

# MRCOOL® SIGNATURE SERIES

TECHNICAL SPECIFICATION SHEET | AUXILIARY ELECTRIC HEAT KIT

## Product Overview

The **MRCOOL® MCAEHFD7X1AA** is a premium 7.5kW electric resistance heat kit engineered specifically for seamless field installation within next-generation, eco-friendly **R-454B Signature Series Multi-position Air Handlers**. Providing reliable supplemental or emergency thermal output, this kit is built with heavy-gauge nickel-chromium heating elements to ensure continuous airflow comfort and optimal heat distribution during extreme winter weather or defrost cycles.

## Key Mechanical & Operational Features

- **Multi-position Capabilities:** Fully certified for installation within multi-position air handler cabinets configured for Upflow, Downflow, Horizontal Left, or Horizontal Right orientations.
- **Integrated Circuit Breaker Protection:** Features a factory-installed 60A circuit breaker assembly acting as an overcurrent protection device and an accessible local service disconnect.
- **Quick-Connect Wiring Harness:** Includes a plug-and-play internal control harness to eliminate complex terminal wiring and field errors.
- **Defrost Cycle Conditioning:** Synchronizes dynamically with the primary heat pump system to temper indoor air and counteract temporary drafts during outdoor defrost phases.
- **Corrosion-Resistant Support:** Constructed with a heavy-duty galvanized steel framing matrix to resist structural warping under high temperature operational cycles.

## Engineering & Electrical Specifications

| Technical Parameter                | Certified Specification Value               |
|------------------------------------|---------------------------------------------|
| Model Identifier                   | MCAEHFD7X1AA                                |
| Nominal Capacity                   | 7.5 kW                                      |
| Thermal Output (Estimated)         | approx. 22,500 – 25,600 BTU/hr              |
| Voltage / Frequency                | 208 / 230-240V AC, 60 Hz, Single Phase (1Ø) |
| Calculated Heater Amperage         | 31.25 Amps (@ 240V)                         |
| Refrigerant Platform Compatibility | R-454B Signature Series Systems exclusively |
| Cabinet Suitability                | Multi-position Cased Air Handlers           |
| Integrated Disconnect Style        | Built-in Toggle Circuit Breaker (60A Frame) |

## Crucial Installation Compliance Notice

**WARNING: NON-DIY PRODUCT LINE.** This auxiliary heater element assembly is classified strictly as a professional field accessory. Installation and dual-line high voltage electrical wiring **MUST** be performed exclusively by a licensed HVAC technician and certified electrician adhering to the National Electrical Code (NEC), NFPA 70, and local regulatory building ordinances. Self-installation or uncertified field assembly nullifies the MRCOOL® factory limited component warranty protection completely.

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