

NEK6165U



**ENGINEERING CODE**  
861EA51



**REFRIGERANT**  
R-290



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



**APPLICATION**  
HBP



**MOTOR TYPE**  
CSIR



**STANDARD**  
EN12900



**COOLING CAPACITY**  
744 W



**EFFICIENCY**  
2.27 W/W



DATA

GENERAL DATA

|                        |                                   |
|------------------------|-----------------------------------|
| Model                  | NEK6165U                          |
| 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 | 28.2 Ω at 25°C |
| Run Winding Resistance   | 6.1 Ω at 25°C  |

## MECHANICAL DATA

|               |                     |
|---------------|---------------------|
| Displacement  | 6.2 cm <sup>3</sup> |
| Oil Charge    | 350 ml              |
| Oil Type      | ESTER               |
| Oil Viscosity | ISO22               |
| Weight        | 10.4 Kg             |

## ELECTRICAL COMPONENTS

|                             |                |
|-----------------------------|----------------|
| Start Capacitor             | 43-53 µf/330 V |
| CSR CSIR BOX                | No             |
| Starting Device Type        | RELAY          |
| Starting Device Description | MTRP-0029*     |
| Overload Protection         | T0186/G6       |

## PERFORMANCE

### TESTED CONDITIONS

|                         |         |
|-------------------------|---------|
| Tested Refrigerant      | R-290   |
| Tested Application      | HBP     |
| Tested Standard         | EN12900 |
| Tested Cooling          | Fan     |
| Tested Voltage          | 220 V   |
| 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                          | 744                | 2.27           | 328                 | -         | 9.9                |

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                        | 433                | 1.89           | 228                 | -         | 4.82               |
| -10                        | 528                | 2.19           | 242                 | -         | 5.92               |
| -5                         | 638                | 2.50           | 255                 | -         | 7.19               |
| 0                          | 765                | 2.87           | 267                 | -         | 8.69               |
| 5                          | 910                | 3.34           | 273                 | -         | 10.42              |
| 10                         | 1074               | 3.98           | 270                 | -         | 12.42              |

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                        | 376                | 1.48           | 253                 | -         | 4.60               |
| -10                        | 459                | 1.73           | 266                 | -         | 5.65               |
| -5                         | 557                | 1.97           | 283                 | -         | 6.90               |
| 0                          | 670                | 2.23           | 300                 | -         | 8.37               |
| 5                          | 799                | 2.54           | 315                 | -         | 10.08              |
| 10                         | 946                | 2.92           | 324                 | -         | 12.07              |

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                        | 394                | 1.41           | 280                 | -         | 5.41               |
| -5                         | 478                | 1.61           | 296                 | -         | 6.62               |
| 0                          | 575                | 1.82           | 316                 | -         | 8.04               |
| 5                          | 688                | 2.05           | 336                 | -         | 9.72               |
| 10                         | 817                | 2.31           | 354                 | -         | 11.68              |

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

## ENVELOPE



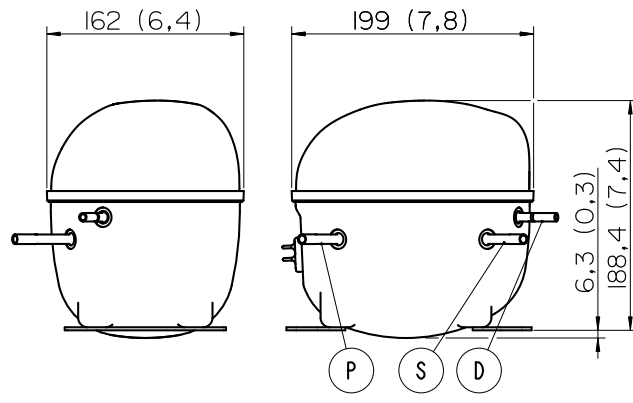
## External

### EXTERNAL CHARACTERISTICS

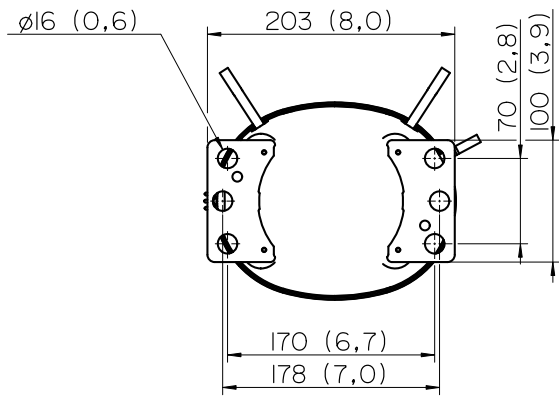
| Base Plate  |                   | SMALL       |          |
|-------------|-------------------|-------------|----------|
| Tray Holder |                   | NO          |          |
| Connector   | Internal Diameter | Shape       | Material |
| Suction     | 8.1 mm            | SLANTED 42° | COPPER   |
| Discharge   | 6.1 mm            | STRAIGHT    | COPPER   |
| Process     | 6.1 mm            | SLANTED 42° | COPPER   |

## EXTERNAL DIMENSIONS

### SHELL



### BASE



### FENCE

