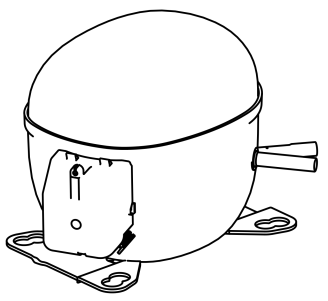
# COMPRESSOR TECHNICAL DATA

## NT2160U



**ENGINEERING CODE**
842AA04

**REFRIGERANT**
R-290

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

**APPLICATION**
LBP

**MOTOR TYPE**
CSCR

**STANDARD**
ASHRAE

**COOLING CAPACITY**
704 W

**EFFICIENCY**
1.45 W/W

## DATA

### GENERAL DATA

| | |
|---|---|
| **Model** | NT2160U |
| **Type** | Hermetic Reciprocating |
| **Technology** | ON/OFF |
| **Compressor Application** | LBP |
| **Expansion Device** | Capillary Tube or Expansion Valve |
| **Compressor Cooling** | Fan/220 |
| **HP** | 3/4 |
| **Starting Torque** | HST |
| **Plant** | SLOVAKIA |

### ELECTRICAL DATA

| | |
|---|---|
| **Start Winding Resistance** | 13.8 Ω at 25°C |
| **Run Winding Resistance** | 2.7 Ω at 25°C |

## MECHANICAL DATA

| | |
|---|---|
| **Displacement** | 17.39 $cm^3$ |
| **Oil Charge** | 450 ml |
| **Oil Type** | AB |
| **Oil Viscosity** | ISO32 |
| **Weight** | 17.2 Kg |

## ELECTRICAL COMPONENTS

| | |
|---|---|
| **Start Capacitor** | 53-64 µf/330 V |
| **Run Capacitor** | 10.0 µf/440 V |
| **CSR CSIR BOX** | Yes |
| **Starting Device Description** | RVA2L3C |
| **Overload Protection** | T0916/G9 |

# PERFORMANCE

## TESTED CONDITIONS

| | |
|---|---|
| **Tested Refrigerant** | R-290 |
| **Tested Application** | LBP |
| **Tested Standard** | ASHRAE |
| **Tested Cooling** | Fan |
| **Tested Voltage** | 220 V |
| **Max Refrigerant Charge** | 400 g |
| **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 |
|---|---|---|---|---|---|---|
| 54.4 | -23.3 | 704 | 1.45 | 485 | 2.48 | 7.15 |

Test Condition: Liquid 32.2 ºC, Return Gas 32.2 ºC. 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 |
|---|---|---|---|---|---|
| -40 | 341 | 1.15 | 297 | 1.70 | 3.44 |
| -35 | 457 | 1.35 | 339 | 1.88 | 4.61 |
| -30 | 599 | 1.56 | 384 | 2.06 | 6.06 |
| -25 | 770 | 1.80 | 428 | 2.24 | 7.81 |
| -20 | 968 | 2.06 | 470 | 2.42 | 9.85 |
| -15 | 1195 | 2.36 | 507 | 2.59 | 12.21 |
| -10 | 1451 | 2.71 | 536 | 2.77 | 14.89 |

Test Condition: Liquid 32.2 °C, Return Gas 32.2 °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 |
|---|---|---|---|---|---|
| -40 | 304 | 1.01 | 301 | 1.71 | 3.06 |
| -35 | 412 | 1.18 | 348 | 1.91 | 4.16 |
| -30 | 548 | 1.37 | 400 | 2.12 | 5.54 |
| -25 | 711 | 1.56 | 454 | 2.33 | 7.21 |
| -20 | 901 | 1.77 | 508 | 2.55 | 9.17 |
| -15 | 1120 | 2.00 | 559 | 2.77 | 11.45 |
| -10 | 1368 | 2.26 | 605 | 3.00 | 14.03 |

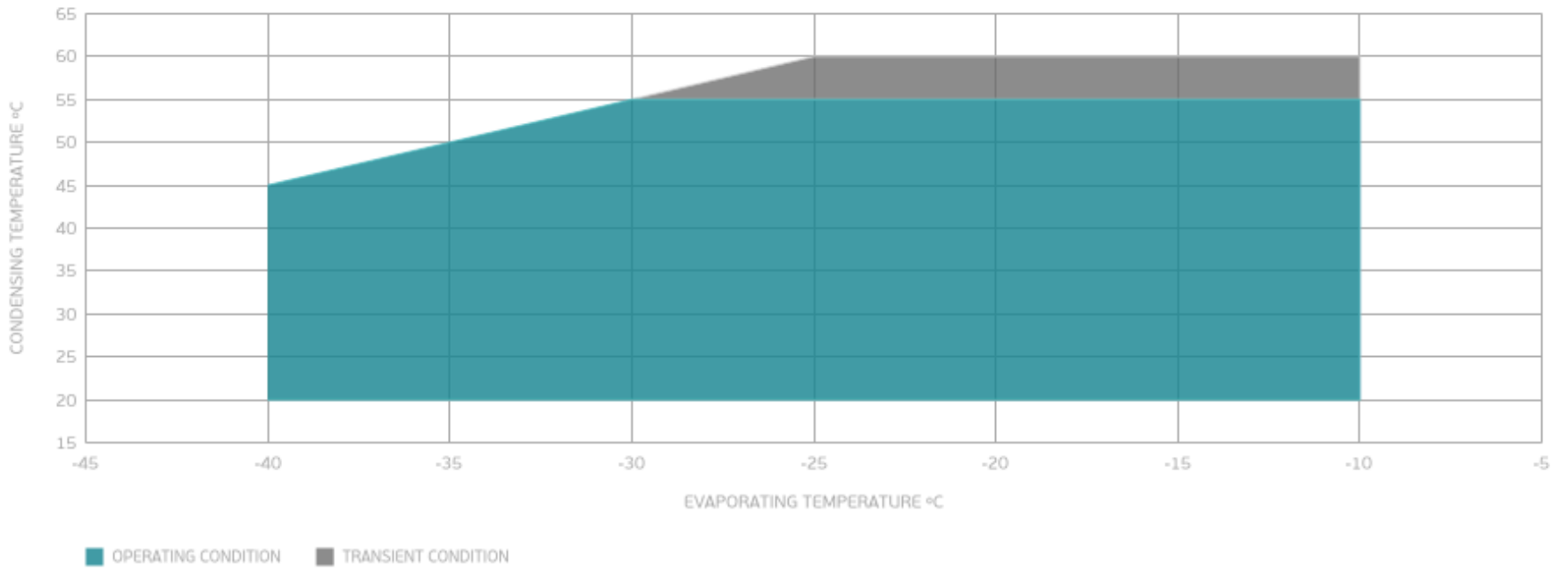
Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

## 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 |
|---|---|---|---|---|---|
| -30 | 486 | 1.21 | 401 | 2.15 | 4.92 |
| -25 | 640 | 1.38 | 463 | 2.40 | 6.49 |
| -20 | 822 | 1.56 | 527 | 2.66 | 8.37 |
| -15 | 1032 | 1.75 | 591 | 2.93 | 10.54 |
| -10 | 1270 | 1.95 | 652 | 3.21 | 13.03 |

Test Condition: Liquid 32.2 °C, Return Gas 32.2 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

## ENVELOPE




# External

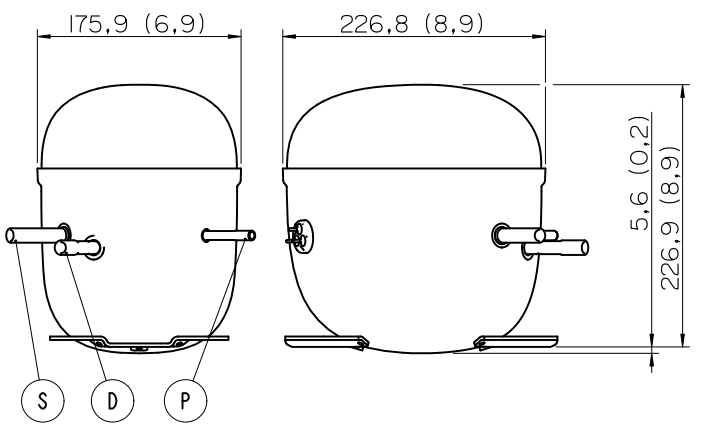
## EXTERNAL CHARACTERISTICS

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

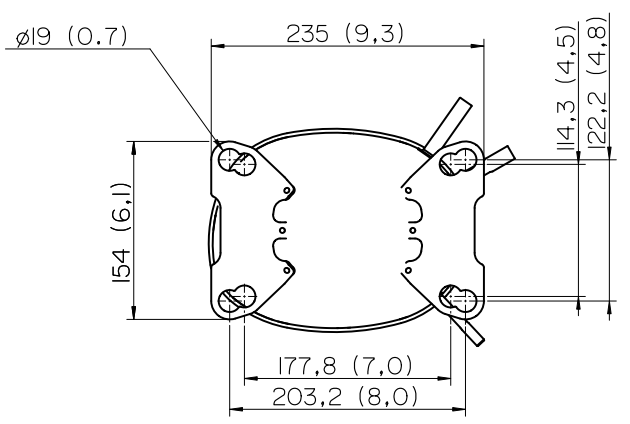
| Connector | Internal Diameter | Shape | Material |
|---|---|---|---|
| **Suction** | 9.6 mm | VERTICAL | COPPER |
| **Discharge** | 6.42 mm | VERTICAL | COPPER |
| **Process** | 6.42 mm | VERTICAL | COPPER |

## EXTERNAL DIMENSIONS

### SHELL




### BASE




### FENCE