

# NLX13KK.1

## High Energy-optimized Compressor

### R600a

### 220-240V 50Hz

#### General

|                       |                             |
|-----------------------|-----------------------------|
| Code number           | 105H6304                    |
| Approvals             | EN 60335-2-34 with Annex AA |
| Compressors on pallet | 80                          |

#### Application

| Application                                    | LBP |            |    |
|--|-----|------------|----|
| Frequency                                      | Hz  | 50         | 60 |
| Evaporating temperature                        | °C  | -35 to -10 | -  |
| Voltage range                                  | V   | 198 - 254  | -  |
| Max. condensing temperature continuous (short) | °C  | 60 (70)    | -  |
| Max. winding temperature continuous (short)    | °C  | 105 (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

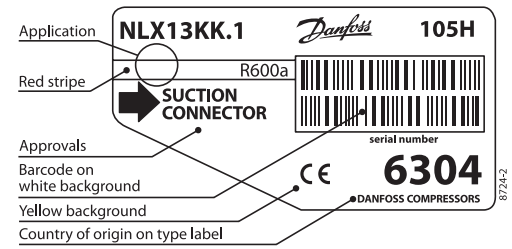
| Motor type                                | RSCR |      |      |
|---|------|------|------|
| LRA (rated after 4 sec. UL984), HST   LST | A    | -    | 4.5  |
| Cut in Current, HST   LST                 | A    | -    | 8.0  |
| Resistance, main   start winding (25°C)   | Ω    | 17.8 | 28.2 |

#### Design

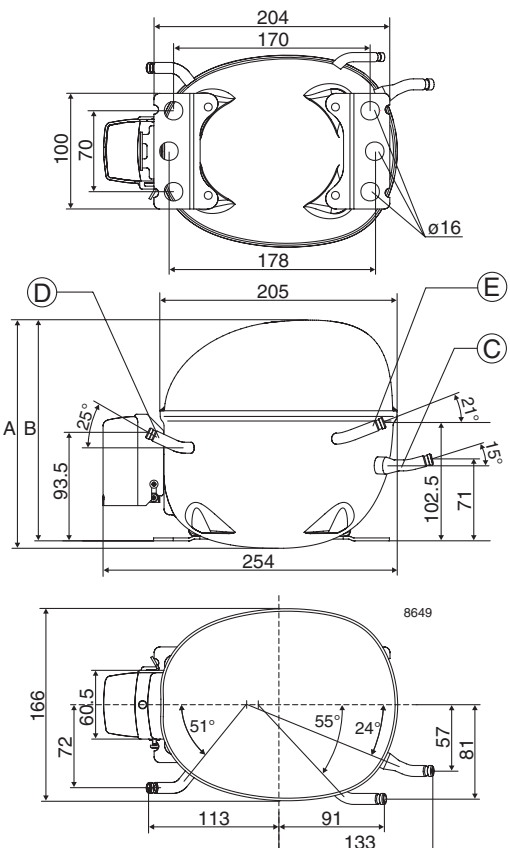
|                                     |                 |               |
|-------------------------------------|-----------------|---------------|
| Displacement                        | cm <sup>3</sup> | 13.25         |
| Oil quantity (type)                 | cm <sup>3</sup> | 270 (mineral) |
| Maximum 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 caps |
| Process connector    | location/I.D. mm   angle | D  | 6.2   25°                 |
|                      | material   comment       |    | Cu-plated steel   Al caps |
| Discharge connector  | location/I.D. mm   angle | E  | 5.0   21°                 |
|                      | material   comment       |    | Cu-plated steel   Al caps |
| 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

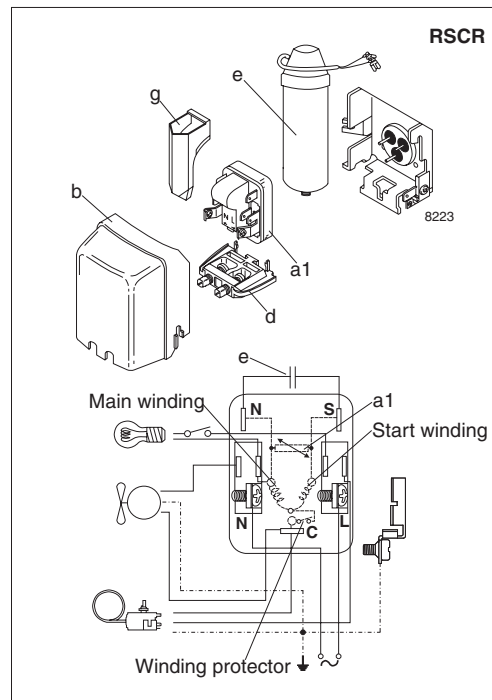


**EN 12900 Household (CECOMAF)** 220V, 50Hz, RC 4µF, 2W PTC consumption incl., static cooling

|                    |     |     |      |      |      |       |      |      |      |      |    |   |   |     |    |    |    |
|--------------------|-----|-----|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| 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      |     |     | 90.8 | 125  | 167  | 183   | 217  | 276  | 345  |      |    |   |   |     |    |    |    |
| Power cons. in W   |     |     | 86.1 | 104  | 122  | 128   | 140  | 159  | 181  |      |    |   |   |     |    |    |    |
| Current cons. in A |     |     | 0.46 | 0.53 | 0.62 | 0.65  | 0.70 | 0.80 | 0.89 |      |    |   |   |     |    |    |    |
| COP in W/W         |     |     | 1.05 | 1.20 | 1.37 | 1.43  | 1.55 | 1.73 | 1.91 |      |    |   |   |     |    |    |    |

**ASHRAE LBP** 220V, 50Hz, RC 4µF, 2W 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      |     |     | 111  | 154  | 204  | 224   | 265  | 337  | 422  |      |    |   |   |     |    |    |    |
| Power cons. in W   |     |     | 86.6 | 104  | 122  | 128   | 140  | 159  | 180  |      |    |   |   |     |    |    |    |
| Current cons. in A |     |     | 0.46 | 0.53 | 0.62 | 0.64  | 0.70 | 0.79 | 0.89 |      |    |   |   |     |    |    |    |
| COP in W/W         |     |     | 1.29 | 1.47 | 1.68 | 1.75  | 1.90 | 2.12 | 2.34 |      |    |   |   |     |    |    |    |



| Accessories for                 | NLX13KK.1               | Figure | Code number |
|---------------------------------|-------------------------|--------|-------------|
| PTC starting device             | 6.3 mm spade connectors | a1     | 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 (compulsory) | 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    |

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