

**Technical Information**
**Loadstar MCBs**

**Overview:**
**Devices (MCBs)**

- 10kA Fault Rating
- 6A – 63A Current Range
- Single, Double & Triple Pole Variants
- Type B, C & D Characteristics

**Features:**

- 18mm wide modules
- Suitable for use within Loadstar Distribution Boards
- Compliant with BS EN 60898 and EN 60947-2

**Part No.s**

<b>Single Pole</b>			
<b>Current Rating</b>	<b>Type B</b>	<b>Type C</b>	<b>Type D</b>
6A	6HS06B	6HS06C	6HS06D
10A	6HS10B	6HS10C	6HS10D
16A	6HS16B	6HS16C	6HS16D
20A	6HS20B	6HS20C	6HS20D
32A	6HS32B	6HS32C	6HS32D
40A	6HS40B	6HS40C	6HS40D
50A	6HS50B	6HS50C	6HS50D
63A	6HS63B	6HS63C	6HS63D

<b>Double Pole</b>			
<b>Current Rating</b>	<b>Type B</b>	<b>Type C</b>	<b>Type D</b>
6A	6HD06B	6HD06C	6HD06D
10A	6HD10B	6HD10C	6HD10D
16A	6HD16B	6HD16C	6HD16D
20A	6HD20B	6HD20C	6HD20D
32A	6HD32B	6HD32C	6HD32D
40A	6HD40B	6HD40C	6HD40D
50A	6HD50B	6HD50C	6HD50D
63A	6HD63B	6HD63C	6HD63D

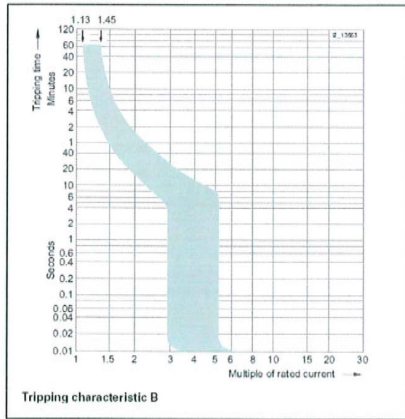
<b>Triple Pole</b>			
<b>Current Rating</b>	<b>Type B</b>	<b>Type C</b>	<b>Type D</b>
6A	6HT06B	6HT06C	6HT06D
10A	6HT10B	6HT10C	6HT10D
16A	6HT16B	6HT16C	6HT16D
20A	6HT20B	6HT20C	6HT20D
32A	6HT32B	6HT32C	6HT32D
40A	6HT40B	6HT40C	6HT40D
50A	6HT50B	6HT50C	6HT50D
63A	6HT63B	6HT63C	6HT63D

**Technical Specification:**

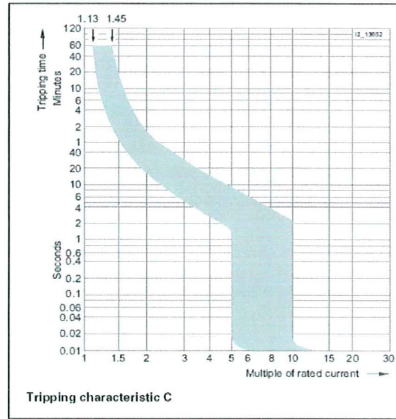
<b>Standards Approved acc. to</b>		BS EN 60898 & IEC/EN 60947-2
<b>Operational Voltage</b>	min V AC/DC	24
Acc. To EN 60898 & EN 60947-2	max V DC/pole	*60
	max V AC	440
Acc. To UL1077 & CSA C22.2 No. 235	Max V AC	
	Max V DC/pole	60
<b>Rated Switching Capacity</b>		
• Icn acc. To IEC/EN 6089801	kA AC	10
• Icn acc. To IEC/EN 6089801	kA DC	
• Icn acc. To IEC/EN 6089801	kA AC	15
• Acc. To UL 1077 & CSA22.2	kA AC	5
<b>Insulation Coordination</b>		
• Rated Insulation voltage	V AC	250 / 440
• Degree of pollution for overvoltage category		3 / III
<b>Touch Protection</b> to EN 50274-1		Yes
<b>Degree of Protection</b> acc. to EN 60529		IP20 with connected conductors
<b>CFC and Silicone Free</b>		Yes
<b>Mounting</b>		
• Snap on fixing system		Yes
• Standard mounting rail and screw connection		Yes
<b>Terminals</b>		
• Tunnel terminals at both ends		Yes
• Combined terminals at both ends		Yes
• Terminal connection solid, stranded or finely stranded with ferrule		0.75...0.25
• Terminal tightening torque	Nm	2.5...3
<b>Conductor Cross Sections</b>		
• Solid and stranded, top and bottom terminal	mm <sup>2</sup>	0.75...35
• Finely stranded, with end sleeve, top and bottom terminal	mm <sup>2</sup>	0.75...25
<b>Mains Connection</b>		Any
<b>Mounting Position</b>		Any
<b>Service life on average, with rated load</b>		20,000 operations (6A to 32A); 10,000operations (40A to 63A)
<b>Ambient Temperature</b>	°C	-25...+45, occasionally +55, max, 95% humidity, storage temperature: -40...+75
<b>Resistance to Climate</b> Acc. to IEC 60068-2-30		6 cycles
<b>Resistance to Vibrations</b> Acc to IEC 60068-2-6	m/s <sup>2</sup>	60 at 10Hz...150Hz

\* The operational voltage 60V DC/pole takes into account a battery charging voltage with peak value of 72V

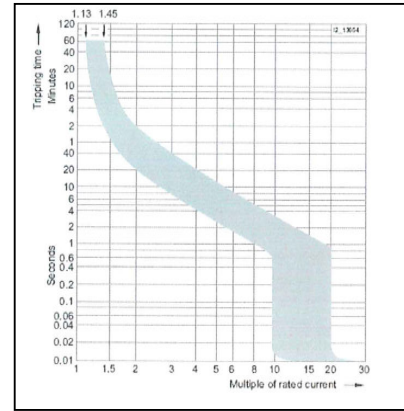
**Trip Curves:**



**B Curve:** For universal use in socket outlet lighting circuits

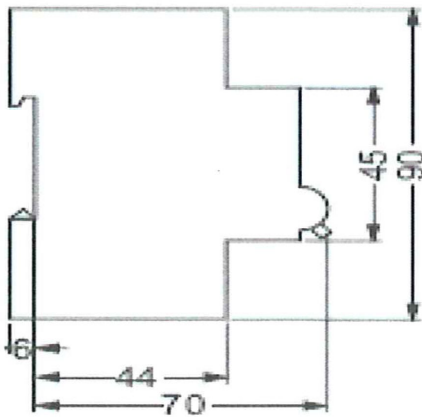


**C Curve:** Advantageous in lighting and motor circuits with higher starting currents



**D Curve:** Advantageous in circuits with highly inductive loads

**Dimensions:**



SP device = 18mm Wide  
TP device = 54mm Wide

**Earth Loop Impedance Values:**

Earth fault loop impedances ( $Z_s$ ohms) to give compliance with BS7671 regulations 411.3.2.2 & 411.3.2.3 at 230V			
	Maximum earth fault loop impedance (Ohms)		
Device Rating	Type B	Type C	Type D
6A	7.666	3.832	1.917
10A	4.599	2.299	1.150
16A	2.874	1.437	0.719
20A	2.299	1.149	0.575
25A	1.839	0.919	0.460
32A	1.437	0.718	0.359
40A	1.149	0.574	0.288
50A	0.919	0.459	0.230
63A	0.729	0.364	0.183

**Further Information:**

Crabtree Sales: 01543 455010  
Crabtree Technical: 01543 438310  
Website: [www.electrium.co.uk](http://www.electrium.co.uk)