

# FDKU033-D

# FDKU033-D-X

## MULTI-CRITERIA ANALOG ADDRESSABLE SMOKE DETECTOR

### Features

- UL268 7th Edition Listed
- Very Low Profile (28.7mm/1.13-inch only in height)
- Wide Alarm Set-point Range of 5.1 to 11.0%/m (1.57 to 3.50%/foot)
- True Analog Detector
- UL listed Smoke Calibration and Sensitivity
- Simple and Accurate Address Setting without Mechanical Switches
- LEDs for 360° Viewing



### Description

The FDKU033 series is a Multi-Criteria Analog Addressable Smoke Detector compatible with any fire alarm control panels of Integlex Multicrest series. The FDKU033 series is certified with the UL268 7th Edition, which requires to pass flaming and smoldering polyurethane tests, as well as a nuisance test that detectors must not alarm when subjected to certain types of cooking smoke. In addition to the requirements of UL 268 7th Edition, the FDKU033 series is also designed to distinguish smoke from dust with a unique chamber that prevents dust from entering the smoke detection area. The Nohmi's new detection technology helps to reduce nuisance alarms and improve reliability of fire detection. The FDKU033 series is applied with Nohmi's new circuit integration technology. This state-of-the-art technology was able to simplify the product circuits and down-size the product structure significantly. The Nohmi's extremely thin detectors do not spoil the aesthetics of the building. The FDKU033 series has an alarm set-point range of 5.1 to 11.0%/m (1.57 to 3.50%/ft). The FDKU033 series can be configured for drift compensation and has built-in dirty detector warning. If the dirty level reaches the limit, the detectors should be replaced or cleaned the smoke chamber. The FDKU033 series and the control panel communicate over a proven and robust digital communication path and the system analyzes the level of alarm at the particular device. The total polling speed is less than five (5) seconds, well under the UL requirements. The FDKU033 series has two LEDs that allow for 360° viewing. The detector is compatible with any of the Nohmi bases indicated in this sheet and simply twists on. The FDKU033 series is addressed by electrically using the hand held programmer, which is more reliable than physical switches.

### Ordering Information

Model no. FDKU033-D  
Model no. FDKU033-D-X

### Air Velocity Ratings

The FDKU033 series has an Open Area of Protection air velocity rating of 0 to 91.4 m (300 feet) per minute. The FDKU033 series is UL listed on maximum 9.1m (30 feet) spacing limitation on smooth ceiling. Refer to NFPA 72 for specific information regarding detector spacing, placement, and special applications.

### Specifications

No.	Item	FDKU033-D	FDKU033-D-X
1	Working voltage range	22.0 to 24.0 V	
2	Standby current	250 $\mu$ A	
3	Alarm indicator	2 LEDs	
4	Alarm indicator current	1.5 mA D.C	
5	Alarm set-point range	5.1 to 11.0 %/m (1.57 to 3.50%/foot)	
6	Installation temperature range	0°C to 49°C (32°F to 120°F)	
7	Operating relative humidity range	0% to 93% (Non-condensing)	
8	Start-up time	Max. 1 sec.	
9	IP rating	IP42	
10	Color	Eggshell White	
11	Weight (without base)	84g (2.96oz)	88g (3.0oz)
12	Dimensions (without base)	Height: 28.7mm (1.13 inch) Diameter: 99mm (4.0 inches)	
13	Remote indicator	N/A	Available
14	Detector removal tool	FZC014	

## Setting the Address

Each addressable module, smoke detector, heat detector and combination detector must have the address set before connecting the device to the Signaling Line Circuit (SLC) loop. The address is set using the hand held programmer.

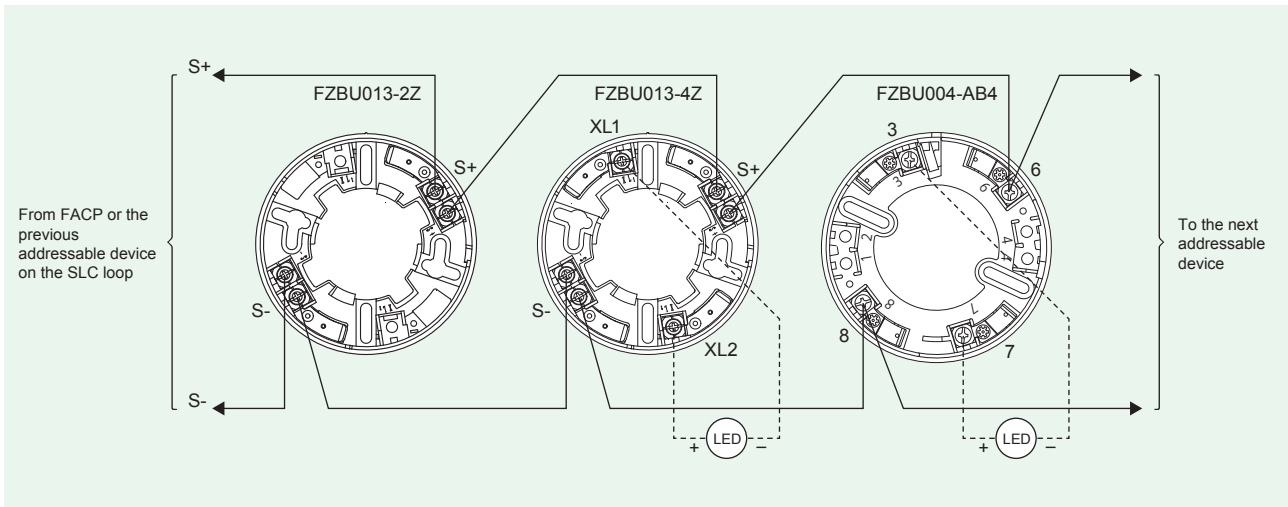
## Compatible Bases

All bases will mount on a single gang, double gang, octagon, 4 inches square or mud ring electrical box.

No.	Device	Description
1	FZBU004-AB4	4 inches Standard Base
2	FZBU013-2Z	4 inches Standard base, 2 terminals (without remote indication circuit)
3	FZBU013-4Z	4 inches Standard Base, 4 terminals
4	FZBU005-AIB	6 inches base that has an isolator module included. The base is pre-wired with a pluggable jumper to the module.
5	FZBU005-ASB	6 inches base with sounder module included. Sound pattern is provided from external source. The base is pre-wired with a pluggable jumper into the module.

## Wiring Diagram

Typical wiring of detector base onto which detector is mounted.



## NOTE

- The information contained herein does not purport to cover all the details or variations of the equipment described, nor to provide for every possible contingency that may be met in connection with its installation, operation or maintenance.
- Specifications are subject to change without notice. Contact Nohmi before relying on the information.
- Actual performance is based on proper application of the product by a qualified professional.
- Should further information be required or should particular concerns arise that are not covered sufficiently for the purchaser's purposes, the matter should be referred to Nohmi or your nearest distributor.

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