



## 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

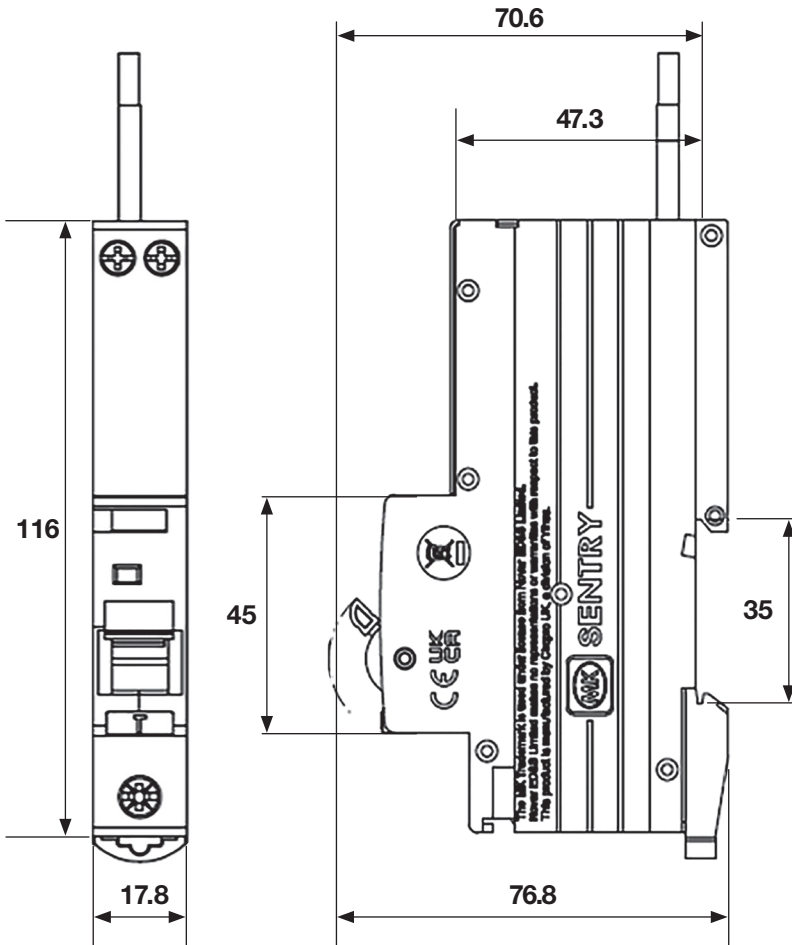
RANGE	
H4406s	AFDD/RCBO 6A DP MCB CURVE B, RCD 30MA TYPE A
H4410s	AFDD/RCBO 10A DP MCB CURVE B, RCD 30MA TYPE A
H4416s	AFDD/RCBO 16A DP MCB CURVE B, 3RCD 30MA TYPE A
H4420s	AFDD/RCBO 20A DP MCB CURVE B, RCD 30MA TYPE A
H4432s	AFDD/RCBO 32A DP MCB CURVE B, RCD 30MA TYPE A
H4440s	AFDD/RCBO 40A DP MCB CURVE 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

# MK Sentry

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### Dimensions (mm)

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



### TECHNICAL SPECIFICATION

<b>ELECTRICAL</b>	
<b>CURRENT RATING</b>	6/40A
<b>OPERATING VOLTAGE</b>	285V ac
<b>RATED SHORT CIRCUIT CAPACITY</b>	6000A
<b>MCB CURVE</b>	B and C
<b>RCD OPERATION</b>	Type A - 30mA tripping current
<b>SURGE CURRENT RESISTANCE</b>	3000A @8/20s $\mu$ s
<b>ENERGY LIMITING CLASS</b>	3
<b>PHYSICAL</b>	
<b>AMBIENT OPERATING TEMPERATURE</b>	-5°C to +40°C
<b>NUMBER OF POLES</b>	1P + N
<b>IP RATING</b>	Front face IP4X, screw IP2X
<b>TERMINAL CAPACITY</b>	Line / Neutral (Load) 16mm <sup>2</sup> (torque 1.2Nm) Line (Supply) 10mm <sup>2</sup> (torque 2.5Nm)
<b>MAX. INSTALLATION ALTITUDE</b>	2000 metres

### LED INDICATION

The following table describes all possible LED states:

Green LED is on	Device operable	●●●●●●●●●●●●●●●●●●●●	
1X red flash	Serial or parallel arc detected	●○●○●○●○●○●○●○●○	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.
2X yellow flash	Overvoltage (>285V)	●●○●○●○●○●○●○●○●○●○	
3X yellow flash	Residual current detected	●●●○●○●○●○●○●○●○●○●○●○	
Red LED is on	Self test failed	●○●○●○●○●○●○●○●○●○●○●○●○●○●○●○●○●○●○	
No flash	No supply voltage		

Greenbrook Electrical  
West Road, Harlow,  
Essex CM20 2BG  
Phone: 01279 772700  
Email: info@greenbrook.co.uk  
[www.mksentrycircuitprotection.co.uk](http://www.mksentrycircuitprotection.co.uk)

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