



Fire alarm systems Multi detector 4350

- Low profile design / Unleaded soldering / Latest IC technology
- One detector housing, two detector types and AI function

General

This low profile multi detector contains one photoelectric (optical) smoke detector and one heat detector within one housing. The latest IC technology is used to secure the highest reliability possible.

In the **smoke** detection chamber is a high-efficient optical system consisting of an LED and a photodiode with two lenses. Scattered light (i.e. reflection of infrared light) is used to detect smoke.

The **heat** sensing element is a thermistor.

Reduces false fire alarms

The smoke enters the detection chamber through an insect filter and an optical labyrinth. This construction not only improves the smoke inflow but it also causes steam, fog, etc. to condense into moisture on its surfaces, to prevent false (nuisance) alarms.

The detector maintains a constant sensitivity regardless of the contamination. It has also a self diagnosis of the internal devices.

AI function

- **Combined heat and smoke sensing** will guarantee reliable and accurate fire alarm detection.
- **Variable delay function**, i.e. the delay time before fire alarm is activated, is influenced by temporary changes of the temperature and the smoke obscuration.
- **Learning function / condition** means that the detector will adapt an alarm

algorithm according to the smoke and/or temperature conditions where the detector is located, i.e. temperature changes and occurrence of smoke. There is a normal algorithm (default) and there are less and more sensitive learning conditions (algorithms) that will be adapted after a learning period. If the conditions changes, the normal will be adapted again.

Environment friendly

The detector has unleaded soldering. The latest IC technology reduces the number of semiconductors and other electronic components to a minimum.

Compatibility

The conventional multi detector 4350 is the best substitute for the ionization smoke detectors 2316 and 2317.

Miscellaneous

The detector is plugged in a conventional base (2324), connected to a conventional zone line input. The base has an LED that will light when the detector goes into alarm. In the base there are terminals to connect an external LED, e.g. 2218.

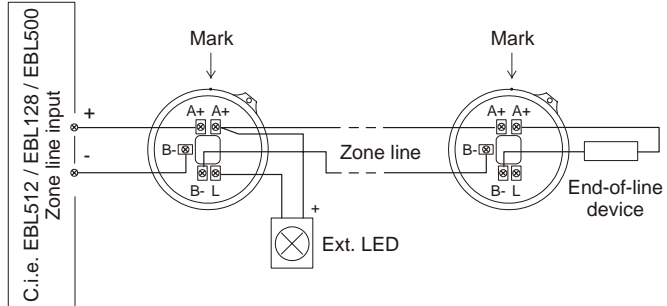
Product applications

The detector is intended for indoor use and in dry premises. It is excellent to detect all types of fires, also a methylated spirits fire.

Used in the systems EBL500 / 512 / 128 / 1000 / 2000.

Type number	
4350	Multi detector

The zone line is connected to the base 2324 (A+ & B-)
Ext. LED is connected to the base 2324 (A+ & L).



In the detector:

- A** Contact for base 2324
- B** Contact for base 2324

See also "Engineering Instructions for detectors Type 435x".

The detector is plugged in a base 2324. End-of-line device depending on the zone line input.

Technical data	
Voltage (V DC)	
rated	24
allowed	12-30
normal	24
Current consumption at nom. volt. (mA)	Depending on the base the detector is plugged into. For more details see the Product Leaflet respectively, e.g. MEW00008 (Base 2324).
quiescent (detector only)	0.04
active (detector only)	min. 3
Ambient temperature (°C)	
operating	-10 to +50
storage	-25 to +75
Ambient humidity (% RH)	max. 95, non condensing
Ingress Protection rating (estimated)	IP 51
Sensitivity (obscuration; %/m)	3.7 / 5 (depending on algorithm) >2.5 in combination with temp. rate-of-rise (depending on algorithm)
Sensitivity (T=°C; $\Delta T = ^\circ\text{C}/\text{min.}$)	57; 6.43 / not used (depending on algorithm) 57; >1.07 in combination with smoke obscur. (depending on algorithm)
Size \varnothing x h (mm)	102 x 46
Weight (g)	84
Construction / Colour	Modified polycarbonate / Grey (N8, Munsell colour code)
Approvals	CE 05 EC Certificate no. 0786-CPD-20143; EN54-7

All technical features and data are subject to changes without notice, resulting from continuous development and improvement.

Product Leaflet	Date of issue	Revision / Date of revision
MEW00309	2002-12-03	8 / 2008-09-18