

## SC10CL LBP/MBP Compressor R404A/R507 115V 60Hz

### General

|                       |          |
|-----------------------|----------|
| Code number           | 104L1509 |
| Approvals             | UL984    |
| Compressors on pallet | 80       |

### Application

| Application                                    | LBP/MBP |    |           |  |
|------------------------------------------------|---------|----|-----------|--|
| Frequency                                      | Hz      | 50 | 60        |  |
| Evaporating temperature                        | °F      | –  | -40 to 45 |  |
| Voltage range                                  | V       | –  | 103 - 127 |  |
| Max. condensing temperature continuous (short) | °F      | –  | 131 (140) |  |
| Max. winding temperature continuous (short)    | °F      | –  | 257 (275) |  |

### Cooling requirements

|                         |    |     |     |     |                |                |     |
|-------------------------|----|-----|-----|-----|----------------|----------------|-----|
| Frequency               | Hz | 50  |     |     | 60             |                |     |
| Application             |    | LBP | MBP | HBP | LBP            | MBP            | HBP |
| 90°F                    |    | –   | –   | –   | F <sub>2</sub> | F <sub>2</sub> | –   |
| 100°F                   |    | –   | –   | –   | F <sub>2</sub> | F <sub>2</sub> | –   |
| 110°F                   |    | –   | –   | –   | F <sub>2</sub> | F <sub>2</sub> | –   |
| Remarks on application: |    |     |     |     |                |                |     |

### Motor

|                                           |      |      |     |
|-------------------------------------------|------|------|-----|
| Motor type                                | CSIR |      |     |
| LRA (rated after 4 sec. UL984), HST   LST | A    | 41.9 | –   |
| Cut in Current, HST   LST                 | A    | 41.9 | –   |
| Resistance, main   start winding (77°F)   | Ω    | 1.0  | 4.3 |

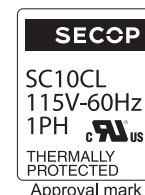
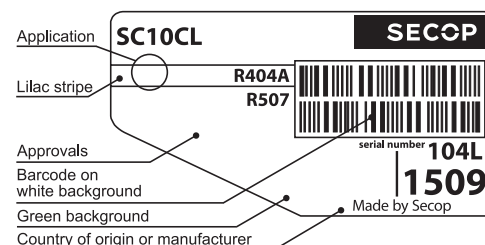
### Design

|                                     |        |                    |
|-------------------------------------|--------|--------------------|
| Displacement                        | cu.in  | 0.63               |
| Oil quantity (type)                 | fl.oz. | 16.9 (polyolester) |
| Maximum refrigerant charge          | oz.    | 45.8               |
| Free gas volume in compressor       | fl.oz. | 51.1               |
| Weight without electrical equipment | lbs.   | 27.7               |

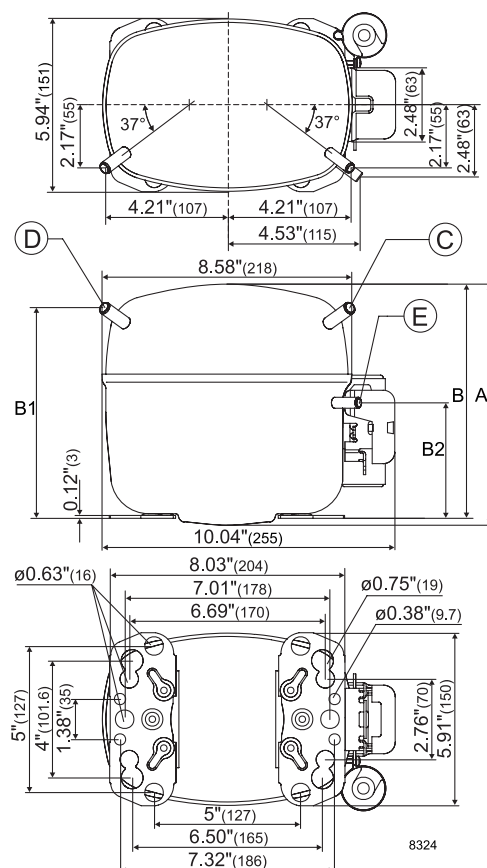
### Dimensions

Dimensions

|                      |                            |                      |                   |
|----------------------|----------------------------|----------------------|-------------------|
| Height               | inch                       | A                    | 8.23              |
|                      |                            | B                    | 8.00              |
|                      |                            | B1                   | 7.20              |
|                      |                            | B2                   | 3.93              |
| Suction connector    | location, I.D. in.   angle | C                    | 0.320-0.327   37° |
|                      | material   comment         | Copper   Rubber plug |                   |
| Process connector    | location, I.D. in.   angle | D                    | 0.252-0.259   37° |
|                      | material   comment         | Copper   Rubber plug |                   |
| Discharge connector  | location, I.D. in.   angle | E                    | 0.252-0.259   37° |
|                      | material   comment         | Copper   Rubber plug |                   |
| Oil cooler connector | location, I.D. in.   angle | F                    | —                 |
|                      | material   comment         | —                    |                   |
| 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**115V, 60Hz, fan cooling F<sub>2</sub>

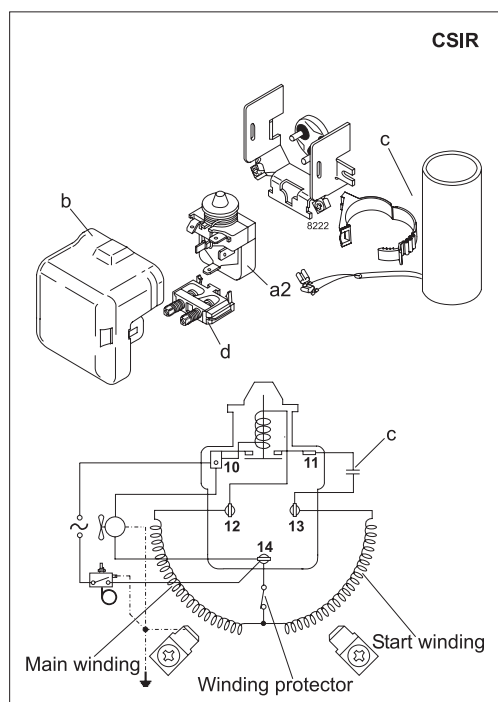
|                    |     |      |      |      |      |      |      |      |      |      |      |      |      |      |    |    |    |
|--------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|----|----|----|
| Evap. temp. in °F  | -49 | -40  | -30  | -20  | -13  | -10  | 0    | 10   | 14   | 20   | 30   | 40   | 41   | 45   | 50 | 59 | 68 |
| Capacity in BTU/h  |     | 122  | 482  | 909  | 1257 | 1420 | 2034 | 2769 | 3101 | 3643 | 4677 | 5893 | 6025 | 6576 |    |    |    |
| Power cons. in W   |     | 145  | 248  | 339  | 398  | 422  | 500  | 573  | 602  | 645  | 719  | 795  | 803  | 835  |    |    |    |
| Current cons. in A |     | 4.21 | 4.64 | 5.10 | 5.44 | 5.58 | 6.09 | 6.63 | 6.85 | 7.19 | 7.78 | 8.39 | 8.45 | 8.71 |    |    |    |
| EER in BTU/Wh      |     | 0.84 | 1.95 | 2.68 | 3.16 | 3.36 | 4.07 | 4.83 | 5.15 | 5.64 | 6.51 | 7.41 | 7.50 | 7.87 |    |    |    |

**ASHRAE MBP**115V, 60Hz, fan cooling F<sub>2</sub>

|                    |     |      |      |      |      |      |      |      |      |      |      |      |      |      |    |    |    |
|--------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|----|----|----|
| Evap. temp. in °F  | -49 | -40  | -30  | -20  | -13  | -10  | 0    | 10   | 14   | 20   | 30   | 40   | 41   | 45   | 50 | 59 | 68 |
| Capacity in BTU/h  |     | 104  | 412  | 776  | 1073 | 1212 | 1734 | 2357 | 2638 | 3096 | 3968 | 4989 | 5100 | 5560 |    |    |    |
| Power cons. in W   |     | 145  | 248  | 339  | 398  | 422  | 500  | 573  | 602  | 645  | 719  | 795  | 803  | 835  |    |    |    |
| Current cons. in A |     | 4.21 | 4.64 | 5.10 | 5.44 | 5.58 | 6.09 | 6.63 | 6.85 | 7.19 | 7.78 | 8.39 | 8.45 | 8.71 |    |    |    |
| EER in BTU/Wh      |     | 0.71 | 1.66 | 2.29 | 2.69 | 2.87 | 3.47 | 4.11 | 4.38 | 4.80 | 5.52 | 6.27 | 6.35 | 6.66 |    |    |    |

**EN 12900 Household (CECOMAF)\*** 115V, 60Hz, fan cooling F<sub>2</sub>

|                    |     |      |      |      |      |      |      |      |      |      |      |      |      |      |    |    |    |
|--------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|----|----|----|
| Evap. temp. in °F  | -49 | -40  | -30  | -20  | -13  | -10  | 0    | 10   | 14   | 20   | 30   | 40   | 41   | 45   | 50 | 59 | 68 |
| Capacity in W      |     | 75   | 184  | 310  | 411  | 458  | 632  | 834  | 924  | 1070 | 1342 | 1655 | 1688 | 1827 |    |    |    |
| Power cons. in W   |     | 193  | 284  | 364  | 415  | 436  | 502  | 565  | 590  | 628  | 691  | 759  | 766  | 795  |    |    |    |
| Current cons. in A |     | 4.45 | 4.79 | 5.15 | 5.42 | 5.54 | 5.96 | 6.40 | 6.59 | 6.87 | 7.36 | 7.88 | 7.93 | 8.15 |    |    |    |
| COP in W/W         |     | 0.39 | 0.65 | 0.85 | 0.99 | 1.05 | 1.26 | 1.48 | 1.57 | 1.70 | 1.94 | 2.18 | 2.20 | 2.30 |    |    |    |



| Accessories for           | SC10CL                                            | Figure | Code number |
|---------------------------|---------------------------------------------------|--------|-------------|
| PTC starting device       | 1/4 in. spade connect.<br>3/16 in. spade connect. | —      | —           |
| Starting relay            | 1/4 in. spade connect.                            | a2     | 117U6020 *) |
| Cover                     |                                                   | b      | 103N2008 *) |
| Start. capacitor 240 µF   | 1/4 in. spade connect.                            | c      | 117U5023 *) |
| Cord relief               |                                                   | d      | 103N1004 *) |
| Protection screen for PTC |                                                   | —      | —           |
| *) Remarks: pre-assembled |                                                   |        |             |

| Test conditions     | ASHRAE LBP | ASHRAE MBP | EN 12900/CECOMAF* |
|---------------------|------------|------------|-------------------|
| Condensing temp.    | 130°F      | 130°F      | 130°F             |
| Ambient temperature | 90°F       | 95°F       | 90°F              |
| Suction gas temp.   | 90°F       | 95°F       | 90°F              |
| Liquid temperature  | 90°F       | 115°F      | no subcooling     |

| Mounting accessories     |            | Code number |
|--------------------------|------------|-------------|
| Bolt joint for one comp. | Ø: 5/8 in. | 118-1917    |
| Bolt joint in quantities | Ø: 5/8 in. | 118-1918    |
| Snap-on in quantities    | Ø: 5/8 in. | 118-1919    |

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