## Description

The AZRD-A80VP is a 24VAC powered damper with modulating or variable positioning control using the Manual Wall Control or Occupancy Sensor. These dampers are designed for use with ceiling diffusers or grills to control airflow.

### **Comfort Improvement**

Overheating and overcooling of work spaces are common to many facilities and can be eliminated using the AZRD-A80VP Damper and Manual Wall Control or Occupancy Sensor. Additional energy savings can be achieved by automatically lowering airflow when an office, conference room or other space is vacant.

The Occupancy Sensor lets you set the airflow level for best comfort and a lower airflow level to save energy when the space is vacant and the lights turned off. The Occupancy Sensor automatically lowers airflow level when the lights are turned off and raises airflow to your comfort level when the lights are turned on.

## **Saves Energy**

When overheating and overcooling are eliminated, the conditioned air is automatically directed to areas or zones that require additional heating or cooling. The HVAC unit runs a shorter period of time and energy consumption is reduced.

This damper can also be used to lower airflow to unoccupied spaces providing further energy savings.

## **Compatible Controls**



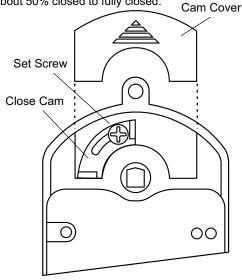
The OSL Occupancy Sensor automatically adjusts airflow for best comfort when a space is occupied and lowers airflow for added energy savings when the space is vacant.

The MWC Manual Wall Control allows you to set the airflow to the level best suited to your comfort and optionally lower the airflow when the space is vacant.



## 1 Setting Mechanical Bypass

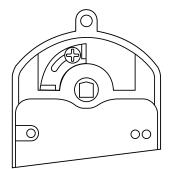
The AZRD-A80VP damper actuator has a Close Position limit that can be used to insure a minimum airflow even when all dampers are closed. The minimum Close Position can be set from about 50% closed to fully closed.



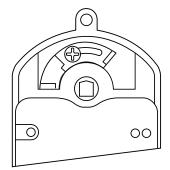
## **Adjusting Close Limit**

Set the damper to the fully open position by applying 24VAC to COM and 24VAC terminals. The damper will cycle open-close-open to calibrate itself.

Loosen the set screw and rotate the Close Cam CW and tighten the set screw. With the cam in the fully CCW position, the damper will completely close. In the fully CW position, the damper will close to about 50% closed allowing some air to pass even when the user sets the damper to fully closed. Replace the cam cover.



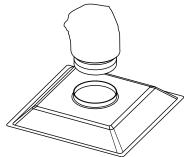
Cam set for fully close operation.



Cam set for 50% close operation.

# 2 Mechanical Installation

Remove the flex-duct from the ceiling register or diffuser collar.

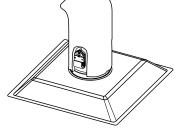


Insert the damper into the collar and secure it with sheet metal screws.

Attach the flex-duct to the damper and secure the inner sleeve to the damper using the cable tie provided.



Alternately you can shorten the inner sleeve by the length of the damper and slide the outer insulation over the damper and secure it with duct tape. Cut a slot in the insulation to fully expose the actuator.





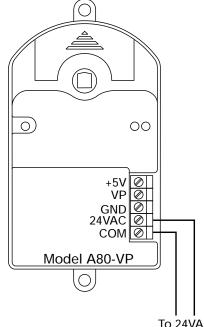
## Wiring Instructions

The damper requires 24VAC power that can be provided by a 40VA, 24VAC transformer. The transformer can be a plug-in type or a transformer mounted on a junction box in the ceiling. A single 40VA transformer can power 12 dampers.

- 24VAC Connect to 24VAC transformer
- COM Connect to 24VAC transformer
- **GND** Connect to occupancy sensor or manual wall control.
- VP 0 to +5V control input. Connect to occupancy sensor or manual wall control.
- +5V +5VDC output. Connect to occupancy sensor or manual wall control.

## Wiring 24VAC Power

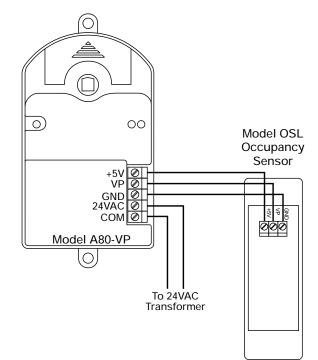
The damper requires 24VAC power that can be provided by a 40VA, 24VAC transformer. Connect the transformer output to terminals 24VAC and COM.



To 24VAC Transformer

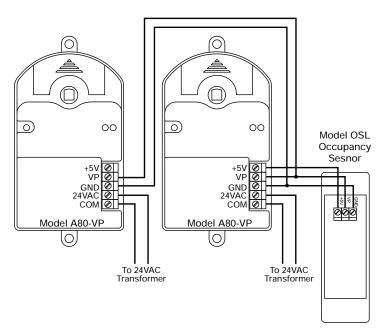
## Wiring Using an OSL Occupancy Sensor

An AZRD-A80VP damper and OSL Occupancy Sensor are connected using the GND, VP and +5V terminals.



## Wiring Using One OSL Occupancy Sensor to Control Multiple VPD Dampers

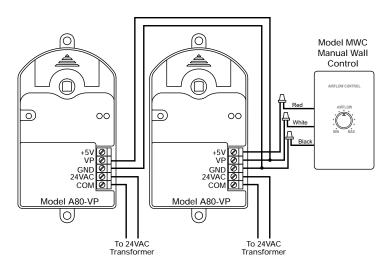
An Occupancy Sensor can control multiple AZRD-A80VP dampers using the VP and GND terminals. Up to six AZRD-A80VP dampers can be controlled by an Occupancy Sensor.



IMPORTANT! Only the +5V terminal on the first damper is connected to the Occupancy Sensor.

## Wiring Using an MWC Manual Wall Control with Multiple VPD Dampers

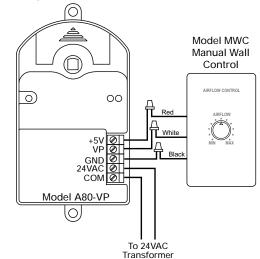
A Manual wall Control can control multiple AZRD-A80VP Dampers using the VP and GND terminals. Up to six AZRD-A80VP Dampers can be controlled by a single Manual Wall Control



IMPORTANT! Only the +5V terminal on the first damper is connected to the Manual Wall Control.

## Wiring Using an MWC Manual Wall Control

An AZRD-A80VP damper and MWC Manual Wall Control are connected using the GND, VP and +5V terminals.



## **3-Year Limited Warranty**

The 3-year warranty is limited to the repair or replacement of defective product due to parts failure or defective workmanship.