

NL7.3MF

Standard Compressor

R134a

220-240V 50Hz & 208-230V 60Hz

General

| | |
|-----------------------|-------------------------------|
| Code number | 105G6772 |
| Approvals | EN 60335-2-34, UL984/CSA 22.2 |
| Compressors on pallet | 80 |

Application

| Application | MBP | | | |
|--|-----|-----------|------------|--|
| | Hz | 50 | 60 | |
| Frequency | Hz | 50 | 60 | |
| Evaporating temperature | °C | -20 to 10 | -25 to 7.2 | |
| Voltage range | V | 187 - 254 | 198 - 254 | |
| Max. condensing temperature continuous (short) | °C | 60 (70) | 60 (70) | |
| Max. winding temperature continuous (short) | °C | 125 (135) | 125 (135) | |

Cooling requirements at max. ambient temperature

| Frequency | Hz | 50 | | | 60 | | |
|-----------|----|-----|----------------|-----|-----|----------------|-----|
| | | LBP | MBP | HBP | LBP | MBP | HBP |
| 32°C | | - | F ₁ | - | - | F ₁ | - |
| 38°C | | - | F ₁ | - | - | F ₁ | - |
| 43°C | | - | F ₁ | - | - | F ₁ | - |

Remarks on application: F₂ for 230-240V 50Hz nominal below -12°C evaporating temperature
CSIR strongly recommended for 60Hz

Motor

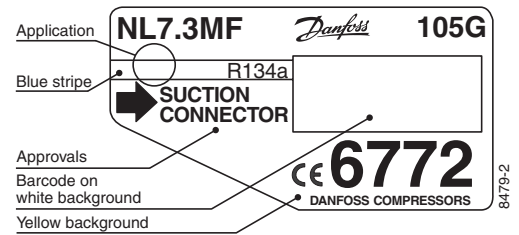
| Motor type | RSIR/CSIR | | |
|---|-----------|------|------|
| LRA (rated after 4 sec. UL984), HST LST | A | 11.3 | 8.8 |
| Cut in Current, HST LST | A | 11.3 | 12.9 |
| Resistance, main start winding (25°C) | Ω | 8.3 | 17.0 |

Design

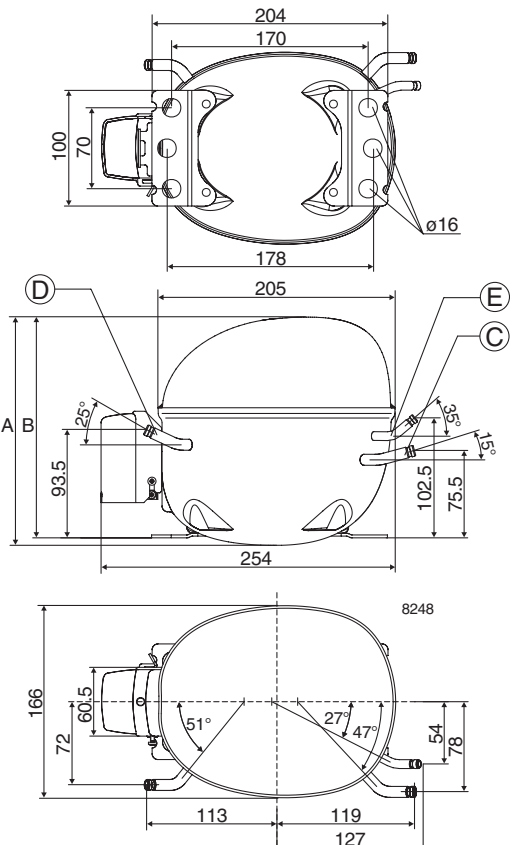
| | | |
|-------------------------------------|-----------------|-------------------|
| Displacement | cm ³ | 7.27 |
| Oil quantity (type) | cm ³ | 320 (polyolester) |
| Maximum refrigerant charge | g | 600 |
| Free gas volume in compressor | cm ³ | 2360 |
| Weight without electrical equipment | kg | 10.5 |

Dimensions

| | | |
|----------------------|--------------------------|---------------------------|
| Height | A | 197 |
| | B | 191 |
| | B1 | - |
| | B2 | - |
| Suction connector | location/I.D. mm angle | C 8.2 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 6.2 35° |
| | 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 |
| 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



EN 12900 Household (CECOMAF) 220V, 50Hz, fan cooling F₁

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|-----|-----|-----|-------|------|------|------|------|------|------|------|------|------|----|----|
| 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 | | | | | | | 179 | 236 | 304 | 356 | 385 | 480 | 591 | 645 | 719 | | |
| Power cons. in W | | | | | | | 181 | 204 | 227 | 242 | 250 | 274 | 298 | 310 | 325 | | |
| Current cons. in A | | | | | | | 1.57 | 1.61 | 1.67 | 1.71 | 1.74 | 1.82 | 1.91 | 1.96 | 2.02 | | |
| COP in W/W | | | | | | | 0.99 | 1.16 | 1.34 | 1.47 | 1.54 | 1.75 | 1.98 | 2.08 | 2.21 | | |

EN 12900 Household (CECOMAF) 220V, 60Hz, fan cooling F₁, preliminary data

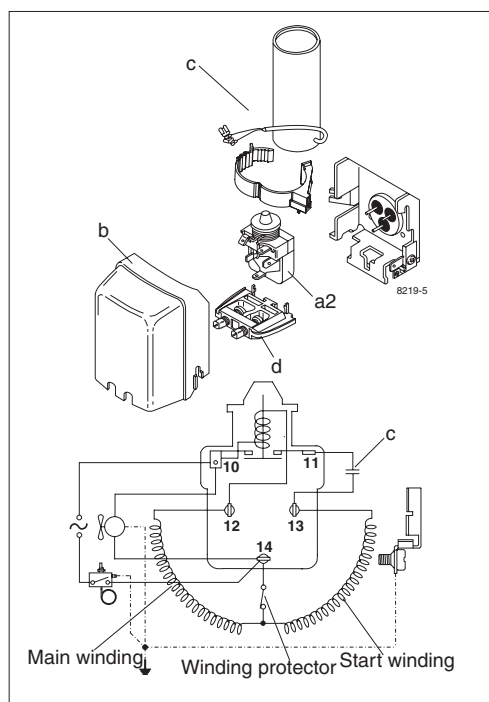
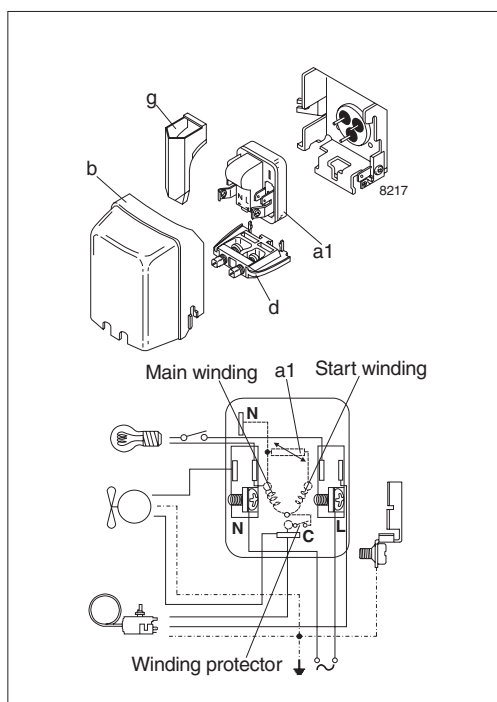
| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|-----|-----|-----|-------|-----|-----|------|------|----|------|---|------|----|----|----|
| Evap. temp. in °C | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15 | -10 | -6.7 | -5 | 0 | 5 | 7.2 | 10 | 15 | 20 |
| Capacity in W | | | | | | | | | 370 | 423 | | 585 | | 769 | | | |
| Power cons. in W | | | | | | | | | 277 | 298 | | 356 | | 420 | | | |
| Current cons. in A | | | | | | | | | 1.60 | 1.73 | | 1.95 | | 2.22 | | | |
| COP in W/W | | | | | | | | | 1.34 | 1.42 | | 1.64 | | 1.83 | | | |

ASHRAE MBP 220V, 50Hz, fan cooling F₁

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|-----|-----|-----|-------|------|------|------|------|------|------|------|------|------|----|----|
| 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 | | | | | | | 197 | 260 | 335 | 392 | 424 | 528 | 651 | 710 | 792 | | |
| Power cons. in W | | | | | | | 181 | 204 | 226 | 241 | 249 | 273 | 297 | 308 | 323 | | |
| Current cons. in A | | | | | | | 1.57 | 1.61 | 1.67 | 1.71 | 1.74 | 1.82 | 1.91 | 1.95 | 2.02 | | |
| COP in W/W | | | | | | | 1.09 | 1.28 | 1.48 | 1.62 | 1.70 | 1.94 | 2.19 | 2.30 | 2.45 | | |

ASHRAE MBP 220V, 60Hz, fan cooling F₁, preliminary data

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|-----|-----|-----|-------|-----|-----|-----|------|----|---|---|------|----|----|----|
| 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 | | | | | | | | | | 466 | | | | 845 | | | |
| Power cons. in W | | | | | | | | | | 297 | | | | 420 | | | |
| Current cons. in A | | | | | | | | | | 1.73 | | | | 2.22 | | | |
| COP in W/W | | | | | | | | | | 1.57 | | | | 2.01 | | | |



| Accessories for | NL7.3MF | Figure | Code number |
|---------------------------|-------------------------|--------|-------------|
| PTC starting device | 6.3 mm spade connectors | a1 | 103N0011 |
| | 4.8 mm spade connectors | | 103N0018 |
| Starting relay | 6.3 mm spade connectors | a2 | 117U6016 |
| Cover (UL-approved) | | b | 103N2011 |
| Start. capacitor 80 µF | 6.3 mm spade connectors | c | 117U5015 |
| Cord relief | | d | 103N1010 |
| Protection screen for PTC | | g | 103N0476 |

| Test conditions | EN 12900/CECOMAF | ASHRAE |
|-------------------------|------------------|--------|
| Condensing temperature | 55°C | 54.4°C |
| Ambient temperature | 32°C | 35°C |
| Suction gas temperature | 32°C | 35°C |
| Liquid temperature | no subcooling | 46.1°C |

| Mounting accessories | Code number |
|-------------------------------|-------------|
| Bolt joint for one compressor | 118-1917 |
| Bolt joint in quantities | 118-1918 |
| Snap-on in quantities | 118-1919 |

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