

# FDCJ004-D

## INFRARED THREE-WAVELENGTH FLAME DETECTOR



### Features

- High Sensitivity
- Long Monitoring Range, Wide Viewing Area
- Reliable Fire Detection
- Simple and Accurate Address Setting without Mechanical Switches
- Dustproof and Waterproof (Equivalent to "IP66")
- Equipped with Self-diagnosis function

### Description

Nohmi's infrared three-wavelength flame detector (FDCJ004-D) captures the radiant energy (CO<sub>2</sub> resonance radiation) from the flame and the flicker of the flame that occur when an object burns.

The FDCJ004-D quickly detects fire even in places with ventilation flow, external air, or high ceilings where detection is often difficult for the ordinary detectors. This high-sensitivity detector is suitable not only for indoor large spaces but also for outdoor facilities. Despite its high sensitivity, the FDCJ004-D has fewer false alarm performance and can be installed under direct sunlight or artificial lighting such as sodium lamp, mercury lamp, fluorescent lamp, germicidal lamp, halogen lamp, etc.

The FDCJ004-D has the automatic testing function to periodically check the contamination rate of the light receiving window and the fire detection function.

### Ordering Information

#### Indoor installation

- Flame Detector : Model no. FDCJ004-D
- Swivel Mount : Model no. ZPDJ005-R
- Wall Mounting Fitting : Model no. ZBU-K1

#### Outdoor installation

- Flame Detector : Model no. FDCJ004-D
- Tilt Mount : Model no. ZPDJ006-R
- Cable Box : Model no. ZBWJ001-R
- Weather Cover : Model no. ZADJ002-R

### Nominal Monitoring Range

| Field of View from Center Line of Detector (degrees) | 0  | 5  | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
|--|----|----|----|----|----|----|----|----|----|----|----|
| Nominal Monitoring Range (m)                         | 45 | 45 | 45 | 40 | 40 | 40 | 35 | 35 | 30 | 30 | 25 |

### Specifications

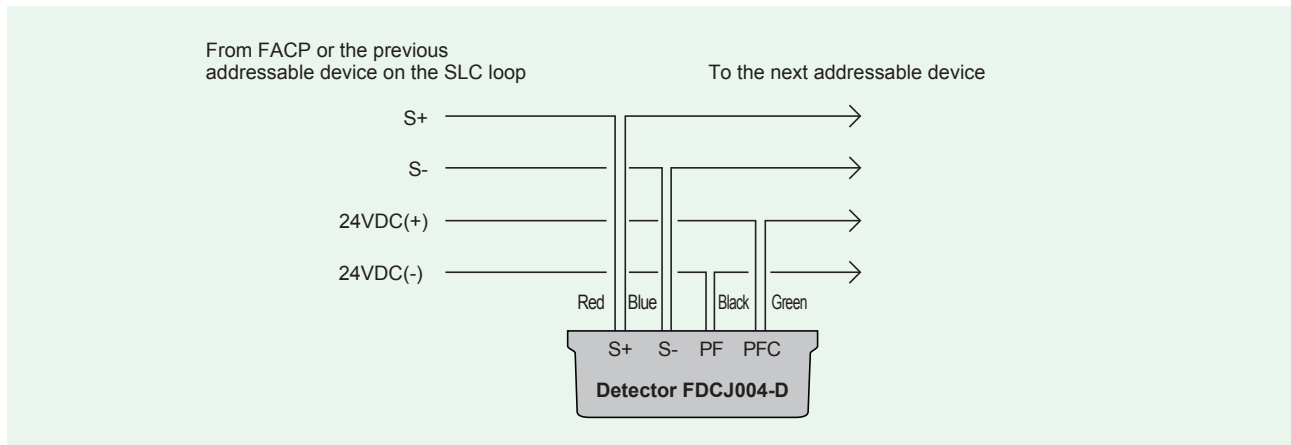
| No. | Item                        | Specification  |
|-----|-----------------------------|--|
| 1   | Classification              | Infrared spot type detector (with testing function), CO <sub>2</sub> resonance radiation type, Flickering type |
| 2   | Nominal Monitoring Range    | Max. 25m (50° from the center) to max. 45m (0° from the center)  |
| 3   | Field of View               | 100° (50° in all directions from the center line of the detector downward to the floor)                        |
| 4   | Rated Voltage, Current      | 24VDC, 100mA   |
| 5   | Operating Voltage Range     | 19.2VDC to 28.8VDC   |
| 6   | Protection Class            | Equivalent to IP66   |
| 7   | Indicator Light             | Red LED  |
| 8   | Operating Temperature Range | -10°C to +50°C   |
| 9   | Main Material               | Aluminum alloy   |
| 10  | Weight                      | Approx. 350g   |
| 11  | Dimensions                  | Approx. 106mm x 106mm x 37mm   |

## Setting the Address

The FDCJ004-D must have the address set before connecting to the Signaling Line Circuit (SLC) loop. The address is set using the hand held device programmer.

## Wiring Diagram

Typical wiring of detector.



### 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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