



### Modular DIN-Rail equipment for circuit protection and people protection MCB's / RCBO's

**RCBO's**  
a new Residual current operated  
circuit breakers with integral  
overcurrent protection

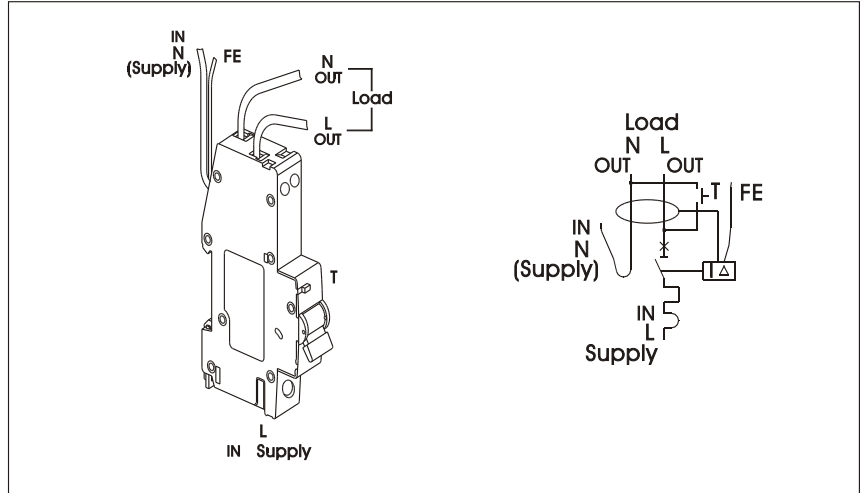


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Single Pole



Wiring Diagram

### Features

- Standards: ..... EN61009-1
- Voltage: ..... 230Vac
- Ratings: ..... 10 to 32 Amperes
- Sensitivity: ..... 30mA
- Module Width: ..... 1 x 18 mm
- Module Length: ..... 110 mm
- Magnetic Range\*: ... Curve C - 5(In) to 10(In)
- Connection Type: .. Cable, Busbar (Fork & Pin)
- Cable Size: .....  
 Load - 1 mm<sup>2</sup> to 16 mm<sup>2</sup>  
 Line - 1 mm<sup>2</sup> to 25 mm<sup>2</sup>
- IP Rating: ..... IP20
- Operation Temp: ..... -5°C to +40°C
- Rated Insulation Voltage (Un): . 500V
- Impulse Withstand Voltage (Vimp): ..... 2.5kV
- Mounting: ..... DIN RAIL 35 mm
- Functionality depend on line voltage.
- Single pole with one over-current protected pole and uninterrupted neutral.
- Sensitivity non-adjustable.

\* Note: (In) = Overload Rated Current

### Short Circuit Capacity

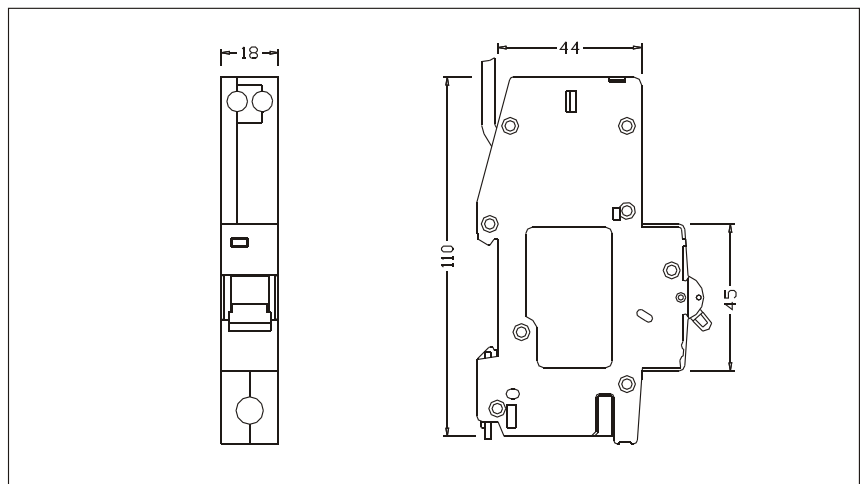
C Curve - 5(In) to 10(In)

EN61009-1(Icn)	6,000 A
	10,000 A

### Selection table

Rated residual current I n mA	Rated current In A	Cat. Number	
		6kA	10kA
30	10A	KBL-6AC1030	KBL-1AC1030
30	16A	KBL-6AC1630	KBL-1AC1630
30	20A	KBL-6AC2030	KBL-1AC2030
30	25A	KBL-6AC2530	KBL-1AC2530
30	32A	KBL-6AC3230	KBL-1AC3230

### Dimensions (mm)





### Features

**6kA & 10kA Breaking Capacity:** These MCBs have a high breaking capacity throughout the range. They operate on current limiting principle ensuring extremely low let through energy ( $I^2t$ ) under fault conditions.

**Trip Free Mechanism:** The MCB trips positively even when locked in on (I) position.

**Terminal Design:** Double function terminal design for accepting both busbar and conductors simultaneously.

**Safety Terminals:** The terminals are touch proof ensuring maximum operator safety against accidental contact (Ip20 of protection).

**DIN Clip:** The two-position DIN clip facilitates easy mounting and removal of MCB from the DIN channel.

**Uniform Components Profile:** The MCBs have a uniform profile and can be connected through pin type & Fork type busbars. Bottom terminal for Fork type busbar is isolated between the poles.

**Accessories:** Common modular accessories like Shunt trip, Motor mechanism, Undervoltage release and Auxiliary contacts ensure flexibility.

**Energy Saver:** The Watt loss of the MCBs is extremely low providing valuable savings over its entire lifecycle.

### Technical Specifications

Standards	IEC60898
Rated Current	In 6,10,16,20,25,32,40,50,63
Number of poles	1,2,3
Rated Operational Voltage	Ue 230/400V AC
DC Application	48V per pole
Frequency	50-60Hz
Tripping Characteristics	B, C curve
Operating temperature range	-5°C to +55°C Ambient
Mounting Arrangement	Snap on fixing, 35mm Din channel
Terminal Size	Suitable for 35mm <sup>2</sup> cable
Shock resistance (x,y & z dir)	40g, duration of 5 ms.
Vibration resistance (x,y & z dir)	3g, operating time at least 30mins

### Short-circuit capacity

According to EN60898

Poles	Voltage	Icn (kA)
1 - 3	230/400 AC	6
1- 3	230/400 AC	10

### Selection table

#### Single pole

Rated current In	Cat. Number			
	6kA		10kA	
A	B TYPE	C TYPE	B TYPE	C TYPE
6A	KB-6SB06	KB-6SC06	KB-1SB06	KB-1SC06
10A	KB-6SB10	KB-6SC10	KB-1SB10	KB-1SC10
16A	KB-6SB16	KB-6SC16	KB-1SB16	KB-1SC16
20A	KB-6SB20	KB-6SC20	KB-1SB20	KB-1SC20
25A	KB-6SB25	KB-6SC25	KB-1SB25	KB-1SC25
32A	KB-6SB32	KB-6SC32	KB-1SB32	KB-1SC32
40A	KB-6SB40	KB-6SC40	KB-1SB40	KB-1SC40
50A	KB-6SB50	KB-6SC50	KB-1SC50	KB-1SC50
63A	KB-6SB63	KB-6SC63	KB-1SC63	KB-1SC63

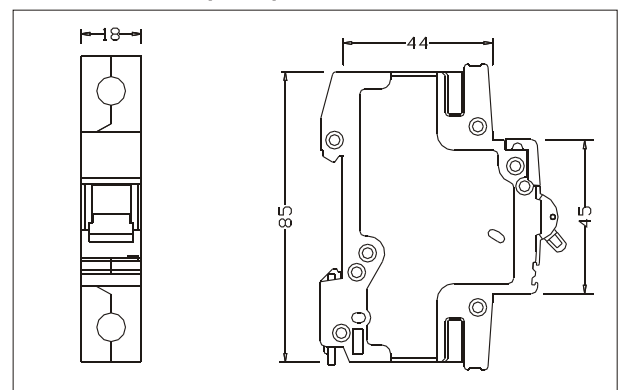
#### Double poles

Rated current In	Cat. Number			
	6kA		10kA	
A	B TYPE	C TYPE	B TYPE	C TYPE
6A	KB-6DB06	KB-6DC06	KB-1DB06	KB-1DC06
10A	KB-6DB10	KB-6DC10	KB-1DB10	KB-1DC10
16A	KB-6DB16	KB-6DC16	KB-1DB16	KB-1DC16
20A	KB-6DB20	KB-6DC20	KB-1DB20	KB-1DC20
25A	KB-6DB25	KB-6DC25	KB-1DB25	KB-1DC25
32A	KB-6DB32	KB-6DC32	KB-1DB32	KB-1DC32
40A	KB-6DB40	KB-6DC40	KB-1DB40	KB-1DC40
50A	KB-6DB50	KB-6DC50	KB-1DC50	KB-1DC50
63A	KB-6DB63	KB-6DC63	KB-1DC63	KB-1DC63

#### Triple poles

Rated current In	Cat. Number			
	6kA		10kA	
A	B TYPE	C TYPE	B TYPE	C TYPE
6A	KB-6TB06	KB-6TC06	KB-1TB06	KB-1TC06
10A	KB-6TB10	KB-6TC10	KB-1TB10	KB-1TC10
16A	KB-6TB16	KB-6TC16	KB-1TB16	KB-1TC16
20A	KB-6TB20	KB-6TC20	KB-1TB20	KB-1TC20
25A	KB-6TB25	KB-6TC25	KB-1TB25	KB-1TC25
32A	KB-6TB32	KB-6TC32	KB-1TB32	KB-1TC32
40A	KB-6TB40	KB-6TC40	KB-1TB40	KB-1TC40
50A	KB-6TB50	KB-6TC50	KB-1TC50	KB-1TC50
63A	KB-6TB63	KB-6TC63	KB-1TC63	KB-1TC63

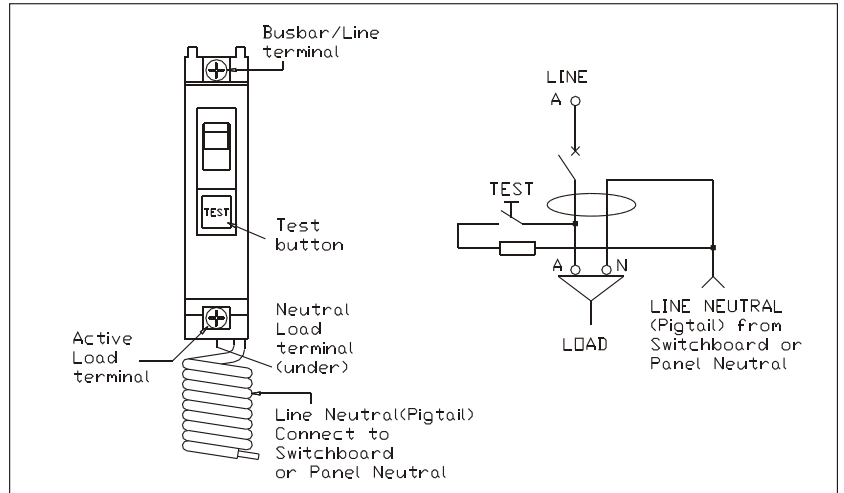
### Dimensions (mm)



Dimensions of 2,3 pole MCBs are multiples of single pole MCB dimensions, as these are modular units.



Single Pole



Wiring Diagram

### Features

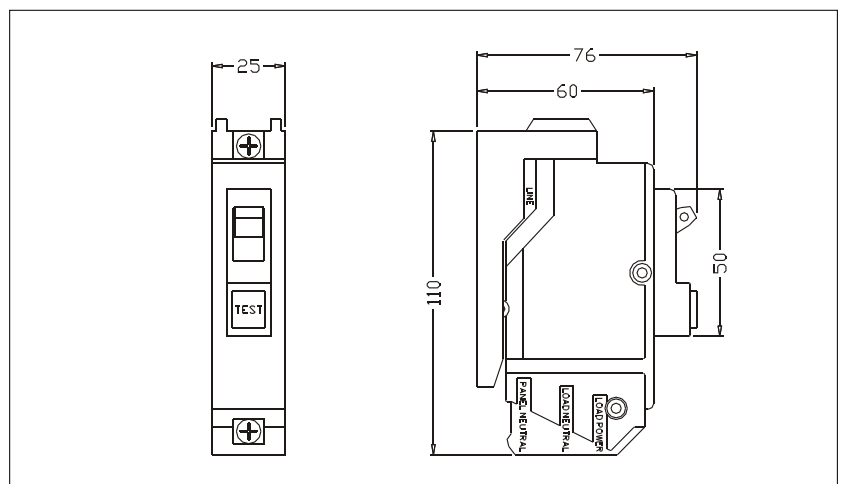
DBL single pole residual current circuit breakers are designed to provide overload, short circuit and residual current (earth leakage) protection in a signal module width unit when clip tray mounted within load centres and switchboards on 240V a.c. And 120 a.c. systems.

- Overload protection is provided by calibrated thermal element.
- Short circuit protection is provided by magnetic trip mechanism.
- Earth leakage protection is provided by balance core sensing device.

### Selection table

Rated residual current $I_n$ mA	Rated current $I_n$ A	Cat. Number
30	10A	6kA
30	16A	DBL-6AC1030
30	20A	DBL-6AC1630
		DBL-6AC2030

### Dimensions (mm)



### Short Circuit Capacity

IEC947-2	240V	6,000A
	120V	10,000A