

## FR7.5CL LBP/MBP Compressor R404A/R507 220-240V 50Hz

### General

|                       |               |
|-----------------------|---------------|
| Code number           | 103U2790      |
| Approvals             | EN 60335-2-34 |
| Compressors on pallet | 80            |

### Application

| Application                                    | LBP/MBP |           |    |
|--|---------|-----------|----|
| Frequency                                      | Hz      | 50        | 60 |
| Evaporating temperature                        | °C      | -45 to -5 | -  |
| Voltage range                                  | V       | 198 - 254 | -  |
| Max. condensing temperature continuous (short) | °C      | 50 (60)   | -  |
| Max. winding temperature continuous (short)    | °C      | 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

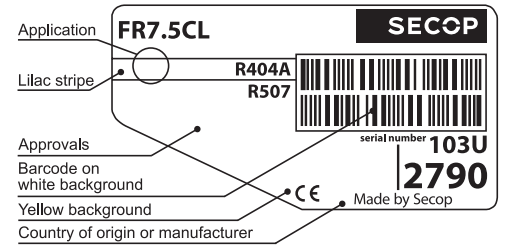
| Motor type                                | CSIR |     |      |
|---|------|-----|------|
| LRA (rated after 4 sec. UL984), HST   LST | A    | 9.1 | -    |
| Cut in Current, HST   LST                 | A    | 9.1 | -    |
| Resistance, main   start winding (25°C)   | Ω    | 8.8 | 12.0 |

### Design

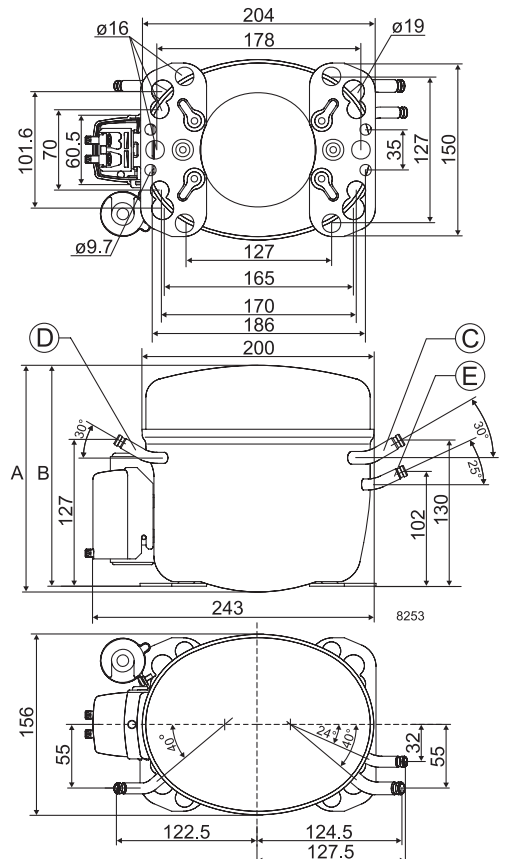
|                                     |                 |                   |
|-------------------------------------|-----------------|-------------------|
| Displacement                        | cm <sup>3</sup> | 6.93              |
| Oil quantity (type)                 | cm <sup>3</sup> | 450 (polyolester) |
| Maximum refrigerant charge          | g               | 850               |
| Free gas volume in compressor       | cm <sup>3</sup> | 1350              |
| Weight without electrical equipment | kg              | 10.6              |

### Dimensions

|                      |                          |    |                          |
|----------------------|--------------------------|----|--------------------------|
| Height               | mm                       | A  | 196                      |
|                      |                          | B  | 191                      |
|                      |                          | B1 | -                        |
|                      |                          | B2 | -                        |
| Suction connector    | location/I.D. mm   angle | C  | 8.2   30°                |
|                      | material   comment       |    | Cu-plated steel   Al cap |
| Process connector    | location/I.D. mm   angle | D  | 6.2   30°                |
|                      | material   comment       |    | Cu-plated steel   Al cap |
| Discharge connector  | location/I.D. mm   angle | E  | 6.2   25°                |
|                      | 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
- 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



**EN 12900 Household (CECOMAF)**

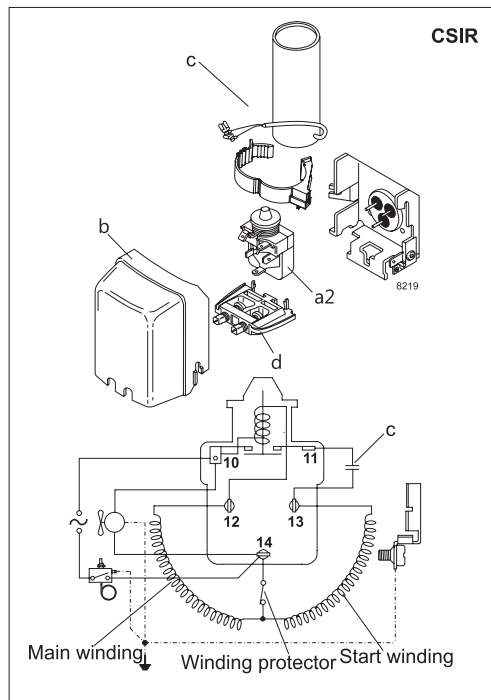
220V, 50Hz, fan cooling F<sub>2</sub>

|                    |      |      |      |      |      |       |      |      |      |      |      |   |   |     |    |    |    |
|--------------------|------|------|------|------|------|-------|------|------|------|------|------|---|---|-----|----|----|----|
| 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      | 86   | 114  | 154  | 202  | 262  | 285   | 333  | 418  | 515  | 587  | 630  |   |   |     |    |    |    |
| Power cons. in W   | 142  | 168  | 197  | 231  | 267  | 280   | 307  | 349  | 395  | 425  | 440  |   |   |     |    |    |    |
| Current cons. in A | 1.39 | 1.44 | 1.52 | 1.62 | 1.75 | 1.81  | 1.91 | 2.09 | 2.28 | 2.43 | 2.51 |   |   |     |    |    |    |
| COP in W/W         | 0.61 | 0.68 | 0.78 | 0.88 | 0.98 | 1.02  | 1.09 | 1.20 | 1.30 | 1.38 | 1.43 |   |   |     |    |    |    |

**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      | 101  | 132  | 178  | 235  | 305  | 333   | 388  | 488  | 602  | 688  | 737  |   |   |     |    |    |    |
| Power cons. in W   | 142  | 168  | 197  | 231  | 267  | 280   | 307  | 349  | 395  | 425  | 440  |   |   |     |    |    |    |
| Current cons. in A | 1.39 | 1.44 | 1.52 | 1.62 | 1.75 | 1.81  | 1.91 | 2.09 | 2.28 | 2.44 | 2.51 |   |   |     |    |    |    |
| COP in W/W         | 0.71 | 0.79 | 0.90 | 1.02 | 1.14 | 1.19  | 1.27 | 1.40 | 1.53 | 1.62 | 1.67 |   |   |     |    |    |    |



| Accessories for           | FR7.5CL                 | Figure | Code number |
|---------------------------|-------------------------|--------|-------------|
| PTC starting device       | 6.3 mm spade connectors | a1     | -           |
|                           | 4.8 mm spade connectors |        | -           |
| Starting relay            | 6.3 mm spade connectors | a2     | 117U6016    |
| Cover                     |                         | b      | 103N2010    |
| Start. capacitor 80 µF    | 6.3 mm spade connectors | c      | 117U5015    |
| Cord relief               |                         | d      | 103N1010    |
| Protection screen for PTC |                         | g      | -           |

| Test conditions         | EN 12900/CECOMAF | ASHRAE LBP* |
|-------------------------|------------------|-------------|
| Condensing temperature  | 45°C             | 45°C        |
| Ambient temperature     | 32°C             | 32°C        |
| Suction gas temperature | 32°C             | 32°C        |
| Liquid temperature      | no subcooling    | 32°C        |

| 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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