



Innovairflex



MEAs
approved



D4120

DESCRIPTION

The InnovairFlex D4120 4-wire photoelectric duct smoke detector features a pivoting housing that fits both square and rectangular footprints and mounts to round or 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 -4°F to 158°F, and a humidity range of 0 to 95 percent (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.

FEATURES

- *Photoelectric, integrated low-flow technology*
- *NEMA 4 models for outdoor mounting*
- *Versatile mounting options: square or rectangular configuration*
- *Plug-in sensor offers superb false alarm immunity and the latest sensor technology*
- *2:1 sensor-to-power capability allows one power board to monitor both supply and return smoke sensors*
- *Patented sampling tube installs from front or back of the detector with no tools required*
- *Increased wiring space with a newly added 3/4-inch conduit knockout*
- *One easy-access Test/Reset button and improved LED status*
- *Patented interconnect feature for multi-fan shutdown*
- *New high contrast terminal designations*
- *Built-in short circuit protection from operator wiring errors*
- *Field selectable settings for configuring the detector*
- *Two DPDT Form-C relay contacts*
- *24 VAC/DC or 120VAC*
- *Backward compatibility*

SPECIFICATIONS

Supply Voltage	(without accessories) 24 VAC @ 65 mA (standby & alarm) 20-29 VDC @ 21 mA (standby & alarm) 120 VAC @ 20 mA (standby & alarm) 50/60 Hz	Air Velocity	100 to 4000 ft/min (0.5 to 20.32 m/sec)
Frequency		Warm Up Time	35 seconds maximum
Relay Contacts		Reset Time	Using RTS45:1 0.03 to 0.3 seconds powering down: 0.6 seconds maximum
Alarm (SPST)	2.0A @ 30 VDC (resistive)	Operating Temperature	-4° to 158°F (-20° to 70°C)
Aux (DPDT)	10A @ 250 VAC (resistive), 1/2 HP @ 240 VAC, 1/4 HP @ 120 VAC	Operating Humidity	0% to 95% non-condensing
Supervisory (SPDT)	2.0A @ 30 VDC (resistive) 2.0A @ 125 VAC (resistive)	Enclosure Rating	
Alarm Response Time	15 seconds	D4120	NEMA 1
Reset Voltages	3.0 VDC minimum, 2.0 VAC minimum, 10 VAC minimum, 3.0 VDC minimum 2.0 VAC minimum 10 VAC minimum	D4120W	NEMA 4
		Dimensions	14.4"L x 5"W x 2.5"D (37 x 12.7 x 6.4 cm)
		Weight	
		D4120	3.2 lb (1.45 Kg)
		D4120W	3.3 lb (1.5 Kg)
		Approvals	UL File #S911, FM, CSFM
		Warranty	3 years

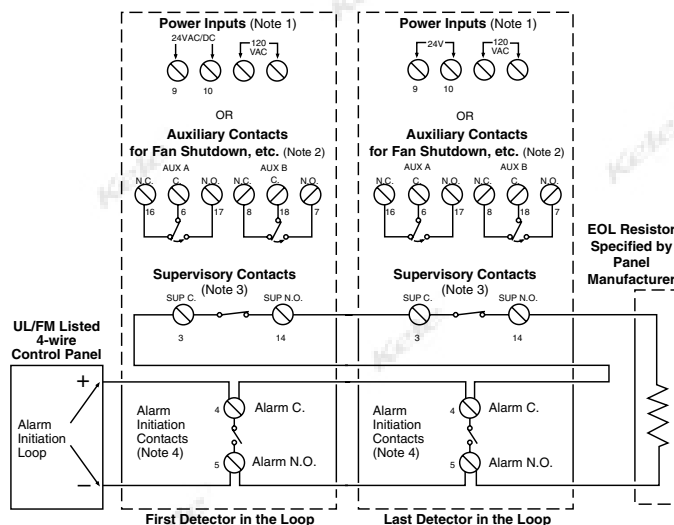


GAS & SPECIALTY SENSORS

PHOTOELECTRIC DUCT SMOKE DETECTOR

D4120

WIRING



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

NOTE 2: 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 UL Fire/Smoke panel. See specifications for contact ratings.

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

NOTE 4: For use with UL Fire/Smoke panels. Alarm Initiation contacts shown in standby position. Closed contacts indicate an alarm condition to the panel. See specifications for contact ratings.

*Please refer to the corresponding installation manual for accessory wiring diagrams.

ORDERING INFORMATION

MODEL
D4120
D4120W

DESCRIPTION
4-wire photoelectric low-flow duct smoke detector
Watertight 4-wire photoelectric low-flow duct smoke detector



D4120W



D4120



D4S



D4P120



2D51

ACCESSORIES

691-K0A
AOS
APA151
D4P120
D4S
DCP-1.5-W
DCPA-1.2
DST1
DST1.5
DST10
DST3
DST5
MHR
MHW
RA100Z
RTS151
RTS151KEY
RTS2
P48-21-00

Control transformer, 120:24 VAC, 40 VA, Class 2
Mini-alert add-on strobe, clear
Remote annunciator with piezo alarm
Power board component only, 24 VAC/VDC, 120 VAC
Remote or replacement sensor (not watertight)
Power supply, 24 VAC IN to 24 VDC OUT
Power supply, 120 VAC IN to 24 VAC/24 VDC OUT
D4120 metal duct sampling tube, 1 ft (0.3m)
D4120 metal duct sampling tube, 1.5 ft (0.45 m)
D4120 metal duct sampling tube, 10 ft (3.0m)
D4120 metal duct sampling tube, 3.0 ft (0.91m)
D4120 metal duct sampling tube, 5 ft (1.5m)
Mini Horn, Red
Mini Horn, White
Remote annunciator, red alarm LED
Magnetic remote test station, red alarm LED
Key-activated remote test/reset station with bi-color (green/red) power/alarm LED
Key-activated remote test/reset station with sounder and power, trouble, and alarm LEDs
Sensor tube end cap replacement