



## Arc Fault Detection Device combined with RCBO (AFDD)



### Description

MK SENTRY AFDDs provide protection against fires caused by electrical arcing resulting from faulty wiring or poor connections. The AFDD analyses current/voltage characteristics to identify arcing and automatically trip to isolate the circuit. AFDDs detect arcing faults which can be undetected by MCBs and RCDs.

### Types of arc fault

Series arc fault, in-line conductor caused by;

- Loose connections
- Damaged cables (broken, crushed, worn cables)
- Rodent damage

Parallel arc fault, between live conductors, L-N and L-E undetected by MCB/RCD resulting from;

- Damaged insulation
- Pierced insulation (power tools, nails etc)
- Rodent damage
- Poor wiring / damaged appliance plugs

### Features

- Meets BS EN and IET Wiring Regulation requirements
- Single module
- DP switching
- MCB Curve B and C
- RCD Type A
- 6000A breaking capacity
- Reduces the risk of fire
- Positive status indication

### Standards and approvals

Product Standard: BS EN62606, BS EN61009-1

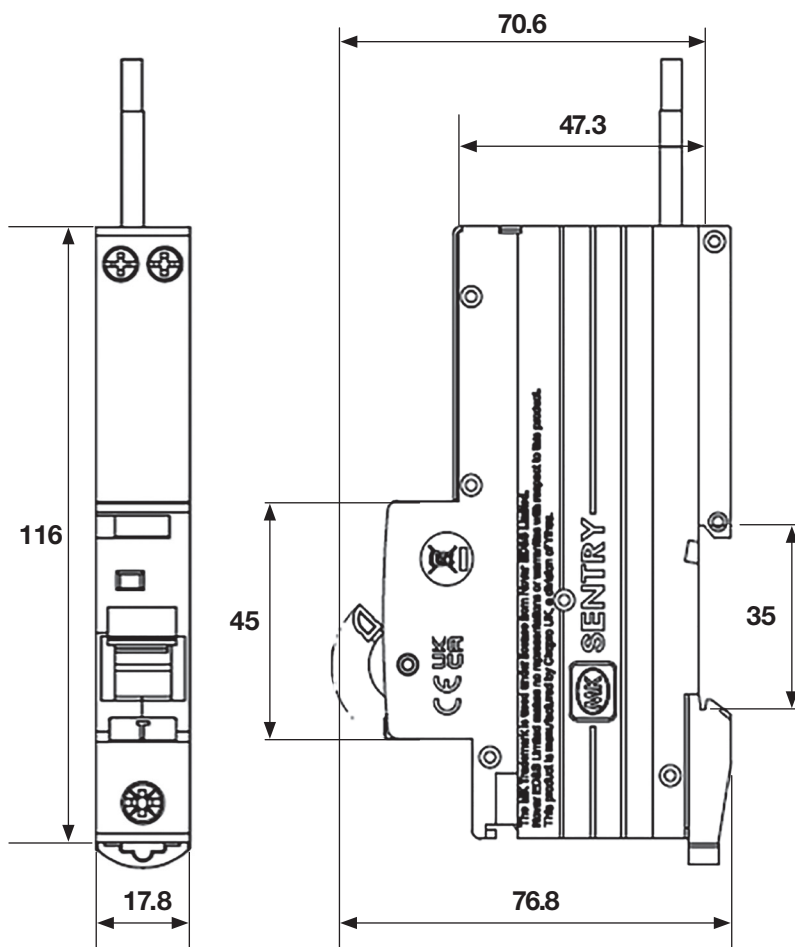
Product Certification: UKCA/CE

Degree of Pollution: 2

| RANGE  |  |
|--------|--|
| H4406s | AFDD/RCBO 6A DP MCB CURVE B, RCD 30MA TYPE A   |
| H4410s | AFDD/RCBO 10A DP MCB CURVE B, RCD 30MA TYPE A  |
| H4416s | AFDD/RCBO 16A DP MCB CURVE B, 3RCD 30MA TYPE A |
| H4420s | AFDD/RCBO 20A DP MCB CURVE B, RCD 30MA TYPE A  |
| H4432s | AFDD/RCBO 32A DP MCB CURVE B, RCD 30MA TYPE A  |
| H4440s | AFDD/RCBO 40A DP MCB CURVE B, RCD 30MA TYPE A  |
| H4506s | AFDD/RCBO 6A DP MCB CURVE C, RCD 30MA TYPE A   |
| H4510s | AFDD/RCBO 10A DP MCB CURVE C, RCD 30MA TYPE A  |
| H4516s | AFDD/RCBO 16A DP MCB CURVE C, RCD 30MA TYPE A  |
| H4520s | AFDD/RCBO 20A DP MCB CURVE C, RCD 30MA TYPE A  |
| H4532s | AFDD/RCBO 32A DP MCB CURVE C, RCD 30MA TYPE A  |
| H4540s | AFDD/RCBO 40A DP MCB CURVE C, RCD 30MA TYPE A  |

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**(Height) 116mm x (Width) 18mm x (Depth) 77mm**  
**weight 0.185Kq (0.2Kq packed)**



## ELECTRICAL

## 6/40A

**285V ac**

### B and C

### Type A - 30mA tripping current

3000A @8/20s  $\mu$ s

## 3

**-5°C to +40°C**

**1P + N**

**Front face IP4X, screw IP2X**

**Line / Neutral (Load) 16mm<sup>2</sup> (torque 1.2Nm) Line  
(Supply) 10mm<sup>2</sup> (torque 2.5Nm)**

## 2000 metres

The following table describes all possible LED states:

|                        |  |  |   |
|------------------------|--|--|---|
| <b>Green LED is on</b> | <b>Device operable</b>                 |  | <b>After LED flash 5 times, then product will do self test: self test passed, green LED will flash; failed, red LED will stay on, need contact service.</b> |
| <b>1X red flash</b>    | <b>Serial or parallel arc detected</b> |  |   |
| <b>2X yellow flash</b> | <b>Overvoltage (&gt;285V)</b>          |  |   |
| <b>3X yellow flash</b> | <b>Residual current detected</b>       |  |   |
| <b>Red LED is on</b>   | <b>Self test failed</b>                |  |   |
| <b>No flash</b>        | <b>No supply voltage</b>               |  |   |