

ASIC/1-8055 Outside Air Damper

Application

This application bulletin describes the operation of an outdoor air damper with the ASIC/1-8055-D Fan Powered VAV controllers with secondary airflow sensor. This has been implemented with FW155A Version 2.0.

When Outside Air Enable is yes, the secondary damper will be controlled to maintain an Outside Air Volume Setpoint when in the Occupied state. In Night Setback, Unoccupied, and Morning Warmup states, the Outside Air Damper is driven closed continuously.

Controller Configuration

SET-8055 1.26 and ASI Expert both to support Outside Air Damper.

Select the proper personality. For example, VAV personality with 2 stages of electric heat, Personality 7 for intermittent fan, or Personality 10 for constant fan. This feature is not available with Dual Duct personalities, 14 and 15.

Mount the outside airflow pickup in the outside air duct, and connect it to secondary airflow sensor. Verify that this sensor has been calibrated at zero airflow and that the proper Secondary K-factors and Duct Areas are used. You can now monitor secondary airflow.

Configure the Light Output Mask as None, the Secondary Damper Open Mask as Output 7, and the Secondary Damper Close Mask as Output 8 to control the Outside Air .

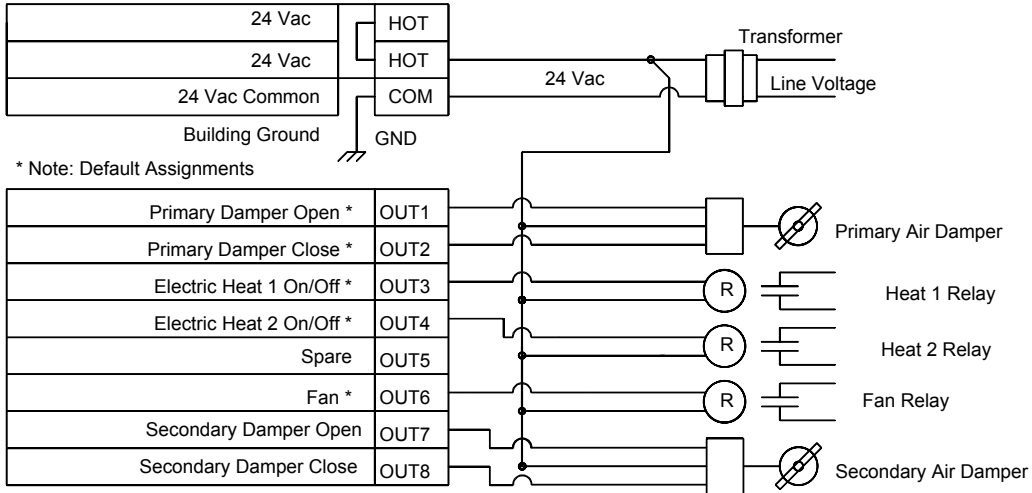
Set Outside Air Enable to "Yes" and set the Outside Airflow Setpoint to the desired airflow value.

Reset and Resynchronize the controller. It will now control the secondary damper to the Outside Airflow Setpoint during Occupied and drive the damper closed in Night Setback, Unoccupied, and Morning Warm-up.

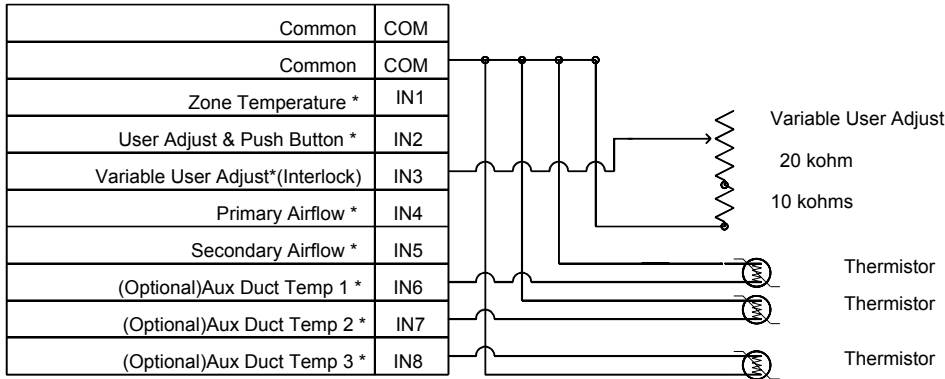
Wiring Layout

Outside Air Damper Modulation

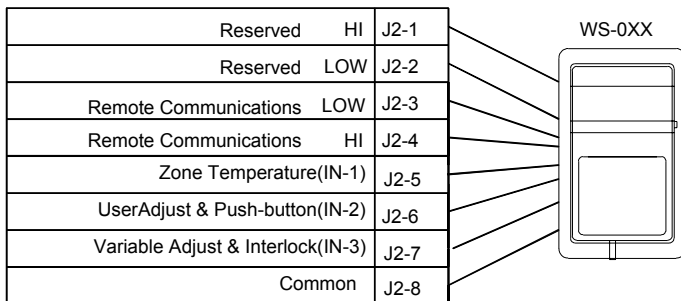
Typical Fan Powered VAV with 2 stages electric heat, and optional secondary damper control for constant Outside Air. Configure the Light Output Mask as None, the Secondary Damper Open as Output 7, and the Secondary Damper Close as Output 8.



* Note: Default Assignments



Remote Communications HI(+)	TB4-1
Remote Communications LOW(-)	TB4-2
Shield / Common (c)	TB4-3



CLG Fan Powered VAV with 2 Stage Electric Heat and Secondary Outdoor Air Damper