

Polaris NT2180GK

Polaris NT2180GK Compressor User Manual

Model: NT2180GK

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Polaris NT2180GK fully hermetic compressor. This unit is designed for refrigeration applications, specifically for refrigerators, and is compatible with ROLL-IN-1P and ROLL-IN-1PP systems. Please read this manual thoroughly before installation or operation to ensure proper use and to prevent damage or injury.

2. SAFETY INFORMATION

Warning: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

- Always disconnect power before servicing the compressor or any associated components.
- Installation and maintenance should only be performed by qualified and authorized personnel.
- Ensure proper grounding to prevent electrical shock.
- Handle refrigerants with care and in accordance with local regulations. Refrigerants can cause frostbite or other injuries.
- Ensure adequate ventilation in the installation area to prevent the accumulation of refrigerant gases.
- Do not operate the compressor if any parts are damaged or missing.

3. PRODUCT OVERVIEW AND COMPONENTS

The Polaris NT2180GK is a robust, fully hermetic compressor designed for reliable performance in refrigeration systems. It features a compact design and is engineered for efficiency.



Die Abbildung des Zubehörs dient nur der Illustration.
Das genaue Zubehör kann sich je nach Kompressor unterscheiden.

Picture of accessories is for illustration purpose only.
The exact accessories may differ depending on the specific compressor.

Figure 1: Compressor Accessories

This image displays various accessories that may accompany the Polaris NT2180GK compressor. These typically include electrical starting components (such as a capacitor and relay), mounting hardware (bolts and washers), and vibration-dampening rubber grommets. Please note that the exact accessories provided may vary depending on the specific compressor model and package.

4. SPECIFICATIONS

Below are the key technical specifications for the Polaris NT2180GK compressor:

Model: NT2180GK

Application: Refrigerator (LBP - Low Back Pressure)

Construction: Fully Hermetic

Frequency: 50 Hz

Weight: 17.3 kg

Height: 221 mm

Displacement: 20.44 cm³

Refrigerant: R404a / R507

Nominal Power: 1 HP

Cooling Capacity at -10°C: 956 W

Cooling Capacity at -15°C: 1460 W

Cooling Capacity at -20°C: 769 W

Cooling Capacity at -25°C: 873 W

Starting Type: CSR (Capacitor Start, Run)

Voltage: 220-240 V ASHRAE

Power Source: Corded Electric

Manufacturer: Gastroteileshop

Note: A hose length of 5 meters is listed in some specifications, which may refer to an accessory or related product.

5. SETUP AND INSTALLATION

Installation of the Polaris NT2180GK compressor should only be performed by a certified refrigeration technician. Incorrect installation can lead to system failure, refrigerant leaks, and safety hazards.

5.1. Unpacking

Carefully remove the compressor from its packaging. Inspect for any signs of shipping damage. Do not install a damaged unit.

5.2. Mounting

Mount the compressor on a stable, level surface using appropriate vibration-dampening mounts (e.g., rubber grommets) to minimize noise and vibration. Ensure adequate airflow around the compressor for proper cooling.

5.3. Electrical Connection

Connect the compressor to a dedicated electrical circuit as per local electrical codes and the compressor's voltage requirements (220-240V, 50Hz). Ensure all wiring is secure and properly insulated. The CSR starting type requires specific wiring for the capacitor and relay; refer to the wiring diagram provided with the compressor or system.

5.4. Refrigerant Line Connection

Connect the suction and discharge lines to the compressor using proper brazing techniques. Ensure all connections are leak-free. Use appropriate fittings for R404a/R507 refrigerants.

5.5. Evacuation and Charging

Evacuate the refrigeration system to a deep vacuum to remove all non-condensable gases and moisture. Charge the system with the correct type and amount of R404a or R507 refrigerant as specified by the refrigeration system manufacturer.

6. OPERATING INSTRUCTIONS

Once installed and charged, the compressor will operate automatically based on the refrigeration system's thermostat settings.

- **Initial Startup:** After installation, power on the system. The compressor should start and begin cooling. Monitor the system for unusual noises or vibrations.
- **Temperature Control:** The refrigeration system's thermostat controls the compressor's cycling to maintain the desired temperature.
- **Monitoring:** Periodically check the system's performance, including temperature, and listen for any abnormal sounds from the compressor.

7. MAINTENANCE

Regular maintenance helps ensure the longevity and efficiency of your compressor. All maintenance should be performed by qualified personnel.

- **Cleanliness:** Keep the compressor and surrounding area clean and free of dust and debris to ensure proper heat dissipation.
- **Electrical Connections:** Periodically check all electrical connections for tightness and signs of corrosion.
- **Refrigerant Levels:** Ensure the refrigeration system has the correct refrigerant charge. Low charge can lead to compressor overheating and failure.

- **Vibration Mounts:** Inspect vibration mounts for wear or damage and replace if necessary.

8. TROUBLESHOOTING

If you encounter issues with your compressor, refer to the following common troubleshooting steps. For complex problems, contact a qualified technician.

- **Compressor Not Starting:**

- Check power supply and circuit breaker.
- Verify electrical connections, including the capacitor and relay.
- Ensure the thermostat is set correctly.

- **Insufficient Cooling:**

- Check refrigerant charge level.
- Ensure condenser coils are clean and not obstructed.
- Verify proper airflow around the compressor.

- **Unusual Noise or Vibration:**

- Check for loose mounting bolts or worn vibration mounts.
- Inspect for contact between refrigerant lines or other components.
- If the noise persists, it may indicate an internal compressor issue requiring professional service.

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact your point of purchase or the manufacturer, Gastroteileshop. Keep your purchase receipt and product model number (NT2180GK) handy when contacting support.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question