Goodman GLXS4BA4810

Goodman GLXS4BA4810 4 Ton 14.3 SEER2 R-32 AC Condenser User Manual

Model: GLXS4BA4810 | Brand: Goodman

1. Introduction

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your Goodman GLXS4BA4810 4 Ton 14.3 SEER2 R-32 AC Condenser. Please read all instructions carefully before installation or operation. This unit is designed for use as part of a split-system air conditioning setup.
Important: Installation and servicing of this HVAC equipment must be performed by qualified, experienced technicians. Improper installation, adjustment, alteration, service, or maintenance can cause property damage, personal injury, or death.

2. Safety Information

Always adhere to local and national electrical and safety codes. Disconnect all power to the unit before performing any service or maintenance. Wear appropriate personal protective equipment (PPE) such as safety glasses and gloves.

- **Electrical Hazard:** Ensure power is disconnected before working on the unit.
- **Refrigerant Handling:** R-32 refrigerant requires specific handling procedures. Only certified technicians should handle refrigerants.
- **Sharp Edges:** Be cautious of sharp edges on metal parts.
- **Heavy Equipment:** The unit is heavy. Use proper lifting techniques or equipment to prevent injury.

3. Product Overview

The Goodman GLXS4BA4810 is a 4-ton, single-speed air conditioning condenser designed for residential and light commercial applications. It features a 14.3 SEER2 efficiency rating and uses R-32 refrigerant, known for its lower environmental impact. This outdoor unit works in conjunction with an indoor air handler to provide cooling.

Figure 1: Exterior view of the Goodman GLXS4BA4810 AC Condenser.

Figure 2: Internal view of the Goodman GLXS4BA4810 AC Condenser with the side panel removed, revealing the compressor and other components.

Figure 3: Close-up of the electrical wiring and capacitor, critical components for unit operation.

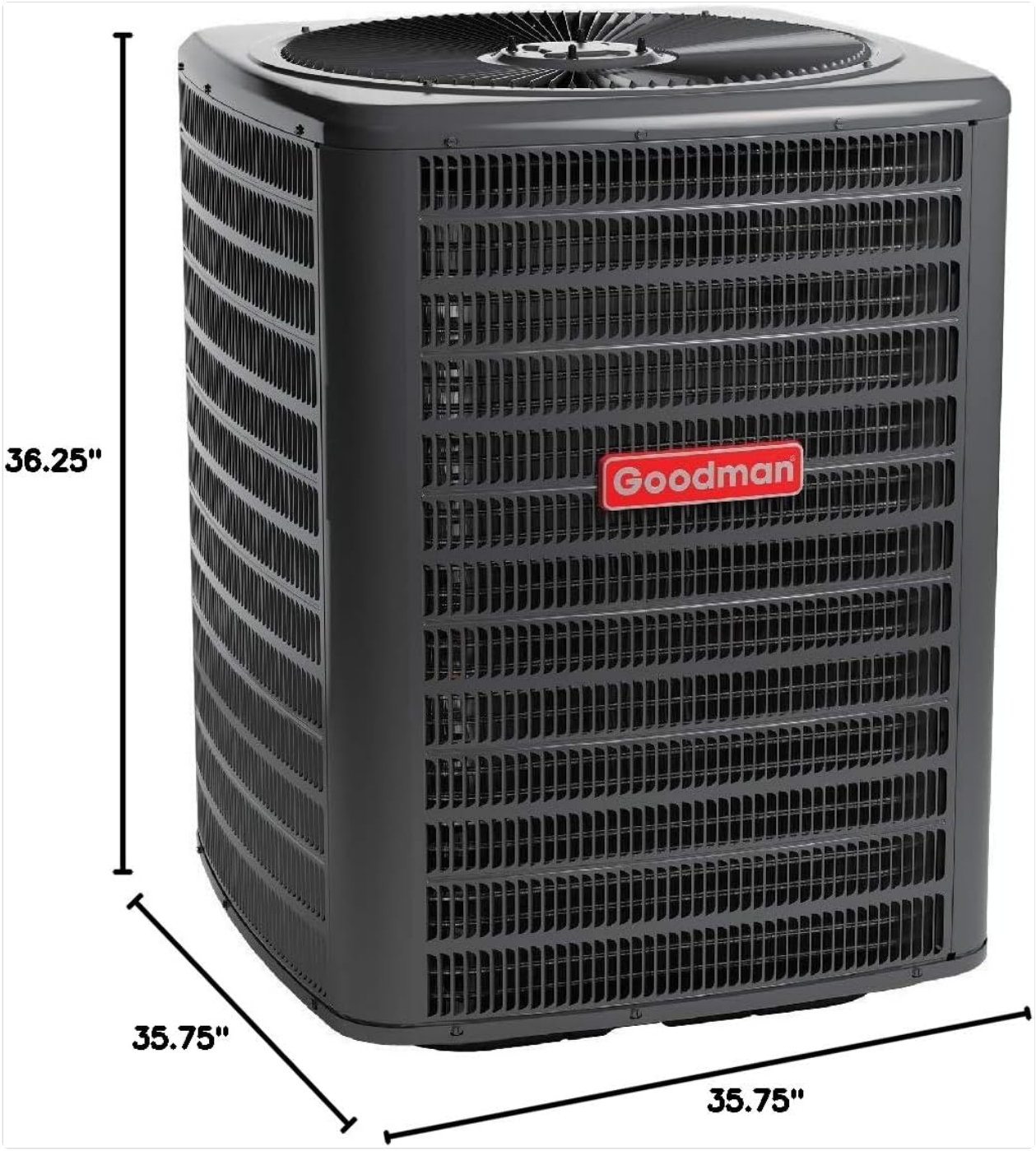

Figure 4: Dimensional drawing of the Goodman GLXS4BA4810 AC Condenser, showing its height, width, and depth.

4. Setup & Installation

This unit requires professional installation. Do not attempt to install this unit yourself unless you are a certified HVAC technician. Proper installation ensures optimal performance, safety, and warranty validity.

4.1 Site Selection

The outdoor unit should be placed on a level, stable surface, typically a concrete pad. Ensure adequate clearance around the unit for proper airflow and future servicing. Avoid locations where debris or foliage could obstruct the coils. Placing the unit in a shaded area can improve efficiency.

4.2 Electrical Connections

All electrical wiring must comply with national and local codes. The unit requires a 208/230 V, 1 Phase, 60 Hz

power supply. A dedicated circuit and proper overcurrent protection are essential.

4.3 Refrigerant Piping

The unit uses R-32 refrigerant. Proper sizing, installation, and evacuation of refrigerant lines are critical for system performance and longevity. This process requires specialized tools and expertise.

5. Operating Instructions

Once installed by a qualified technician, operating your Goodman AC condenser is typically managed through your indoor thermostat.

5.1 Initial Startup

After installation, the technician will perform an initial startup sequence to verify proper operation, refrigerant charge, and airflow.

5.2 Thermostat Control

Set your thermostat to the desired cooling temperature. The system will automatically cycle on and off to maintain this temperature. For optimal efficiency, avoid frequently adjusting the thermostat setting.

5.3 Understanding Heat Pump vs. Straight Cool

This unit is a straight cool condenser. If your indoor unit is a heat pump, it can provide both heating and cooling. A straight cool condenser only provides cooling. The following video explains the difference:

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Video 1: Explanation of Heat Pump vs. Straight Cool systems by Superior Home Supplies. This video clarifies the operational differences between these HVAC configurations.

5.4 R-32 Refrigerant Information

Your unit uses R-32 refrigerant. This refrigerant is a more environmentally friendly option with a lower Global Warming Potential (GWP) compared to older refrigerants. Learn more about R-32:

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Video 2: R-32 Fact vs Fiction by Superior Home Supplies. This video provides information regarding the R-32 refrigerant used in modern HVAC systems.

6. Maintenance

Regular maintenance is crucial for the longevity and efficient operation of your AC condenser. It is recommended to have a qualified HVAC technician perform annual inspections and tune-ups.

6.1 Cleaning the Outdoor Unit

Keep the area around the outdoor unit clear of leaves, grass clippings, and other debris. Periodically rinse the outdoor coils with a garden hose to remove dirt and dust. Ensure the power is off before cleaning.

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Video 3: Preview of Goodman 4 Ton 14 SEER Air Conditioner. This short video demonstrates the exterior of a Goodman AC unit, similar to the GLXS4BA4810, and shows a user cleaning it with a hose.

6.2 Indoor Unit Filter Replacement

Regularly check and replace the air filter in your indoor air handler. A dirty filter restricts airflow, reduces efficiency, and can lead to system malfunctions.

6.3 Professional Servicing

Schedule annual professional maintenance to ensure all components are functioning correctly, refrigerant levels are optimal, and the system is operating at peak efficiency.

7. Troubleshooting

Before calling for service, check the following common issues:

- **No Cooling:**
  - Check thermostat settings (ensure it's set to 'Cool' and desired temperature is below room temperature).
  - Verify circuit breakers for both indoor and outdoor units are not tripped.
  - Ensure outdoor unit fan is spinning.
- **Insufficient Cooling:**
  - Check and replace dirty air filters in the indoor unit.
  - Ensure outdoor unit coils are clean and free of obstructions.
  - Verify all supply and return vents are open and unobstructed.
- **Unusual Noises:**
  - Rattling or vibrating sounds may indicate loose panels or debris.
  - Hissing or bubbling sounds could indicate a refrigerant leak (call a technician immediately).

If these steps do not resolve the issue, contact a qualified HVAC technician for diagnosis and repair.

8. Specifications

Goodman GLXS4BA4810 AC Condenser Specifications

Feature	Detail
Brand	Goodman
Model Name	GLXS4BA4810
Cooling Capacity	48,000 BTU (4 Ton)
SEER2 Efficiency Rating	14.3
Voltage	208/230 V
Phase	1 Phase
Frequency	60 Hz
Refrigerant	R-32

Feature	Detail
Product Dimensions (D x W x H)	35.75"D x 35.75"W x 36.25"H
Item Weight	242 Pounds
Installation Type	Split System
Compressor Type	Reciprocating Compressor
Core Material	Aluminium Alloy

9. Warranty & Support

Goodman offers comprehensive warranty coverage for this equipment:

- **10-Year Parts Limited Warranty:** Covers replacement part(s) for any part found to be defective due to workmanship or materials under normal use and maintenance.
- **10-Year Unit Replacement Limited Warranty:** Provides for unit replacement under specific conditions.
- **Lifetime Compressor Limited Warranty:** Covers the compressor for the lifetime of the unit.
- **Lifetime Heat Exchanger Warranty:** (Note: This unit is a condenser, heat exchanger warranty typically applies to furnaces. Please consult Goodman's official warranty documentation for exact terms applicable to your specific condenser model.)

To ensure enhanced warranty coverage, register your new Goodman unit. For detailed warranty terms, registration, or technical support, please refer to the official Goodman website or contact their customer service.