

# NF7FX

## Standard Compressor

### R134a

### 220V 50/60Hz



#### General

|                       |               |
|-----------------------|---------------|
| Code number           | 105G6743      |
| Approvals             | EN 60335-2-34 |
| Compressors on pallet | 80            |

#### Application

| Application                                    | LBP/MBP |           |           |  |
|------------------------------------------------|---------|-----------|-----------|--|
| Frequency                                      | Hz      | 50        | 60        |  |
| Evaporating temperature                        | °F      | -30 to 45 | -30 to 45 |  |
| Voltage range                                  | V       | 198 - 242 | 198 - 242 |  |
| Max. condensing temperature continuous (short) | °F      | 140 (158) | 140 (158) |  |
| Max. winding temperature continuous (short)    | °F      | 257 (275) | 257 (275) |  |

#### Cooling requirements

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

#### Motor

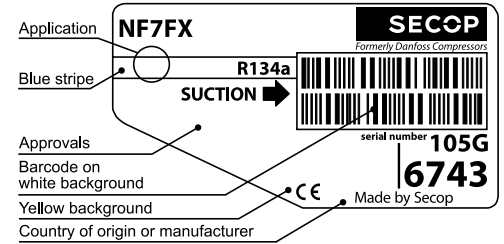
|                                           |      |      |      |
|-------------------------------------------|------|------|------|
| Motor type                                | CSIR |      |      |
| LRA (rated after 4 sec. UL984), HST   LST | A    | 15.8 | —    |
| Cut in Current, HST   LST                 | A    | 15.8 | —    |
| Resistance, main   start winding (77°F)   | Ω    | 5.8  | 12.6 |

#### Design

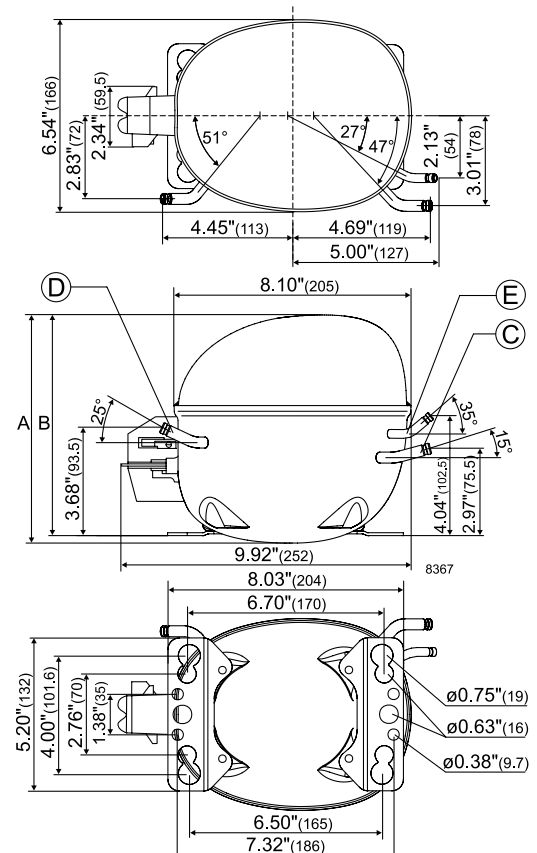
|                                     |        |                    |
|-------------------------------------|--------|--------------------|
| Displacement                        | cu.in  | 0.44               |
| Oil quantity (type)                 | fl.oz. | 10.8 (polyolester) |
| Maximum refrigerant charge          | oz.    | 14.0               |
| Free gas volume in compressor       | fl.oz. | 79.7               |
| Weight without electrical equipment | lbs.   | 23.0               |

#### Dimensions

|                      |                            |    |                     |
|----------------------|----------------------------|----|---------------------|
| Height               | inch                       | A  | 8.00                |
|                      |                            | B  | 7.76                |
|                      |                            | B1 | —                   |
|                      |                            | B2 | —                   |
| Suction connector    | location, I.D. in.   angle | C  | 0.320-0.327   15°   |
|                      | material   comment         |    | Copper   Ruber plug |
| Process connector    | location, I.D. in.   angle | D  | 0.252-0.259   25°   |
|                      | material   comment         |    | Copper   Ruber plug |
| Discharge connector  | location, I.D. in.   angle | E  | 0.252-0.259   35°   |
|                      | material   comment         |    | Copper   Ruber 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**

220V, 50Hz, 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  |     |     | 341  | 496  | 630  | 696  | 943  | 1255 | 1400 | 1630 | 2086 | 2604 | 2670 | 2899 |    |    |    |
| Power cons. in W   |     |     | 134  | 158  | 176  | 184  | 209  | 235  | 247  | 261  | 287  | 314  | 318  | 327  |    |    |    |
| Current cons. in A |     |     | 1.70 | 1.73 | 1.76 | 1.78 | 1.83 | 1.89 | 1.91 | 1.95 | 2.02 | 2.10 | 2.11 | 2.14 |    |    |    |
| EER in BTU/Wh      |     |     | 2.55 | 3.13 | 3.58 | 3.79 | 4.52 | 5.36 | 5.73 | 6.27 | 7.29 | 8.35 | 8.48 | 8.90 |    |    |    |

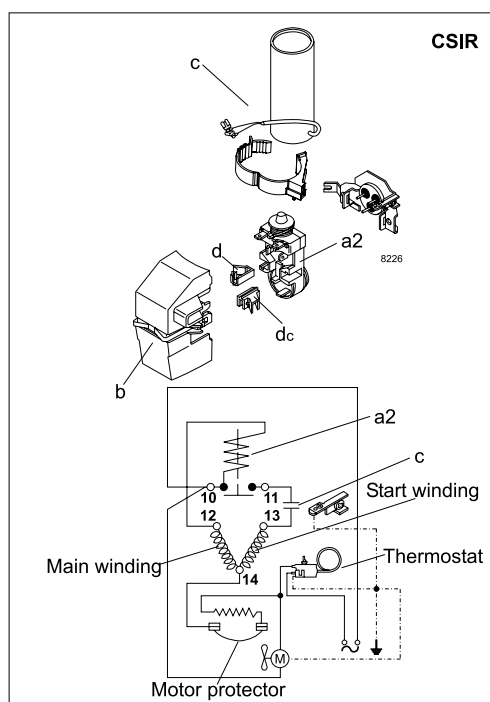
**ASHRAE MBP**

220V, 50Hz, 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  |     |     | 304  | 442  | 562  | 620  | 840  | 1117 | 1250 | 1450 | 1854 | 2312 | 2370 | 2573 |    |    |    |
| Power cons. in W   |     |     | 134  | 158  | 176  | 184  | 209  | 235  | 247  | 261  | 287  | 314  | 318  | 327  |    |    |    |
| Current cons. in A |     |     | 1.70 | 1.73 | 1.76 | 1.78 | 1.83 | 1.89 | 1.91 | 1.95 | 2.02 | 2.10 | 2.11 | 2.14 |    |    |    |
| EER in BTU/Wh      |     |     | 2.27 | 2.80 | 3.19 | 3.37 | 4.02 | 4.76 | 5.08 | 5.56 | 6.46 | 7.36 | 7.46 | 7.87 |    |    |    |

**EN 12900 Household (CECOMAF)** 220V, 50Hz, 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      |     |     | 82   | 119  | 151  | 167  | 226  | 301  | 336  | 390  | 498  | 622  | 638  | 691  |    |    |    |
| Power cons. in W   |     |     | 134  | 158  | 176  | 184  | 209  | 235  | 247  | 261  | 287  | 314  | 318  | 327  |    |    |    |
| Current cons. in A |     |     | 1.70 | 1.73 | 1.76 | 1.78 | 1.83 | 1.89 | 1.91 | 1.95 | 2.02 | 2.10 | 2.11 | 2.14 |    |    |    |
| COP in W/W         |     |     | 0.61 | 0.75 | 0.86 | 0.91 | 1.08 | 1.28 | 1.36 | 1.49 | 1.73 | 1.98 | 2.01 | 2.11 |    |    |    |



| Accessories for         | NF7FX                  | Figure | Code number |
|-------------------------|------------------------|--------|-------------|
| Starting relay          | 1/4 in. spade connect. | a2     | 117U4140    |
| Protector 3/4 in.       | Texas Instruments      |        | MRP56EN-6   |
| Cover                   |                        | b      | 117U1023    |
| Start. capacitor 125 µF | 1/4 in. spade connect. | c      | 117U5018    |
| Cord relief             |                        | d      | 117U0349    |
| Cord relief capacitor   |                        | dc     | 117U0349    |

| Test conditions    | ASHRAE LBP | ASHRAE MBP | EN 12900/CECOMAF |
|--------------------|------------|------------|------------------|
| Condensing temp.   | 130°F      | 130°       | 131°F            |
| Ambient temp.      | 90°F       | 95°        | 90°F             |
| Suction gas temp   | 90°F       | 95°        | 90°F             |
| Liquid temperature | 90°F       | 115°F      | no subcooling    |

| 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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