

Iris

Conventional detectors

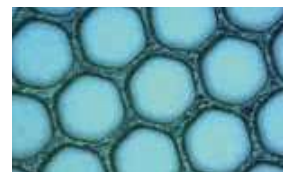


Iris series detectors maintain the ease-of-use of conventional detectors, yet are capable of providing a series of technical solutions that until today were provided by only the most sophisticated addressable analogue systems. As a result of advanced technologies based on new-generation microprocessors, these detectors implement a set of sophisticated algorithms capable of ensuring unequaled reliability and a high immunity to false alarms. The ground-breaking Versa++ technology incorporated in Iris series detectors allows you to configure individual detectors to suit their specific environments and, when used in conjunction with the EITK1000

kit, to connect directly to the detector line for a complete diagnosis of each detector and thus test its operating capacity, verify its real-time values, view the contamination level in the optical smoke chamber and change its sensitivity and operating mode. Each detector has a non-volatile memory which allows you to view the smoke and temperature levels measured in the period prior to the last alarm detected. These detectors have passed - with flying colours - all the tests taken at the LPCB test facility, the prestigious English certification service. And, therefore, hold the right to use this mark in addition to the obligatory CPD certification for the commercialization of fire detectors.

Main features

- Newly designed optical chamber with sealed upper-part and 500 μm holes diameter mesh insect screen
- Bicolour LED: Red for alarm; green flash (optional) for stand-by and fast flash for trouble (fault or high level of contamination in the optical smoke chamber)
- Drift compensation for sensor drift caused by dust in the chamber
- Settable smoke and heat detection sensitivity (by means of EDRV1000 driver)
- Operating mode selection (by means of EDRV1000 driver for ID300 version): only smoke; only heat; AND mode; OR mode; PLUS mode
- Complete diagnostics: view the contamination level in the optical chamber and verify real-time values (by means of EDRV1000 driver)
- Memory of the smoke and temperature readings measured in the five-minute period prior to the last alarm detected
- Vast range of options (selected by means of EDRV1000 driver)
- Bypass plate on base guarantees continuity in the event of removal of the detector from the line



Insect screen



Smoke and temperature graph



ID100 – Optical smoke detector

The ID100 optical smoke detector is based on the Tyndall effect (diffusion of light) and provides first-rate early warning in the event of fire. It offers wide-spectrum detection of smoke particles generated by the majority of fires. The newly designed optical chamber with sealed

upper-part and 500 µm holes diameter mesh insect screen ensure high immunity to false alarms. Sensitivity can be modified to adapt the detector to different conditions of use (sensitivity that can be set: 0.08 dB/m – 0.10 dB/m – 0.12 dB/m - 0.15dB/m).



ID200 – Heat detector

The detector is supplied in A1R mode (fixed threshold at 58°C and rate of rise detection), however it can be set (via the EDRV1000 driver) in mode: B (Fixed threshold at 72°C), A2S (Fixed threshold at 58°C), BR (Fixed threshold at 72°C

with rate of rise detection). As a result of its high flexibility, this detector is suitable for installation in dusty or smoky environments where the risk of false alarms is high.



ID300 – Smoke and Heat detector

This detector combines smoke and heat sensing technologies that provide (in accordance with the operating mode) exceptionally high sensitivity to all types of fires (especially to fast burning blazing fires involving

inflammable liquids which produce a limited amount of smoke) yet is highly immune to false alarms. The operating mode can be set directly on site (by means of the EDRV100 driver) by selecting from the following:



- **PLUS Mode (set at factory):** the detector will trigger an alarm when the measured values exceed the set smoke threshold (configurable as per the ID100), or when the measured values exceed the set heat threshold (configurable as per the ID200). Furthermore, in the event of a rise in temperature, the smoke detection sensitivity will be taken to the maximum value. This operating mode, characterized by high sensitivity, allows detection of fast burning blazing fires (for example, fires involving inflammable liquids such as alcohol).
- **OR Mode:** the detector will trigger an alarm when the measured values exceed the set smoke threshold (configurable as per the ID100), or when the measured values exceed the set heat threshold (configurable as per the ID200). This operating

- mode, characterized by discrete sensitivity analysis, allows the detector to sense fires with a high emission of smoke and low heat output (for example, smouldering fires) and also fires with low emission of smoke and high heat output (for example, burning chemicals).
- **AND mode:** the detector will trigger an alarm only when the set smoke and heat thresholds (configurable as per the ID100 and ID200) are exceeded at the same time. This operating mode, characterized by low sensitivity, greatly reduces the risk of false alarms. Given the low reactivity of this operating mode, before using it, conditions must be carefully assessed.
- **SMOKE Mode:** the detector will operate as per the ID100.
- **HEAT Mode:** the detector will operate as per the ID200.

Black plastic and wood-look enclosures available on request for quantities.

Parameter	ID100	ID200	ID300
Power supply voltage	10-30 Vdc		
Standby current consumption	90 uA	70 uA	90 uA
Alarm current consumption	Max 40 mA		
Sensitivity	0.08 – 0.10 – 0.12 – 0.15 dB/m	A1R (58°C + RoR) – B (72°C) – BR (72°C + RoR) – A2S (58°C)	0.08 – 0.10 – 0.12 – 0.15 dB/m A1R (58°C + RoR) – B (72°C) – BR (72°C + RoR) – A2S (58°C) AND – OR – PLUS Mode
Operating temperature	-5°C + 40°C		
Height (base included)	46 mm	54 mm	
Diameter	110 mm		
Weight (with base)	160 g		
Weight (without base)	90 g		

Bases



EB0010 – Detector mounting base
Detector base for Iris and Enea series detectors, equipped with short-circuit plate which ensures continuity in the event of removal of the detector from the line.



EB0020 – Relay base
The base is equipped with a relay activated by the detector.



EB0030 – Deep base
Mounting base for Enea and Iris detectors with pipes entry, 4 knock out for 16mm pipes. To be installed under EB0010 or EB0020 mounting bases. To be installed under the detector base, h 34mm.



EB0040
Base protected against dripping water when tilted up to 15 degrees max.



EB0050
EB0010 base spacer, to be installed under the base to create a 10mm gap for the entry of exposed cables.



EB0060
Base for Iris and Enea detectors with integrated buzzer piloted by the 'R' output of the detector.

Manual call points

IC0020 – Manual call point

- Manual call point with resettable element operated by plastic key (included)
- Activation condition indicated by coloured band and LED
- Selectable alarm resistor

WCP0020 optional accessories (transparent screen for IC0020 buttons protects against accidental activation) and FCP0020 (flange for flush mounting the IC0020 button; fits UK Single Gang boxes). DBCP0020 – Deep box for external pipe fitting (base h = 33mm; base h + call point h = 57mm).



IC0011E – Outdoor manual call point (IP67)

Manual call point with resettable element. Waterproof to IP67, suitable for outdoor installation.



Remote indicators

IL0010 – Remote indicator

Remote fire-warning indicator

