

Single Pack FR8.5G 220-240V 50/60Hz CSIR

Single pack code number: **195B4032**

| Position | Title | Code | Amount |
|----------|---|----------|--------|
| 1 | Compressor FR8.5G | 103G6780 | 1 |
| 2 | Starting relay | 117U6015 | 1 |
| 3 | Starting capacitor (80 μ F 220V, 6.3mm) | 117U5015 | 1 |
| 4 | Cord relief | 103N1010 | 1 |
| 5 | Cover | 103N2010 | 1 |
| 6 | Bolt joint for one compressor M6 \varnothing 16mm | 118-1917 | 1 |

Secop GmbH • Lise-Meitner-Straße 29 • 24941 Flensburg, Germany • Tel: +49 461 4941 0 • www.secop.com

Secop accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Secop reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Secop GmbH. All rights reserved.

FR8.5G Universal Compressor R134a 220-240V 50/60Hz

General

| | |
|-----------------------|---------------------------|
| Code number | 103G6780 |
| Approvals | EN 60335-2-34, UL984, CCC |
| Compressors on pallet | 80 |

Application

| Application | LBP/HBP | LBP |
|--|--------------|------------|
| Frequency | Hz 50 | 60 |
| Evaporating temperature | °C -30 to 10 | -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 | F ₂ | F ₂ | S | - | - |
| 38°C | | S | F ₂ | F ₂ | S | - | - |
| 43°C | | F ₁ | F ₂ | F ₂ | F ₁ | - | - |

Remarks on application: HBP at 198 - 254V 50Hz only.

Motor

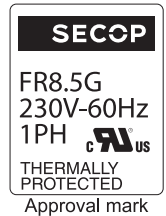
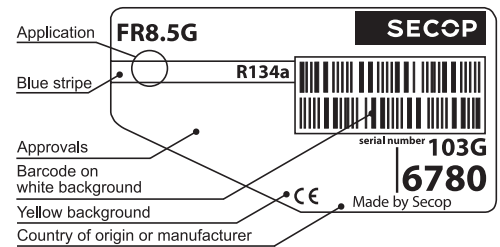
| Motor type | | RSIR/CSIR | |
|---|---|-----------|------|
| LRA (rated after 4 sec. UL984), HST LST | A | 8.2 | 8.1 |
| Cut in Current, HST LST | A | 8.2 | 12.8 |
| Resistance, main start winding (25°C) | Ω | 8.9 | 12.0 |

Design

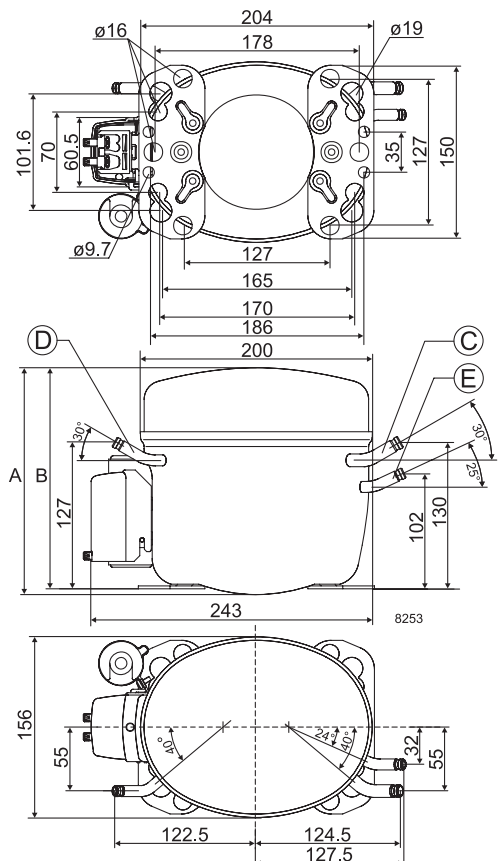
| | | |
|-------------------------------------|-----------------|-------------------|
| Displacement | cm ³ | 7.95 |
| Oil quantity (type) | cm ³ | 450 (polyolester) |
| Maximum refrigerant charge | g | 900 |
| Free gas volume in compressor | cm ³ | 1350 |
| Weight without electrical equipment | kg | 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
- 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) 220V, 50Hz, fan cooling F₂

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|-----|------|------|-------|------|------|------|------|------|------|------|------|------|----|----|
| 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 | | | | 84.9 | 123 | 138 | 171 | 228 | 298 | 351 | 381 | 478 | 592 | 647 | 722 | | |
| Power cons. in W | | | | 127 | 151 | 159 | 176 | 203 | 231 | 251 | 261 | 291 | 321 | 335 | 352 | | |
| Current cons. in A | | | | 1.16 | 1.22 | 1.25 | 1.30 | 1.38 | 1.47 | 1.53 | 1.56 | 1.67 | 1.78 | 1.83 | 1.90 | | |
| COP in W/W | | | | 0.67 | 0.82 | 0.87 | 0.97 | 1.12 | 1.29 | 1.40 | 1.46 | 1.65 | 1.84 | 1.93 | 2.05 | | |

EN 12900 Household (CECOMAF) 220V, 60Hz, fan cooling F₂

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|-----|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| 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 | | | | 92.3 | 138 | 156 | 195 | 263 | 345 | | | | | | | | |
| Power cons. in W | | | | 134 | 164 | 174 | 197 | 233 | 273 | | | | | | | | |
| Current cons. in A | | | | 1.02 | 1.12 | 1.16 | 1.24 | 1.37 | 1.53 | | | | | | | | |
| COP in W/W | | | | 0.69 | 0.85 | 0.90 | 0.99 | 1.13 | 1.26 | | | | | | | | |

ASHRAE LBP 220V, 50Hz, fan cooling F₂

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|-----|------|------|-------|------|------|------|------|------|------|------|------|------|----|----|
| 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 | | | | 105 | 152 | 171 | 211 | 282 | 368 | 434 | 471 | 592 | 734 | 803 | 898 | | |
| Power cons. in W | | | | 127 | 151 | 159 | 176 | 203 | 231 | 251 | 261 | 291 | 321 | 335 | 352 | | |
| Current cons. in A | | | | 1.16 | 1.22 | 1.25 | 1.30 | 1.38 | 1.47 | 1.53 | 1.56 | 1.67 | 1.78 | 1.83 | 1.90 | | |
| COP in W/W | | | | 0.83 | 1.01 | 1.07 | 1.19 | 1.39 | 1.59 | 1.73 | 1.81 | 2.04 | 2.29 | 2.40 | 2.55 | | |

ASHRAE LBP 220V, 60Hz, fan cooling F₂

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|-----|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| 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 | | | | 114 | 171 | 193 | 241 | 325 | 426 | | | | | | | | |
| Power cons. in W | | | | 134 | 164 | 174 | 197 | 233 | 273 | | | | | | | | |
| Current cons. in A | | | | 1.02 | 1.12 | 1.16 | 1.24 | 1.37 | 1.53 | | | | | | | | |
| COP in W/W | | | | 0.85 | 1.04 | 1.11 | 1.22 | 1.39 | 1.56 | | | | | | | | |



| Accessories for | FR8.5G | 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 | 117U6015 |
| Start. capacitor 80 µF | 6.3 mm spade connectors | c | 117U5015 |
| Cover | | b | 103N2010 |
| Cord relief | | d | 103N1010 |
| Protection screen for PTC | | g | 103N0476 |

| Test conditions | EN 12900/CECOMAF | ASHRAE |
|-------------------------|------------------|--------|
| 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 |

Secop accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Secop reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without substantial changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Secop GmbH. All rights reserved. www.secop.com