

# Intelligent Non-Relay Photoelectric Smoke Detector

## DNRE

### Overview

- Advanced intelligent detection functionality
- Fully digital addressing technology
- Includes Advanced ADEVA protocol
- Photoelectric, integrated low-flow technology
- Air velocity rating from 100 ft/min to 4000ft/min (0.5m/s to 20.32m/sec)
- Patented sampling tube installs from or back of the detector with no tools required
- New cover tamper signal
- Increased wiring space with a newly added 3/4 inch 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
- Rotary decade address switches
- Pure white colour to compliments modern buildings
- New base design to compliment the detector
- Tested and approved to EN54-7:2000+A1:2002+A2:2006



### 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 and DNREW watertight non-relay photoelectric duct smoke detector feature a pivoting housing that fits both square and rectangular footprints capable of mounting to a round or rectangular duct.

DNREW duct smoke detector, with its NEMA 4 rating, is listed as a watertight enclosure providing protection against falling dirt, rain, and windblown dust, splashing and hose directed water, allowing operators to use the detector in the most extreme environments.

These units sense smoke in the most challenging conditions, operating in airflow speeds of 100 to 4000 feet per minute, temperatures of -4°F to 158°F, 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 3/4-inch conduit knock out 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.

**WARNING:** Duct smoke detectors have specific limitations.

**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. Refer to NFPA 72 and 90A for additional duct smoke detector application information.

# Intelligent Non-Relay Photoelectric Smoke Detector DNRE

## Architect/Engineer Specifications

The air duct smoke detector shall be a System Sensor InnovairFlex™ DNRE intelligent Non-Relay Photoelectric Duct Smoke Detector. The detector housing shall be UL listed per UL 268A specifically for use in air handling system. The flexible housing of the duct detector fits both square and rectangular footprints. The detector shall operate at air velocities of 100ft/min to 4000 ft/min (0.5m/sec to 20.32m/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 RTS451KEY remote test station. Terminal connections shall be of the strip and clamp method suitable for 12-18 AWG wiring.

All ADEVA products are covered by our extended 5 years manufacturer warranty.

## Electrical Specifications

Please see detector head installation manual for electrical

Accessory Current Loads at	230µA at 24VDC (no communications)	
Device	Standby	Alarm
RA400Z	0mA	12 mA Max.
RTS451 / RTS451KEY	0mA	12 mA Max.

## Physical Specifications

Size:(Rectangular)	37 cm Length;12.7 cm Width;6.6 cm Depth
(Square)	19.7 cm Length;22.9 cm Width;6.35 cm Depth
Weight	0.73 kg
Environmental Range	NEMA4 (DNREW only)
Operating Temperature Range	-20°C to +70°C
Storage Temperature Range	-30°C to +70°C
Operating Humidity Range	10 to 93% Relative Humidity (non condensing)
Air Duct Velocity	0.5 to 20.32 m/s

## Installing the InnovairFlex Sampling

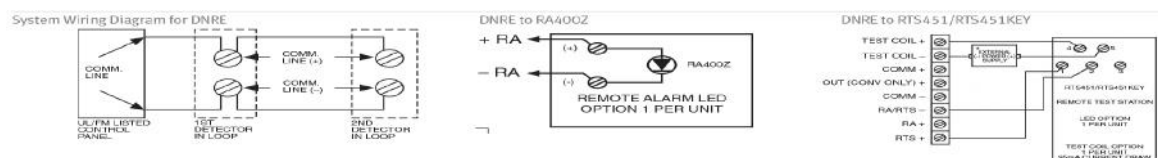
The InnovairFlex sampling tube may be installed from the front or back of the

The tube locks securely into place and can be removed by releasing the front or rear locking



## Wiring for intelligent Non-Relay Duct Smoke Detector\*

The use of either RTS451 or RTS451KEY requires the installation of an accessory coil, DCOIL, sold separately



## Product Range

Part No	Description	Part No	Description	
DNRE	Intelligent non-relay photoelectric low-flow duct smoke detector	ETX	Metal exhaust tube duct width 0.3m	
DNREW	Waterlight Intelligent non-relay photoelectric low-flow duct smoke detector	M02-04-00	Test magnet	
Accessories Part No	Description	P48-21-00	End cap for metal sampling	
DCOIL	Remote test coil required with RTS451/RTS451KEY	RA400Z	Remote test station	
DST1	Metal sampling tube duct width up to 0.3m	RTS451	Remote test station	
DST1.5	Metal sampling tube duct widths 0.3 to 0.6m	RTS451KEY	Remote test station with key lock	
DST3	Metal sampling tube duct widths 0.6 to 1.2m			
DST5	Metal sampling tube duct widths 1.2 to 2.4m			
DST10	Metal sampling tube duct widths 2.4 to 3.7m			
DST10	Weatherproof enclosure			
Other Devices in range	FCO731 / FCOI731	FCHR751 / FCHRI751	2251CTLE	2251EIS
	FCOT721 / FCOTI721	FCHF741 / FCHF1741	7251	6500
	FCOTI781 / FCOI781	FCHH761 / FCHH1761	FTX-P1	

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