

# MK SENTRY



## Miniature Circuit Breakers (MCB)



### Description

MK Sentry MCBs are of the thermo-magnetic, current limiting type and are available with either Type B or Type C operating characteristics.

The thermal component is carefully calibrated, thermally operated bi-metal element. Larger overloads and fault current situations are dealt with using the magnetic tripping mode of the MCB. This acts very quickly, overriding the thermal operation.

BS EN 60898 requires the tripping to occur within 100 milliseconds and when short circuit happens and the design of the MK Sentry MCB allows fault currents of up to 6000A (M6) to be safely interrupted within this time-scale.

### Positive contact status indication

When the green indicator is visible, then a contact gap of 4mm has been achieved. MK Sentry MCBs may therefore be used as single pole isolating switches where appropriate.

The operating dolly may be locked in either the ON or OFF position without affecting the ability of the trip mechanism to operate. The contacts themselves are manufactured from carefully chosen materials, selected specifically for their low electrical resistance and low propensity to weld under fault conditions.

### Features

- Designed to fully comply with the requirements of BN EN 60988-1
- Positive contact status indication
- Trip-free mechanism
- Tunnel type, captive terminals
- 25mm<sup>2</sup> terminal capacity
- Can be used as a single pole isolating switch
- Protective shutter

TYPE B CURVE	
TYPE B SINGLE POLE	RATING
H5903s	3A
H5906s	6A
H5910s	10A
H5916s	16A
H5920s	20A
H5925s	25A
H5932s	32A
H5940s	40A
H5945s	45A
H5950s	50A
H5963s	63A

TYPE C CURVE	
TYPE C SINGLE POLE	RATING
H8703s	3A
H8706s	6A
H8710s	10A
H8716s	16A
H8720s	20A
H8725s	25A
H8732s	32A
H8740s	40A
H8750s	50A
H8763s	63A

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### Standards and approvals

Product Standard  
BS EN 60898-1

Product Certification  
CE, UKCA

IP Degree of Protection  
Front face = IP4X  
Screw = IP2X

Degree of Pollution: 2

Energy Limiting Class: 3

### TECHNICAL SPECIFICATION

#### ELECTRICAL

Voltage Rating  
230/400V a.c.

Rated Current  
3 – 63A

Rated Short Circuit Capacity ICN  
6000A (when backed up by a BS1361, 100A  
fuse, breaking capacity increased to 16,000A)

#### PHYSICAL

Number of Poles  
1P

Mounting  
Din-Rail / Clip-on

Mechanical Durability  
10,000 cycles

Ambient Operating Temperature  
-5°C to + 55°C

Calibration Temperature  
+30°C

IP Rating  
Front face IP4X, screw IP2X

Terminal Capacity  
25mm<sup>2</sup>

Tightening Torque  
3Nm (max)

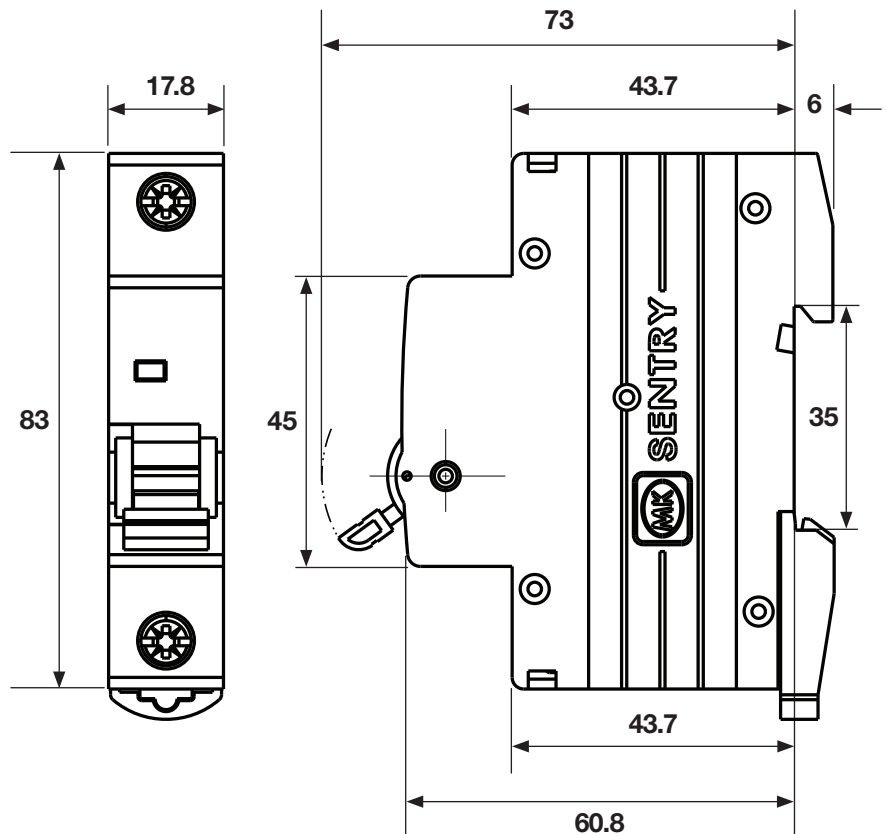
Max. Installation Altitude  
2000 metres

Material  
PA6 Nylon



### Dimensions (mm)

(Height) 83mm x (Width) 18mm x (Depth) 79mm



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### Tripping Characteristics Curve

Limit Specified in BS EN 60898-1: 2003

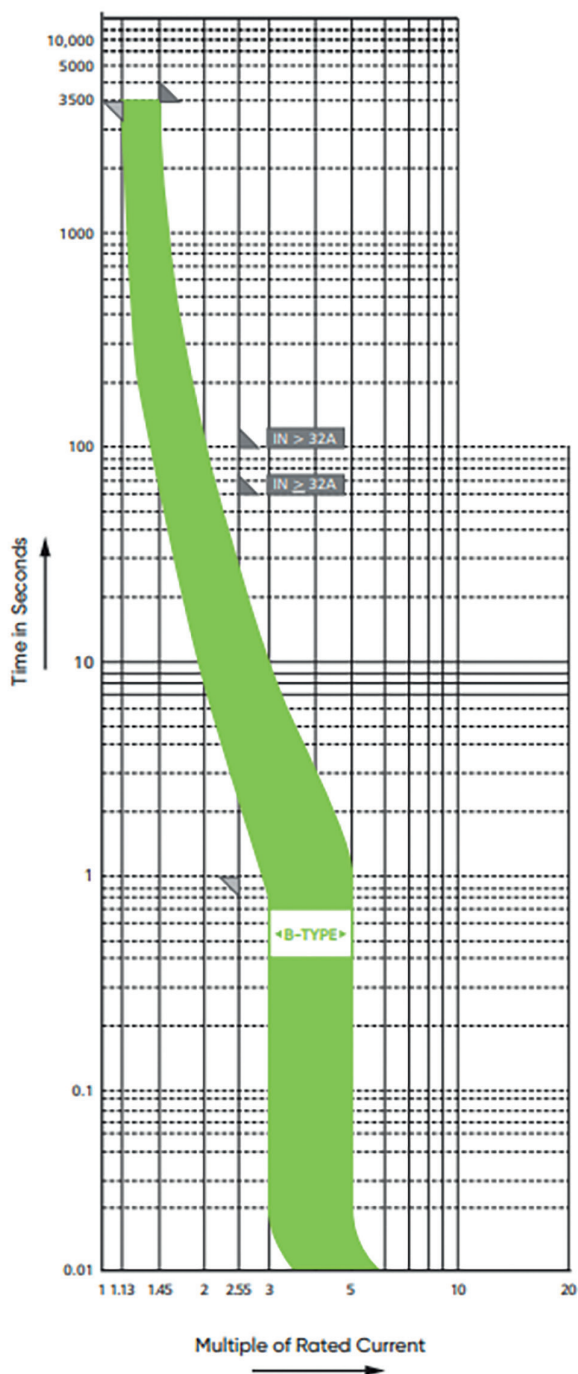
$I_n$  : Rated Current

B Type : 3A to 50A

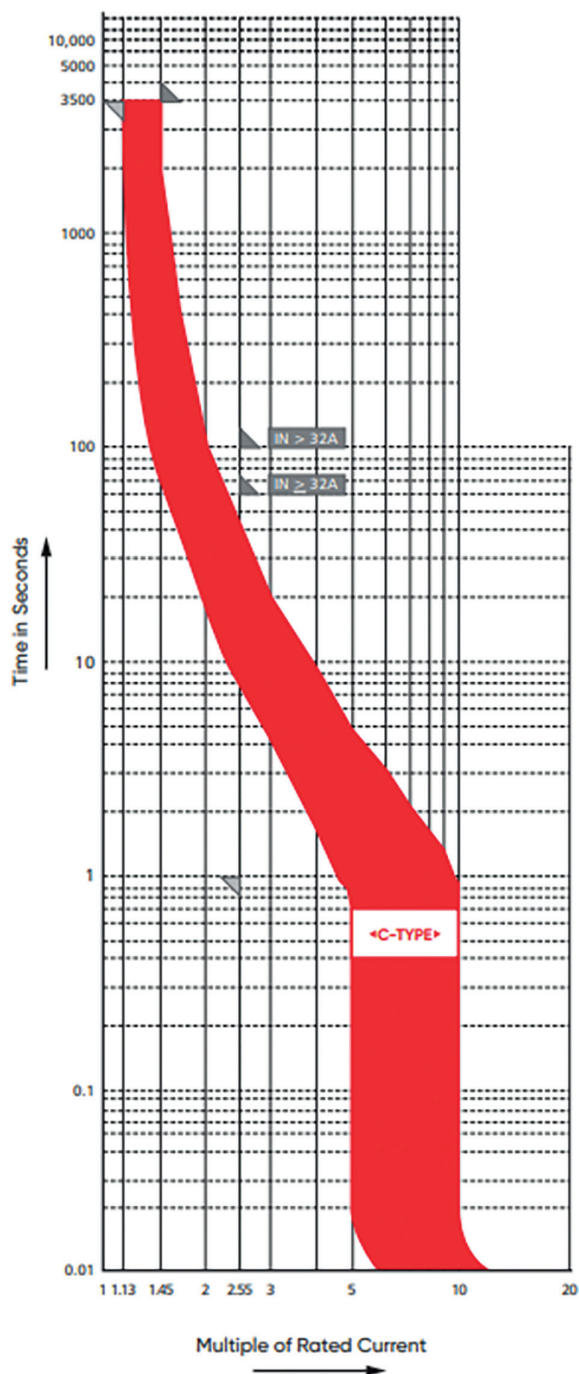
C Type : 3A to 50A

Reference calbi. Temp. 30°C

Lower Limit as per Standard  
Upper Limit as per Standard



B-TYPE



C-TYPE

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### I<sup>2</sup>T Curves

