

Safety Information

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction, installation, and operation of electrical equipment and has received safety training to recognize and avoid the hazards involved.

Esmi Impresia Multicriteria Detector

Esmi Impresia Multicriteria Detector is an addressable combined (optical smoke and heat) detector with a built-in short circuit isolator. It is designed for installation in addressable fire detection systems with ELC Loop Controllers, which communicate via the ELC communication protocol. The detector is powered from the panel and can be controlled via the communication protocol.

For more technical information visit www.se.com.



1293
DoP No: DP20019
Made in Bulgaria
EN 54-5:2017+A1:2018
EN 54-7:2018
EN 54-17:2005/AC:2007
Detector Category A1/R

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⚠ WARNING

COMPROMISED FUNCTIONALITY

- Make sure that the setup where the device is installed meets the device specifications.
- Remove the dust cover before operation.
- Remove the detector if it will be exposed to excessive dust or similar, due to, for example, maintenance work.
- Make sure that the corresponding address is enabled in the fire detection panel when the detector is re-installed.
- Do not paint the detector.

Failure to follow these instructions can result in death or serious injury.

Essential characteristics according to EN 54-17	Performance
Performance under fire conditions	Pass
Operational reliability	Pass
Durability of operational reliability:	
Temperature resistance	Pass
Humidity resistance	Pass
Shock and vibration resistance	Pass
Corrosion resistance	Pass

Part Numbers and Designations

Product	Color	Designation	Part number
Esmi Impresia Multicriteria Detector	White	Not applicable	FFS06741003
	Black	EIB-1300	FFS06742003

Part numbers and designations for related products

Product	Color	Designation	Part number
Esmi Impresia Standard Base	White	Not applicable	FFS06741018
	Black	EIB-2200	FFS06742018
Esmi Impresia Standard High Profile Base	White	Not applicable	FFS06741028
	Black	EIB-2300	FFS06742028
Esmi Impresia Base Sounder/Esmi Impresia Sounder	White	Not applicable	FFS06741030
	Black	EIB-6200	FFS06742030
Esmi Impresia R VAD for Base Base Sounder	White	Not applicable	FFS06741032
Esmi Impresia W VAD for Base Base Sounder	White	Not applicable	FFS06741033

Compatibility

The Esmi Impresia Multicriteria Detector is compatible with the Esmi Impresia Standard Base and the Esmi Impresia Standard High Profile Base.

Specifications

Wire size for terminals	0.5–2.5 mm ²
Operating temperature	–10 °C to +60 °C
Weight.....	approx. 94.5 g without base
Mounting location	Indoor
Color	White: RAL 9016
.....	Black: RAL 9005

Technical Specifications

Operating voltage	16–32 VDC (Nominal 27 VDC)
Consumption in quiescent state, no communication	< 190 µA at 27 VDC
Consumption in quiescent state, with communication	< 310 µA at 27 VDC
Consumption in alarm state, with communication	6.5 mA
Category (EN 54-5)	A1/R
Sensitivity level	High/Normal*/Middle/Low
Output in alarm state at terminal RI (terminals 4/1).....	7.5 mA (max)/7.5 V
Supported communication protocol	ELC
Maximum relative humidity	(93 ± 3)% at 40 °C
Dimensions	103 × 48.3 mm
Ingress protection rating	IP30

*) in accordance with EN 54-7

Short Circuit Isolator Technical Specifications

Maximum line voltage - Vmax	32 V
Nominal line voltage - Vnom.....	28 V
Minimum line voltage - Vmin	16 V
Maximum voltage at which the device isolates - Vso max*	7.5 V
Minimum voltage at which the device isolates - Vso min*	5.9 V
Maximum voltage at which the device reconnects - Vsc max**	6.7 V
Minimum voltage at which the device reconnects - Vsc min**	5 V
Maximum rated continuous current with the switch closed - I _c max.....	0.7 A
Maximum rated switching current (e.g. under short circuit) - I _s max	1.8 A
Maximum leakage current with the switch open (isolated state) - I _l max	16 mA
Maximum series impedance with the switch closed - Z _c max	0.12 Ω at 28 VDC
.....	0.15 Ω at 16 VDC

*) Switches from closed to open

**) Switches from open to closed

Installation Instructions

NOTICE

SHORT CIRCUIT AND ELECTROSTATIC DISCHARGE

- Remove all power from the fire detection panel before you measure, connect, or disconnect wires.
- First disconnect the battery, then the main power supply.

Failure to follow these instructions can result in equipment damage.

IMPORTANT: Install multicriteria detectors away from sources of steam, condensation and smoke. Also install multicriteria detectors away from heat sources, that is, avoid placing them above, for example, cookers, ovens or fire places.

1. Set the address on the detector.
2. Install a base.
Select the type of base according to the installation requirements.
3. If you want to make it more difficult to remove the detector from the base, remove the locking tab on the base.
4. Connect the base to the fire detection panel according to the connection diagram.
5. Align the line on the detector with the short line on the base.
6. Insert the detector into the base.
7. Rotate the detector clockwise until you hear a click.
8. Make sure that the long line on the base is aligned with the line on the detector.
9. Test the detector for proper operation and LED indication.

Testing

NOTICE

COMPROMISED FUNCTIONALITY

Use suitable testing equipment to test detectors.

Failure to follow these instructions can result in equipment damage.

Use Solo 461 or equivalent to test the heat capability of multicriteria detectors.

IMPORTANT: Notify everyone in the building before you test detectors that activate fire alarm devices.

1. Apply power to the detector.
2. Wait 30 seconds.
3. Apply a smoke generator (aerosol dispenser) or artificial smoke.
Within 8 seconds the fire detector enters fire alarm condition. Both LEDs light up.
Troubleshoot it this is not the case.
4. Apply a heat tester according to the instructions for the heat tester.
Within 8 seconds the fire detector enters fire alarm condition. Both LEDs light up.
Troubleshoot it this is not the case.
5. Power off the detector for at least 2 seconds.
After resetting, the detector enters normal operation and the LEDs go off.

Maintenance

NOTICE

NON-COMPLIANCE

Make sure that you comply with any applicable legislation, regulations and/or standards regarding maintenance.

Failure to follow these instructions can result in negative business impact and/or legal action.

NOTICE

ABRASIVE SUBSTANCES

Clean the outside of the device with cleaning supplies suitable for the material in question.

Failure to follow these instructions can result in equipment damage.

Locking and Releasing

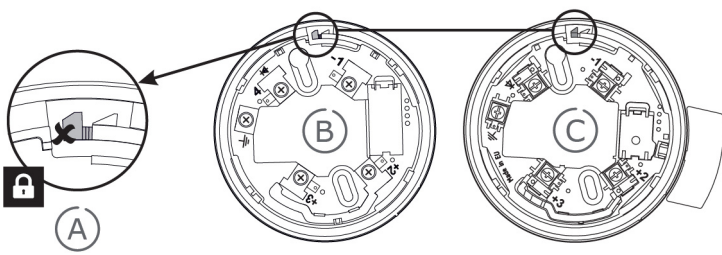
NOTICE

EXCESSIVE FORCE

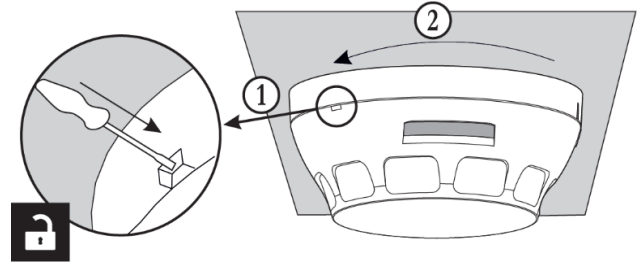
Press the locking tab in a controlled manner when you remove the detector.

Failure to follow these instructions can result in equipment damage.

To remove the detector if the locking feature has been used, gently press a slotted screwdriver into the opening in the base and at the same time rotate the detector counter-clockwise.



- A. Remove locking tab to make it more difficult to remove the detector from the base
- B. Esmi Impresia Standard Base
- C. Esmi Impresia Standard High Profile Base



Base Installation and Connection Diagram

NOTICE

SHORT CIRCUIT AND ELECTROSTATIC DISCHARGE

- Remove all power from the fire detection panel before you measure, connect, or disconnect wires.
- First disconnect the battery, then the main power supply.

Failure to follow these instructions can result in equipment damage.

Refer to the following user instructions:

- O2038GB Esmi Impresia Standard Base Installation Quick Guide
- O2084GB Esmi Impresia Standard High Profile Base Installation Quick Guide

Setting the Address

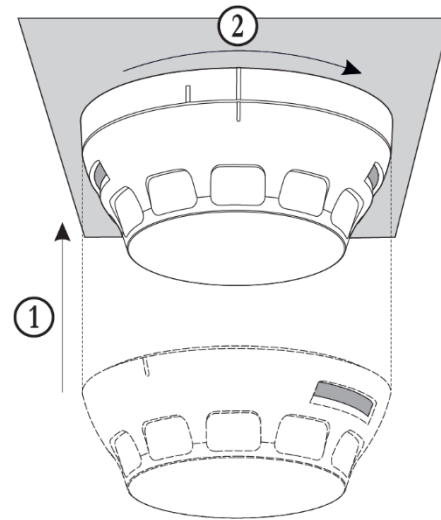


Set the address on the detector using one of these methods:

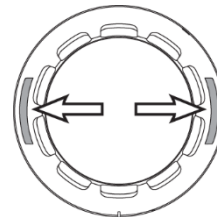
- QR code and EcoStruxure™ Fire Expert
- Esmi Impresia Handheld Programming Tool attach the detector to the tool
- Auto addressing feature in the fire detection panel.

The address must be in the range from 1 to 250.

Installation



LED Indication



Flashing*	○ ☀ ○	↔ Communication with panel
Off	○	🔥 No fire alarm
On	☀	🔥 Fire alarm

*) Provided that the **DEV LED** jumper on the ELC Loop Controller is connected.