

SNI01C, SNI02C, SNI03C

Conventional fire detectors to be connected to a remote LED



Addressee for this information: User | Installer

1 DECLARATION OF CONFORMITY AND PERFORMANCE

CE SNI01C: 2831-CPR-F4359
 2831 20 SNI02C: 2831-CPR-F4358
 SNI03C: 2831-CPR-F4357



2 DESCRIPTION

SNI01C is an optical smoke detector.

SNI02C is a heat detector.

SNI03C is a heat and optical smoke detector.

3 WARNINGS


The maximum number of detectors that can be connected to a line depends on the control unit model and it is stated by the local regulations.

According to European laws, only 32 detectors can be installed on one line.

The total maximum power consumption on a single line shall not be greater than the maximum current available on the same line.

 *Keep plastic protections until works are finished.*

 *Do not paint the detector.*

 *Do not install detectors in areas where air speed is above 5 km/h.*

The detector does not provide early warnings for fire events and cannot detect gas, fire particles or flames.

4 TECHNICAL DATA

Model		SNI01C	SNI02C	SNI03C	
General features					
Protection class		IP 43			
Alarm threshold	Smoke	0,08÷0,12	-	0,08÷0,13	dB/m
	Heat	-	A1R	A2	
Operating voltage	Power supply	24			V
	Maximum operating voltage	33,0			V
	Minimum power supply	9,0			V
Consumption at power voltage, idle mode		0,045	0,035	0,050	mA

Model	SNI01C	SNI02C	SNI03C	
Consumption at 9/24/33 V, alarm mode, without remote LED	19 / 64 / 91			mA
Alarm indicator	2 red LEDs, fixed light			
Voltage at remote LED terminals	24,0			V
Max consumption of remote LED	3,5			mA
Working temperature	-10 ÷ 50			°C
Humidity	95%			
Dimensions	H38 × Ø100		H48 × Ø100	mm
Weight	145	140	150	g
Conformity	EN54-7:2001	EN54-5:2001	EN54-5/7:2001	

Note: height includes base.

5 PARTS SUPPLIED

- technical manual
- plastic protection

6 DEVICE MOUNTING



Wire devices while they are disconnected from power/ mains.

Make sure to be free of static charges and take all precautions needed to safely install the product.

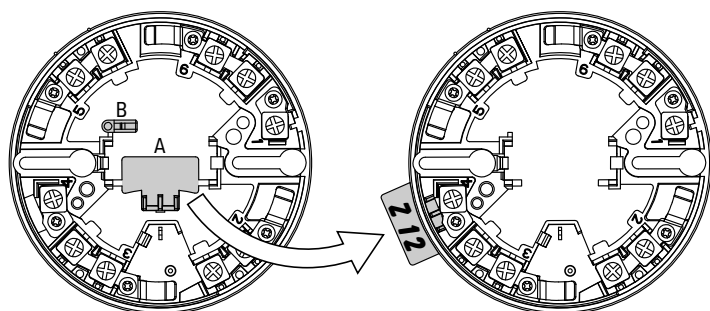
• Wires selection

Use flame-resistant, twisted, shielded and low smoke zero halogen cables, resistant to fire for at least 30 minutes and compliant to current laws.

Base terminals are suitable to conductors with section area between 0.4 and 2.5 mm².

• BSC base mounting and wiring

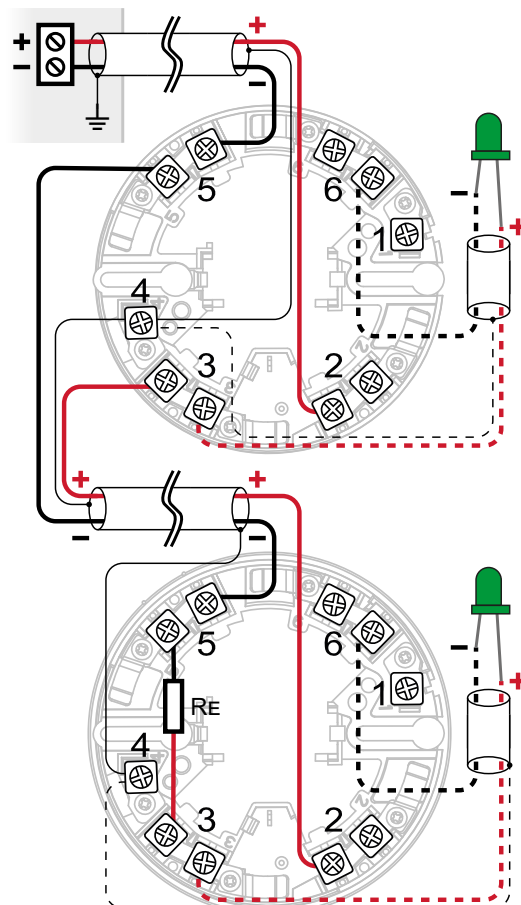
The detector base can be screwed to a connector block directly (75, 90 or 100 mm octagonal, 75 mm round or 100 mm squared).



- unfasten (A) hook from base bottom
- fix the hook near terminal 4 as illustrated
- write the conventional line to which the detector belongs

on the hook

- unfasten (B) blocking pin from base bottom
- keep the blocking pin in a safe place
- feed network cables through base central hole
- install the base on a flat surface or a connector block using suitable screws and dowels
- wire line wires to terminals as indicated in the diagram:



- if not using the remote LED indicator (not included), do not wire the dotted wires
- position end-of-line resistor (usually supplied with the control panel) inside the base of the last detector on the line

• Positioning the detector

Do not install optical detectors in dusty areas.

Consequently, before positioning the detector on its base, wait for the end of site workings.

- clean detector and base contacts
- position the detector against the base, with the detector notch aligned to the base short notch
- rotate the detector clockwise and align detector notch to base longest notch

Now connect the unit to power/mains.

- if a earth fault occurs, find the contact point between shield and conductors and remove it
- if it is necessary to prevent a non-authorized removal of the detector, insert the blocking pin into the hole indicated



To remove the detector body, first use pliers to remove the blocking pin.

• Control on line working mode

- connect all bases on the line
- install all detectors
- measure resistance at line ends

The measured resistance shall be close to that of the end-of-line resistor.

If it is greater, the circuit is open.

If it is smaller, the circuit has a short-circuit.

- fix line interruptions and short-circuits


7 MAINTENANCE



Maintenance operations shall be performed according to environment conditions and current law.

After a month:	inspection cycle to be repeated every 3 months
Every 6 months:	working test
Every 12 months:	working test and detector cleaning
After 10 years:	replace the detector

For optical smoke detectors, a regular maintenance will prevent false alarm caused by dirt and dust inside the detectors

 *Do not disassemble parts assembled by the manufacturer.*

 *Do not open or tamper with sealed parts.*

Disassembling the detector body will invalidate the warranty.

7.1 Inspection cycle

- verify detector body integrity
- check optical detectors filter grid is undamaged
- check optical detectors smoke entries are not blocked
- in case of deposits due to the presence of oil vapour, dust etc, the sensor should be cleaned
- ensure that no equipment which may generate vapour with particulate matter that may gather inside the reflection chamber has been installed in the vicinity of the detector since the last routine inspection. If such equipment has been installed, then you should notify the system manager and competent authority that such matter may cause false alarms.

7.2 Working test

During the test, disable release devices (ex. of fire doors), telephone dialers, fire extinguishing systems, etc.

If necessary, alert authorities and emergency teams.

- power on the detector line
 - wait for about 1 minute
 - check remote and built-in LEDs flash about once every 5 s
- If not, check line voltage and faults or replace the detector.

• Smoke test

- using a special spray can, let the smoke enter into the inner reflection chamber for at least 10 s
- upon alarm event check remote and built-in LED indicators light on
- wait until the chamber is free from smoke
- reset the control unit

• Temperature test


- using a special heating device create a regular warm air flow between 65C° and 80C° around the detector
- The detector should detect the alarm within 30 seconds.

Otherwise contact the supplier to adjust detector sensitivity.

- upon alarm event remove hot air flow immediately
- check remote and built-in LED indicators light on
- reset the control unit

7.3 Detector external cleaning

- use a soft brush without loose bristles
- use a soft cloth dampened with alcohol to remove encrustations from plastic surfaces
- use a compressed air spray to remove dust from reflection chamber or grid

 *Do not use air compressed from standard compressors: it can contain humidity or oil residue.*

For internal and deep cleaning of the detector send it to the company technical assistance.

EU DECLARATION OF CONFORMITY

The product complies with current European EMC and LVD directives.

The full text of the EU declaration of conformity is available at the following internet address: www.elmospa.com – registration is quick and easy.



GENERAL WARNINGS



This device has been designed, built and tested with the utmost care and attention, adopting test and inspection procedures in compliance with current legislation. Full compliance of the working specifications is only achieved in the event the device is used solely for its intended purpose, namely:

Conventional fire detectors to be connected to a remote LED

The device is not intended for any use other than the above and hence its correct functioning in such cases cannot be assured. Consequently, any use of the manual in your possession for any purpose other than those for which it was compiled - namely for the purpose of explaining the product's technical features and operating procedures - is strictly prohibited.

Production processes are closely monitored in order to prevent faults and malfunctions. However, the components adopted are subject to an extremely modest percentage of faults, which is nonetheless the case with any electronic or mechanical product.

Given the intended use of this item (protection of property and people), we invite you to adapt the level of protection offered by the system to suit the actual situation of risk (allowing for the possibility of impaired system operation due to faults or other problems), while reminding you that there are specific standards for the design and production of systems intended for this kind of application.

We hereby advise you (the system's operator) to see that the system receives regular routine maintenance, at least in accordance with the provisions of current legislation, and also check on as regular a basis as the risk involved requires that the system in question is operating properly, with particular reference to the control unit, sensors, sounders, dialler(s) and any other device connected. You must let the installer know how well the system seems to be operating, based on the results of periodic checks, without delay.

Work involved in the design, installation and maintenance of systems incorporating this product should be performed only by personnel with suitable skills and knowledge required to work safely so as to prevent any accidents. It is vital that systems be installed in accordance with current legislation. The internal parts of certain equipment are connected to the mains and therefore there is a risk of electrocution when maintenance work is performed inside without first disconnecting the primary and emergency power supplies. Certain products include batteries, rechargeable or otherwise, as an emergency backup power supply.

If connected incorrectly, they may cause damage to the product or property, and may endanger the operator (explosion and fire).

INSTALLER WARNINGS



Comply strictly with current standards governing the installation of electrical systems and security systems, and with the manufacturer's directions given in the manuals supplied with the products.

Provide the user with full information on using the system installed and on its limitations, pointing out that there are different levels of security

performance that will need to suit the user's requirements within the constraints of the specific applicable standards. See that the user looks through the warnings given herein.

Work involved in the design, installation and maintenance of systems incorporating this product should be performed only by personnel with suitable skills and knowledge required to work safely so as to prevent any accidents. It is vital that systems be installed in accordance with current legislation. The internal parts of certain equipment are connected to the mains and therefore there is a risk of electrocution when maintenance work is performed inside without first disconnecting the primary and emergency power supplies. Certain products include batteries, rechargeable or otherwise, as an emergency backup power supply.

If connected incorrectly, they may cause damage to the product or property, and may endanger the operator (explosion and fire).

USER WARNINGS



Check the system's operation thoroughly at regular intervals, making sure the equipment can be armed and disarmed properly.

Make sure the system receives proper routine maintenance, employing the services of specialist personnel who meet the requirements prescribed by current regulations.

Ask your installer to check that the system suits changing operating conditions (e.g. changes in the extent of the areas to be protected, change in access methods, etc...)

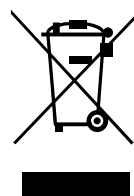
MAIN SAFETY RULES

The use of the device is forbidden for children and unassisted disabled individuals.

Do not touch the device when bare footed, or with wet body parts. Do not directly spray or throw water on the device.

Do not pull, remove or twist the electric cables protruding from the device even if the same is disconnected from the power source.

DISPOSAL WARNINGS



IT08020000001624

In accordance with Directive 2012/19/EU on waste electrical and electronic equipment (WEEE), please be advised that the EEE was placed on the market after 13 August 2005 and must be disposed of separately from normal household waste.