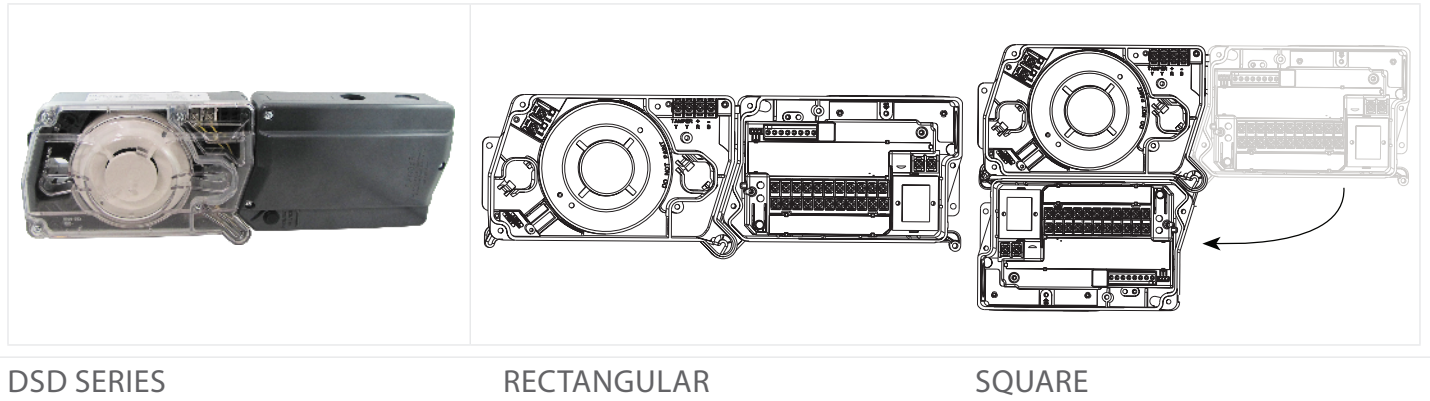




DUCT SMOKE DETECTOR



PRODUCT DESCRIPTION

The DSD Series, 4-wire photoelectric duct smoke detector features a pivoting housing that fits both square and rectangular ductwork. This unit senses smoke in the most challenging conditions, operating in airflow speeds of 100 to 4,000 feet per minute, temperatures of -20°C to 70°C (-4°F to 158°F), and a humidity range of 0 to 95% (non-condensing). A plug-in sensor head offers improved false alarm immunity and simple installation, testing, and maintenance. An improved cover design isolates the sensor head from the low-flow feature for simple maintenance.

The DSD housing provides ample wiring space, a $\frac{3}{4}$ -inch conduit knockout, and built-in short circuit protection to prevent damage to sensitive components during installation. High contrast terminal designations make wiring easy. With its 2:1 sensor-to-power capability, the power board of the DSD may be used to monitor a second sensor, D4S, simultaneously (i.e., supply and return side). As many as 50 detectors can be interconnected. When one unit senses smoke, all interconnected detectors will switch their relays; only the detector sensing smoke will go into alarm, thus pinpointing the fire source.

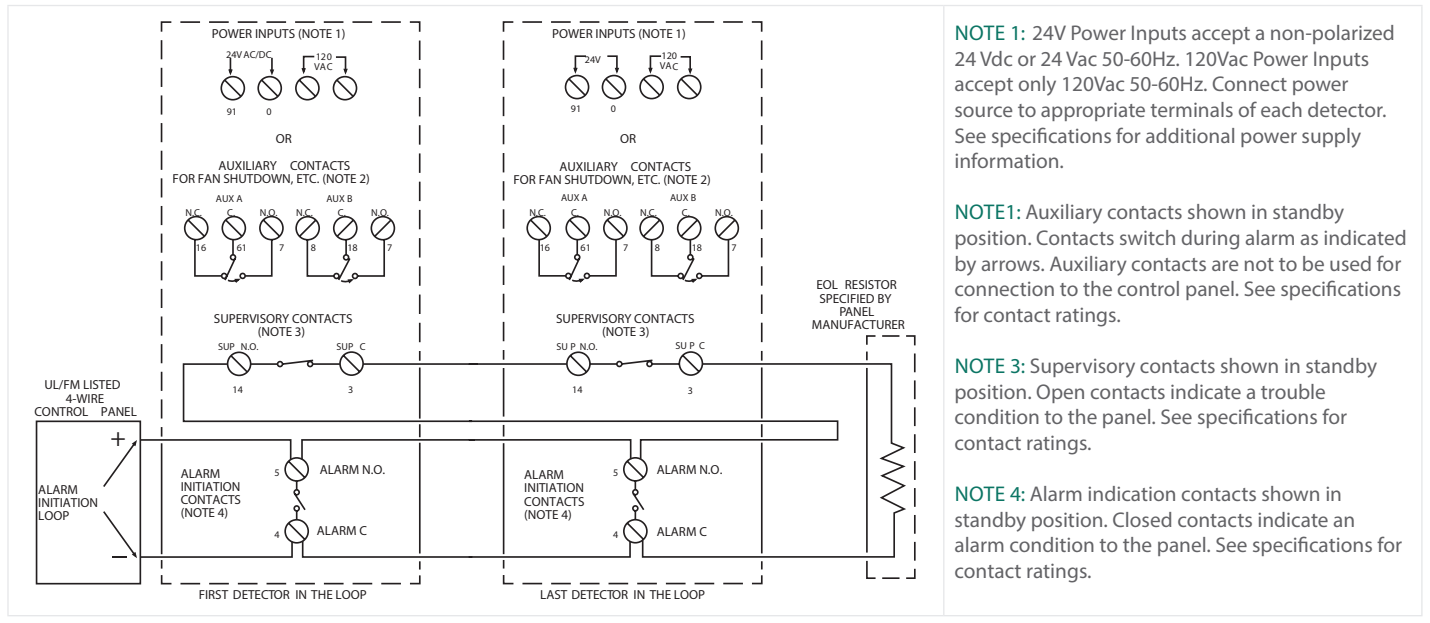
All detectors must be used with a metal sampling tube, DST series.

SPECIFICATIONS

SIZE	Rectangular Dimensions: 37cm (14.38in) L, 12.74cm (5in) W, 6.36cm (2.5in) D Square Dimensions: 19.7cm (7.75in) L, 22.9cm (9in) W, 6.35 (2.5in) D			
WEIGHT	1.14kg (2.5lbs)			
OPERATING TEMPERATURE	-20 to 70°C (-4 to 158°F)			
STORAGE TEMPERATURE	-30 to 70°C (-22 to 158°F)			
OPERATING HUMIDITY	0 to 95 %RH, non-condensing			
AIR DUCT VELOCITY	0.5 to 20.32 m/sec (100 to 4000 ft/m)			
ELECTRICAL RATINGS	DSD120/240	DSD120/240	DSD120	DSD240
POWER SUPPLY VOLTAGE	20-29 Vdc	24Vac 50-60Hz	120Vac 50-60Hz	240 Vac 50-60Hz
INPUT CAPACITANCE	270 μF maximum	270 μF minimum	N/A	N/A
RESET VOLTAGE	3.0 Vdc minimum	2.0 Vac minimum	10 Vac minimum	20 Vac minimum
REST TIME (BY POWER DOWN)	0.6 sec. max.	0.6 sec. max.	0.6 sec. max.	0.6 sec. max.
POWER UP TIME	35 sec. max.	35 sec. max.	35 sec. max.	35 sec. max.
ALARM RESPONSE TIME	15 seconds	15 seconds	15 seconds	15 seconds
SENSITIVITY TEST	See detector label	See detector label	See detector label	See detector label
CURRENT REQUIREMENTS				
MAX. STANDBY TEST	21 mA @ 24 Vdc	65 mA RMS @ 24 Vac 60 Hz	20 mA RMS @ 120 Vac 60 Hz	10mA @ 240 Vac 60 Hz
MAX. ALARM CURRENT	65 mA @ 24 Vdc	135 mA RMS @ 24 Vac 60 Hz	35 mA RMS @ 120 Vac 60 Hz	18 mA RMS @ 240 Vac 60 Hz
CONTACT RATINGS	Alarm Initiation Contacts (SPST): 2.0A @ 30 Vdc (resistive) Alarm Auxiliary Contacts (SPST): 10A @ 30 Vdc (resistive); 10A @ 250 Vac (resistive); 1/2 HP @ 240 Vac; 1/4 HP @ 120 Vac <i>Note: Alarm auxiliary contacts shall not be connected to initiating circuits of control panels. Use the alarm initiation contact for this purpose.</i> Supervisory Contacts (SPST): 2.0A @ 30 Vdc (resistive); 2.0A @ 125 Vac (resistive)			



WIRING INFORMATION



NOTE 1: 24V Power Inputs accept a non-polarized 24 Vdc or 24 Vac 50-60Hz. 120Vac Power Inputs accept only 120Vac 50-60Hz. Connect power source to appropriate terminals of each detector. See specifications for additional power supply information.

NOTE1: Auxiliary contacts shown in standby position. Contacts switch during alarm as indicated by arrows. Auxiliary contacts are not to be used for connection to the control panel. See specifications for contact ratings.

NOTE 3: Supervisory contacts shown in standby position. Open contacts indicate a trouble condition to the panel. See specifications for contact ratings.

NOTE 4: Alarm indication contacts shown in standby position. Closed contacts indicate an alarm condition to the panel. See specifications for contact ratings.

ORDERING

PRODUCT	DSD	Duct Smoke Detector, Photoelectric
POWER SUPPLY	120	120 Vac, 24 Vac/Vdc
	240	240 Vac, 24 Vac/Vdc

NOTE: Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.

PART NUMBER

DSD

ORDERING

PRODUCT	DST-	Metal Duct Sampling Tube for DSD Series
DUCT SIZE	1.0	Duct widths up to 305mm (12")
	1.5	Duct widths between 305mm - 610mm (12" - 24")
	3.0	Duct widths between 610mm - 1200mm (24" - 48")
	5.0	Duct widths between 1200mm - 2400mm (48" - 96")
	10.0	Duct widths between 2400mm - 3700mm (96" - 144")

NOTE: Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.

PART NUMBER

DST-



3242-1653-0207



Greystone Energy Systems, Inc.
150 English Drive, Moncton,
New Brunswick, Canada E1E 4G7

Ph: +1 (506) 853-3057 Fax: +1 (506) 853-6014
North America: 1-800-561-5611
E-mail: mail@greystoneenergy.com