

APPLICATION NOTE

M9000 Applications On-Off/Floating Return Air/Exhaust

This application for the M9200 Series Electric Motor Actuator provides control for exhaust and return air dampers. It can be used with on-off/floating controllers providing the proper positioning for the dampers. Mount the actuator to the preferred driving blade. Obtain the system diagrams for controller installation to verify proper terminals for each actuator.

IMPORTANT: M9000 Series actuators have speed variations in response to loading, therefore, consider the installed speed of the damper and actuator(s) to avoid possible pressure related problems.

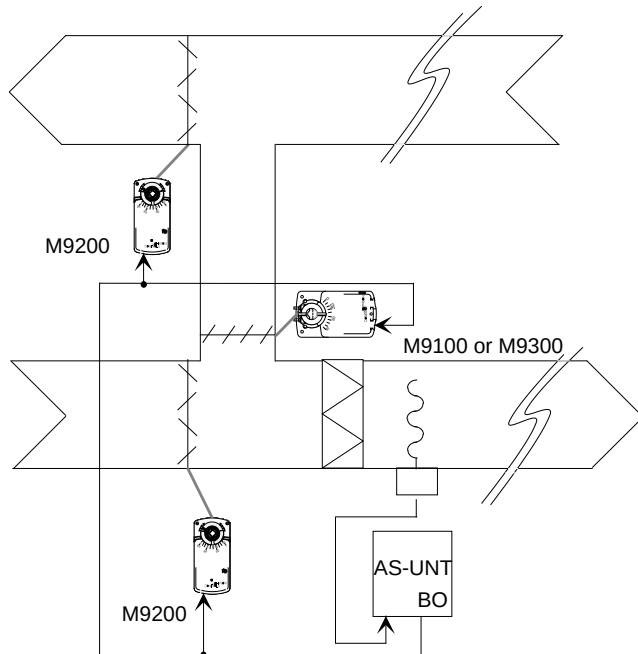


Figure 1: Return Air/Exhaust Using M9200 for Outdoor Air

Return-to-normal actuators are recommended for use with outdoor air dampers.

When selecting actuators for an air handling unit economizer section, consider the speed of the actuators involved and possible pressure related problems.

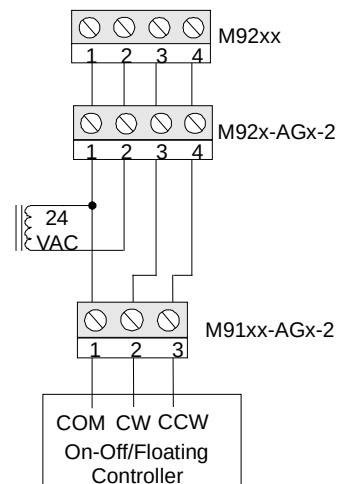


Figure 2: Multiple Actuator Wiring from Single Output

Note: Incremental applications could have false operation if used in parallel with devices such as the M9104 actuator.



CAUTION: Equipment Damage Hazard.

After a power failure, drive all actuators to a home or known position **before** starting the fan, when operating a system or air handling unit with both spring return and non-spring return actuators on an economizer section. If both the return air and outdoor air dampers are closed when the fan is started, damage to the ducts, dampers, or fan may occur.



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