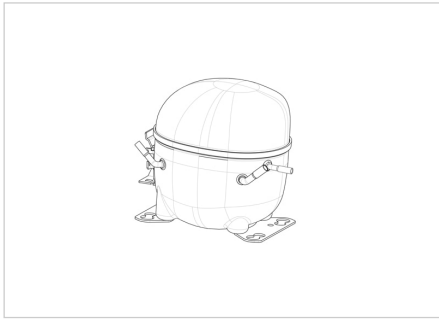


MODEL

NEK1116Z

embraco

**APPROVALS**

ENGINEERING CODE
268EA47

APPROVED REFRIGERANT
R-134a

POWER SUPPLY
220-240 V 50 Hz

STANDARD CONDITIONS
ASHRAE

APPLICATION
LBP

COOLING CAPACITY
194 W

EFFICIENCY
1.45 W/W

MOTOR TYPE
RSCR

STARTING TORQUE
LST

DATA

General Data

| | |
|-----------------------------------|------------------------|
| Type | Hermetic reciprocating |
| Technology Type | On-Off |
| Displacement | 7.37 cm ³ |
| Compressor Cooling | Static |
| Expansion Device | Capillary Tube |
| Horse Power | 1/5 hp |
| Max Condensing Pressure Operating | 13.92 bar |
| Max Condensing Pressure Peak | 15.62 bar |
| Power Supply | 220-240 V 50 Hz |
| Evaporating Temperature Range | -30 °C to -5 °C |

Electrical Data

| | |
|------------------------------------|-----------------|
| Motor type | RSCR |
| Starting Torque | LST |
| Start Winding Resistance | 15 Ω at 25° C |
| Run Winding Resistance | 15.2 Ω at 25° C |
| Locked Rotor Amperage (LRA) | 5.3 A |
| Rated Load Amperage (RLA) at 50 Hz | 0.82 A |

Mechanical Data

| | |
|--|----------------|
| Maximum Recommended Refrigerant Charge | 350 g |
| Oil Charge | 350 ml |
| Oil Type Configuration | Polyolester |
| Oil Type Viscosity | ISO22 |
| Pressurization | Dry air charge |
| Weight | 10.7 Kg |
| Free Internal Volume | 2.1 L |

Electrical Components

| | Description |
|------------------|------------------------|
| Starting Device | PTC PTC 230V |
| Motor Protection | External 3/4" T0503/07 |

External Characteristics

| Base Plate | European | |
|-------------|-------------------|-------------|
| Tray Holder | Yes | |
| Height | 200 mm | |
| Connector | Internal Diameter | Shape |
| Suction | 6.1 mm | Slanted 42° |
| Discharge | 4.86 mm | Straight |
| Process | 6.1 mm | Slanted 42° |

PERFORMANCE

Rated Points

| Condensing Temperature | Evaporating Temperature | Cooling Capacity | Power Consumption | Current | Gas Flow Rate | Efficiency |
|------------------------|-------------------------|------------------|-------------------|---------|---------------|------------|
| 54.40°C | -23.30°C | 194 W | 134 W | 0.61 A | 3.76 kg/h | 1.45 W/W |

Test Condition: ASHRAE, Static, Return Gas 32.2°C, Evaporation -23.30°C, Condensing 54.40°C, Ambient 32.2°C, Liquid 32.2°C. Data in accordance to ASHRAE guideline polynomial curve.

Performance Curve Data

Condensing Temperature 35°C

| Evaporating Temperature °C | Cooling Capacity W | Power W | Current A | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|-----------|--------------------|----------------|
| -30 | 154 | 99 | 0.49 | 2.97 | 1.56 |
| -25 | 205 | 114 | 0.55 | 3.96 | 1.79 |
| -20 | 267 | 131 | 0.61 | 5.18 | 2.03 |
| -15 | 342 | 149 | 0.68 | 6.67 | 2.3 |
| -10 | 434 | 167 | 0.76 | 8.48 | 2.6 |
| -5 | 543 | 184 | 0.85 | 10.66 | 2.95 |

Test Condition: ASHRAE, Static, LBP. Data in accordance to ASHRAE guideline polynomial curve.

Condensing Temperature 45°C

| Evaporating Temperature °C | Cooling Capacity W | Power W | Current A | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|-----------|--------------------|----------------|
| -30 | 141 | 102 | 0.49 | 2.74 | 1.38 |
| -25 | 191 | 121 | 0.57 | 3.71 | 1.58 |
| -20 | 252 | 142 | 0.65 | 4.89 | 1.78 |
| -15 | 324 | 162 | 0.73 | 6.32 | 2 |
| -10 | 411 | 183 | 0.83 | 8.05 | 2.24 |
| -5 | 515 | 204 | 0.94 | 10.11 | 2.52 |

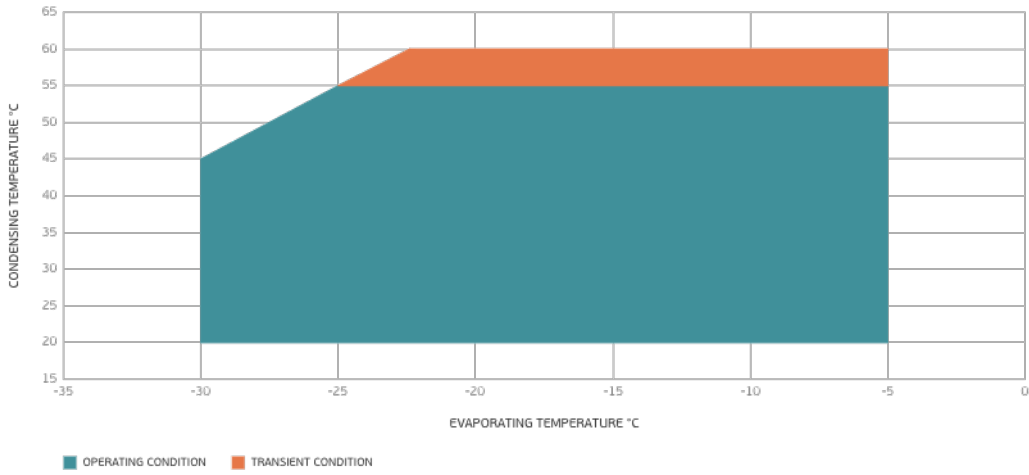
Test Condition: ASHRAE, Static, LBP. Data in accordance to ASHRAE guideline polynomial curve.

Condensing Temperature 55°C

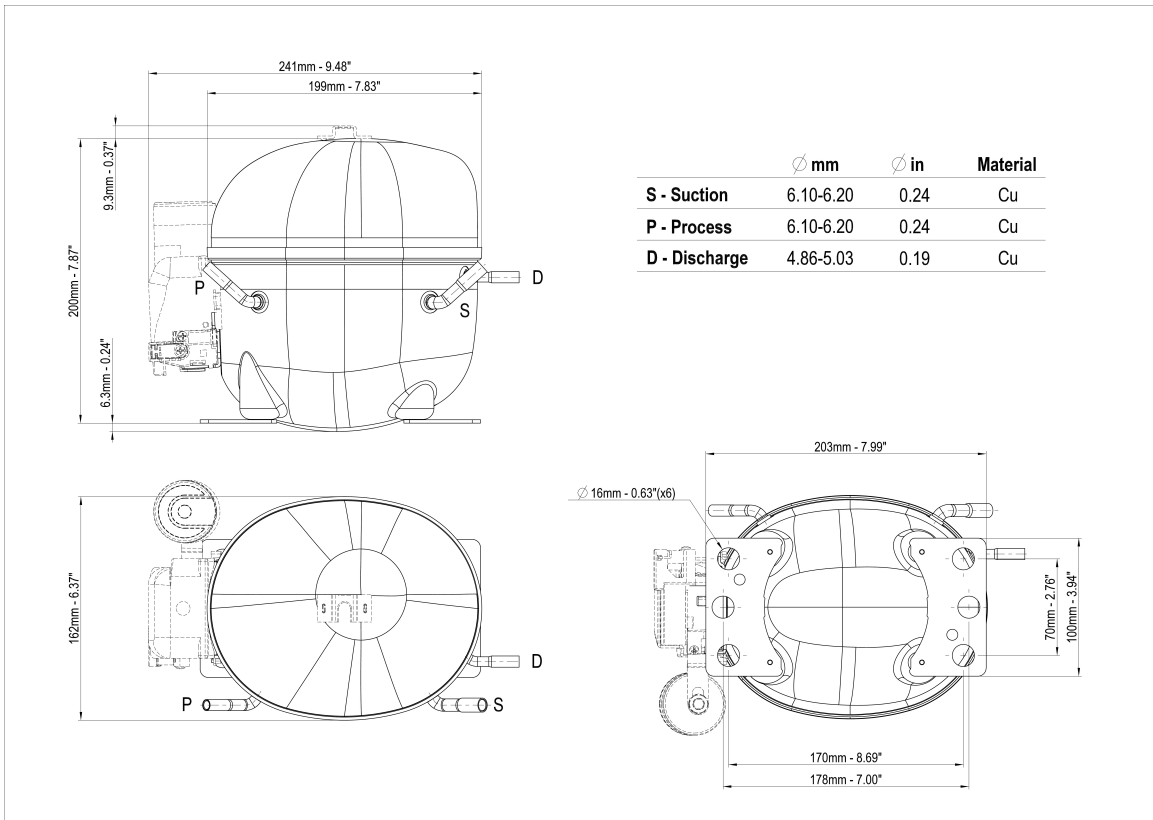
| Evaporating Temperature °C | Cooling Capacity W | Power W | Current A | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|-----------|--------------------|----------------|
| -25 | 174 | 126 | 0.58 | 3.38 | 1.38 |
| -20 | 232 | 151 | 0.68 | 4.52 | 1.54 |
| -15 | 302 | 176 | 0.79 | 5.88 | 1.71 |
| -10 | 385 | 202 | 0.91 | 7.52 | 1.91 |
| -5 | 483 | 227 | 1.05 | 9.48 | 2.13 |

Test Condition: ASHRAE, Static, LBP. Data in accordance to ASHRAE guideline polynomial curve.

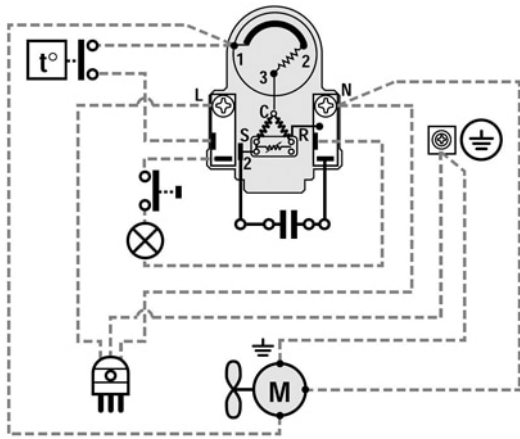
Operating Envelope



External Dimensions



Wiring Diagram



Assembly Instructions

