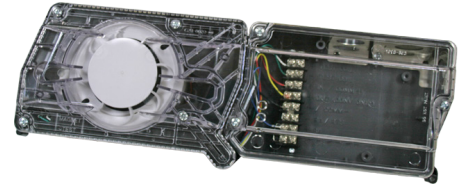


Intelligent Non-Relay Photoelectric Duct Smoke Detector Model DNRE

Overview

Features

- Photoelectric, integrated low-flow technology
- Air velocity rating from 1.5m/s to 20.3m/sec
- Versatile mounting options: square or rectangular configuration
- Broad ranges for operating temperature -20°C to 70°C and humidity (0% to 95% non-condensing)
- Patented sampling tube installs from front or back of the detector with no tools required
- New Cover tamper signal
- Increased wiring space with a newly added 20mm conduit knockout
- Available space within housing to accommodate mounting of relay module
- Easily accessible code wheels on sensor head (sold separately)
- Clear cover for convenient visual inspection



VdS - Pending



Description

The InnovairFlex™ Series are the only duct smoke detectors flexible enough to fit configurations from square to rectangular and everything in between.

The InnovairFlex DNRE intelligent non-relay photoelectric duct smoke detector features a pivoting housing that fits both square and rectangular footprints capable of mounting to a round or rectangular duct.

These units sense smoke in the most challenging conditions, operating in airflow speeds of 1.5m/s to 20.3m/sec, temperatures of -20°C to 70°C , and a humidity range of 0 to 95 percent (non-condensing).

An improved cover design isolates the sensor head from the low-flow feature for simple maintenance. A cover tamper feature was added to indicate a trouble signal for a removed or improperly installed sensor cover. The InnovairFlex housing provides a 20mm conduit knockout and ample space to facilitate easy wiring and mounting of relay module.

The InnovairFlex duct smoke detector can be customized to meet local codes and specifications without additional wiring. The new InnovairFlex product line is compatible with all previous Innovair models, including remote test accessories.

PLEASE REMEMBER DUCT SMOKE DETECTORS ARE:
NOT a substitute for an open area smoke detector,
NOT a substitute for early warning detection, and
NOT a replacement for a building's regular fire detection system.

Architect/Engineers Specifications

The air duct smoke detector shall be a System Sensor InnovairFlex™ DNRE Intelligent Non-Relay Photoelectric Duct Smoke Detector and DNREW Watertight NEMA4 Duct Smoke Detector. The detector housing shall be UL listed per UL 268A specifically for use in air handling systems. The flexible housing of the duct smoke detector fits both square and rectangular footprints. The detector shall operate at air velocities of 0.5 m/sec to 20.32 m/sec. The unit shall be capable of providing a trouble signal in the event that the sensor cover is removed or improperly installed. It shall be capable of local testing via magnetic switch or remote testing using the RTS151KEY remote test station. Terminal connections shall be of the strip and clamp method suitable for 2mm gauge wiring.

Electrical Specifications

Please see detector head installation manual for electrical specifications

Accessory Current Loads at 24 VDC

Device	Standby	Alarm
RA100Z	0 mA	12 mA Max.
RTS151/RTS151KEY	0 mA	12 mA Max.

Physical Specifications

Size: (Rectangular)	37 cm Length; 12.7 cm Width; 6.36 cm Depth
(Square)	19.7 cm Length; 22.9 cm Width; 6.35 cm Depth
Weight:	0.82 kg
Operating Temperature Range:	-20°C to 70°C
Storage Temperature Range:	-30° to 70°C
Operating Humidity Range:	0% to 95% relative humidity non-condensing
Air Duct Velocity:	1.5 to 20.3 m/sec

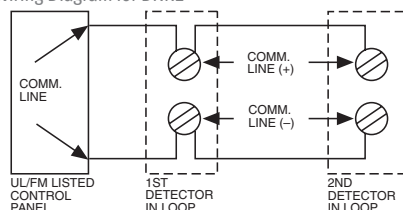
Installing the InnovairFlex Sampling Tube

The InnovairFlex sampling tube may be installed from the front or back of the detector. The tube locks securely into place and can be removed by releasing the front or rear locking tab.

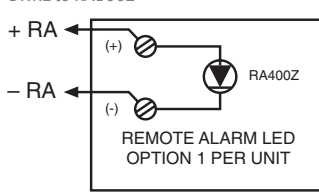


Wiring for Intelligent Non-Relay Duct Smoke Detector *

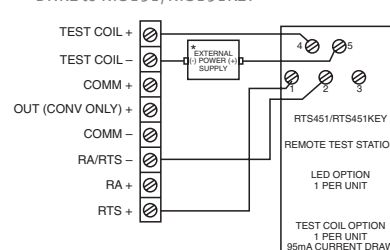
System Wiring Diagram for DNRE



DNRE to RA100Z



DNRE to RTS151/RTS151KEY



Product Range

Part No.	Description	Part No.	Description
DCOIL	2-wire remote test coil required with RTS451/RTS451KEY	RA100Z	Remote annunciator alarm LED
DST1	Metal sampling tube duct width up to 0.3m	RTS151	Remote test station
DST1.5	Metal sampling tube duct widths 0.3 to 0.6 m	RTS151KEY	Remote test station with key lock
DST3	Metal sampling tube duct widths 0.6 to 1.2 m		
DST5	Metal sampling tube duct widths 1.2 to 2.4 m		
DST10	Metal sampling tube duct widths 2.4 to 3.6 m		

* Important Notes:

The use of either RTS151 or RTS151KEY requires the installation of an accessory coil, DCOIL, sold separately.

Please refer to the DNRE installation manual for more information

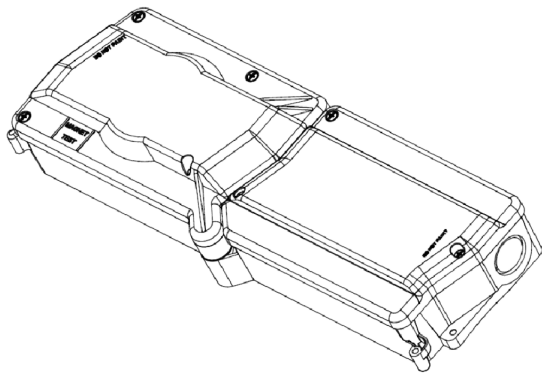
The RTS151/RTS151KEY test coil circuit requires an external 24vdc power supply

WEEE/RoHS/REACH Assessment

DNRE Product Evaluation Record

General information

Manufacturing Location:	System Sensor de Mexico SA de CV
	Av. Valle del Cedro No. 1681
	Parque Industrial Intermex
	Cuidad Juarez, CHIH CP 32574
	Mexico
Model Numbers	DNRE
Product description	Intelligent Non-Relay Duct Smoke Detector (sensor not included)
Product Life Cycle	Life span expectancy of >20 years (assuming that environmental conditions have been taken into consideration and the modules are regularly maintained)



Material Content

Name Of Part	Material	RoHS	Hazardous	Recycling Instruction (WEEE is out of scope)
Covers	Polycarbonate	Yes	Non-hazardous	Recycled by regrinding into granules and blending with fresh material
Housings	Polycarbonate/ABS/alloy	Yes	Non-hazardous	Re-used or recycled
Base	Polycarbonate/ABS/alloy	Yes	Non-hazardous	Re-used or recycled
Terminal block	Polycarbonate/Tinned Brass	Yes	Non-hazardous	Re-used or recycled
Gasket	Silicone sponge	Yes	Non-hazardous	Recycled or land filled
Screws	Steel	Yes	Non-hazardous	Recycled or land filled
Terminals	Tinned Brass	Yes	Non-hazardous	Recycled or land filled
Wiring	Copper/PVC	Yes	Non-hazardous	Recycled or land filled

Energy Consumption

Max. Avg. Standby Power:	0 mW (Refer to sensor specifications)
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Packaging

Primary packaging	Corrugated carton
Secondary packaging	Corrugated carton
Transportation packaging	Pallet (wooden platform), wrapping (polyethylene 04)

Additional Information

The purpose of this report is to provide information on the environmental aspects of the product, emphasis being on the material content and the energy consumption. Since there are not any emissions of harmful substances during the use of this product or in the manufacturing process of it, it is not necessary to specify these factors in this report. Also the transportation emissions are not included.