

# MRCOOL® Signature Series TruInverter™ Heat Pump

Model: MCAESHV8T2421BA (2 Ton, 18 SEER2 Condenser)

The MRCOOL Signature Series TruInverter 24K Heat Pump Condenser provides continuous, variable-speed comfort with optimized energy efficiency. Equipped with next-generation eco-friendly R-454B refrigerant, this split-system unit dynamically alters compressor frequency to balance load demand precisely. It supports seamless integration with MRCOOL No-Vac Quick Connect line sets, eliminating field vacuuming processes.

## Performance & Ratings

|                                               |                                               |
|-----------------------------------------------|-----------------------------------------------|
| Tonnage                                       | 2.0 Tons                                      |
| Nominal Cooling Capacity                      | 24,000 BTU/h                                  |
| Nominal Heating Capacity                      | 24,000 BTU/h                                  |
| Seasonal Energy Efficiency Ratio (SEER2)      | 18.0                                          |
| Energy Efficiency Ratio (EER2)                | 10.0                                          |
| Heating Seasonal Performance Factor (HSPF2-4) | 9.0                                           |
| Coefficient of Performance (COP @ 47°F)       | 3.2                                           |
| Sound Level (Decibel Rating)                  | 67 dB(A)                                      |
| Ambient Temperature Range                     | Cooling: 5°F to 115°F / Heating: -5°F to 75°F |

## Technical & Component Specifications

|                                      |                                     |
|--------------------------------------|-------------------------------------|
| Compressor Motor Type                | TruInverter Variable Rotary         |
| Condenser Fan Motor Type             | Brushless DC                        |
| Metering Expansion Device            | Electronic Expansion Valve (EEV)    |
| Refrigerant Chemistry Type           | R-454B (Next-Gen, Low GWP Platform) |
| Factory Refrigerant Charge           | 75.84 oz (Pre-charged)              |
| Liquid Pipe Connection Size          | 3/8" Outer Diameter                 |
| Suction / Vapor Pipe Connection Size | 3/4" Outer Diameter                 |
| Maximum Allowable Lineset Length     | 100 feet                            |

## Electrical & Physical Parameters

|                                |                              |
|--------------------------------|------------------------------|
| Electrical Profile             | 208/230V, Single-Phase, 60Hz |
| Minimum Circuit Ampacity (MCA) | 16.0 A                       |

|                                             |                                      |
|---------------------------------------------|--------------------------------------|
| Maximum Overcurrent Protection (MOP / Fuse) | 25.0 A                               |
| Cabinet Finish Color                        | Premium Gunmetal Finish              |
| Net Physical Dimensions (W x D x H)         | 29.125" x 29.125" x 24.94"           |
| Gross Packaged Dimensions (W x D x H)       | 30.25" x 30.25" x 31.25"             |
| Net Weight / Gross Shipped Weight           | 137.0 lbs / 159.0 lbs                |
| Manufacturer Component Warranty             | 10-Year Parts Standard Protection    |
| Compressor Specific Warranty                | Limited Lifetime Compressor Warranty |