

## NF6FK Standard Compressor R134a 115-127V 60Hz

### General

|  |          |
|--|----------|
| Code number (pre-assembled CSIR start equipment) | 105G5645 |
| Approvals  | UL984    |
| Compressors on pallet                            | 80       |

### Application

| Application                                    | Hz | LBP/MBP |           |
|--|----|---------|-----------|
|  |    | 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 (275) |

### Cooling requirements

| Frequency               | Hz | 50  |     |     | 60             |                |     |
|-------------------------|----|-----|-----|-----|----------------|----------------|-----|
|                         |    | LBP | MBP | HBP | LBP            | MBP            | HBP |
| 90°F                    |    | -   | -   | -   | S              | S              | -   |
| 100°F                   |    | -   | -   | -   | S              | S              | -   |
| 110°F                   |    | -   | -   | -   | F <sub>1</sub> | F <sub>1</sub> | -   |
| Remarks on application: |    |     |     |     |                |                |     |

### Motor

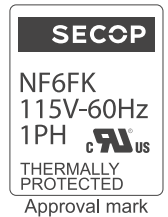
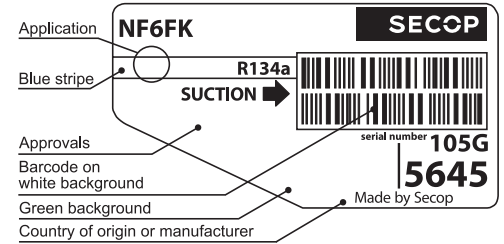
| Motor type                                | CSIR |     |      |
|---|------|-----|------|
| LRA (rated after 4 sec. UL984), HST   LST | A    | -   | 29.4 |
| Cut in Current, HST   LST                 | A    | -   | 29.4 |
| Resistance, main   start winding (77°F)   | Ω    | 2.0 | 9.1  |

### Design

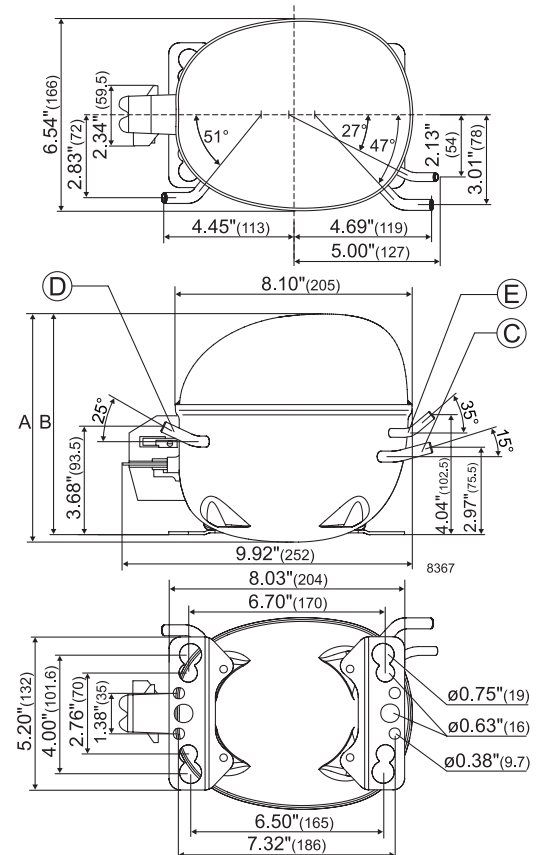
|                                     |        |                    |
|-------------------------------------|--------|--------------------|
| Displacement                        | cu.in  | 0.37               |
| Oil quantity (type)                 | fl.oz. | 10.8 (polyolester) |
| Maximum refrigerant charge          | oz.    | 14.0               |
| Free gas volume in compressor       | fl.oz. | 79.7               |
| Weight without electrical equipment | lbs.   | 23.0               |

### Dimensions

|                      |                            |                    |                      |
|----------------------|----------------------------|--------------------|----------------------|
| Height               | inch                       | A                  | 7.72                 |
|                      |                            | B                  | 7.52                 |
|                      |                            | B1                 | -                    |
|                      |                            | B2                 | -                    |
| Suction connector    | location, I.D. in.   angle | C                  | 0.320-0.327   15°    |
|                      |                            | material   comment | Copper   Rubber plug |
| Process connector    | location, I.D. in.   angle | D                  | 0.252-0.259   25°    |
|                      |                            | material   comment | Copper   Rubber plug |
| Discharge connector  | location, I.D. in.   angle | E                  | 0.252-0.259   35°    |
|                      |                            | 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
- 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



**ASHRAE LBP**

115V, 60Hz, fan cooling F<sub>1</sub>

|                    |     |     |      |      |      |      |      |      |      |      |      |      |      |      |    |    |    |
|--------------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|----|----|----|
| Evap. temp. in °F  | -49 | -40 | -30  | -20  | -13  | -10  | 0    | 10   | 14   | 20   | 30   | 32   | 40   | 45   | 50 | 59 | 68 |
| Capacity in BTU/h  |     |     | 286  | 462  | 602  | 668  | 912  | 1206 | 1344 | 1560 | 1982 | 2081 | 2484 | 2768 |    |    |    |
| Power cons. in W   |     |     | 100  | 138  | 162  | 172  | 204  | 232  | 243  | 259  | 285  | 290  | 310  | 323  |    |    |    |
| Current cons. in A |     |     | 2.33 | 2.49 | 2.60 | 2.65 | 2.82 | 3.00 | 3.08 | 3.19 | 3.39 | 3.43 | 3.59 | 3.69 |    |    |    |
| EER in BTU/Wh      |     |     | 2.87 | 3.35 | 3.71 | 3.87 | 4.48 | 5.19 | 5.53 | 6.01 | 6.95 | 7.17 | 8.00 | 8.57 |    |    |    |

**ASHRAE MBP**

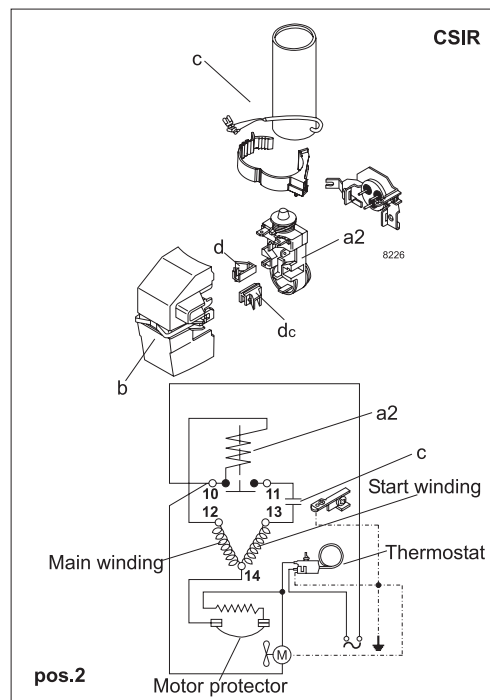
115V, 60Hz, fan cooling F<sub>1</sub>

|                    |     |     |      |      |      |      |      |      |      |      |      |      |      |      |    |    |    |
|--------------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|----|----|----|
| Evap. temp. in °F  | -49 | -40 | -30  | -20  | -13  | -10  | 0    | 10   | 14   | 20   | 30   | 32   | 40   | 45   | 50 | 59 | 68 |
| Capacity in BTU/h  |     |     | 254  | 411  | 535  | 593  | 811  | 1071 | 1194 | 1384 | 1758 | 1849 | 2202 | 2452 |    |    |    |
| Power cons. in W   |     |     | 100  | 138  | 162  | 172  | 204  | 232  | 243  | 259  | 285  | 290  | 310  | 323  |    |    |    |
| Current cons. in A |     |     | 2.33 | 2.49 | 2.60 | 2.65 | 2.82 | 3.00 | 3.08 | 3.19 | 3.39 | 3.43 | 3.59 | 3.69 |    |    |    |
| EER in BTU/Wh      |     |     | 2.55 | 2.98 | 3.30 | 3.44 | 3.98 | 4.61 | 4.91 | 5.34 | 6.16 | 6.38 | 7.09 | 7.59 |    |    |    |

**EN 12900 Household (CECOMAF)**

115V, 60Hz, fan cooling F<sub>1</sub>

|                    |     |     |      |      |      |      |      |      |      |      |      |      |      |      |    |    |    |
|--------------------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|----|----|----|
| Evap. temp. in °F  | -49 | -40 | -30  | -20  | -13  | -10  | 0    | 10   | 14   | 20   | 30   | 32   | 40   | 45   | 50 | 59 | 68 |
| Capacity in W      |     |     | 67   | 109  | 143  | 158  | 216  | 286  | 317  | 369  | 468  | 490  | 586  | 653  |    |    |    |
| Power cons. in W   |     |     | 100  | 138  | 162  | 172  | 204  | 232  | 244  | 259  | 285  | 291  | 310  | 323  |    |    |    |
| Current cons. in A |     |     | 2.33 | 2.49 | 2.60 | 2.65 | 2.82 | 3.00 | 3.08 | 3.19 | 3.39 | 3.44 | 3.59 | 3.69 |    |    |    |
| COP in W/W         |     |     | 0.68 | 0.79 | 0.88 | 0.92 | 1.06 | 1.23 | 1.30 | 1.42 | 1.64 | 1.68 | 1.88 | 2.01 |    |    |    |



| Accessories for           | NF6FK                  | Figure | Code number | Test conditions    | ASHRAE LBP | ASHRAE MBP | EN 12900/CECOMAF |
|---------------------------|------------------------|--------|-------------|--------------------|------------|------------|------------------|
| Starting relay            | 1/4 in. spade connect. | a2     | 117U4132    | Condensing temp.   | 130°F      | 130°F      | 131°F            |
| Protector 3/4 in.         | Texas Instruments      |        | MRT30AEZ-6  | Ambient temp.      | 90°F       | 95°F       | 90°F             |
| Start. capacitor 320 µF   | 1/4 in. spade connect. | c      | 117U5022    | Suction gas temp.  | 90°F       | 95°F       | 90°F             |
| Cord relief for capacitor |                        | dc     | 117U0349    | Liquid temperature | 90°F       | 115°F      | 131°F            |
| Cord relief               |                        | d      | 117U0349    |                    |            |            |                  |
| Cover                     |                        | b      | 117U1021    |                    |            |            |                  |

| 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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