



MD-Series Damper

Supplemental Installation Manual for Accessories

HE05



 **NOTE:** This unit is an Energy Recovery Ventilator, or ERV. It is commonly referred to throughout this manual as an ERV.

 **NOTE:**

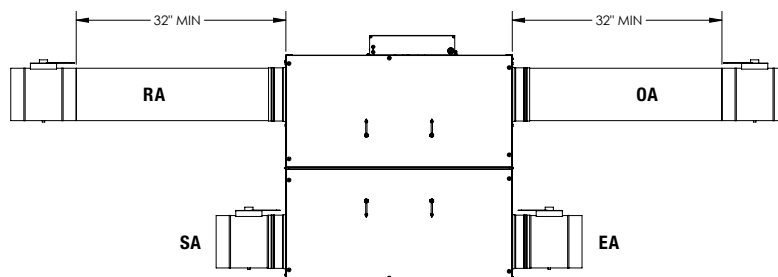
- Outside Air (OA)
- Supply Air (SA)
- Return Air (RA)
- Exhaust Air (EA)

1.0 OVERVIEW

The MD-Series 24VAC, 8" diameter damper can be used to prevent unwanted airflow through a RenewAire ERV. Even when the ERV is installed to provide continuous ventilation, a manual override may be desired to prevent supply flow through the unit during adverse outdoor air conditions, such as wildfire smoke, or to meet local codes. When the ERV is connected to a ducted return of the HVAC system, outdoor air may be pulled through the ERV via the HVAC fan. This can be prevented by installation of an MD-Series damper installed at the fresh air outlet of the ERV.

2.0 INSTALLATION

The ERV can operate one or two motorized dampers at a time. The damper(s) can be installed into any of the airstreams, however, if a damper is in the OA or RA airstream (upstream of the EC motorized impeller) there must be at least 32" of ducting separating the ERV and damper. If a damper is in the SA or EA, it can be installed directly into the ERV duct collar. Regardless of installation location, be sure to leave the damper wire leads accessible.



GRAPHIC FOR VISUAL REFERENCE ONLY, UNIT CANNOT OPERATE FOUR MOTORIZED DAMPERS AT ONE TIME

FIGURE 2.0.0 DAMPER INSTALLATION TO ERV

2.1 WIRING

To connect the Damper to the ERV:

1. Connect the included wire harness(es) to the plug-in port(s) on the circuit board.
2. The opposing end, without a connector, is comprised of wire leads which need to be connected to the wire leads on the motorized damper.
3. The two black leads supply 24VAC to power the damper motor and the two red leads carry the speed signal to the EC motorized impellers from the damper end switch. Polarity does not matter for the two sets of leads.
4. Important: Refer to the figures on the next page to determine what jumper needs to be removed for your application.

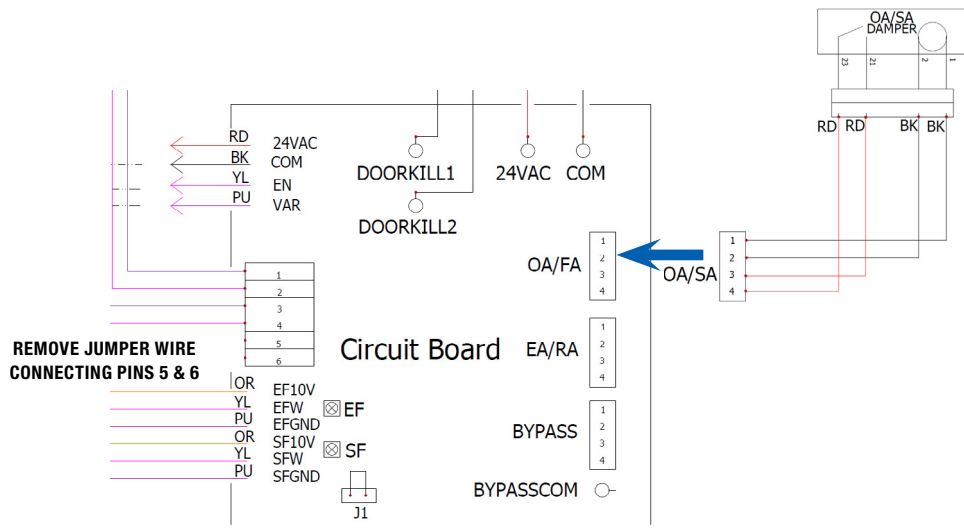


FIGURE 2.1.0 SCHEMATIC FOR CONNECTING MOTORIZED OA/SA DAMPER

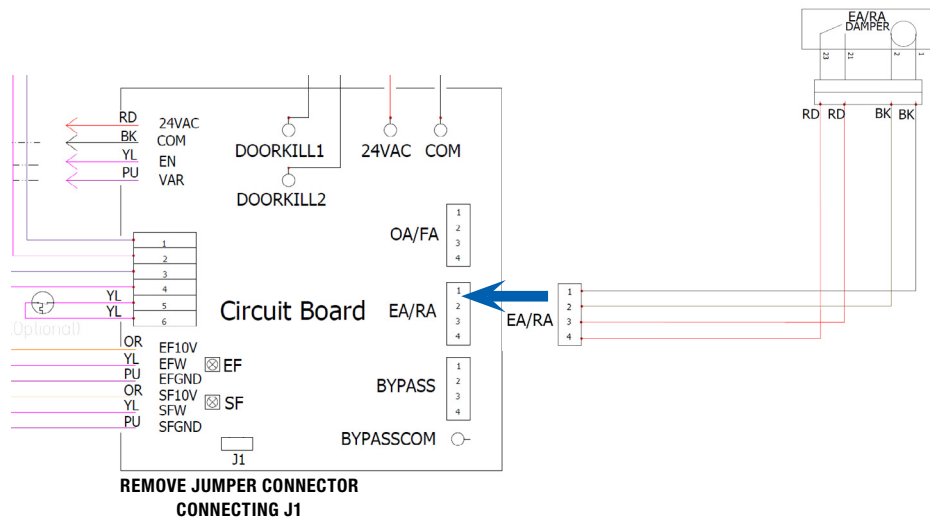


FIGURE 2.1.1 SCHEMATIC FOR CONNECTING MOTORIZED EA/RA DAMPER

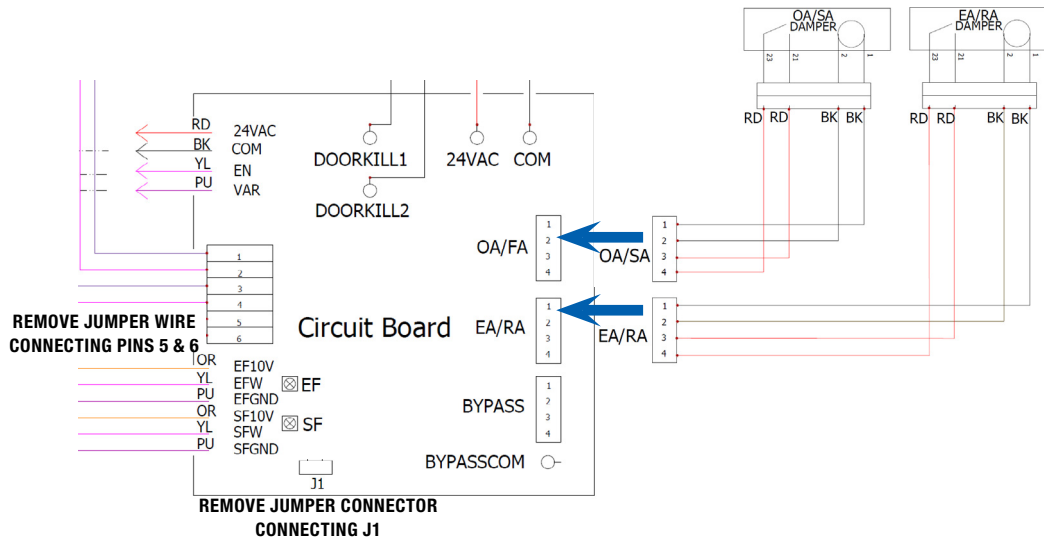


FIGURE 2.1.2 SCHEMATIC FOR CONNECTING TWO MOTORIZED DAMPERS



About RenewAire

For over 40 years, **RenewAire** has been a pioneer in enhancing indoor air quality (IAQ) in commercial and residential buildings of every size. This is achieved while maximizing sustainability through our fifth-generation, static-plate, enthalpic-core **Energy Recovery Ventilators (ERVs)** that optimize energy efficiency, lower capital costs via load reduction and decrease operational expenses by minimizing equipment needs, resulting in significant energy savings. Our ERVs are competitively priced, simple to install, easy to use and maintain and have a quick payback. They also enjoy the industry's best warranty with the lowest claims due to long-term reliability derived from innovative design practices, expert workmanship and **Quick Response Manufacturing (QRM)**.

As the pioneer of static-plate core technology in North America, RenewAire is the largest ERV producer in the USA. We're **committed to sustainable manufacturing** and lessening our environmental footprint, and to that end our Waunakee, WI plant is 100% powered by wind turbines. The facility is also one of the few buildings worldwide to be LEED® Gold and Green Globes certified, as well as having achieved ENERGY STAR Building status. In 2010, RenewAire joined the Soler & Palau (S&P) Ventilation Group in order to provide direct access to the latest in energy-efficient air-moving technologies. For more information, visit: renewaire.com

201 Raemisch Road | Waunakee, WI | 53597 | 800.627.4499 | RenewAire.com