

## MRCOOL® SIGNATURE SERIES

# 7.5kW Electric Heat Kit Specification Sheet

**Model:** MCAEHWD7X1AA | **Compatibility:** R-454B Stud Mount Air Handlers

## Product Overview

The MRCOOL MCAEHWD7X1AA is a high-performance supplemental electric resistance heating kit engineered exclusively for seamless integration inside next-generation, low-GWP R-454B Signature Series Stud Mount Air Handlers. This field-installed accessory provides critical auxiliary heating during extreme outdoor conditions and delivers instantaneous emergency back-up warmth if primary heat pump cycles are interrupted.

## Key Technical Features

- **Architectural Stud-Wall Alignment:** Tailored layout configuration ensures zero spatial conflict with standard interior stud framing gaps.
- **Premium Heating Elements:** Heavy-duty nickel-chromium resistance wire heating loops supply rapid, uniform heat delivery without structural degradation.
- **Integrated Overcurrent Safeguard:** Features a factory-mounted 60A circuit breaker providing strict line overload regulation and a local service technician disconnect.
- **Plug-and-Play Control Integration:** Hardwired polarized low-voltage harnesses avoid manual sequencing connection errors during hardware commissioning.
- **Defrost Comfort Tempering:** Automatically steps in during outdoor coil defrost cycles to stabilize room discharge temperatures and prevent draft chills.

## Technical Parameters & Operational Data

| Parameter Specification           | Value / Value Range             |
|-----------------------------------|---------------------------------|
| Product Model Identifier          | MCAEHWD7X1AA                    |
| Nominal Heating Capacity          | 7.5 kW                          |
| Calculated Thermal Energy Output  | ~25,600 BTU/hr                  |
| Primary Voltage Configuration     | 208V / 230V - 240V AC           |
| Electrical Frequency / Phases     | 60 Hz / Single Phase (1Ø)       |
| Pure Heater Current Draw          | 31.25 Amps                      |
| Integrated Circuit Breaker Module | 60A Component Factory Installed |
| Refrigerant Architecture Match    | R-454B Signature Series Only    |
| Air Handler Compatibility Profile | Stud Mount Form Factors         |

## Installation Compliance & Safety Directives

**MANDATORY PROFESSIONAL INSTALLATION (NON-DIY):** This internal mechanical accessory is classified as a Non-DIY product line. Structural connection, mains high-voltage wiring, and component integration must be completed strictly by an EPA-certified, licensed HVAC mechanical professional and a registered electrician. Self-installation or unauthorized product modifications instantly void the MRCOOL factory component warranty plan.

**Local Electrical Code Adherence:** All field-supplied high-voltage supply lines, branch circuit breakers, and earth grounding configurations must fully comply with the National Electrical Code (NEC), NFPA 70, and all applicable municipal, local building, and electrical codes.