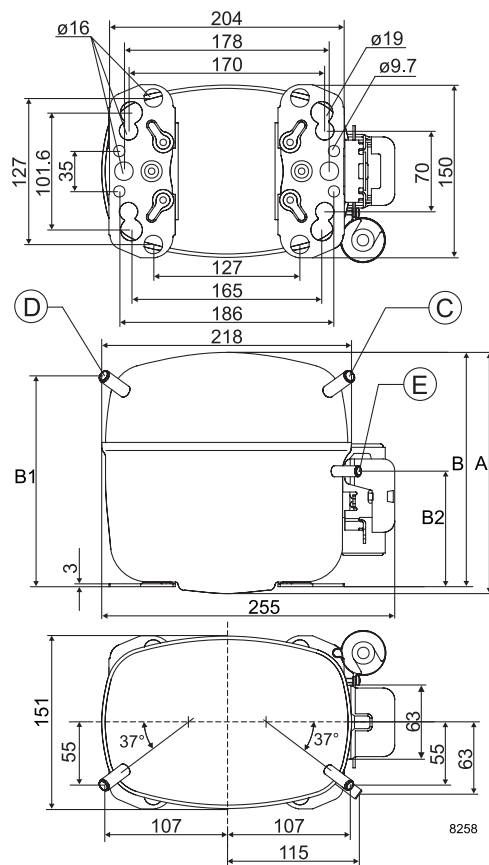
|                                     |                 |                   |
|-------------------------------------|-----------------|-------------------|
| Displacement                        | cm <sup>3</sup> | 12.87             |
| Oil quantity (type)                 | cm <sup>3</sup> | 550 (polyolester) |
| Maximum refrigerant charge          | g               | 1300              |
| Free gas volume in compressor       | cm <sup>3</sup> | 1510              |
| 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  | 8.2   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
- 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
- SG = Suction gas cooling normally sufficient
- = not applicable in this area



**ASHRAE LBP\*** 230V, 60Hz, fan cooling F<sub>2</sub>

|                    |      |      |      |      |      |       |      |      |      |      |    |   |   |     |    |    |    |
|--------------------|------|------|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| 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      | 176  | 283  | 426  | 598  | 739  | 805   | 1051 | 1339 | 1467 |      |    |   |   |     |    |    |    |
| Power cons. in W   | 259  | 329  | 405  | 482  | 536  | 560   | 643  | 732  | 769  |      |    |   |   |     |    |    |    |
| Current cons. in A | 2.31 | 2.45 | 2.63 | 2.84 | 3.00 | 3.08  | 3.35 | 3.66 | 3.78 |      |    |   |   |     |    |    |    |
| COP in W/W         | 0.68 | 0.86 | 1.05 | 1.24 | 1.38 | 1.44  | 1.63 | 1.83 | 1.91 |      |    |   |   |     |    |    |    |

**ASHRAE LBP\*** 220V, 50Hz, fan cooling F<sub>2</sub>

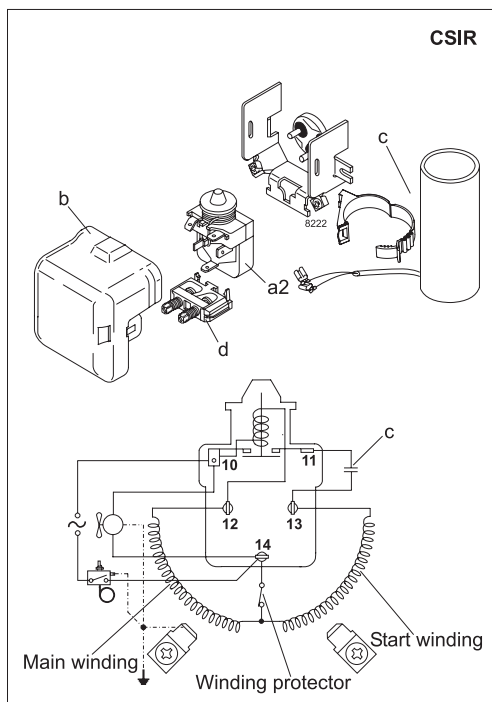
|                    |      |      |      |      |      |       |      |      |      |      |    |   |   |     |    |    |    |
|--------------------|------|------|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| Evap. temp. in °C  | -45  | -40  | -35  | -30  | -25  | -23.3 | -20  | -15  | -10  | -6.7 | -5 | 0 | 5 | 7.2 | 10 | 15 | 20 |
| Capacity in W      | 160  | 247  | 363  | 502  | 616  | 670   | 868  | 1101 | 1205 |      |    |   |   |     |    |    |    |
| Power cons. in W   | 256  | 310  | 370  | 430  | 472  | 491   | 555  | 624  | 654  |      |    |   |   |     |    |    |    |
| Current cons. in A | 2.79 | 2.89 | 3.02 | 3.17 | 3.29 | 3.34  | 3.54 | 3.75 | 3.85 |      |    |   |   |     |    |    |    |
| COP in W/W         | 0.63 | 0.80 | 0.98 | 1.17 | 1.30 | 1.36  | 1.56 | 1.76 | 1.84 |      |    |   |   |     |    |    |    |

**EN 12900 Household (CECOMAF)\*** 230V, 60Hz, fan cooling F<sub>2</sub>

|                    |      |      |      |      |      |       |      |      |      |      |    |   |   |     |    |    |    |
|--------------------|------|------|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| 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      | 141  | 233  | 343  | 473  | 626  | 683   | 804  | 1011 | 1248 |      |    |   |   |     |    |    |    |
| Power cons. in W   | 255  | 327  | 398  | 469  | 541  | 566   | 615  | 693  | 777  |      |    |   |   |     |    |    |    |
| Current cons. in A | 2.28 | 2.43 | 2.60 | 2.79 | 3.01 | 3.09  | 3.25 | 3.52 | 3.81 |      |    |   |   |     |    |    |    |
| COP in W/W         | 0.55 | 0.71 | 0.86 | 1.01 | 1.16 | 1.21  | 1.31 | 1.46 | 1.61 |      |    |   |   |     |    |    |    |

**EN 12900 Household (CECOMAF)\*** 220V, 50Hz, fan cooling F<sub>2</sub>

|                    |      |      |      |      |      |       |      |      |      |      |    |   |   |     |    |    |    |
|--------------------|------|------|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| 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      | 130  | 205  | 294  | 399  | 522  | 569   | 666  | 834  | 1026 |      |    |   |   |     |    |    |    |
| Power cons. in W   | 253  | 309  | 365  | 420  | 475  | 495   | 533  | 594  | 659  |      |    |   |   |     |    |    |    |
| Current cons. in A | 2.77 | 2.88 | 3.00 | 3.13 | 3.29 | 3.35  | 3.46 | 3.65 | 3.86 |      |    |   |   |     |    |    |    |
| COP in W/W         | 0.51 | 0.66 | 0.81 | 0.95 | 1.10 | 1.15  | 1.25 | 1.40 | 1.56 |      |    |   |   |     |    |    |    |



| Accessories for           | SC12CLX.2 (50/60Hz)     | Figure | Code number | Test conditions             | EN 12900/<br>CECOMAF* | ASHRAE<br>LBP* |
|---------------------------|-------------------------|--------|-------------|-----------------------------|-----------------------|----------------|
| PTC starting device       | 6.3 mm spade connectors | a1     | —           | Condensing temperature      | 45°C                  | 43.3°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      | 103N2008    | 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 |                         | g      | —           |                             |                       |                |
|                           |                         |        |             | <b>Mounting accessories</b> | <b>Code number</b>    |                |
|                           |                         |        |             | 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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