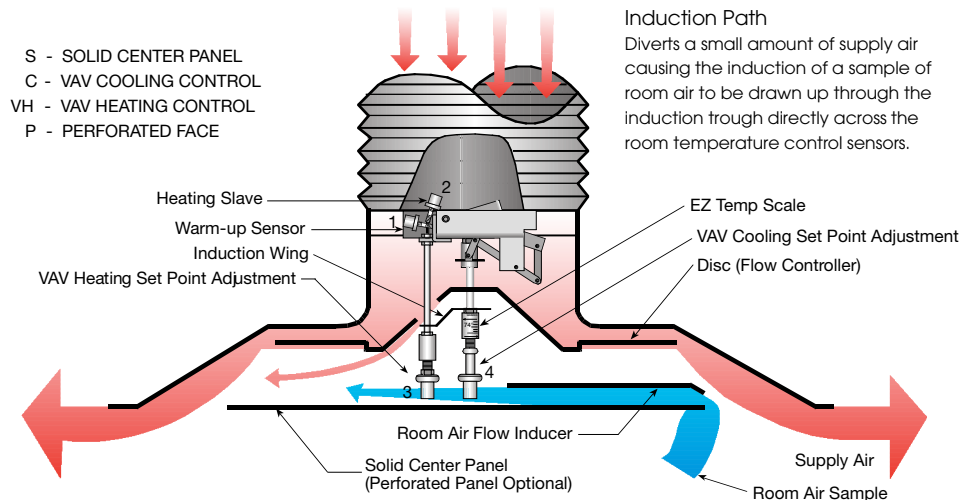


SCVH

Protected by U.S. Patent Number 6,176,435

Thermally Powered Diffusers

Separately adjustable set-points for VAV heating and VAV cooling control



SCVH 2 x 2 Square - Operational Air Flow

SCVH is a thermally powered VAV diffuser which is completely self-contained and self-powered. The mechanism is operated by four thermostatic elements to provide VAV room temperature control in heating and cooling. The simple design is based on fewer moving parts to hinder the element's response. A cone shaped diffusion damper creating less turbulence allows complete and even air distribution.

OPERATION Change over between heating and cooling modes is determined by supply air temperature. When heating cycle is initiated, element #1 will react first, lowering damper to full open position (full heating).

Then element #2, the heating slave, reacts at 78 degrees or greater, positioning the heating u-arm to engage element #3, the room thermostat for heating control.

As the room warms, element #3 begins to sense room temperature to vary the heating supply volume to achieve and sustain the desired room temperature. The factory set point of 74 degrees is adjustable between 72 - 78 degrees. For less heating, turn element #3 clockwise. For more heating turn element #3 counter-clockwise. Each full turn will equal plus or minus 2 degrees. A drop in room temperature and unit will respond by opening to increase heating volume until the room temperature reaches the desired set point.

VAV cooling control is initiated when supply air is below 68 degrees.

In cooling mode elements #1 & #2, do not react. This engages the cooling control element #4 which will vary the supply air when cooling. A rise in room temperature and unit will respond by allowing cool air into the space until the room temperature reaches the desired set point. All units are factory set at 74 degrees, and are adjustable between 72 and 78 degrees.

For a cooler room temperature turn element #4 clockwise. For a warmer room temperature turn element #4 counter-clockwise.

Determine room temperature set point by aligning the end of the element with the indicators on the temperature scale. Each full turn or indicator will equal plus or minus 2 degrees.

INDUCTION Room air is induced across elements #3 and #4 by use of a simple induction wing. This diverts a small amount of supply air which induces a room air sample through an induction trough located on the back side of the appearance panel.

PERFORMANCE AIR PRODUCTS, INC.

102 Kimball Ave., Unit #16, So. Burlington, VT 05403 • 802/859-0471 • FAX 802/859-0473 • 800/852-1624

Performance Air Products, Inc., warrants the thermal diffuser for a period of 10 years. The diffusers shall be free from defects in material and workmanship. We agree to repair or replace any defective parts. This warranty excludes shipping charges and field labor required to exchange, test or service the diffuser.