



INSTALLATION INSTRUCTION FIRE SMOKE DAMPER WITH DUCT SMOKE DETECTOR

SERIES KFSD & KSD WITH DSD-HS-100

DEFINITION

The DSD-HS-100 is designed for use with KBE UL Classified Smoke & Fire/Smoke Dampers. The device detects the presence of smoke in the airstream of ductwork in HVAC systems operating without a minimum operating velocity.

DSD-HS-100 are factory mounted for "single point field power connection" to a standard KBE damper actuator (damper with fusible link) or electronic fuse link (RL).

The DSD-HS-100 factory mounted with a smoke rated damper is intended to close the damper in accordance with International Building Codes. The DSD-HS-100 can be field wired back to a UL listed fire alarm panel by others.

APPLICATION

International safety standards and codes recognize the ability of air duct systems to transfer smoke, toxic gases and flame from area to area. Smoke can be a serious hazard to life safety unless blowers are shut down and dampers are actuated. **The primary purpose of duct smoke detection is to prevent injury, panic and property damage by reducing the spread of smoke.** Duct smoke detection can also serve to protect the air conditioning system itself from fire and smoke damage, and can be used to assisting equipment protection applications.

When presence of smoke in the duct is sensed, or when loss of power occurs the damper will fail close. **Consult NFPA90A, NFPA72 documents and local codes to determine where smoke detectors are required.**

DAMPERS

The DSD-SM-501 can be factory mounted on any of the following KBE combination fire/smoke and smoke dampers: KFSD-111, KFSD-L-111 & KSD-333

DSD-HS-100 DESCRIPTION / SPECIFICATION

Model: AIR PRODUCT & CONTROLS HS-100-P

Type: Photoelectric

Velocity: 0 to 3,000 fpm.

Dimensions (Dia): 6" (152).

Weight: 0.45Kg.

Operating Temperature Range: 32°F to 140°F (0° to 60°C).

Operating Humidity Range: 0% to 85% Relative Humidity.

Operating Voltages: 24 VAC/VDC or 115/220 VAC operation.

Contact Ratings: Refer to information provided with detector.

LISTINGS OF HS-100

- UL Listed, file S2829
- CSFM Listing #3240-1004:0118.



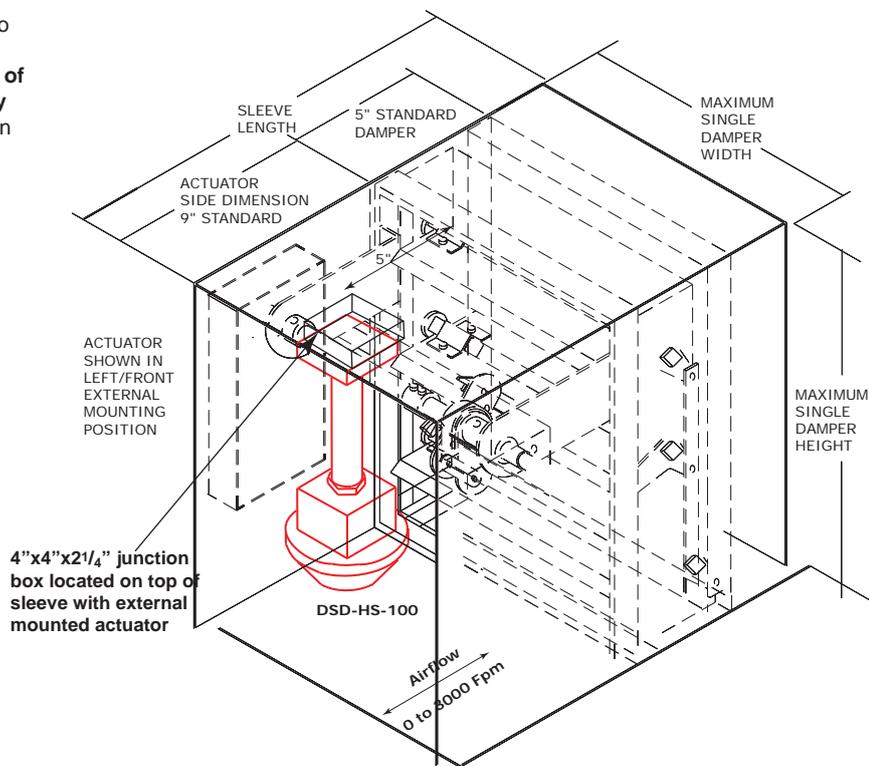
APPROVAL

UL does not have a separate Product Category for factory mounted smoke detectors. The smoke detector and the damper have been individually evaluated by their applicable UL standards.

The local authority having jurisdiction should be consulted prior to installation of the damper and smoke detector.

ACCESSORIES

Annunciators, remote test & reset stations, sounders, strobes, etc. are available from the duct smoke detector manufacturer.



MAINTENANCE AND SERVICE OF DUCT DETECTORS

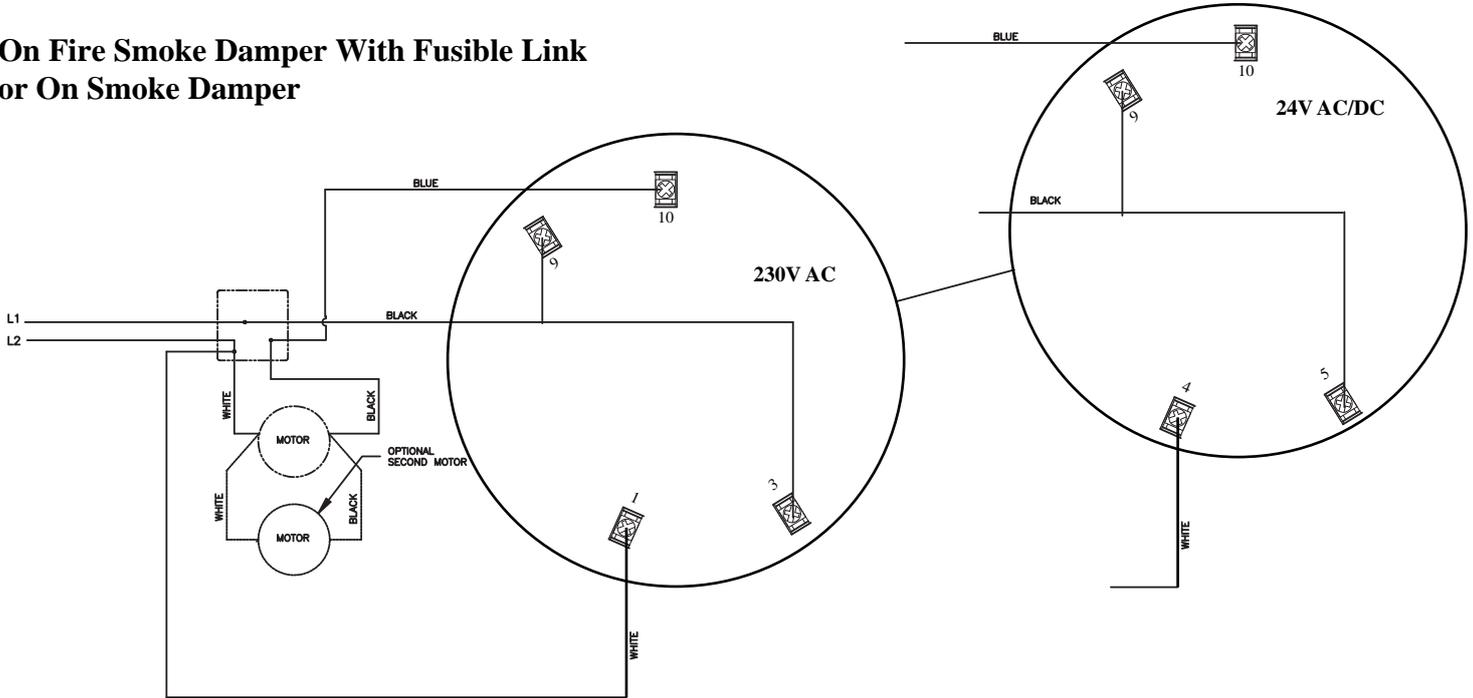
Dust, dirt and other foreign matter can accumulate inside a detector and change its sensitivity. Detectors should be tested and main-tained periodically. Routine maintenance should be performed atleast once a year and more frequently in dirtier environments. Refer to NFPA90A, NFPA72 and detector manufacturer's instructions packaged with each detector for specific maintenance and testing information.

NOTE: Dimensions shown in parentheses () indicate millimeters.

FIRE SMOKE DAMPER WITH DUCT SMOKE DETECTOR

WIRING DIAGRAM FOR DSD-HS-100-P

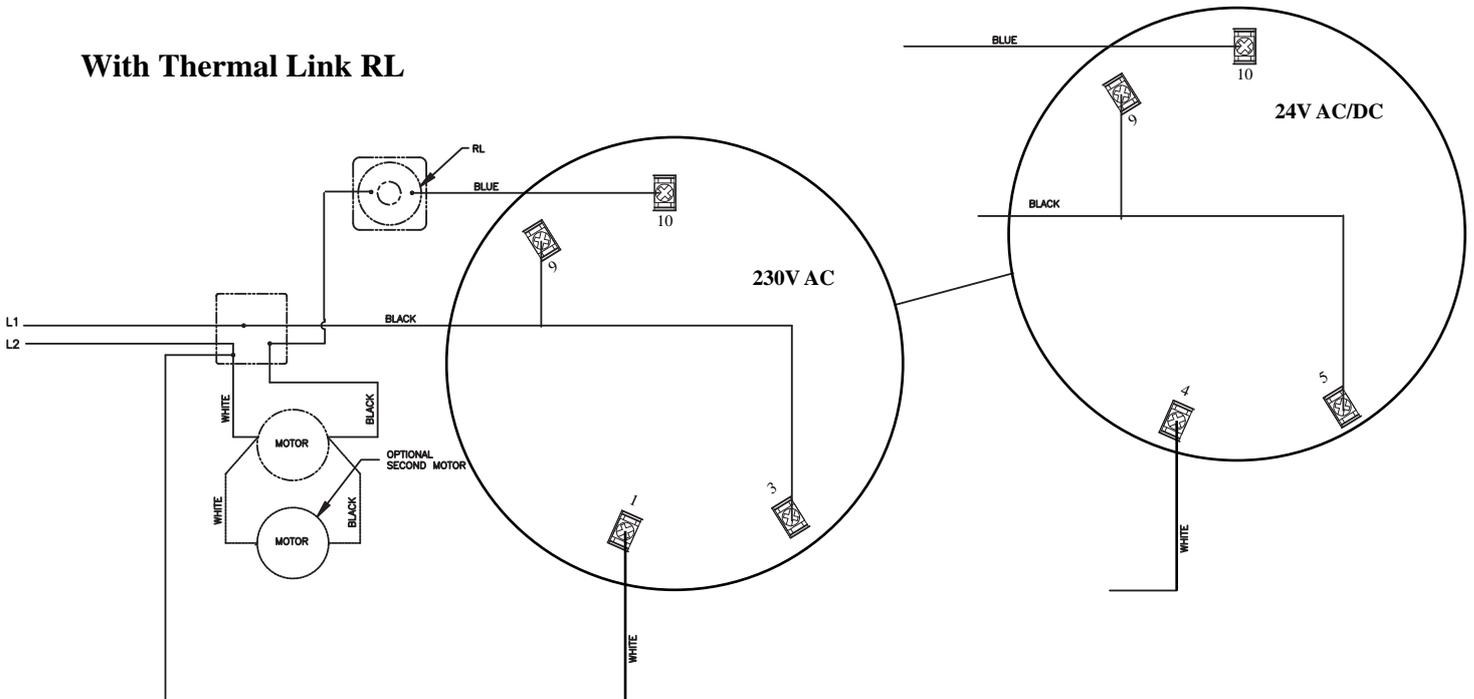
On Fire Smoke Damper With Fusible Link or On Smoke Damper



NOTES:

- 1- Flex conduit must be secured with a conduit clamp within 12" of conduit termination at the handi-Box
- 2- Flex Conduit runs must be secured along sleeve at a 24" maximum spacing.
- 3- Please consult factory for number of sensor for each type of Motor and Sections

With Thermal Link RL



NOTES:

- 1- Flex conduit must be secured with a conduit clamp within 12" of conduit termination at the handi-Box
- 2- Flex Conduit runs must be secured along sleeve at a 24" maximum spacing.
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