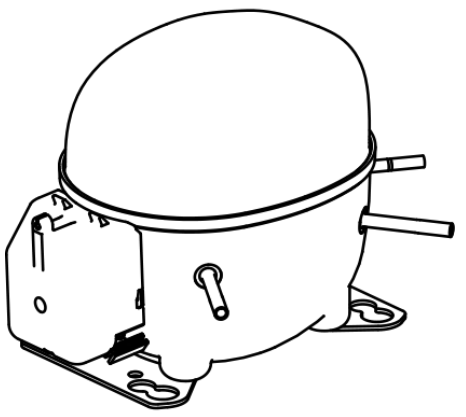
# COMPRESSOR TECHNICAL DATA

## NEK6187Z



**ENGINEERING CODE**
268AA51

**REFRIGERANT**
R-134a

**POWER SUPPLY**
220-240 V 50 Hz

**APPLICATION**
HBP

**MOTOR TYPE**
CSIR

**STANDARD**
EN12900

**COOLING CAPACITY**
851 W

**EFFICIENCY**
2.22 W/W

## DATA

### GENERAL DATA

| | |
|---|---|
| **Model** | NEK6187Z |
| **Type** | Hermetic Reciprocating |
| **Technology** | ON/OFF |
| **Compressor Application** | HBP |
| **Expansion Device** | Capillary Tube or Expansion Valve |
| **Compressor Cooling** | Fan/220 |
| **HP** | 1/3 |
| **Starting Torque** | HST |
| **Plant** | SLOVAKIA |

### ELECTRICAL DATA

| | |
|---|---|
| **Start Winding Resistance** | 28.84 Ω at 25°C |
| **Run Winding Resistance** | 6.67 Ω at 25°C |

## MECHANICAL DATA

| | |
|---|---|
| **Displacement** | 9.99 $cm^3$ |
| **Oil Charge** | 350 ml |
| **Oil Type** | ESTER |
| **Oil Viscosity** | ISO22 |
| **Weight** | 10.5 Kg |

## ELECTRICAL COMPONENTS

| | |
|---|---|
| **Start Capacitor** | 53-64 µf/330 V |
| **CSR CSIR BOX** | No |
| **Starting Device Type** | RELAY |
| **Starting Device Description** | MTRP-0029* |
| **Overload Protection** | T0168/G6 |

## EXTERNAL CHARACTERISTICS

| | |
|---|---|
| **Base Plate** | SMALL |
| **Tray Holder** | NO |

| Connector | Internal Diameter | Shape | Material |
|---|---|---|---|
| **Suction** | 8.1 mm | SLANTED 42° | COPPER |
| **Discharge** | 6.1 mm | STRAIGHT | COPPER |
| **Process** | 6.1 mm | SLANTED 42° | COPPER |

# PERFORMANCE

## TESTED CONDITIONS

| | |
|---|---|
| **Tested Refrigerant** | R-134a |
| **Tested Application** | HBP |
| **Tested Standard** | EN12900 |
| **Tested Cooling** | Fan |
| **Tested Voltage** | 220 V |
| **Tested Frequency** | 50 Hz |
| **Refrigerant Temperature** | Dew |

## RATED POINTS

| Condensing Temperature °C | Evaporating Temperature °C | Cooling Capacity W | Efficiency W/W | Power Consumption W | Current A | Gas Flow Rate kg/h |
|---|---|---|---|---|---|---|
| 50 | 5 | 851 | 2.22 | 383 | - | 21.35 |

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data are an indication of performance based simulation.

## PERFORMANCE CURVE

Condensing Temperature 35°C

| Evaporating Temperature °C | Cooling Capacity W | Efficiency W/W | Power Consumption W | Current A | Gas Flow Rate kg/h |
|---|---|---|---|---|---|
| -15 | 436 | 1.87 | 233 | - | 9.23 |
| -10 | 551 | 2.16 | 255 | - | 11.72 |
| -5 | 688 | 2.46 | 280 | - | 14.70 |
| 0 | 850 | 2.81 | 303 | - | 18.27 |
| 5 | 1040 | 3.25 | 320 | - | 22.54 |
| 10 | 1263 | 3.84 | 329 | - | 27.61 |

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data are an indication of performance based simulation.

## PERFORMANCE CURVE

Condensing Temperature 45°C

| Evaporating Temperature °C | Cooling Capacity W | Efficiency W/W | Power Consumption W | Current A | Gas Flow Rate kg/h |
|---|---|---|---|---|---|
| -15 | 374 | 1.47 | 254 | - | 8.67 |
| -10 | 476 | 1.72 | 277 | - | 11.11 |
| -5 | 599 | 1.95 | 307 | - | 14.04 |
| 0 | 744 | 2.20 | 339 | - | 17.56 |
| 5 | 915 | 2.48 | 369 | - | 21.78 |
| 10 | 1115 | 2.83 | 394 | - | 26.80 |

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data are an indication of performance based simulation.

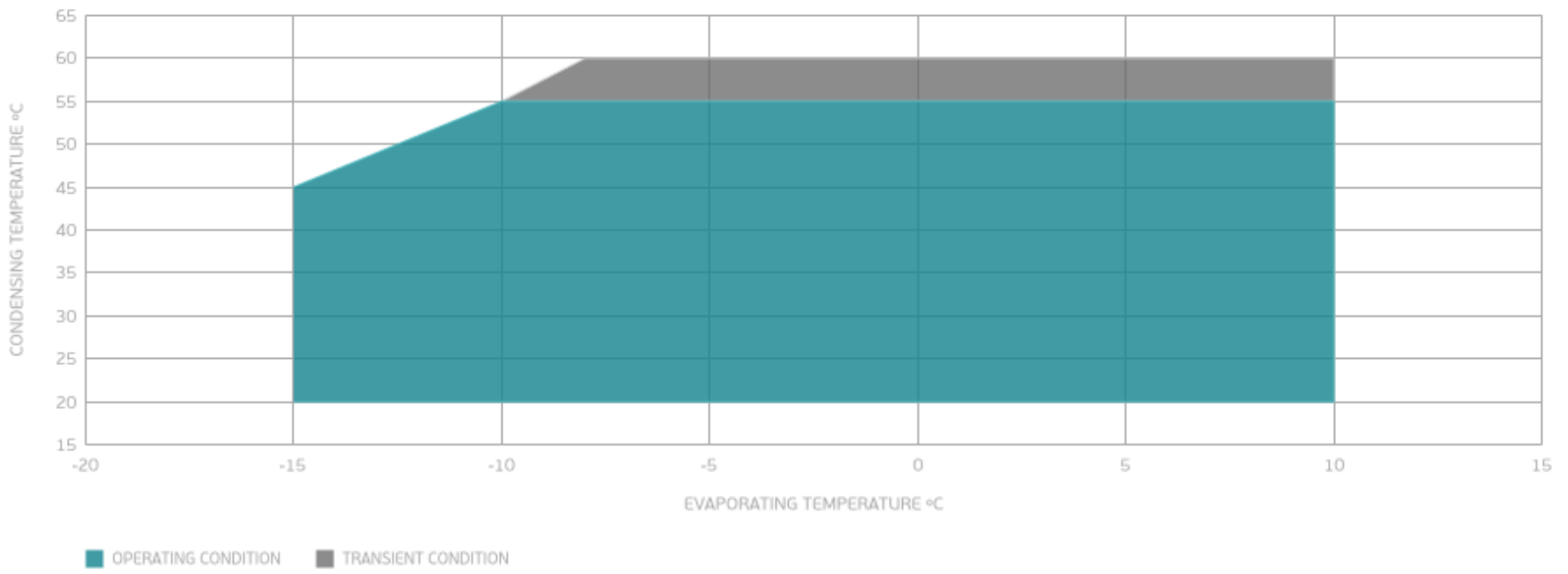
## PERFORMANCE CURVE

Condensing Temperature 55°C

| Evaporating Temperature °C | Cooling Capacity W | Efficiency W/W | Power Consumption W | Current A | Gas Flow Rate kg/h |
|---|---|---|---|---|---|
| -10 | 401 | 1.41 | 285 | - | 10.40 |
| -5 | 508 | 1.61 | 315 | - | 13.26 |
| 0 | 636 | 1.81 | 351 | - | 16.72 |
| 5 | 786 | 2.01 | 390 | - | 20.87 |
| 10 | 963 | 2.25 | 428 | - | 25.83 |

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data are an indication of performance based simulation.

## ENVELOPE




## EXTERNAL DIMENSIONS