

## TL5G Universal Compressor R134a 220-240V 50/60Hz

### General

|                       |               |
|-----------------------|---------------|
| Code number           | 102G4552      |
| Approvals             | EN 60335-2-34 |
| Compressors on pallet | 125           |

### Application

| Application                                    | LBP/HBP |           |            |  |
|--|---------|-----------|------------|--|
| Frequency                                      | Hz      | 50        | 60         |  |
| Evaporating temperature                        | °C      | -30 to 15 | -30 to -10 |  |
| 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   |    | S   | S   | F <sub>2</sub> | S   | S   | -   |
| 38°C   |    | S   | S   | F <sub>2</sub> | S   | S   | -   |
| 43°C   |    | S   | S   | F <sub>2</sub> | S   | S   | -   |
| Remarks on application: HBP at 198 - 254V 50Hz only. |    |     |     |                |     |     |     |

### Motor

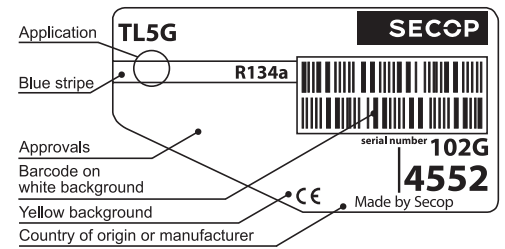
| Motor type                                | RSIR/CSIR |      |      |
|---|-----------|------|------|
| LRA (rated after 4 sec. UL984), HST   LST | A         | 5.7  | 5.4  |
| Cut in Current, HST   LST                 | A         | 5.7  | 9.7  |
| Resistance, main   start winding (25°C)   | Ω         | 14.5 | 14.8 |

### Design

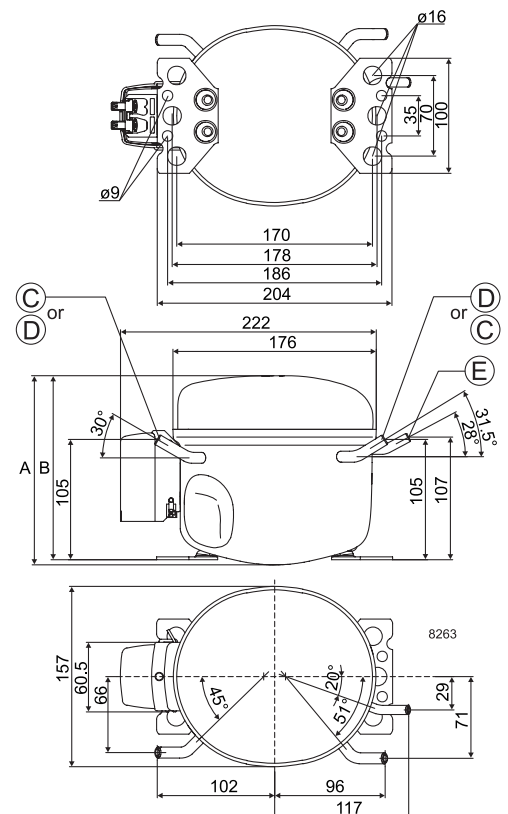
|                                     |                 |                   |
|-------------------------------------|-----------------|-------------------|
| Displacement                        | cm <sup>3</sup> | 5.08              |
| Oil quantity (type)                 | cm <sup>3</sup> | 280 (polyolester) |
| Maximum refrigerant charge          | g               | 400               |
| Free gas volume in compressor       | cm <sup>3</sup> | 1690              |
| Weight without electrical equipment | kg              | 7.5               |

### Dimensions

|                      |                          |    |                           |
|----------------------|--------------------------|----|---------------------------|
| Height               | mm                       | A  | 173                       |
|                      |                          | B  | 169                       |
|                      |                          | B1 | -                         |
|                      |                          | B2 | -                         |
| Suction connector    | location/I.D. mm   angle | C  | 8.2   30°                 |
|                      | material   comment       |    | Copper   Rubber plug      |
| Process connector    | location/I.D. mm   angle | D  | 6.2   31.5°               |
|                      | material   comment       |    | Copper   Rubber plug      |
| Discharge connector  | location/I.D. mm   angle | E  | 5.0   28°                 |
|                      | material   comment       |    | Copper   Rubber plug      |
| Oil cooler connector | location/I.D. mm   angle | F  | -                         |
|                      | material   comment       |    | -                         |
| Connector tolerance  | I.D. mm                  |    | ±0.09, on 5.0 +0.12/+0.20 |
| 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, static cooling

|                    |     |     |     |      |      |       |      |      |      |      |      |      |      |      |      |      |    |
|--------------------|-----|-----|-----|------|------|-------|------|------|------|------|------|------|------|------|------|------|----|
| 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      |     |     |     | 55.6 | 79.0 | 87.9  | 107  | 139  | 178  | 208  | 224  | 278  | 341  | 372  | 414  | 497  |    |
| Power cons. in W   |     |     |     | 84.8 | 100  | 105   | 116  | 132  | 149  | 161  | 167  | 186  | 205  | 213  | 224  | 245  |    |
| Current cons. in A |     |     |     | 0.95 | 0.98 | 0.99  | 1.01 | 1.05 | 1.09 | 1.13 | 1.15 | 1.21 | 1.28 | 1.32 | 1.36 | 1.45 |    |
| COP in W/W         |     |     |     | 0.66 | 0.79 | 0.83  | 0.92 | 1.05 | 1.19 | 1.29 | 1.34 | 1.50 | 1.67 | 1.74 | 1.84 | 2.03 |    |

**EN 12900 Household (CECOMAF)** 220V, 60Hz, static cooling

|                    |     |     |     |      |       |       |      |      |      |      |    |   |   |     |    |    |    |
|--------------------|-----|-----|-----|------|-------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| 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      |     |     |     | 64.7 | 91.5  | 102   | 123  | 162  | 207  |      |    |   |   |     |    |    |    |
| Power cons. in W   |     |     |     | 88.7 | 105.7 | 112.1 | 125  | 147  | 170  |      |    |   |   |     |    |    |    |
| Current cons. in A |     |     |     | 0.83 | 0.88  | 0.90  | 0.94 | 1.01 | 1.08 |      |    |   |   |     |    |    |    |
| COP in W/W         |     |     |     | 0.73 | 0.87  | 0.91  | 0.99 | 1.10 | 1.22 |      |    |   |   |     |    |    |    |

**ASHRAE HBP** 220V, 50Hz, static cooling

|                    |     |     |     |      |      |       |      |      |      |      |      |      |      |      |      |      |    |
|--------------------|-----|-----|-----|------|------|-------|------|------|------|------|------|------|------|------|------|------|----|
| 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      |     |     |     | 68.6 | 97.5 | 108   | 132  | 172  | 220  | 257  | 277  | 345  | 423  | 461  | 514  | 619  |    |
| Power cons. in W   |     |     |     | 84.8 | 100  | 105   | 116  | 132  | 149  | 161  | 167  | 186  | 205  | 213  | 224  | 245  |    |
| Current cons. in A |     |     |     | 0.95 | 0.98 | 0.99  | 1.01 | 1.05 | 1.09 | 1.13 | 1.15 | 1.21 | 1.28 | 1.32 | 1.36 | 1.45 |    |
| COP in W/W         |     |     |     | 0.81 | 0.97 | 1.03  | 1.14 | 1.30 | 1.47 | 1.59 | 1.66 | 1.86 | 2.07 | 2.16 | 2.29 | 2.53 |    |

**ASHRAE HBP** 220V, 60Hz, static cooling

|                    |     |     |     |      |       |       |      |      |      |      |    |   |   |     |    |    |    |
|--------------------|-----|-----|-----|------|-------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| 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      |     |     |     | 79.8 | 113   | 125   | 152  | 200  | 256  |      |    |   |   |     |    |    |    |
| Power cons. in W   |     |     |     | 88.7 | 105.7 | 112.1 | 125  | 147  | 170  |      |    |   |   |     |    |    |    |
| Current cons. in A |     |     |     | 0.83 | 0.88  | 0.90  | 0.94 | 1.01 | 1.08 |      |    |   |   |     |    |    |    |
| COP in W/W         |     |     |     | 0.90 | 1.07  | 1.12  | 1.22 | 1.36 | 1.51 |      |    |   |   |     |    |    |    |



| Accessories for           | TL5G                    | Figure | Code number |
|---------------------------|-------------------------|--------|-------------|
| PTC starting device       | 6.3 mm spade connectors | a1     | 103N0011    |
|                           | 4.8 mm spade connectors |        | 103N0018    |
| Starting relay            | 6.3 mm spade connectors | a2     | 117U6000    |
| Start. capacitor 60 µF    | 6.3 mm spade connectors | c      | 117U5014    |
| Cover                     |                         | b      | 103N2010    |
| Cord relief               |                         | d      | 103N1010    |
| Protection screen for PTC |                         | g      | 103N0476    |

| Test conditions         | EN 12900/CECOMAF | ASHRAE HBP |
|-------------------------|------------------|------------|
| Condensing temperature  | 55°C             | 55°C       |
| Ambient temperature     | 32°C             | 32°C       |
| Suction gas temperature | 32°C             | 32°C       |
| Liquid temperature      | 55°C             | 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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