

TFS4.5FT Tropical Compressor R134a 115-127V 60Hz

General

| | |
|-----------------------|----------|
| Code number | 102G3426 |
| Approvals | UL984 |
| Compressors on pallet | 125 |

Application

| Application | LBP/MBP | | | |
|--|---------|----|-----------|--|
| | Hz | 50 | 60 | |
| Frequency | Hz | 50 | 60 | |
| Evaporating temperature | °F | - | -31 to 45 | |
| Voltage range | V | - | 95 - 135 | |
| Max. condensing temperature continuous (short) | °F | - | 140 (158) | |
| Max. winding temperature continuous (short) | °F | - | 257 (257) | |

Cooling requirements

| Frequency | Hz | 50 | | | 60 | | |
|-----------|----|-----|-----|-----|----------------|----------------|-----|
| | | LBP | MBP | HBP | LBP | MBP | HBP |
| 90°F | | - | - | - | F ₁ | F ₁ | - |
| 100°F | | - | - | - | F ₁ | F ₁ | - |
| 110°F | | - | - | - | F ₁ | F ₁ | - |

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

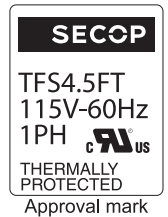
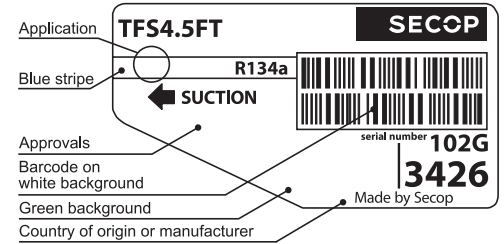
| Motor type | RSIR/CSIR | | |
|---|-----------|-----|------|
| LRA (rated after 4 sec. UL984), HST LST | A | - | 20.1 |
| Cut in Current, HST LST | A | - | 20.1 |
| Resistance, main start winding (77°F) | Ω | 3.3 | 8.8 |

Design

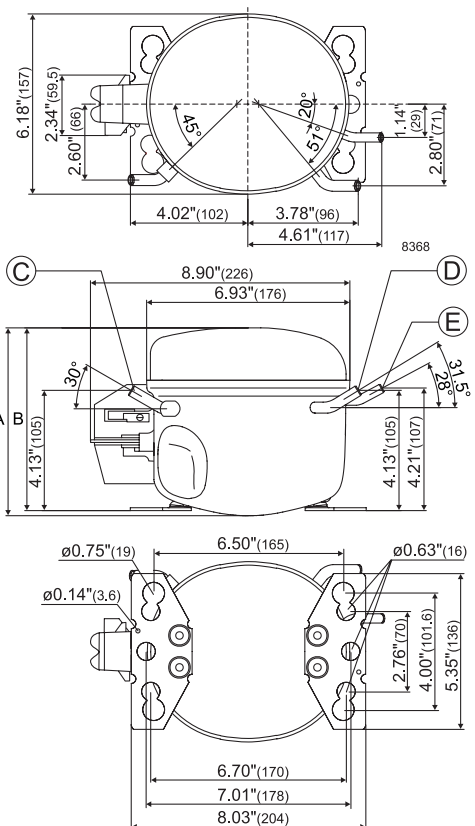
| | | |
|-------------------------------------|--------|-------------------|
| Displacement | cu.in | 0.29 |
| Oil quantity (type) | fl.oz. | 9.5 (polyolester) |
| Maximum refrigerant charge | oz. | 14.0 |
| Free gas volume in compressor | fl.oz. | 57.3 |
| Weight without electrical equipment | lbs. | 14.9 |

Dimensions

| Height | inch | A | 6.81 |
|----------------------|----------------------------|----|----------------------|
| | | B | 6.65 |
| | | B1 | - |
| | | B2 | - |
| Suction connector | location, I.D. in. angle | C | 0.252-0.259 30° |
| | material comment | | Copper Rubber plug |
| Process connector | location, I.D. in. angle | D | 0.252-0.259 31.5° |
| | material comment | | Copper Rubber plug |
| Discharge connector | location, I.D. in. angle | E | 0.202-0.205 28° |
| | 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
- 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



ASHRAE LBP

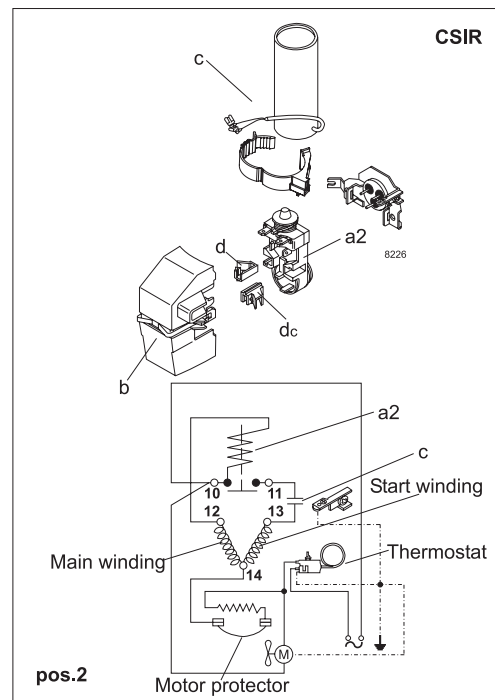
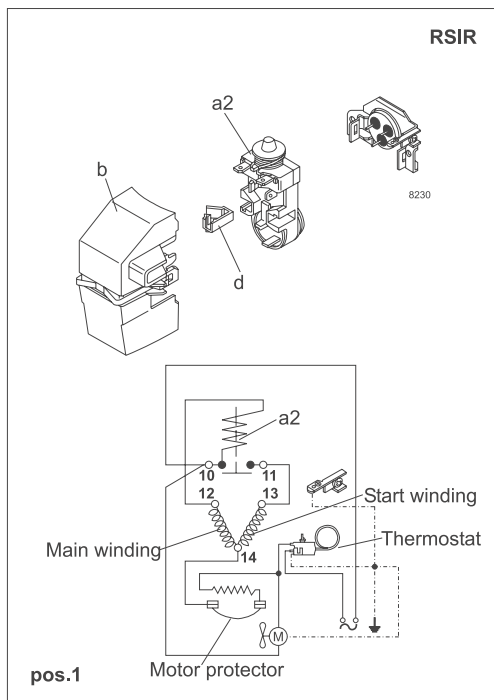
115V, 60Hz, static cooling

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|----|----|----|
| 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 | | | 245 | 340 | 431 | 477 | 654 | 875 | 974 | 1135 | 1445 | 1793 | 1835 | 1987 | | | |
| Power cons. in W | | | 90 | 108 | 121 | 127 | 148 | 172 | 182 | 197 | 225 | 254 | 257 | 270 | | | |
| Current cons. in A | | | 1.88 | 1.94 | 1.99 | 2.02 | 2.12 | 2.25 | 2.31 | 2.41 | 2.60 | 2.83 | 2.86 | 2.96 | | | |
| EER in BTU/Wh | | | 2.72 | 3.16 | 3.56 | 3.75 | 4.40 | 5.09 | 5.36 | 5.76 | 6.43 | 7.06 | 7.14 | 7.37 | | | |

EN 12900 Household (CECOMAF)

115V, 60Hz, static cooling

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|----|----|----|
| Evap. temp. in °F | -49 | -40 | -30 | -20 | -13 | -10 | 0 | 10 | 14 | 20 | 30 | 40 | 41 | 45 | 50 | 59 | 68 |
| Capacity in W | | | 58 | 80 | 102 | 113 | 155 | 208 | 231 | 269 | 343 | 425 | 435 | 471 | | | |
| Power cons. in W | | | 90 | 108 | 121 | 127 | 148 | 172 | 182 | 197 | 225 | 254 | 258 | 270 | | | |
| Current cons. in A | | | 1.88 | 1.94 | 1.99 | 2.02 | 2.12 | 2.25 | 2.31 | 2.41 | 2.60 | 2.83 | 2.86 | 2.96 | | | |
| COP in W/W | | | 0.64 | 0.75 | 0.84 | 0.89 | 1.04 | 1.21 | 1.27 | 1.37 | 1.52 | 1.67 | 1.69 | 1.74 | | | |



| Accessories for TFS4.5FT | Figure | Code number |
|-------------------------------------|---------|-------------|
| Starting relay (protector incl.) | a2 | 117U4113 |
| Protector 3/4 in. Texas Instruments | (pos.1) | MRP39AIL-6 |
| Starting relay (protector incl.) | a2 | 117U4126 |
| Protector 3/4 in. Texas Instruments | (pos.2) | MRP39AIL-6 |
| Start. capacitor 320 µF | c | 117U5022 |
| Cover | b | 117U1021 |
| Cord relief | d | 117U0349 |
| Cord relief capacitor | dc | 117U0349 |

| Test conditions | ASHRAE LBP | EN 12900/CECOMAF |
|--------------------|------------|------------------|
| Condensing temp. | 130°F | 131°F |
| Ambient temp. | 90°F | 90°F |
| Suction gas temp. | 90°F | 90°F |
| Liquid temperature | 90°F | 131°F |

| 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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