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TGS-34 – 0KB3-CE Detectors & CPC-4-CE Control Panel Guidance

1. Overview

The Nittan 0KB3-CE Industrial Optical Smoke Detector is a compact, durable device designed for harsh industrial environments. It offers high resistance to false alarms and is suitable for applications such as:

- Electrical control gear
- Machinery spaces
- Transport containers
- Computer/server racking
- Aircraft spaces (e.g., toilets, equipment bays)

Detector Model: 0KB3-CE

Part No: F09-66015

Dimensions (with base): 40 W × 40 L × 45 H (mm)

Approvals: UL (ETL), CE (STD 61010-1:2012, EN50130-4:2011)

The detector can be used with Nittan compact control units or other suitable detection control panels.

2. Control Panel Options

Nittan provides two compatible compact control units:

Model	Power Input	Notes
CPC-4-CE	100–240 Vac, 50/60 Hz	Mains-powered
CPC-4-24-CE	20–27 Vac, 50/60 Hz or 23–26.8 Vdc	Low-voltage applications

Important: Neither control unit includes battery backup. Select the model based on the available power source.

Control Unit Dimensions: 110 W × 195 D × 40 H (mm)

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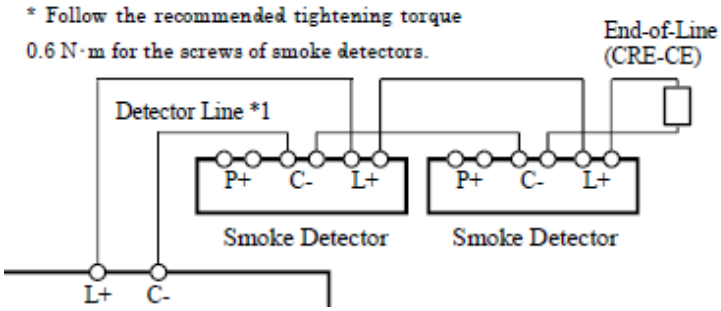
3. System Capacity & Wiring

- Up to 20 × 0KB3-CE detectors can be connected on a single radial monitoring circuit.

- A CRE-CE end-of-line device (supplied with the control unit) must be used.

- Shielded cables are recommended in electrically noisy environments.



4. Standard Control Unit Features

Both CPC-4-CE and CPC-4-24-CE include:

- Power supply inlet
- Monitored circuit for up to 20 detectors
- Indicator LEDs: Power, Fault, Detector Operated, Alarm (2 detectors)
- Buzzer for fire and fault conditions
- Clean changeover contacts: Fault, Detector Operated, Alarm (2 detectors)
- Local reset button and remote reset input
- Power on/off switch

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5. Detector Main Features

1. Compact size for easy integration within machinery or protected spaces
2. Fire alarm configurable for single detector or AND logic (two detectors)
3. Wind speed resistance up to 8 m/s
4. Heat resistance up to 60°C
5. Sensitivity compensation to maintain performance despite dust accumulation
6. Backward compatibility with older detectors (0KB, 0IB) without compensation
7. Simple interface to local PLCs or fire protection systems

6. Installation Examples

Inside the Protected Equipment

- Detectors and control panel may be installed within the machinery.
- Install detectors in accessible locations where smoke can reach from all directions.
- If the machinery includes a fan, position detectors near the exhaust fan.

Inside a Sampling Box

For equipment with high airflow (e.g., semiconductor manufacturing):

- Install detectors within a sampling box placed in the heat exhaust duct.
- This allows monitoring of smoke carried in the exhaust airflow.

7. Technical Support

For further guidance or information, contact:

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