

Embraco NT6215Z1

Embraco NT6215Z1 Refrigeration Compressor Instruction Manual

Model: NT6215Z1 | Refrigerant: R134A | Power: 1/2 HP, 115V

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Embraco NT6215Z1 Refrigeration Compressor. Please read this manual thoroughly before attempting any installation or operation. Keep this manual for future reference.

The Embraco NT6215Z1 is a high-temperature refrigeration compressor designed for use with R134A refrigerant. It operates on 115V power and features a 1/2 HP motor with High Starting Torque (HST).

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.
- Ensure proper grounding to prevent electrical shock.
- Handle refrigerants with care and in accordance with local regulations.
- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves.
- Installation and service should only be performed by qualified personnel.

3. SETUP AND INSTALLATION

3.1 Unpacking

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

3.2 Mounting

Mount the compressor on a stable, level surface using appropriate vibration isolation mounts. The mounting centers for this model are 8.0 inches by 4.8 inches. Ensure adequate ventilation around the compressor for proper heat dissipation.

3.3 Electrical Connection

Connect the compressor to a dedicated 115V power supply circuit. Refer to the wiring diagram provided with your refrigeration system for specific connections. Ensure all electrical connections are secure and comply with local electrical codes. The compressor utilizes a Start Capacitor (G22-839) and a Relay (9660041180EM).

3.4 Refrigerant Line Connection

Connect the suction line to the 5/16 inch ODF suction connection and the discharge line to the 1/4 inch ODF discharge connection. Use proper brazing techniques and ensure all connections are leak-free. This compressor is designed for R134A refrigerant. Evacuate the system thoroughly before charging with refrigerant.

4. OPERATING INSTRUCTIONS

4.1 Initial Startup

After completing all connections and leak checks, slowly open the service valves. Apply power to the compressor. The compressor should start and begin to circulate refrigerant. Monitor system pressures and temperatures to ensure proper operation.

4.2 Normal Operation

The Embraco NT6215Z1 is a high-temperature compressor. Ensure the refrigeration system is designed for high-temperature applications. The compressor will cycle on and off as dictated by the system's thermostat or control board to maintain the desired temperature.

5. MAINTENANCE

Regular maintenance ensures optimal performance and extends the lifespan of your compressor.

- **Cleanliness:** Keep the compressor and surrounding area clean and free of dust and debris to ensure proper airflow and cooling.
- **Electrical Connections:** Periodically check all electrical connections for tightness and signs of corrosion.
- **Vibration:** Inspect mounting for excessive vibration. Replace worn vibration isolators if necessary.
- **Refrigerant Leaks:** Regularly check for refrigerant leaks using an appropriate leak detector.

Note: This product does not include additional components. Ensure all necessary system parts are sourced separately.

6. TROUBLESHOOTING

Before troubleshooting, always disconnect power to the unit.

Problem	Possible Cause	Solution
Compressor does not start	No power; Faulty relay (9660041180EM); Faulty start capacitor (G22-839); Overload protector tripped	Check power supply; Test/replace relay; Test/replace start capacitor; Check for system overload, allow to cool and reset.

Problem	Possible Cause	Solution
Compressor runs but does not cool	Low refrigerant charge; System blockage; Faulty expansion valve	Check for leaks and recharge; Inspect and clear blockages; Inspect/replace expansion valve.
Excessive noise or vibration	Loose mounting; Worn vibration isolators; Internal compressor issue	Tighten mounting bolts; Replace isolators; Consult a qualified technician for internal issues.

If problems persist, contact a qualified refrigeration technician.

7. SPECIFICATIONS

Feature	Specification
Model	NT6215Z1
Refrigerant	R134A
Voltage	115 Volts
Horsepower (HP)	1/2 HP (0.5 HP)
Starting Torque	High Starting Torque (HST)
Suction Connection	5/16 inch ODF
Discharge Connection	1/4 inch ODF
Mounting Centers	8.0 inches x 4.8 inches
BtuH Capacity at 20°F Evap.	3084
BtuH Capacity at 30°F Evap.	4095
BtuH Capacity at 40°F Evap.	5253
BtuH Capacity at 45°F Evap.	5855
Start Capacitor	G22-839
Relay	9660041180EM
Item Weight	31 Pounds
Package Dimensions	14.29 x 9.13 x 8.98 inches

8. WARRANTY AND SUPPORT

Specific warranty details for the Embraco NT6215Z1 compressor are not provided in this document. For warranty information or technical support, please contact Embraco directly or the authorized distributor from whom the product was purchased. Ensure you have your model number (NT6215Z1) and purchase date available when contacting support.

9. MEDIA (IMAGES AND VIDEOS)

No product images or official videos were provided in the source data for inclusion in this manual. For visual references, please refer to the product listing or the manufacturer's official website.

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