

EN54-7:2018 Certified Smoke Detector with Relay Output

TSS8030R

Built-in LED Indicator with Open Collector / Drain Output
Optional Relay Output with Potential-free NO-C-NC Contacts
Wide Operating Conditions : -10 to 55 °C & 93 %RH
Operates on 10 to 30 VDC

Process Precision Instruments

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Applications

Commercial Buildings

Office Complexes, Business Parks, and Conference Centers

Industrial Facilities

Control Rooms, Workshops, and Assembly Areas

Data Centers & Server Rooms

Smoke-sensitive Electronic Environments

Residential Complexes

Apartment Buildings, Lobbies, and Basements

Healthcare Facilities

Hospital Corridors, Clinics, and Diagnostic Centers

Educational Institutions

Classrooms, Libraries, and Administrative Offices

Utility Infrastructure

Electrical Substations, Communication Hubs, and Lift Rooms



Salient Features

- Responds to Fixed Threshold Smoke Concentration using Advanced Optical Sensing
- Built-in Algorithm for Self-compensation of Optic Chamber Contamination Ensures Long-term Reliability
- Open Collector / Drain Output with Optional NO (Normally Open) and NC (Normally Closed) Relay Contacts for Direct Integration with Alarm Panels, PLCs, and Controllers
- Clearly Visible dual LEDs Indicate Normal Operation, Fire Alarm, and Maintenance Requirement (Contamination)
- Meets European Standards for Smoke Detection Performance
- Becomes Active within 40 Seconds after Reset or Power-up
- Compact and Durable Housing with a Protected Optic Chamber Designed for Easy Maintenance and Long Life
- Supports 10 - 30 VDC Supply with Protection up to 93% RH and Temperature Range from -10°C to +55°C

General Information

Product Type Smoke Detector

Ordering Code

TSS8030- ☐

Alarm Output

O : Open Collector / Drain
R : NO-C-NC Relay Contacts

Example : TSS8030-R

Smoke Detector with NO-C-NC Relay Contacts

Quantity 1 Unit

Accessories None

General Specifications

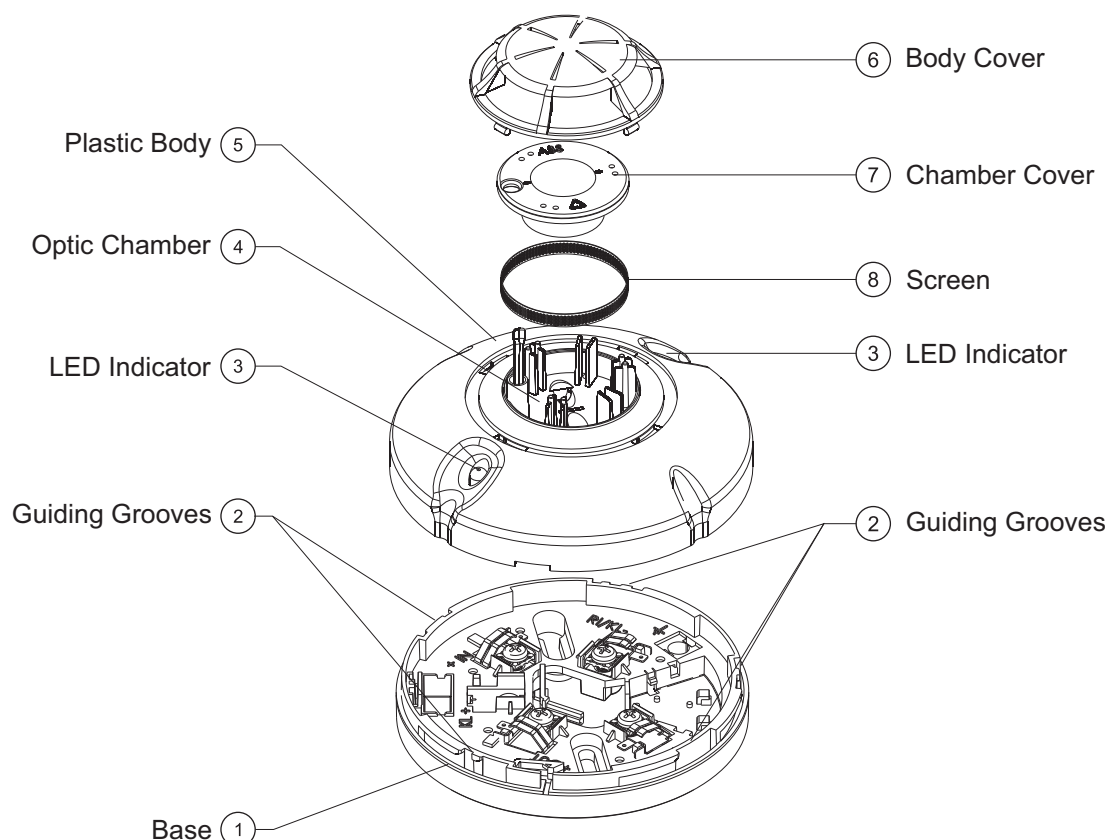
Housing Material	ABS Plastics, White
Power Supply	10 to 30 VDC (24 VDC Nominal)
Working Environment	-10 to 55°C, (93 ± 3) %RH @ 40 °C
Open Collector / Drain Output	Sink to Power Supply Ground. Max Load 35 mA @ 24VDC
Relay Output	NC-C-NO Potential-free Contact
LED Indicators	Two LEDs Positioned Diagonally Opposite for 360° Visibility Duty Mode : Off Fire Condition : On Contaminated Chamber : Flashing
Dimensions	Diameter : 100mm, Height : 47mm
Weight	100g

Smoke Detection

Sensing	Infrared Rays Distraction Cost by Smoke Particles Entering the Optic Chamber
Smoke Sensitivity	EN54-7:2018 Certified
Time to Enter Duty Mode	Up to 40 Sec after Power Switching or Reset
Reset Time	2 Sec (After Power-Off)
Mounting Height	Up to 11 Meter (Complies with EN 54-14)
Protected Area	15 Meter Circular (Complies with EN 54-14)

Installation

Figure 1



The fire detector consists of a printed circuit board and **OPTIC CHAMBER**, fixed in a **PLASTIC BODY**.

The fire detector operates with a detachable **BASE** that is installed on ceiling through relevant screw with plastic-dowel. The fire detector is placed on the base. It is rotated clockwise until reaching the **GUIDING GROOVES**. It is rotated until rest (fig 2.1). The slots of the base and the body should match (fig 2.2).

Figure 2.1

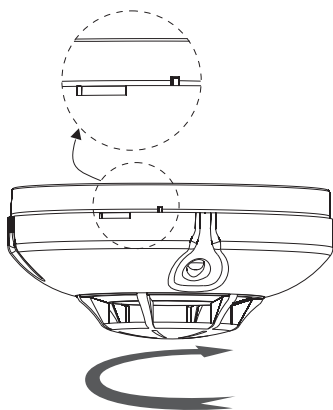
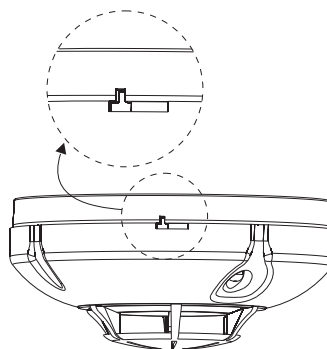


Figure 2.2



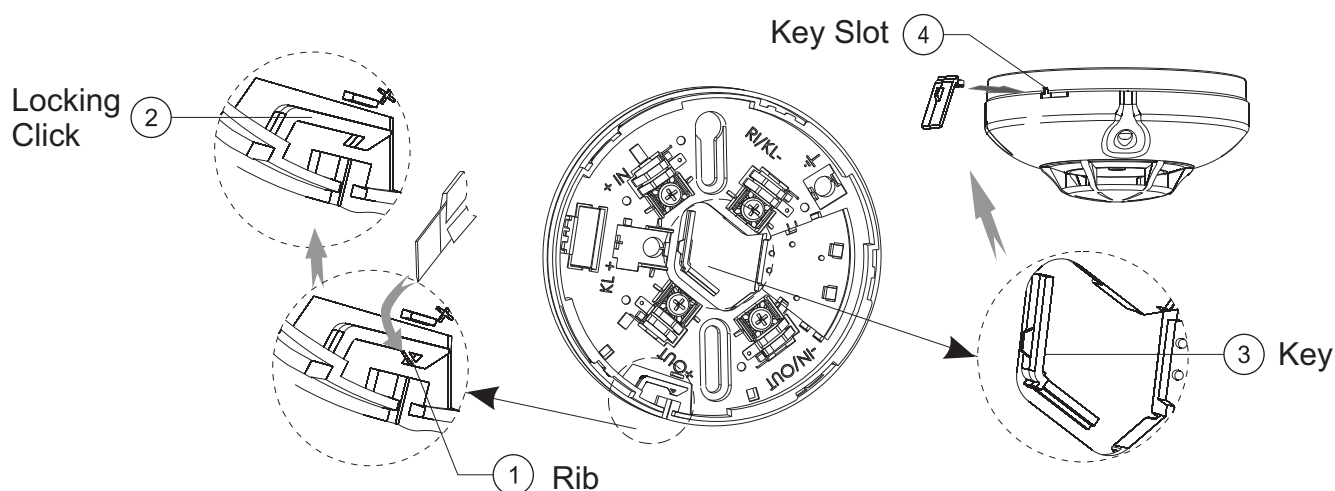
- **Locking the Fire Detector** (Figure 3).

Before installation, the **KEY** is detached from the base and the **RIB** of the **LOCKING CLICK** is cut out.

- **Removing the Fire Detector Locked to the Base** (Figure 3)

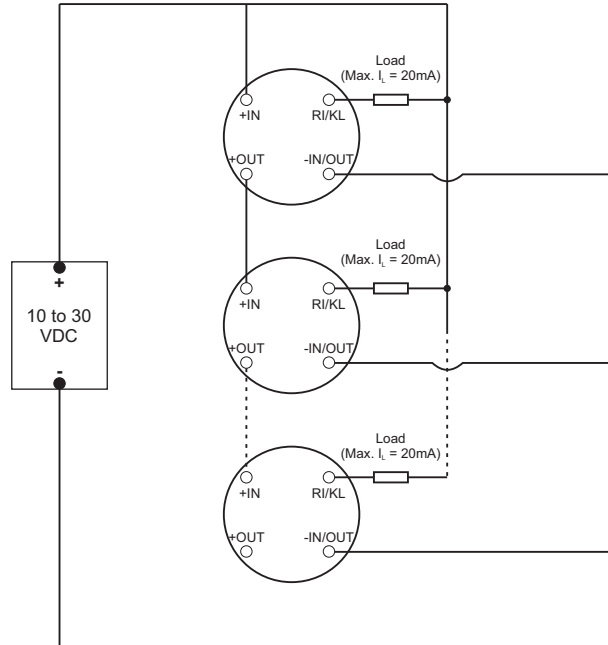
Insert the key into the **KEY SLOT** push in as in the same time the fire detector is rotated anticlockwise. Remove the key and continue to rotate the fire detector in the same direction until it is released from the base.

Figure 3

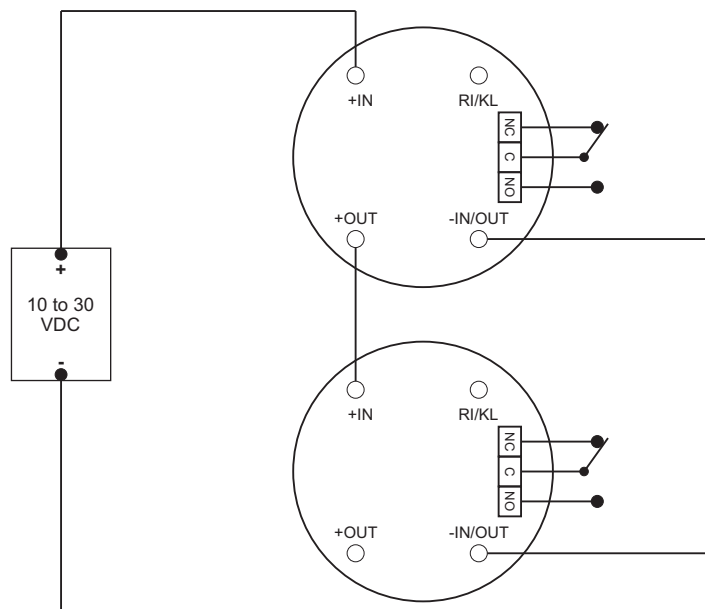


Wiring Instructions

Open Collector/Drain Output



Relay Output



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