# United Enertech

(ENGINEERS)

**MODEL S-3V-II** LOW LEAKAGE SMOKE DAMPER

U.L. 555S CLASSIFIED AND ULC S112.1 LISTED Class II Leakage Rated

### Application and Design

The Model S-3V-II is UL/ULC listed and labeled Class II leakage rated Smoke Damper. Blades are of the 3V shaped or crimped design. The damper is approved for airflow in either direction and provides a maximum leakage of 20 cfm/sq. ft at 4" wg. s.p. It has been designed to be installed in a vertical or horizontal mounting position in the ductwork or separate sleeve within 24" of the smoke partition. These dampers are approved for use in engineered smoke control systems and are controlled via smoke detection system. Electric (24v, 120v, and 230v) or pneumatic actuators are used to operate the smoke dampers.

## Standard Construction

Frame: 5" Roll formed Frame - Galvanized Steel hat-section W/ staked corners & integral bracing

Blades: 16 Ga. Roll formed - Galvanized Steel - 3V Blade Design min. width: 4-1/4" (108mm) max. width: 7-1/4" (184mm)

Axles: Square plated steel

- **Seals:** Pressure Sensitive 450° silicone blade edge seals and flexible metal jamb seals.
- **Linkage:** Concealed in frame. Linkage bars are 1/8" (3.2mm) **Bearings:** Bronze Oilite press-fit into frame

Designed and tested in accordance to standards: UL 555S, ULC S112.1. Labeled and listed by UL/ULC under File # R25410. They meet all the NFPA-90A, IBC Code, and other major code requirements for Smoke Dampers.

| Note: Due to continuing research,                 | Standard Sizes |                     |                        |
|---|----------------|---------------------|------------------------|
| UE reserves the right to<br>change specifications | Min. V or H    | Max. Single Section | Max. Multiple Assembly |
| without notice.                                   | 6" X 6"        | 36"W X 48"H         | 144"W X 96"H           |
|   | 152mm X 152mm  | 914mm X 1219mm      | 3657mm X 2438mm        |

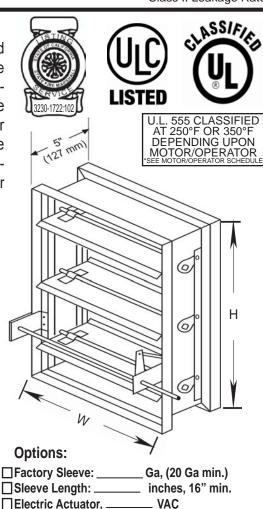
#### Suggested Specification

Low Leakage Smoke Control Dampers shall be Model:S-3V-II by United Enertech. Single blade edge and jamb seals shall be of the pressure sensitive type for low leakage. Dampers shall be rated for leakage as to U.L. 555S / U.L.C. S112.1 rating and shall be Class II with leakage not to exceed 20 cfm per sq. ft. at 4.0 inches static pressure. Linkage shall be of the concealed type for the maximum free area.

#### Manufacturer's Recommendations

All moving parts of the damper must be inspected and cycled at intervals not greater than every 12 months or in accordance with the latest edition of NFPA 90A, 92A, local codes and the actuator manufacturer. In addition, the damper shall be inspected for corrosion. Dry lubricants are recommended.

| Job Name:   | □ MODEL S-3V-II  |                     |                         |  |
|-------------|------------------|---------------------|-------------------------|--|
| Location:   |                  |                     |                         |  |
| Architect:  |                  |                     |                         |  |
| Engineer:   | DRAWN BY:<br>MAB | DATE:<br>11-07-07   | REV. DATE:<br>10-24-08  |  |
| Contractor: | REV. NO.<br>5    | APPROVED BY:<br>SDC | DWG. NO.:<br><b>C-2</b> |  |



•Non-sleeved and side plated dampers are furnished approximately 1/4" (6.4mm) smaller than given duct dimensions. Sleeved dampers are furnished approx. same size as

given duct dimension, unless otherwise noted.Not recommended with blades running vertically.

Pneumatic Actuator, 25 psi

Notes:

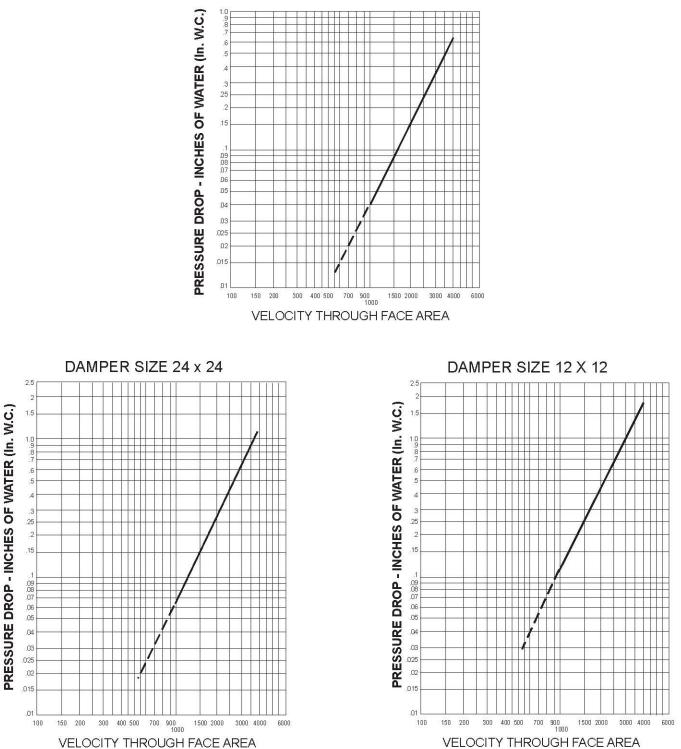


## MODEL S-3V-II LOW LEAKAGE SMOKE DAMPER U.L. 555S CLASSIFIED / CLASS II

# PERFORMANCE DATA

Pressure drop testing was done by an independent laboratory to AMCA Standard 500-D, Fig. 5.3 ductwork upstream & downstream.

DAMPER SIZE 36 x 36



C-2a