

CAP320, CAPT340, CAH330

Intelligent addressable sensors



This range of intelligent addressable sensors have been specifically designed to operate with Eaton's intelligent addressable fire systems.

All sensors are third party approved to the relevant section of EN54 (part 7 for smoke detectors, part 5 for heat detectors and part 17 for short circuit isolators).

The optical sensor (CAP320) is suitable for most applications giving the fastest response to slow burning or smouldering fires which give rise to large visible smoke particles.

The photo-thermal sensor (CAPT340) will respond quickly to fast clean burning fires yet maintain the advantage of optical sensors when detecting smouldering fires. The thermal enhancement of this sensor allows a higher alarm threshold which provides a greater rejection of false alarms. The sensor will also raise an alarm at temperatures exceeding 60°C.

The CAPT340 has day/night modes available, programmeable from the site installer software. The day mode uses the heat aspect of the sensor for areas which may have smoky environments during, for example working hours. The night mode uses a combination of A2S and smoke detection. If not programmed, the sensor defaults to dual mode.

The heat sensor (CAH330) can be set to one of 3 modes 77°C / 92°C and rate of rise. These sensors are designed to be used in environments where the ambient conditions might cause false alarms if smoke detection were to be used, for example where there is a high level of dust, fumes, steam or smoke under normal conditions.

Features

- Soft addressed
- Integral short circuit isolator
- Single address
- Wide range of sensor types
- 360° visibility LED using lightpipe technology
- Drift compensation
- Aesthetically pleasing

Benefits

- Quick and simple to install
- Single "multi-mode" heat sensor
- Wide viewing angle for increased LED visibility
- Common mounting base
- Positive "lock" indication
- Discreet design for incorporation into any decor
- Easy to maintain/service



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Technical specification

Code	CAP320	CAPT340	CAH330
Description	Optical smoke sensor	Photo-Thermal sensor	Multi-Mode heat sensor
Standards	EN54 Pt7 2000 + A1:2002, EN54 Pt17	EN54 Pt5 2000 + A1:2002, EN54 Pt7 2000 + A1:2002, EN54 Pt 17	EN54 Pt5 2000 + A1:2002, EN54 Pt17
Operating volatage	18V dc to 30V dc	18V dc to 30V dc	18V dc to 30V dc
Standby current	220µA (max)	220µA (max)	220µA (max)
Alarm current	5mA (max)	5mA (max)	5mA (max)
Addressing mode	Auto address	Auto address	Auto address

Specification

Mounting position	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas
Mounting options	Surface mount with CAB300 base	Surface mount with CAB300 base	Surface mount with CAB300 base
Area coverage	100m ² (subject to local standard)	100m ² (subject to local standard)	100m ² (subject to local standard)
System wiring	Min. 1.5mm, 2 core loop or spur	Min. 1.5mm, 2 core loop or spur	Min. 1.5mm, 2 core loop or spur

Heat class

Rate of Rise	N/A	A1S	A1R
Fixed Heat 77°C	N/A	N/A	BS
Fixed Heat 90°C	N/A	N/A	CS
Alarm Temperature (static)			
AIR	N/A	60°C	60°C
BS	N/A	N/A	77°C
CS	N/A	N/A	90°C
Indication	360° visibility light pipe	360° visibility light pipe	360° visibility light pipe

Environmental

Operating temperature	-10°C to +60°C	-10°C to +50°C	-10°C to +60°C
Humidity (non condensing)	0 to 95% RH	0 to 95% RH	0 to 95% RH

Physical

Construction	PC/ABS	PC/ABS	PC/ABS
Colour - Ral No.	White - 9003	White - 9003	White - 9003
Dimensions excel base (Dia x D)	101mm x 33mm	101mm x 43mm	101mm x 43mm
Dimensions incl base (Dia x D)	104mm x 45mm	104mm x 55mm	104mm x 55mm
Weight (without base)	76g	76g	76g
IP Rating	IP30	IP30	IP30

Compatibility

Suitable for use with	Eaton: Cooper addressable fire systems	Eaton: Cooper addressable fire systems	Eaton: Cooper addressable fire systems
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LEDs

LED state	LED state behaviour	System event
Off	LED is not illuminated.	Global flash is disabled**.
Slow flash	Momentary flash approximately once every 30 seconds*.	Global flash enabled. Detector is in quiescent state.
Fast flash	Momentary flash approximately 25 times per minute*.	>24 detectors are in fire state.
On	LED is constantly illuminated.	Detector is in fire state.

*Timing can vary depending on loop address quantities.

**Detector flash in quiescent state can be disabled via control panel menu (CF3000, CF1100, CF2000).

Catalogue numbers

Description	Code
CAP320 Optical smoke sensor	400002FIRE-0002X
CAPT340 Photo/Thermal sensor	400004FIRE-0004X
CAH330 Multi-Mode heat sensor	400003FIRE-0003X
Standard base	CAB300
Conventional remote indicator	CIR301
Duct probe (requires detector & base)	MDP201
Loop connected remote indicator	MRIAD