

TLS4FT Tropical Compressor R134a 220-240V 50Hz

General

| | |
|-----------------------|---------------|
| Code number | 102G4424 |
| Approvals | EN 60335-2-34 |
| Compressors on pallet | 125 |

Application

| Application | LBP | | |
|--|-----|------------|----|
| Frequency | Hz | 50 | 60 |
| Evaporating temperature | °C | -35 to -10 | - |
| Voltage range | V | 187 - 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 | | S | - | - | - | - | - |
| 38°C | | S | - | - | - | - | - |
| 43°C | | S | - | - | - | - | - |

Remarks on application: In capillary tube systems where non-equalized pressures may occur at compressor start, or in areas with short power supply drop-outs, a starting capacitor can be used for ensuring a successful start (CSIR)

Motor

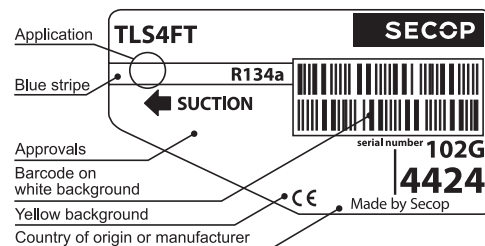
| Motor type | RSIR | | |
|---|------|------|------|
| LRA (rated after 4 sec. UL984), HST LST | A | 5.8 | 4.9 |
| Cut in Current, HST LST | A | 5.8 | 8.7 |
| Resistance, main start winding (25°C) | Ω | 16.0 | 17.0 |

Design

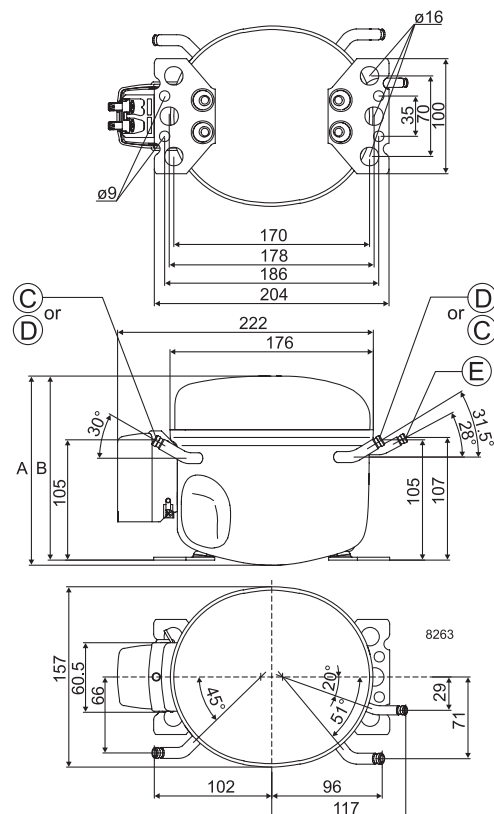
| | | |
|-------------------------------------|-----------------|-------------------|
| Displacement | cm ³ | 3.86 |
| Oil quantity (type) | cm ³ | 180 (polyolester) |
| Maximum refrigerant charge | g | 400 |
| Free gas volume in compressor | cm ³ | 1790 |
| Weight without electrical equipment | kg | 7.5 |

Dimensions

| | | | |
|----------------------|--------------------------|----|---------------------------|
| Height | mm | A | 173 |
| | | B | 169 |
| | | B1 | - |
| | | B2 | - |
| Suction connector | location/I.D. mm angle | C | 6.2 30° |
| | material comment | | Cu-plated steel Al cap |
| Process connector | location/I.D. mm angle | D | 6.2 31.5° |
| | material comment | | Cu-plated steel Al cap |
| Discharge connector | location/I.D. mm angle | E | 5.0 28° |
| | 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, static cooling, PTC consumption incl.

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| 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 | | | 27 | 43 | 63 | 71 | 88 | 117 | 152 | | | | | | | | |
| Power cons. in W | | | 68 | 77 | 87 | 91 | 99 | 110 | 123 | | | | | | | | |
| Current cons. in A | | | 0.78 | 0.79 | 0.82 | 0.82 | 0.84 | 0.87 | 0.91 | | | | | | | | |
| COP in W/W | | | 0.40 | 0.56 | 0.72 | 0.78 | 0.89 | 1.06 | 1.24 | | | | | | | | |

ASHRAE LBP 220V, 50Hz, static cooling, PTC consumption incl.

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| 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 | | | 34 | 53 | 78 | 88 | 108 | 144 | 188 | | | | | | | | |
| Power cons. in W | | | 68 | 77 | 87 | 91 | 99 | 110 | 123 | | | | | | | | |
| Current cons. in A | | | 0.78 | 0.79 | 0.82 | 0.82 | 0.84 | 0.87 | 0.91 | | | | | | | | |
| COP in W/W | | | 0.49 | 0.69 | 0.89 | 0.96 | 1.10 | 1.31 | 1.53 | | | | | | | | |



| Accessories for | TLS4FT | 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 | 117U6004 |
| 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 |
|-------------------------|----------------------|--------|
| Condensing temperature | 55°C | 55°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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