

Datasheets

NLE11CNL Energy-optimized LBP R290 220-240V 50Hz

General

| | |
|-----------------------|---------------------------|
| Code number | 105H6174 |
| Approvals | EN 60335-2-34 w. Annex AA |
| Compressors on pallet | 80 |

Application

| Application | LBP | | |
|--|-----|------------|----|
| Frequency | Hz | 50 | 60 |
| Evaporating temperature | °C | -35 to -10 | - |
| Voltage range | V | 198 to 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 | | F ₂ | - | - | - | - | - |
| 38°C | | F ₂ | - | - | - | - | - |
| 43°C | | F ₂ | - | - | - | - | - |
| Remarks on application: | | | | | | | |

Motor

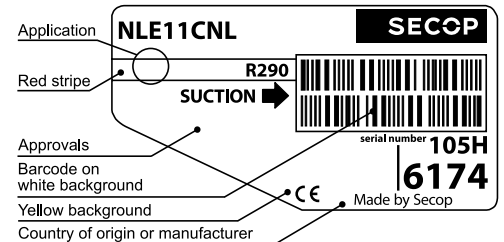
| Motor type | CSIR/RSIR | | |
|---|-----------|------|------|
| LRA (rated after 4 sec. UL984), HST LST | A | 13.8 | 12.6 |
| Cut in Current, HST LST | A | 13.8 | 17.1 |
| Resistance, main start winding (25°C) | Ω | 8.0 | 18.0 |

Design

| | | |
|-------------------------------------|-----------------|-------------------|
| Displacement | cm ³ | 11.15 |
| Oil quantity (type) | cm ³ | 320 (polyolester) |
| Maximum refrigerant charge | g | 150 |
| Free gas volume in compressor | cm ³ | 2360 |
| Weight without electrical equipment | kg | 12.1 |

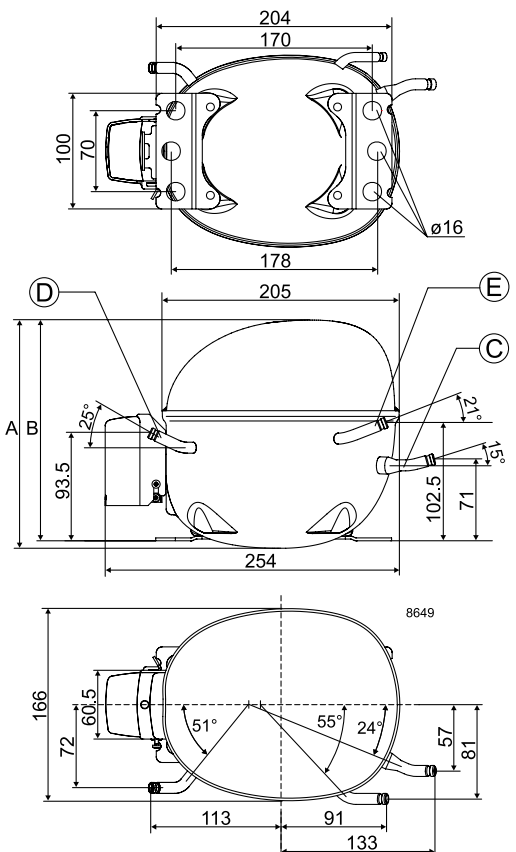
Dimensions

| | | | |
|----------------------|--------------------------|----|--------------------------|
| Height | mm | A | 203 |
| | | B | 197 |
| | | B1 | - |
| | | B2 | - |
| Suction connector | location/I.D. mm angle | C | 8.2 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 | 6.2 21° |
| | 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 |
| Remarks: | | | |



Yellow warning label

- 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 LBP 220V, 50Hz, fan cooling F₂

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| 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 | | | 309 | 398 | 505 | 545 | 630 | 774 | 938 | | | | | | | | |
| Power cons. in W | | | 270 | 302 | 335 | 347 | 369 | 404 | 437 | | | | | | | | |
| Current cons. in A | | | 1.95 | 2.02 | 2.12 | 2.15 | 2.22 | 2.33 | 2.45 | | | | | | | | |
| COP in W/W | | | 1.15 | 1.32 | 1.50 | 1.57 | 1.71 | 1.92 | 2.14 | | | | | | | | |

EN 12900 MBP 220V, 50Hz, fan cooling F₂

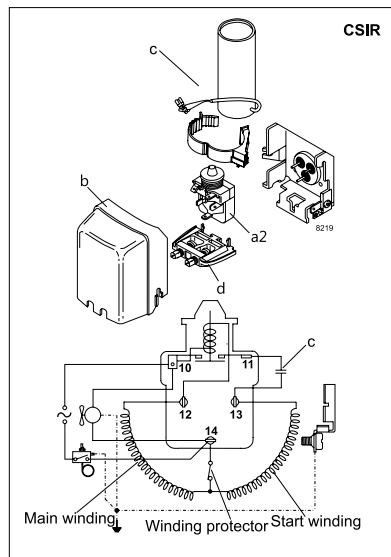
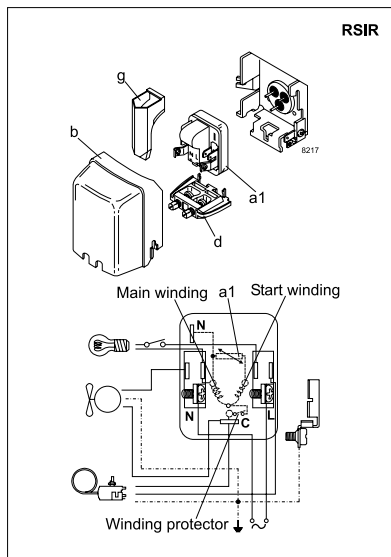
| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| Evap. temp. in °C | -45 | -40 | -35 | -30 | -25 | -23.3 | -20 | -15 | -10 | -6.7 | -5 | 0 | 5 | 7.2 | 10 | 15 | 20 |
| Capacity in W | | | 285 | 367 | 466 | 504 | 583 | 718 | 872 | | | | | | | | |
| Power cons. in W | | | 274 | 308 | 344 | 356 | 381 | 420 | 458 | | | | | | | | |
| Current cons. in A | | | 1.96 | 2.04 | 2.14 | 2.18 | 2.25 | 2.38 | 2.52 | | | | | | | | |
| COP in W/W | | | 1.04 | 1.19 | 1.36 | 1.41 | 1.53 | 1.71 | 1.90 | | | | | | | | |

ASHRAE LBP 220V, 50Hz, fan cooling F₂

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| 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 | | | 300 | 390 | 499 | 540 | 628 | 778 | 950 | | | | | | | | |
| Power cons. in W | | | 267 | 303 | 342 | 356 | 383 | 427 | 472 | | | | | | | | |
| Current cons. in A | | | 1.97 | 2.06 | 2.18 | 2.22 | 2.32 | 2.48 | 2.65 | | | | | | | | |
| COP in W/W | | | 1.12 | 1.29 | 1.46 | 1.52 | 1.64 | 1.82 | 2.01 | | | | | | | | |

ASHRAE MBP/HBP 220V, 50Hz, fan cooling F₂

| | | | | | | | | | | | | | | | | | |
|--------------------|-----|-----|------|------|------|-------|------|------|------|------|----|---|---|-----|----|----|----|
| 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 | | | 271 | 352 | 450 | 488 | 567 | 702 | 857 | | | | | | | | |
| Power cons. in W | | | 267 | 303 | 342 | 356 | 383 | 427 | 472 | | | | | | | | |
| Current cons. in A | | | 1.97 | 2.06 | 2.18 | 2.22 | 2.32 | 2.48 | 2.65 | | | | | | | | |
| COP in W/W | | | 1.01 | 1.16 | 1.32 | 1.37 | 1.48 | 1.65 | 1.82 | | | | | | | | |



| Accessories for | NLE11CNL | Figure | Code number |
|---------------------------|-------------------------|--------|-------------|
| PTC starting device | 6.3 mm spade connectors | a1 | - |
| | 4.8 mm spade connectors | | - |
| ePTC starting device | 4.8 mm spade connectors | | 103N0050 |
| Starting relay | 6.3 mm spade connectors | a2 | 117U7003 |
| Start. capacitor 80 µF | 6.3 mm spade connectors | c | 117U5015 |
| Cover | | b | 103N2010 |
| Cord relief | | d | 103N1010 |
| Protection screen for PTC | | g | - |

| Test conditions | EN 12900 | | ASHRAE | |
|-------------------------|---------------|------|--------|--------|
| | LBP | MBP | LBP | MBP |
| Condensing temperature | 40°C | 45°C | 54.4°C | 54.4°C |
| Ambient temperature | 32°C | 32°C | 32.2°C | 35°C |
| Suction gas temperature | 20°C | 20°C | 32.2°C | 35°C |
| Liquid temperature | no subcooling | | 32.2°C | 46.1°C |

| Mounting accessories | Code number | |
|--------------------------|-------------|----------|
| Bolt joint for one comp. | 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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