

NEK6213U



**ENGINEERING CODE**  
863CA41



**REFRIGERANT**  
R-290



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



**APPLICATION**  
MBP



**MOTOR TYPE**  
CSIR



**STANDARD**  
EN12900



**COOLING CAPACITY**  
810 W



**EFFICIENCY**  
1.62 W/W



DATA

GENERAL DATA

|                        |                                   |
|------------------------|-----------------------------------|
| Model                  | NEK6213U                          |
| Type                   | Hermetic Reciprocating            |
| Technology             | ON/OFF                            |
| Compressor Application | MBP                               |
| Expansion Device       | Capillary Tube or Expansion Valve |
| Compressor Cooling     | Fan/220                           |
| HP                     | 1/2                               |
| Starting Torque        | HST                               |
| Plant                  | SLOVAKIA                          |

ELECTRICAL DATA

|                                  |                 |
|----------------------------------|-----------------|
| Start Winding Resistance         | 20.88 Ω at 25°C |
| Run Winding Resistance           | 3.93 Ω at 25°C  |
| Locked Rotor Amperage (LRA) 50Hz | 19.3 A          |

## MECHANICAL DATA

|               |                       |
|---------------|-----------------------|
| Displacement  | 12.11 cm <sup>3</sup> |
| Oil Charge    | 350 ml                |
| Oil Type      | AB                    |
| Oil Viscosity | ISO32                 |
| Weight        | 11.1 Kg               |

## ELECTRICAL COMPONENTS

|                             |                |
|-----------------------------|----------------|
| Start Capacitor             | 53-64 µf/330 V |
| CSR CSIR BOX                | No             |
| Starting Device Type        | RELAY          |
| Starting Device Description | MTRP-0050*     |
| Overload Protection         | T0743/G6       |

## PERFORMANCE

### TESTED CONDITIONS

|                         |         |
|-------------------------|---------|
| Tested Refrigerant      | R-290   |
| Tested Application      | MBP     |
| 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 |
|---------------------------|----------------------------|--------------------|----------------|---------------------|-----------|--------------------|
| 45                        | -10                        | 810                | 1.62           | 501                 | 3.6       | 9.97               |

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

### 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 |
|----------------------------|--------------------|----------------|---------------------|-----------|--------------------|
| -20                        | 618                | 1.58           | 392                 | 3.31      | 6.85               |
| -15                        | 765                | 1.82           | 421                 | 3.40      | 8.53               |
| -10                        | 941                | 2.07           | 454                 | 3.49      | 10.54              |
| -5                         | 1147               | 2.37           | 485                 | 3.57      | 12.92              |
| 0                          | 1384               | 2.72           | 509                 | 3.66      | 15.71              |
| 5                          | 1654               | 3.17           | 521                 | 3.74      | 18.94              |
| 10                         | 1957               | 3.79           | 517                 | 3.82      | 22.65              |

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

## 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 |
|----------------------------|--------------------|----------------|---------------------|-----------|--------------------|
| -20                        | 531                | 1.22           | 434                 | 3.37      | 6.46               |
| -15                        | 658                | 1.42           | 463                 | 3.49      | 8.05               |
| -10                        | 810                | 1.62           | 501                 | 3.60      | 9.97               |
| -5                         | 989                | 1.82           | 542                 | 3.71      | 12.26              |
| 0                          | 1196               | 2.05           | 582                 | 3.82      | 14.94              |
| 5                          | 1432               | 2.33           | 615                 | 3.93      | 18.06              |
| 10                         | 1698               | 2.67           | 637                 | 4.03      | 21.66              |

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

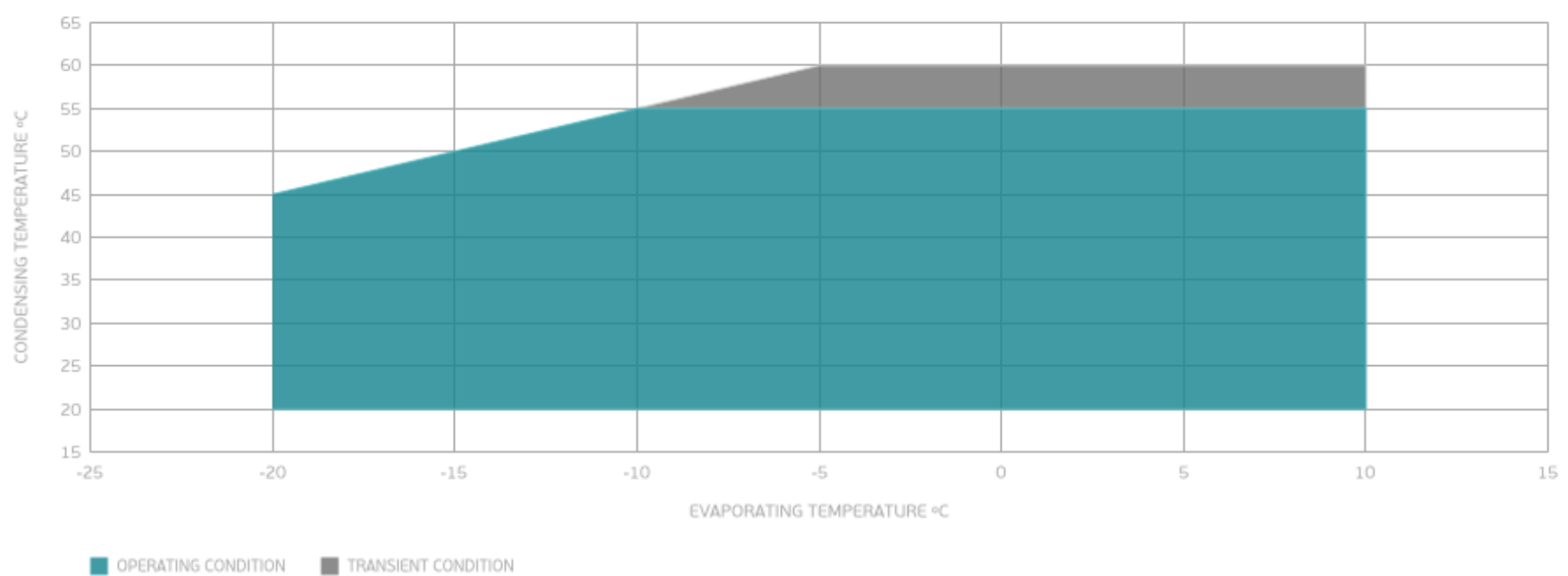
## PERFORMANCE CURVE

Condensing Temperature 55°C

| Evaporating Temperature °C | Cooling Capacity W | Efficiency W/W | Power Consumption W | Current A | Gas Flow Rate kg/h |
|----------------------------|--------------------|----------------|---------------------|-----------|--------------------|
| -10                        | 676                | 1.29           | 525                 | 3.74      | 9.29               |
| -5                         | 828                | 1.45           | 571                 | 3.90      | 11.46              |
| 0                          | 1004               | 1.62           | 621                 | 4.05      | 14.03              |
| 5                          | 1206               | 1.80           | 670                 | 4.19      | 17.03              |
| 10                         | 1434               | 2.02           | 712                 | 4.33      | 20.50              |

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

## ENVELOPE



## External

### EXTERNAL CHARACTERISTICS

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

**EXTERNAL DIMENSIONS**

**SHELL**



**BASE**



**FENCE**

