

APPLICATION NOTE**M9000 Applications
RD-2000 Round Dampers**

This application for the M9000 Family of Electric Motor Actuators provides proportional control or on-off/floating control for RD-2000 round dampers. Obtain the system diagrams for controller installation to verify proper terminals for each actuator.

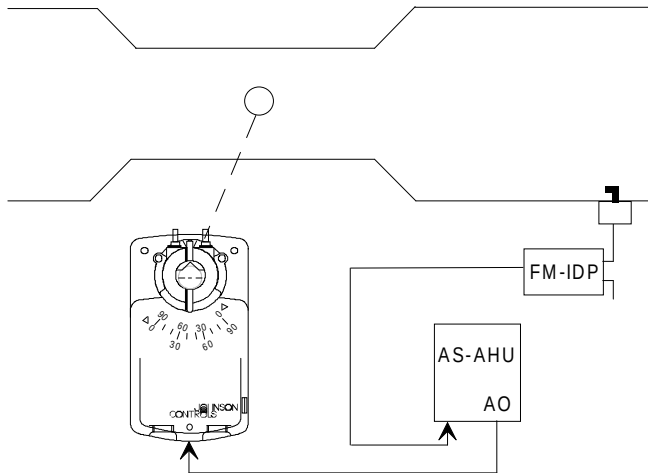


Figure 1: RD-2000 Damper Control

The M9100 actuator has to be limited either mechanically by changing the rotation range or electrically by using the auxiliary switches.

The M9200 actuator has to be limited either mechanically by using the rotation end-stops or electrically by using the auxiliary switches.

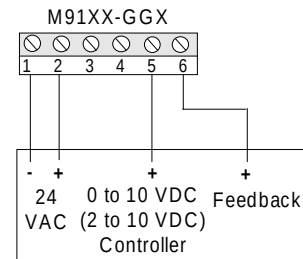


Figure 2: Using Voltage Controller with Feedback

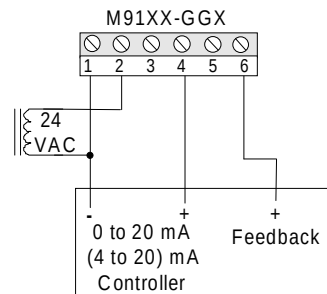


Figure 3: Using Current Controller with Feedback

Note: DX9100 and A350 controllers can only drive one actuator in the current mode.

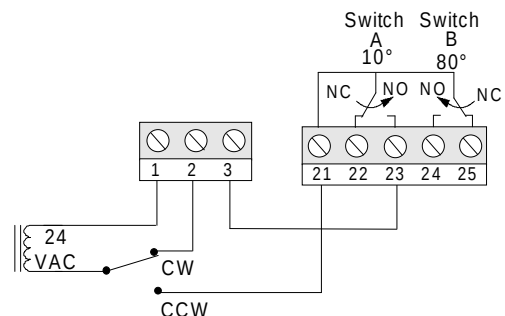


Figure 4: Using On-Off/Floating Controller with Auxiliary Switches for the M9100

Figure 4 shows the use of auxiliary switches (factory set at 10° and 80°) to limit the travel of the actuator.

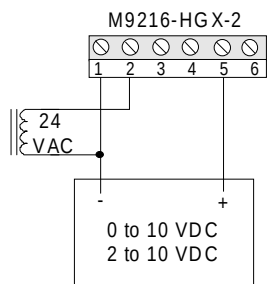


Figure 5: Using Voltage Controller

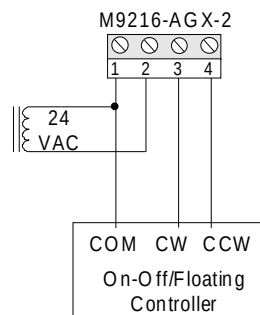


Figure 7: Using On-Off/Floating Controller

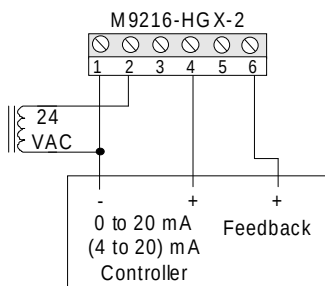


Figure 6: Using Current Controller with Feedback

Note: DX-9100 and A350 controllers can only drive one actuator in the current mode.

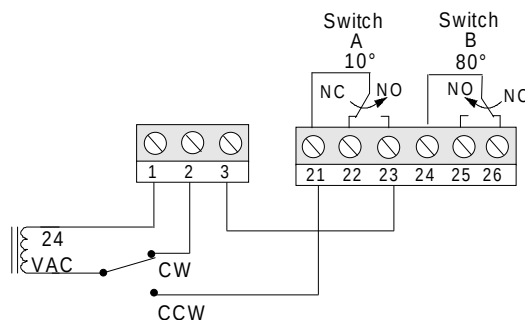


Figure 8: Using On-Off/Floating Controller with Auxiliary Switches for the M9200

Figure 8 shows the use of auxiliary switches (factory set at 10° and 80°) to limit the travel of the actuator.



WARNING: M9200 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.

Mechanically limit stroke to 85° to prevent possible damage to the damper.

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