

PL50F Standard Compressor (HST) R134a 220-240V 50Hz

General

| | |
|-----------------------|-----------------------------|
| Code number | 101G0222 |
| Approvals | EN 60335-2-34 with Annex AA |
| Compressors on pallet | 150 |

Application

| Application | MBP | | |
|--|-----|-----------|----|
| Frequency | Hz | 50 | 60 |
| Evaporating temperature | °C | -25 to 0 | - |
| Voltage range | V | 198 - 254 | - |
| Max. condensing temperature continuous (short) | °C | 60 (70) | - |
| Max. winding temperature continuous (short) | °C | 125 (135) | - |

Cooling requirements

| Frequency | Hz | 50 | | | 60 | | |
|--|----|-----|----------------|-----|-----|-----|-----|
| Application | | LBP | MBP | HBP | LBP | MBP | HBP |
| 32°C | | - | F ₂ | - | - | - | - |
| 38°C | | - | F ₂ | - | - | - | - |
| 43°C | | - | F ₂ | - | - | - | - |
| Remarks on application: HST starting characteristics | | | | | | | |

Motor

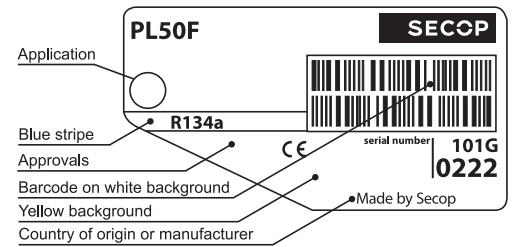
| Motor type | CSIR | | |
|---|------|------|------|
| LRA (rated after 4 sec. UL984), HST LST | A | 4.2 | - |
| Cut in Current, HST LST | A | 4.2 | - |
| Resistance, main start winding (25°C) | Ω | 38.0 | 14.0 |

Design

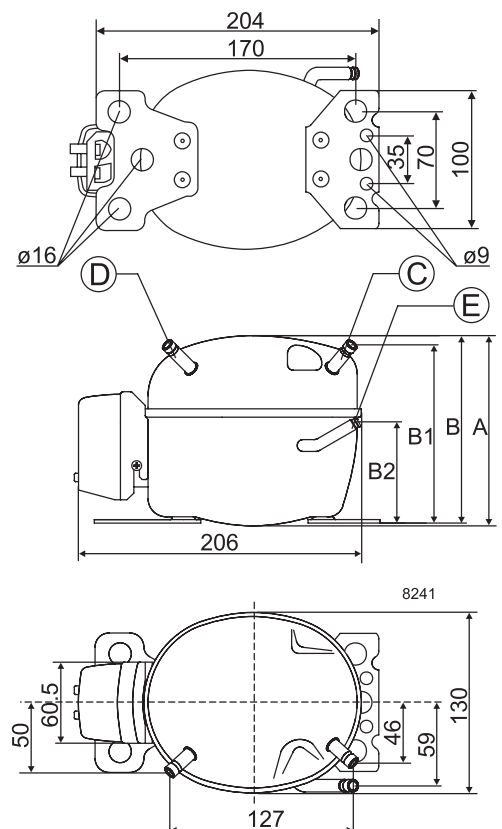
| | | |
|-------------------------------------|-----------------|-------------------|
| Displacement | cm ³ | 2.50 |
| Oil quantity (type) | cm ³ | 150 (polyolester) |
| Maximum refrigerant charge | g | 300 |
| Free gas volume in compressor | cm ³ | 850 |
| Weight without electrical equipment | kg | 4.3 |

Dimensions

| | | | |
|----------------------|--------------------------|----|---------------------------|
| Height | mm | A | 137 |
| | | B | 135 |
| | | B1 | 128 |
| | | B2 | 73 |
| Suction connector | location/I.D. mm angle | C | 6.2 40° |
| | material comment | | Cu-plated steel Al cap |
| Process connector | location/I.D. mm angle | D | 6.2 45° |
| | material comment | | Cu-plated steel Al cap |
| Discharge connector | location/I.D. mm angle | E | 5.0 21° |
| | 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, on 5.0 +0.12/+0.20 |
| 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

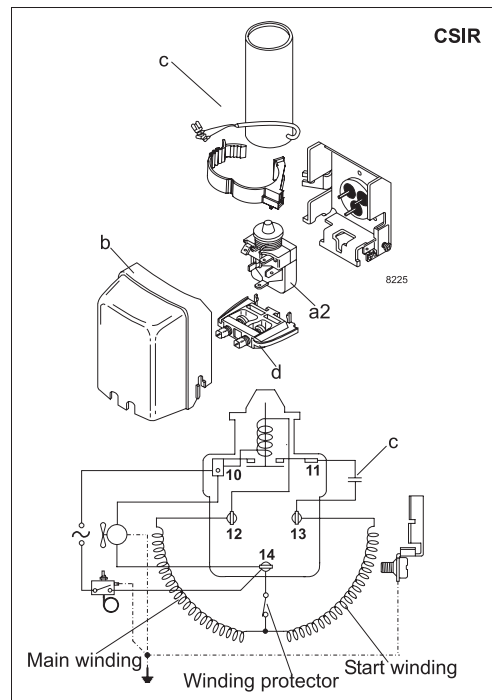


EN 12900 Household (CECOMAF) 220V, 50Hz, fan cooling

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|-----|-----|------|-------|------|------|------|------|------|------|---|-----|----|----|----|
| 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 | | | | | 40.0 | 45.1 | 55.8 | 74.1 | 95.2 | 111 | 120 | 148 | | | | | |
| Power cons. in W | | | | | 58.0 | 60.7 | 66.1 | 74.5 | 83.6 | 90.0 | 93.7 | 105 | | | | | |
| Current cons. in A | | | | | 0.50 | 0.51 | 0.53 | 0.55 | 0.58 | 0.61 | 0.62 | 0.66 | | | | | |
| COP in W/W | | | | | 0.69 | 0.74 | 0.84 | 0.99 | 1.14 | 1.23 | 1.28 | 1.41 | | | | | |

ASHRAE LBP 220V, 50Hz, fan 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 | | | | | 49.3 | 55.6 | 68.9 | 91.5 | 118 | 138 | 148 | 183 | | | | | |
| Power cons. in W | | | | | 58.0 | 60.7 | 66.1 | 74.5 | 83.6 | 90.0 | 93.7 | 105 | | | | | |
| Current cons. in A | | | | | 0.50 | 0.51 | 0.53 | 0.55 | 0.58 | 0.61 | 0.62 | 0.66 | | | | | |
| COP in W/W | | | | | 0.85 | 0.92 | 1.04 | 1.23 | 1.41 | 1.54 | 1.59 | 1.76 | | | | | |



| Accessories for | PL50F (HST) | 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 | 117U6021 |
| Start. capacitor 60 µF | 6.3 mm spade connectors | c | 117U5014 |
| Cover | | b | 103N0491 |
| Cord relief | | d | 103N1010 |

| Test conditions | EN 12900/CECOMAF | ASHRAE |
|-------------------------|------------------|--------|
| Condensing temperature | 55°C | 54.4°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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