Aspirating Super-High Sensitivity Smoke Detection System

Features
- Smoke detection with wider range of sensitivities, from super-high to low levels (0.001 to 20%/m)
- Large flow rate fan (Max. shutoff pressure: At least 350Pa, Max. flow rate: At least 170 L/min)
- Smoke particles with a variety of particle sizes can be detected due to Total Scattered Light Detection Principle
- Smoke density can be checked easily in real time by means of the bar graph indicators
- Event log function: Up to 18,000 events (detector status, smoke density trend, etc.) per detector
- Input rated voltage: 100VAC, 24VDC
- Stand Alone Type
- UL Listed
- FM Approved

Sampling Fan
Air sampled by the turbo type large flow rate sampling fan is stirred in the fan to be made uniform and then, a part of it is sent to the sensing chamber through the filter. Due to a powerful aspiration capacity of the fan, air can be sampled and introduced into the detector even under strong wind and through the long sampling piping.

Filter
As dust in the sampled air, which may cause contamination in the detector and false alarms, is removed when it passes through the filter, it is possible to measure the smoke density with high accuracy for long time.

Sensing Chamber
In the sensing chamber, the sampled air is irradiated with a laser beam and the light receiving element detects all the light scattered by the smoke particles in the sampled air. Due to the Total Scattered Light Detection Principle which emits a laser beam in wide range, it is possible to detect a wide variety of particle sizes ranging from very small one (0.1um or less) to large one.

The output of the laser beam is kept constant with the automatic control function, ensuring smoke detection with high sensitivity for long period. Therefore, the extremely wide range of smoke detection (0.001 to 20%/m) can be achieved.

Typical Installations
- Server rooms, communication equipment rooms, clean rooms, switchboard facilities, storages, art museums, museums, semiconductor manufacturing equipment, other facilities and equipment essential for business continuity
System Configuration

Function

- Power Lamp
- Fault Lamp
- Digital Indicator
- Isolation Lamp
- Bar Graph Indicator
- Audible Alarm
- Silence Lamp

Alarm Lamps 1-3
Each lamp flickers when the smoke density reaches the predetermined level.

Detection principle: Total Scattered Light Detection Method

Model No.: FDNJ00014-1

Speciation

PROTECVIEW™ Detector (Stand Alone Type)

- Model No.: FDNJ00014-1
- Detection principle: Total Scattered Light Detection Method
- Weight: Approx. 2 kg
- Outside dimensions: W305xH235xD94.5mm
- Power supply voltage: 100VAC/24VDC, changeover
- Power/current consumption: Max. 30W(100VAC), Max. 55mA(24VDC)
- Detection range: Light obscuration rate: 0.001 – 20%/m (Alarm setting range: 0.01 – 20%/m)
- Indicator Lamps: 7-LEDs (Alarm 1, 2 & 3, Power, Fault, Isolation, Audible Alarm, Silence, Bar Graph Indicator, Digital Indicator)
- Output signals: [Contact signals] Contacts rating: 1A/30VDC

- Alarm 1/Fault, Alarm 2, Alarm 3
- [Other] Smoke density analog output (4-20mA)
- Event log: Max. 18,000 events

The information contained herein does not purport to cover all 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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