

MRCOOL® Signature Series

5kW Electric Heat Kit Specification Sheet — Model: MCAEHWD5X1AA

Product Overview

The **MCAEHWD5X1AA** is a premium commercial-grade supplemental electric resistance heat kit engineered exclusively for the MRCOOL® Signature Series **Stud-Mount Air Handlers** utilizing environmentally friendly, low-GWP **R-454B** refrigerant. This accessory provides precise supplemental or emergency heating capabilities during extreme cold-weather ambient drops or heat pump outdoor defrost cycles, guaranteeing uniform indoor thermal comfort.

Key Mechanical & Safety Features

- **Form Factor Optimization:** Explicitly designed for a structural flush-fit setup inside Stud-Mount indoor air handler chassis.
- **Integrated Circuit Breaker:** Equipped with a heavy-duty factory-installed 60A circuit breaker providing strict overcurrent safety and localized electrical disconnect functionality directly at the unit.
- **Premium Heating Elements:** Built with high-grade nickel-chromium resistance coils resistant to high temperature oxidation and thermal degradation.
- **Control Harnessing:** Features a simplified plug-and-play low-voltage wiring plug layout for rapid integration with the primary air handler control board.
- **Automated Thermal Safeguards:** Double-disk automatic reset thermal limit cutouts protect the core chassis from unexpected restricted airflow overheating scenarios.

Technical Parameters & Electrical Ratings

Parameter Description	Engineering Specification Value
Product Model Code	MCAEHWD5X1AA
Compatible Refrigerant Base	R-454B Only
Compatible Air Handler Style	Signature Series Stud-Mount Air Handlers
Nominal Heating Capacity	5.0 kW
Rated Thermal Output	~17,065 BTU/hr
Voltage / Frequency Configuration	208V / 230V - 240V AC, 60 Hz, Single Phase (1Ø)
Pure Heater Current Load (Amps)	20.84 A @ 240V
Integrated Circuit Breaker Size	60 Amp (Built-In Local Disconnect)

Regulatory Compliance & Installation Directives

CRITICAL NOTICE: This supplemental heat kit is classified as a **Non-DIY** product accessory. Field installation requires high-voltage wiring, mechanical integration, and structural adjustments within the air handler unit. This system **MUST** be installed and commissioned exclusively by an EPA-certified, licensed HVAC technician and a professional electrician. Unauthorized or uncertified self-installation violates code compliance, presents acute shock and fire hazards, and will completely void the manufacturer's MRCOOL® factory components protection plan.