Goodman HKA-15C

Goodman HKA-15C Electric Heat Kit User Manual

Model: HKA-15C | Brand: Goodman

1. Introduction

This manual provides essential information for the safe and efficient installation, operation, and maintenance of the Goodman HKA-15C Electric Heat Kit. The HKA-15C is a 15 kW, 208/240 V, 1 Phase electric heat kit designed for use with compatible Goodman air handlers, providing supplemental or primary heating. It includes an integrated circuit breaker for protection.

2. Safety Information

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, personal injury, or death. Read these instructions thoroughly before installing or servicing this equipment. Installation and service must be performed by a qualified installer or service agency. This electric heat kit operates on high voltage and current. Ensure all power is disconnected at the main electrical panel before performing any installation or maintenance. Failure to do so can result in severe electrical shock or death.

- Always wear appropriate personal protective equipment (PPE), including safety glasses and electrical gloves.
- Verify that the electrical supply matches the specifications of the heat kit (208/240 V, 1 Phase).
- Ensure proper grounding of the unit.
- Do not bypass any safety devices or circuit breakers.

3. Package Contents

The Goodman HKA-15C Electric Heat Kit package typically includes:

- Goodman HKA-15C Electric Heat Kit assembly
- Integrated Circuit Breaker
- Installation Instructions (this manual)

4. Setup and Installation

Installation of the HKA-15C Electric Heat Kit should only be performed by a qualified HVAC technician or

electrician. This kit is designed to be installed inside a compatible Goodman air handler unit.

4.1 Pre-Installation Checks

1. Verify that the air handler is compatible with the HKA-15C heat kit. Refer to your air handler's documentation.
2. Ensure the electrical supply to the air handler is completely disconnected at the main breaker panel.
3. Confirm that the electrical wiring in the installation location meets local codes and the requirements for a 15 kW, 208/240 V, 1 Phase load.

4.2 Installation Steps (General)

Specific installation steps will vary based on the air handler model. Always refer to the detailed instructions provided with your air handler and the heat kit for precise wiring diagrams and mounting procedures.

1. Access the designated compartment within the air handler for the electric heat kit installation.
2. Mount the HKA-15C heat kit securely within the air handler, ensuring proper airflow and clearances.
3. Connect the electrical wiring from the heat kit to the air handler's control board and the main power supply, following the wiring diagram. Pay close attention to line voltage connections and control wiring.
4. Ensure all connections are tight and secure.
5. Install the integrated circuit breaker into the designated slot, if not pre-installed.
6. Close all access panels on the air handler.

Figure 1: Example of an indoor air handler unit, where the electric heat kit would be installed.

5. Operating Instructions

The Goodman HKA-15C Electric Heat Kit operates in conjunction with your air handler and thermostat. It does not have independent controls.

1. After installation, restore power to the air handler at the main electrical panel.
2. Set your thermostat to the 'Heat' mode and adjust the desired temperature above the current room

temperature.

3. The air handler will activate, and the electric heat kit will energize as required by the thermostat to reach the set temperature.
4. For systems with a heat pump, the electric heat kit typically functions as auxiliary or emergency heat, activating when the heat pump cannot meet the heating demand or when outdoor temperatures are very low.

6. Maintenance

The HKA-15C Electric Heat Kit itself requires minimal maintenance. However, regular maintenance of the entire HVAC system, particularly the air handler, is crucial for optimal performance and longevity of all components, including the heat kit.

- **Air Filter Replacement:** Regularly check and replace the air filter in your air handler according to the manufacturer's recommendations (typically every 1-3 months). A clogged filter restricts airflow, reducing heating efficiency and potentially damaging components.
- **Professional Inspection:** It is recommended to have your entire HVAC system, including the electric heat kit, inspected by a qualified technician annually. They can check electrical connections, element integrity, and overall system performance.
- **Keep Clear:** Ensure the area around the air handler is free from obstructions to allow for proper airflow and prevent overheating.

7. Troubleshooting

If you experience issues with your electric heat kit, consider the following common troubleshooting steps. For complex problems, contact a qualified HVAC technician.

- **No Heat:**
  - Check the thermostat setting: Ensure it is set to 'Heat' and the desired temperature is above the current room temperature.
  - Check circuit breakers: Verify that the circuit breaker for the air handler and the integrated circuit breaker on the heat kit are not tripped. Reset if necessary.
  - Check air filter: A severely clogged air filter can cause the system to shut down or reduce heating capacity.
  - Verify power: Ensure the air handler is receiving power.
- **Insufficient Heat:**
  - Check air filter: A partially clogged filter can reduce heating performance.
  - Ensure proper thermostat operation: The thermostat may not be calling for enough heat or auxiliary heat.
  - Professional inspection: Heating elements may be faulty or wiring issues may exist.
- **Frequent Breaker Trips:**
  - This indicates an electrical fault. Immediately contact a qualified electrician or HVAC technician. Do not repeatedly reset the breaker without identifying the cause.

8. Specifications

Manufacturer	Goodman
Part Number	HKA-15C

Model Number	HKA-15C
Heating Capacity	15 kW
Voltage	208/240 V
Phase	1 Phase
Power Source	Corded Electric
Item Weight	Approximately 15 pounds
Included	Integrated Circuit Breaker

9. Warranty Information

Goodman offers various warranty coverages for its products. For primary Goodman HVAC units, registering your new unit may provide enhanced warranty coverage, such as a 10-year unit replacement limited warranty, lifetime compressor limited warranty, and a 10-year parts limited warranty for defects due to workmanship or materials under normal use and maintenance.
Note: Electric heat kits are often considered accessories. Warranty terms for accessories may differ from those for primary HVAC units. Please refer to the specific warranty documentation included with your HKA-15C kit or contact Goodman customer support to confirm the exact warranty coverage applicable to this accessory.

10. Customer Support

For technical assistance, warranty inquiries, or to locate a qualified service technician, please contact Goodman customer support or visit their official website.

- **Goodman Official Website:** www.goodmanmfg.com
- **Contact a Qualified Technician:** Always seek assistance from a certified HVAC professional for installation, service, and complex troubleshooting.