

# NLE15KTK.2

## Energy-optimized Tropical Compressor

### R600a

### 220-240V 50Hz

#### General

|                       |               |
|-----------------------|---------------|
| Code number           | 105H6966      |
| Approvals             | EN 60335-2-34 |
| Compressors on pallet | 80            |

#### 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: |    |     |     |     |     |     |     |

#### Motor

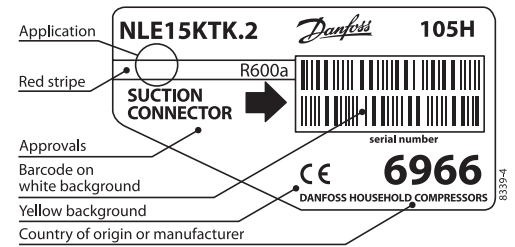
| Motor type                                | RSIR/RSCR |     |      |
|---|-----------|-----|------|
| LRA (rated after 4 sec. UL984), HST   LST | A         | -   | 8.4  |
| Cut in Current, HST   LST                 | A         | -   | 13.1 |
| Resistance, main   start winding (25°C)   | Ω         | 9.0 | 12.0 |

#### Design

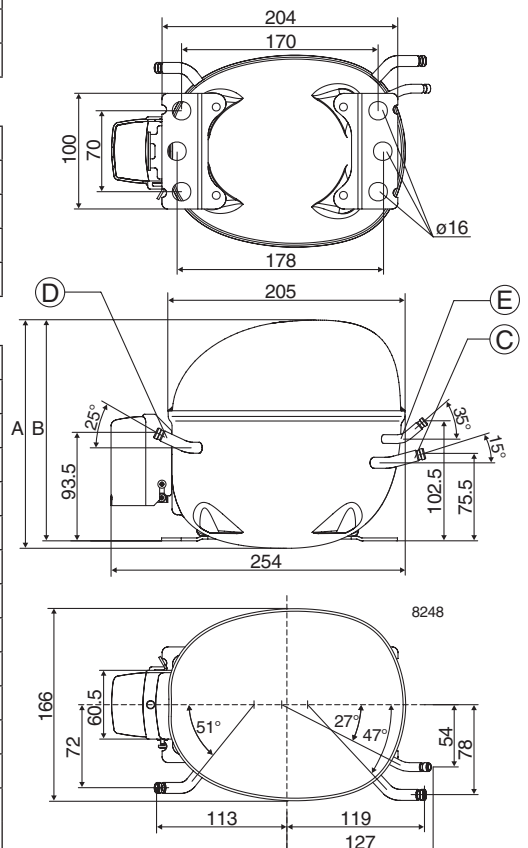
|                                     |                 |               |
|-------------------------------------|-----------------|---------------|
| Displacement                        | cm <sup>3</sup> | 14.65         |
| Oil quantity (type)                 | cm <sup>3</sup> | 320 (mineral) |
| Maximum refrigerant charge          | g               | 150           |
| Free gas volume in compressor       | cm <sup>3</sup> | 2360          |
| Weight without electrical equipment | kg              | 10.8          |

#### Dimensions

|                      |                          |    |                           |
|----------------------|--------------------------|----|---------------------------|
| Height               | mm                       | A  | 203                       |
|                      |                          | B  | 197                       |
|                      |                          | B1 | -                         |
|                      |                          | B2 | -                         |
| Suction connector    | location/I.D. mm   angle | C  | 6.2   15°                 |
|                      | material   comment       |    | Cu-plated steel   Al cap  |
| Process connector    | location/I.D. mm   angle | D  | 6.2   25°                 |
|                      | material   comment       |    | Cu-plated steel   Al cap  |
| Discharge connector  | location/I.D. mm   angle | E  | 5.0   35°                 |
|                      | 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
- 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

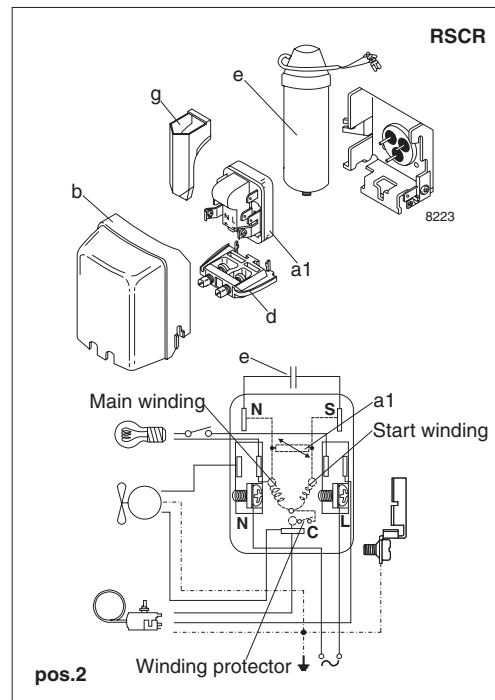
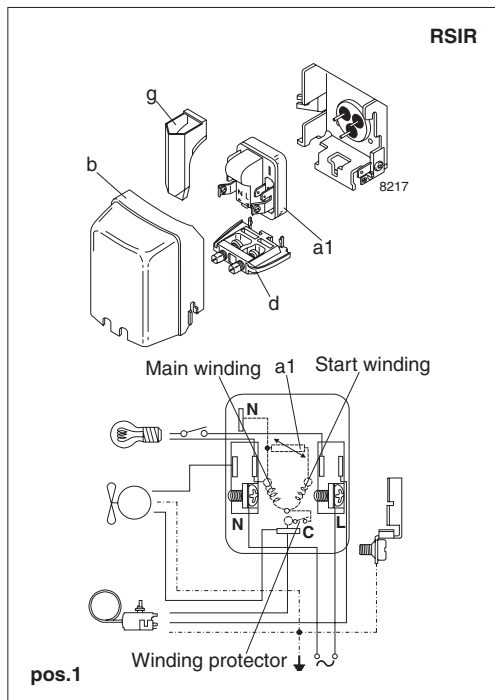


**EN 12900 Household (CECOMAF)** 220V, 50Hz, 2 W PTC consumption incl., static cooling

|                    |     |     |      |      |      |       |      |      |      |      |    |   |   |     |    |    |    |
|--------------------|-----|-----|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| 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      |     |     | 104  | 141  | 186  | 204   | 241  | 308  | 387  |      |    |   |   |     |    |    |    |
| Power cons. in W   |     |     | 116  | 140  | 163  | 171   | 186  | 209  | 234  |      |    |   |   |     |    |    |    |
| Current cons. in A |     |     | 1.04 | 1.14 | 1.24 | 1.28  | 1.35 | 1.46 | 1.58 |      |    |   |   |     |    |    |    |
| COP in W/W         |     |     | 0.89 | 1.00 | 1.14 | 1.19  | 1.30 | 1.47 | 1.65 |      |    |   |   |     |    |    |    |

**ASHRAE LBP** 220V, 50Hz, 2 W PTC consumption incl., static 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      |     |     | 126  | 171  | 227  | 249   | 295  | 376  | 473  |      |    |   |   |     |    |    |    |
| Power cons. in W   |     |     | 116  | 140  | 163  | 170   | 185  | 208  | 233  |      |    |   |   |     |    |    |    |
| Current cons. in A |     |     | 1.04 | 1.14 | 1.24 | 1.28  | 1.35 | 1.46 | 1.57 |      |    |   |   |     |    |    |    |
| COP in W/W         |     |     | 1.09 | 1.22 | 1.40 | 1.46  | 1.59 | 1.80 | 2.03 |      |    |   |   |     |    |    |    |



| Accessories                   | NLE15KTK.2              | Figure        | Code number |
|-------------------------------|-------------------------|---------------|-------------|
| PTC starting device           | 6.3 mm spade connectors | a1<br>(pos.1) | 103N0011    |
|                               | 4.8 mm spade connectors |               | 103N0018    |
| PTC starting device           | 6.3 mm spade connectors | a1<br>(pos.2) | 103N0016    |
|                               | 4.8 mm spade connectors |               | 103N0021    |
| ePTC starting device          | 4.8 mm spade connectors |               | 103N0050    |
| Cover                         |                         | b             | 103N2010    |
| Cord relief                   |                         | d             | 103N1010    |
| Run capacitor 4 µF (optional) | 6.3 mm spade connectors | e             | 117-7117    |
|                               | 4.8 mm spade connectors |               | 117-7119    |
| Protection screen for PTC     |                         | g             | 103N0476    |

| 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 compressor | Ø: 16 mm | 118-1917    |
| Bolt joint in quantities      | Ø: 16 mm | 118-1918    |
| Snap-on in quantities         | Ø: 16 mm | 118-1919    |

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.