

# 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.

IEC / BSEN 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 up to 6000A/10,000A 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 IEC / BSEN 60898
- Positive contact status indication
- Trip-free mechanism
- Tunnel type, captive terminals
- 25mm<sup>2</sup> terminal capacity
- Can be used as an isolating switch
- Protective shutter

TYPE B CURVE				
RATING	6KA		10KA	
	SINGLE POLE	SINGLE POLE	2 POLE	3 POLE
3A	H5903S			
6A	H5906S	H5972S	H5972D	H5972T
10A	H5910S	H5973S	H5973D	H5973T
16A	H5916S	H5974S	H5974D	H5974T
20A	H5920S	H5975S	H5975D	H5975T
25A	H5925S	H5976S	H5976D	H5976T
32A	H5932S	H5977S	H5977D	H5977T
40A	H5940S	H5978S	H5978D	H5978T
45A	H5945S	H5979S	H5979D	H5979T
50A	H5950S			
63A	H5963S			

TYPE C CURVE				
RATING	6KA		10KA	
	SINGLE POLE	SINGLE POLE	2 POLE	3 POLE
3A	H8703S			
6A	H8706S	H8772S	H8772D	H8772T
10A	H8710S	H8773S	H8773D	H8773T
16A	H8716S	H8774S	H8774D	H8774T
20A	H8720S	H8775S	H8775D	H8775T
25A	H8725S	H8776S	H8776D	H8776T
32A	H8732S	H8777S	H8777D	H8777T
40A	H8740S	H8778S	H8778D	H8778T
45A	H8745S	H8779S	H8779D	H8779T
50A	H8750S			
63A	H8763S			

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### Standards and approvals

Product Standard  
IEC / BSEN 60898

Product Certification  
CE, UKCA

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

10,000A/6,000A (for consumer unit when backed up by a BS1361, 100A fuse, breaking capacity increased to 16,000A)

##### TRIPPING CHARACTERISTICS

B and C curve

#### PHYSICAL

##### NUMBER OF POLES

1P / 2P / 3P

##### 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

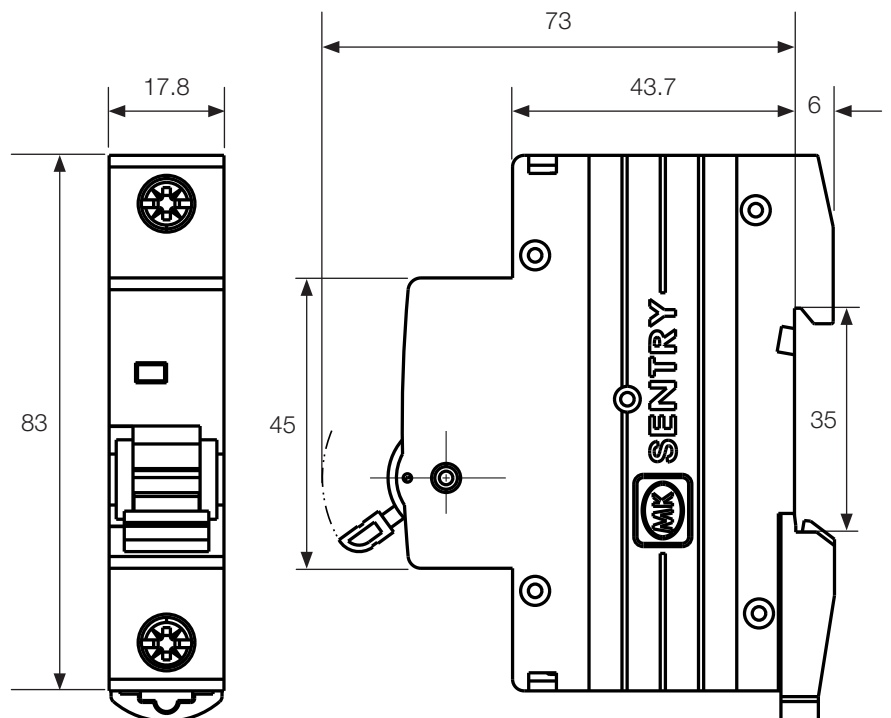
##### MATERIAL

PA6 Nylon

### Dimensions (mm)

#### 1 pole

(height) 83mm x (width) 18mm x (depth) 67mm  
Weight: 0.11Kg



# MK SENTRY

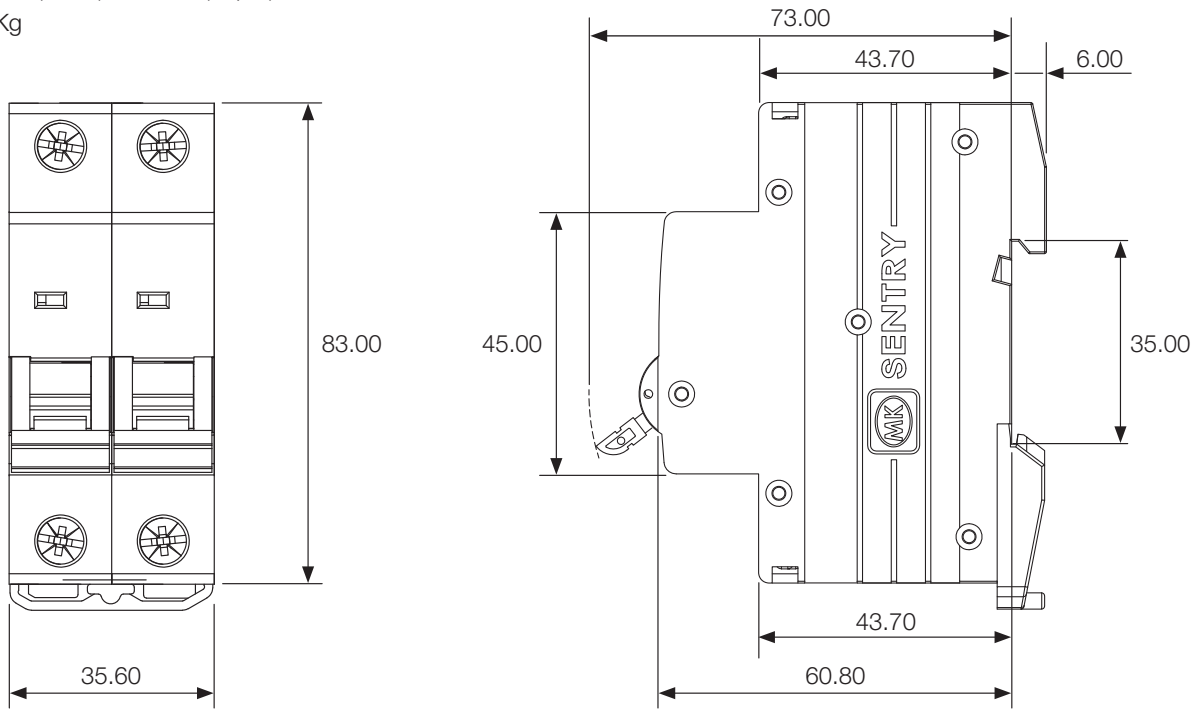
## Miniature Circuit Breakers (MCB)

### Dimensions (mm)

#### 2 pole

(height) 83mm x (width) 36mm x (depth) 67mm

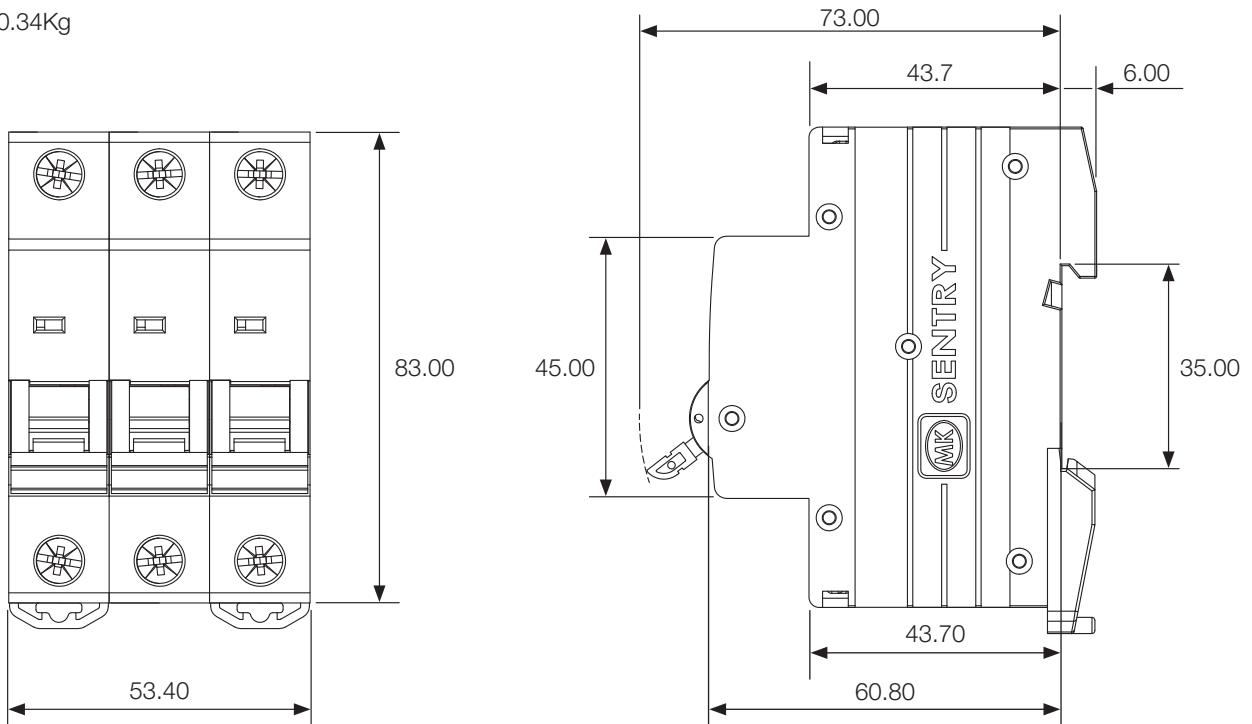
Weight: 0.22Kg



#### 3 pole

(height) 83mm x (width) 54mm x (depth) 67mm

Weight: 0.34Kg



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## Miniature Circuit Breakers (MCB)

### Tripping Characteristics Curve

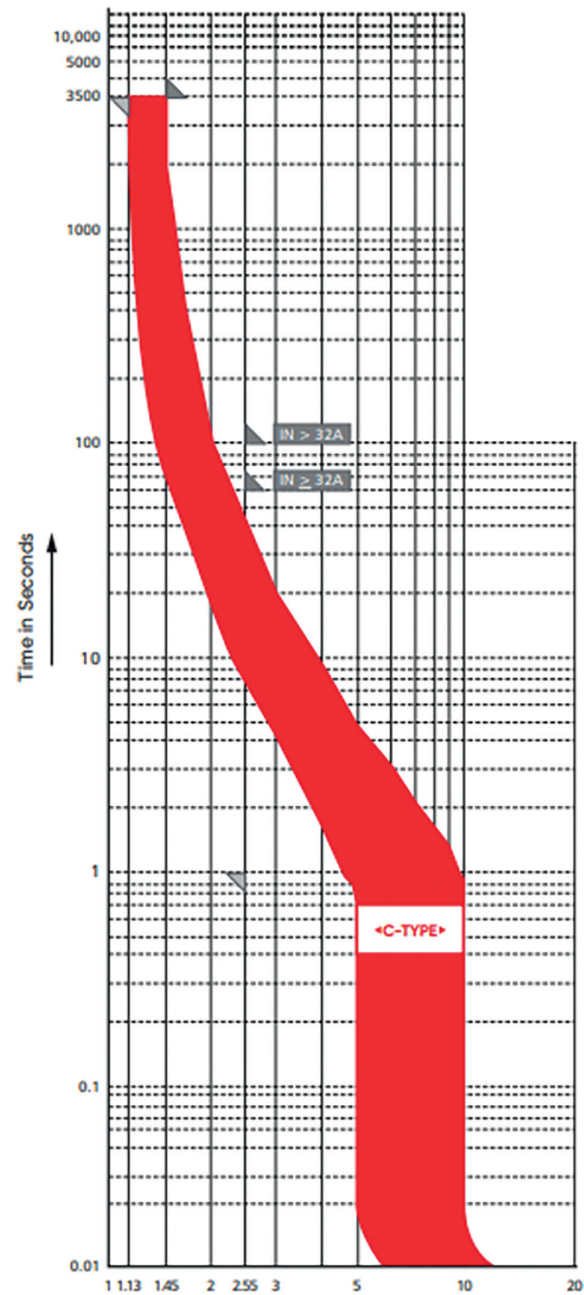
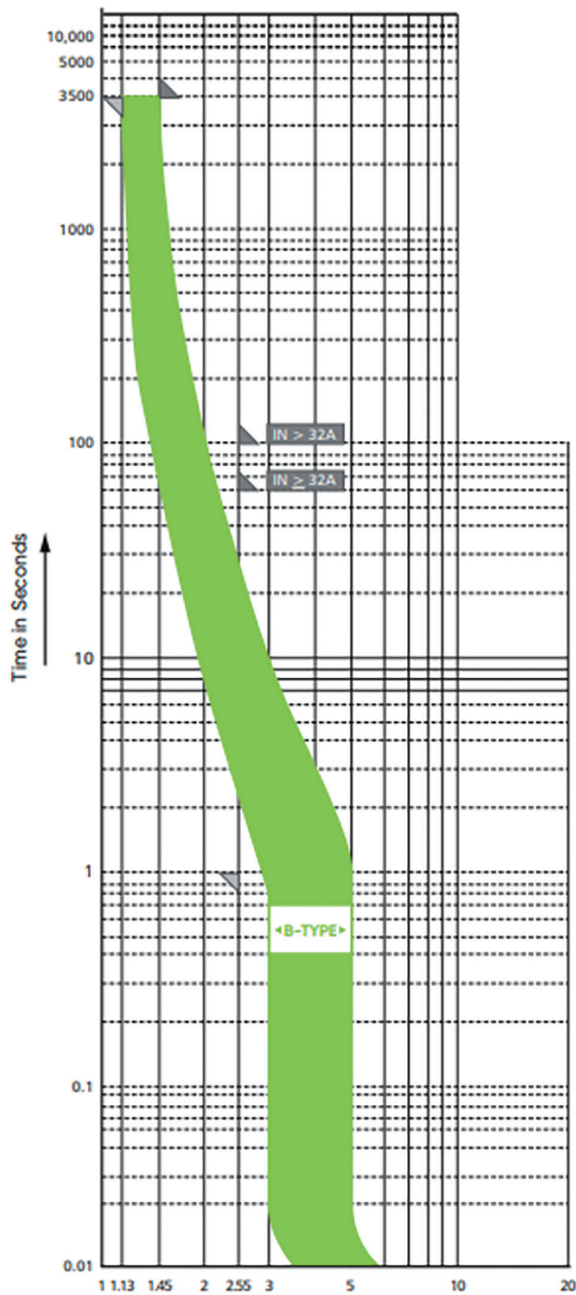
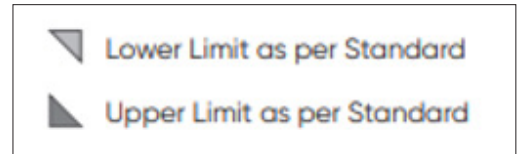
Limit Specified in BS EN 60898-1: 2003

$I_n$  : Rated Current

B Type : 3A to 50A

C Type : 3A to 50A

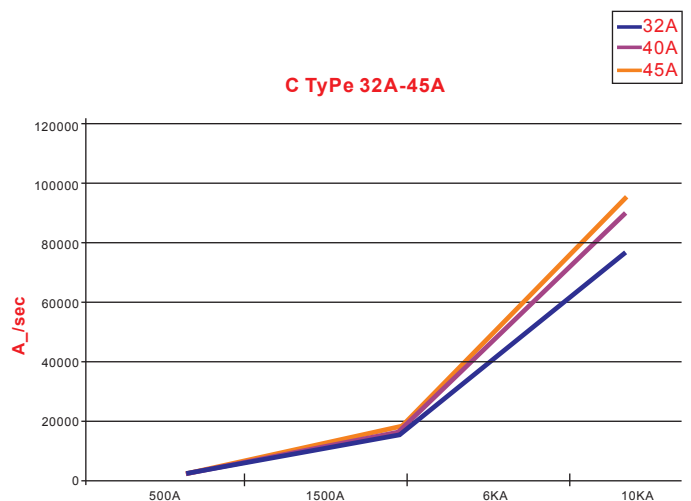
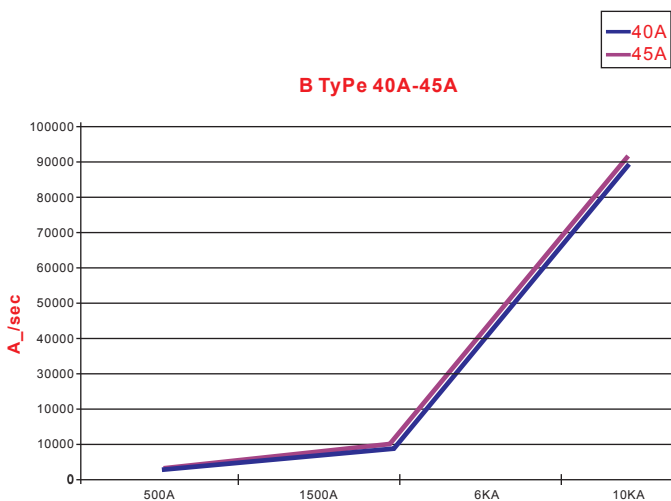
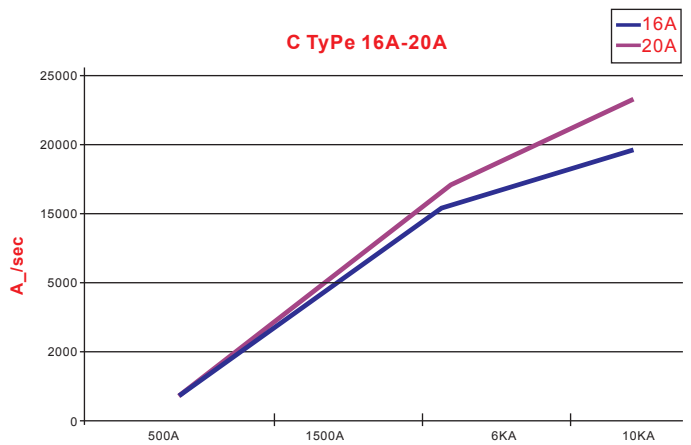
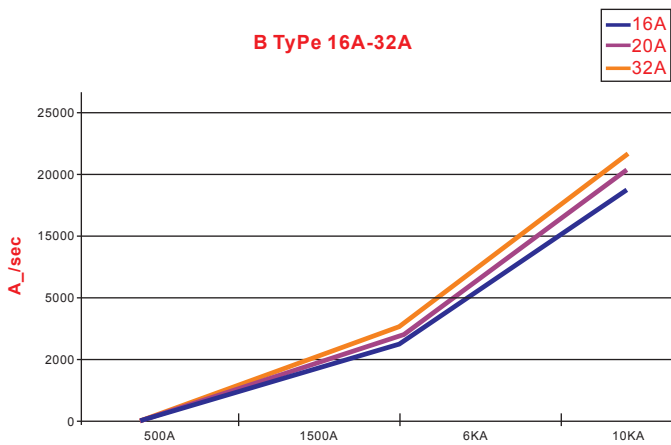
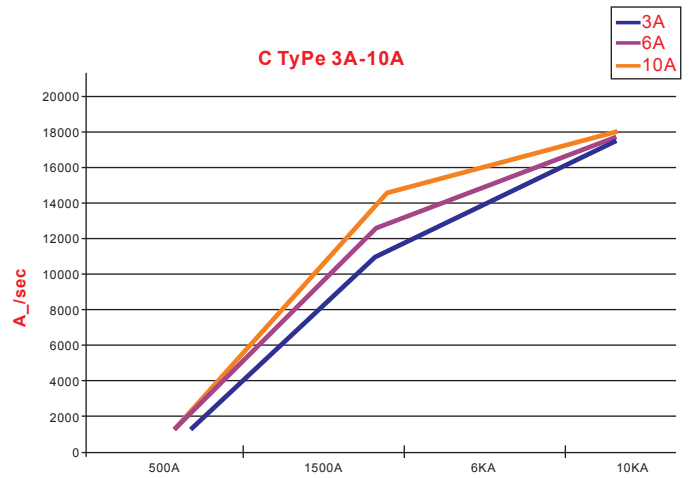
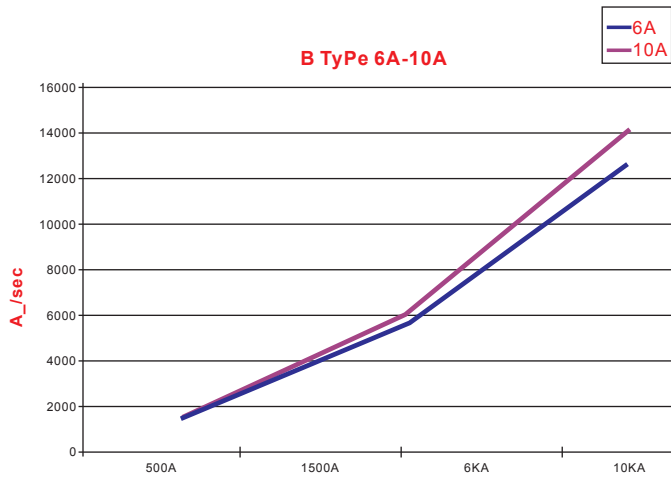
Reference calbi. Temp. 30°C



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## Miniature Circuit Breakers (MCB)

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



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