

Miniature Circuit Breakers B4/B6/B10, Residual Current Devices & Isolating Switches



The IMO range of miniature circuit breakers have been designed for protection of electrical installations against overload and short circuits and are manufactured in accordance with IEC 60898-1, IEC 60947-2

MCB Features

- Handle central-tripping function for circuit fault indicating
- Elegant appearance; cover and handle in arc shape.
- Contact position indicating window; transparent cover to carry label
- High short circuit capacity
- Applicable to terminal and Pin/Fork type busbar connection
- Finger protected connection terminals
- Handle padlock device

Tripping characteristics in accordance with B, C and D type curves

- Curve B: 3-5 I_n Certification: B4/B6: Semko / CE
- Curve C: 5-10 I_n B10: VDE* / Semko / CE
- Curve D: 10-20 I_n

Specifications

In accordance with: IEC 60898-1, IEC 60947-2
Certification: CE, SEMKO, VDE* (only with B10, C & D curve; 1P/2P/3P, 6 to 40A) 3P, 3P+N
Pole composition: 1P, 1P+N, 2P, 3P, 3P+N
Tripping Curve: B, C, D
Rated frequency: 50/60Hz
Rated operational voltage: 230/400VAC ; 60VDC Max
Rated insulation voltage: 250VAC / 500VAC
Rated impulse withstand voltage: 6.2kV
Rated short circuit breaking capacity as per IEC 60898-1 and IEC60947-2:
B4 : 1P+N, C curve : 4.5kA
B6 : 1P, B curve: 6kA
B10 : 1P/2P/3P/3P+N, C & D curve: 10kA
Mechanical lifetime > 20,000 cycles
Electrical lifetime > 8,000 cycles
Fastening torque: 2.0 Nm
Terminal capacity: 35mm ² solid, 25mm ² stranded conductor (10mm ² for 1P+N)
Mounting on rail EN 60715 (EN 50022)
Protection degree: IP20
Temperature range: -5°C - +40°C, average temperature not to exceed 35°C



Options and ordering codes

	B6	B	10	16A
				Rated current Amps
MCB 4,5kA	B4			
MCB 6kA	B6			
MCB 10kA	B10			
Operating characteristic		B		
Operating characteristic		C		
Operating characteristic		D		
Single pole			10	
Single pole + Neutral			1N	
Two pole			20	
Three pole			30	
Three pole + Neutral			3N	

Selection chart

Type	B operating characteristics	C operating characteristics	D operating characteristics
Poles	1	1 1N 2 3 3N	1 2 3
Rated current Amps	2 4 6 10 16 20 25 32 40 50 63	100 200 300 400	100 200 300
Weight (g/pc)	100	100 200 300 400	100 200 300
Packing(Qty)	12	12 6 6 4 3	12 6 4

Miniature Circuit Breakers B4/B6/B10



Accessories

Auxiliary Switch

B10-F3

for monitoring the status of the protection device (open/closed)

1 pole changeover (for C & D curve only)

Rated current : 6A @ 230VAC & 24VDC or 3A @ 400VAC

Dielectric Strength : 2000V/1min

Terminal capacity : 1-4mm²

Mounting on the Left side

Shunt trip

B10-S3

Shunt Trip for remotely switch off the protection device

Rating voltage Ue : AC 110V / 230V / 400V

Operating voltage : 70%~110% X Ue

Mounting on the Left side

Busbars

Description	Ref.
Busbar 1 Pole, 100A, Fork Type, 1M	B10BB1F100-1M
Busbar 3 Pole, 100A, Fork Type, 1M	B10BB3F100-1M
Busbar 1 Pole, 100A, Pin Type, 1M	B10BB1P100-1M
Busbar 3 Pole, 100A, Pin Type, 1M	B10BB3P100-1M
End Cap 3 Pole (Fork type only)	B10BBCAP3F100

Terminal adapter

BA1

Locking device

B10-LOCK

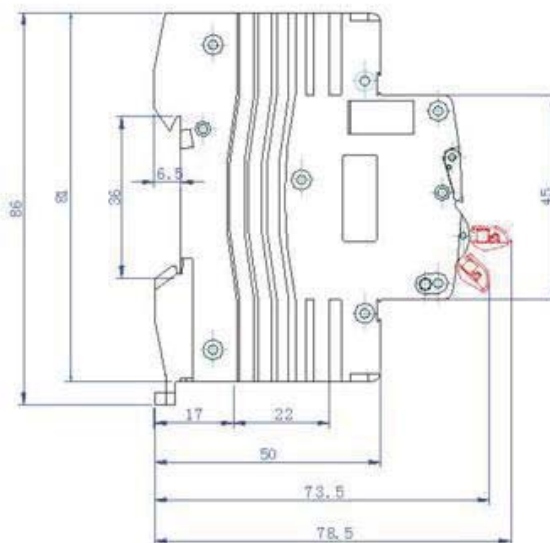
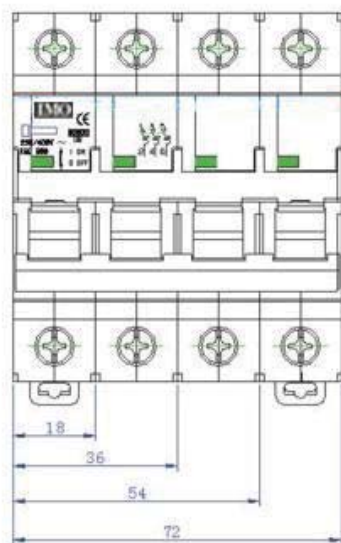
4mm padlock max diameter, non include

Locking device

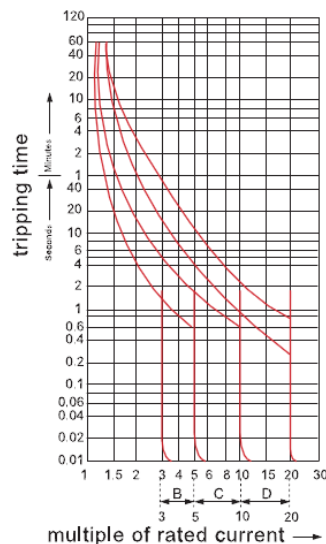
B10-TERM

Dimensions mm

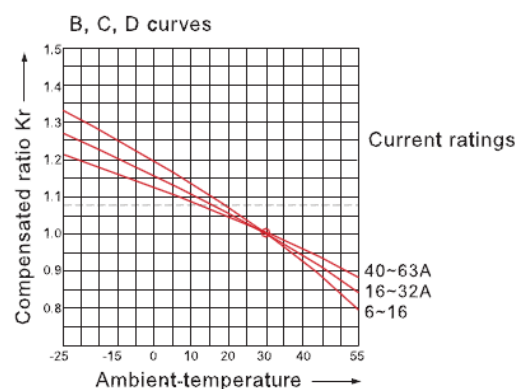
Miniature Circuit Breakers



B, C, D Tripping Curve



Ambient temperature & Current rating curve



Residual Current Circuit Breakers B10R

IMO

The IMO range of Residual Current Circuit Breakers have been designed for protection of electrical installations against earth fault / leakage current and are manufactured in accordance with IEC 61008-1.

Options and ordering codes

B10	R	20	16	30
10kA Rated B10			Rated current Amps	
			30mA residual operating current	30
RCCB Version	R			
1 pole + N (2 pole)		20		
3 pole + N (4 pole)		40		



Specification

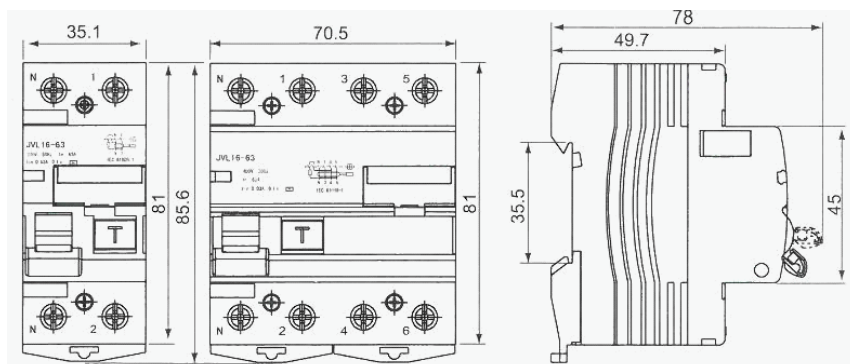
In accordance with: IEC 61008-1
Certification: CE, SEMKO
Pole composition: 2P, 4P
Rated current : 10 A (only 2P), 16A, 25A, 32A, 40A, 63A
Residual current characteristics: AC
Rated frequency: 50/60Hz
Rated voltage: 230VAC / 400VAC
Rated residual operating current $I_{\Delta n}$: 30 mA
Residual tripping current range : $0.5 I_{\Delta n} \sim 1 I_{\Delta n}$
Rated conditional short circuit current : 10 kA
Electrical lifetime > 4,000 cycles
Fastening torque: 2.0 Nm
Terminal capacity: 35mm ² solid, 25mm ² stranded conductor
Mounting on rail EN 60715 (EN 50022)
Protection degree: IP20
Temperature range: -5°C - +40°C, average temperature not to exceed 35°C

Selection chart

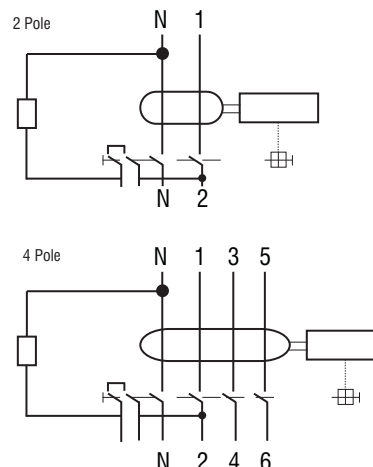
10kA

Type	operating characteristics	
Poles	2N	3N
Rated current Amps	10	
	16	
	25	
	32	
	40	
	63	
Weight (g/pc)	206	412
Packing(Qty)	6	3

Overall & Installation Dimensions



Wiring Diagram



Residual Current Circuit Breakers With Overload Protection

IMO

The IMO range of Residual Current-Circuit Breakers with Overload have been designed for protection of electrical installations against earth fault / leakage current, overload and short circuit and are manufactured in accordance with IEC 61009.

RCBO Features

- Provides protection against earth fault / leakage current, overload, short circuit and function of isolation
- Elegant appearance; cover and handle in arc shape.
- Contact position indicating window; transparent cover to carry label
- High short circuit current withstand capacity
- Applicable to terminal and Pin/Fork type busbar connection
- Finger protected connection terminals
- Compatible with MCB accessories range
- Handle padlock device

Tripping characteristics in accordance with B, C and D type curves

- Curve B: 3-5 I_n
- Curve C: 5-10 I_n
- Curve D: 10-20 I_n

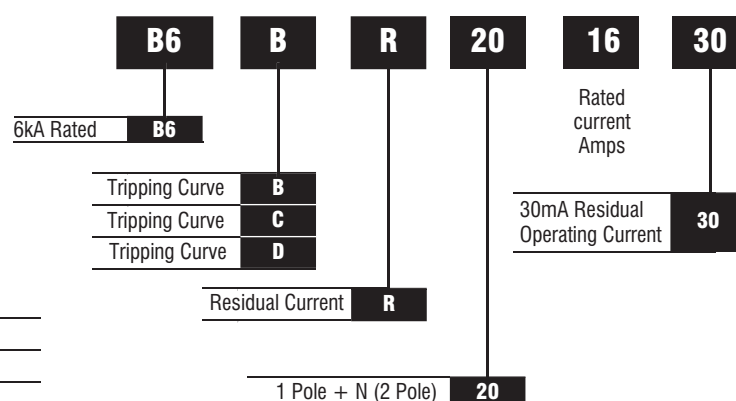
Specifications

In accordance with: IEC 61009
Certification: CE, SEMKO
Pole composition: 2P
Residual current characteristics: AC
Tripping Curve: B, C, D
Rated current : 6A, 10 A, 16A, 20A, 25A, 32A, 40A
Rated short circuit capacity : 10 kA
Rated frequency: 50/60Hz
Rated voltage: 230VAC
Rated residual operating current $I_{\Delta n}$: 30 mA
Residual tripping current range : 0.5 $I_{\Delta n}$ ~ 1 $I_{\Delta n}$
Electrical lifetime > 4,000 cycles
Fastening torque: 2.0 Nm
Terminal capacity: 35mm ² solid, 25mm ² stranded conductor
Mounting on rail EN 60715 (EN 50022)
Protection degree: IP20
Temperature range: -5°C - +40°C, average temperature not to exceed 35°C

For Dimensions refer to RCCB Data.
For Tripping Curve refer to MCB.



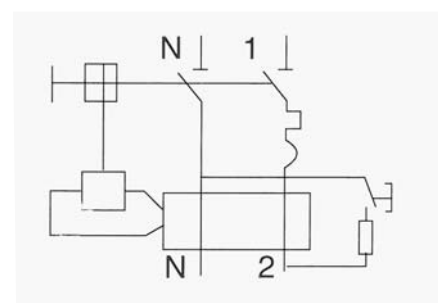
Options and ordering codes



Selection chart

Type	operating characteristics
Poles	1N
Rated current A mps	6, 10, 16, 20, 25, 32, 40
Weight (g/pc)	210
Packing(Qty)	6

Wiring Diagram



Isolating Switch

IMO

The IMO range of isolating switch have been designed to isolate safely your electrical circuit from the main supply and are manufactured in accordance with IEC 60947-3.

- Capable of switch electric circuit with load
- Elegant appearance; cover and handle in arc shape.
- Contact position indicating window; transparent cover to carry label
- Applicable to terminal and Pin/Fork type busbar connection
- Finger protected connection terminals
- Compatible with MCB accessories range
- Handle padlock device



Specification

In accordance with: IEC 60947-3
Certification: CE, SEMKO (63 and 125A only)
Pole composition: 1P / 2P / 3P / 4P
Rated current : 63A / 100A / 125A
Rated voltage: AC 230 / 400 V
Rated frequency: 50/60Hz
Rated short circuit capacity : 6 kA (3kA for 100A version)
Electrical lifetime > 10,000 cycles
Fastening torque: 2.0 Nm
Terminal capacity: 35mm ² solid, 25mm ² stranded conductor
Protection degree: IP20

Selection chart

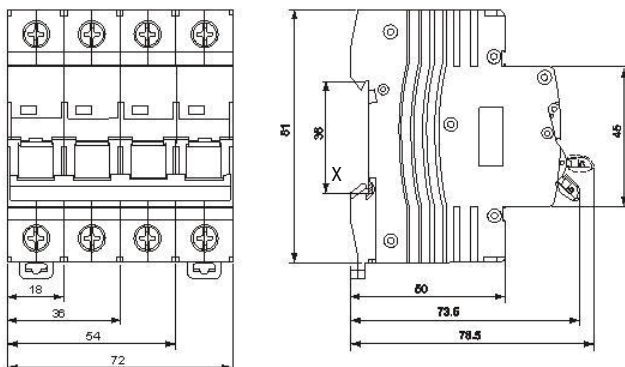
3kA 6 kA Please contact IMO

		3kA	6kA	Conatct IMO	
Poles		1	2	3	4
Rated current Amps	63				
	100				
	125				
Weight (g/pc)		100	200	300	400
Packing(Qty)		12	6	4	3

Options and ordering codes

BIS	20	63A
Distribution board Isolating Switch	BIS	
1 Pole	10	
2 Pole	20	
3 Pole	30	
4 Pole	40	
Amps 63A & 125A	63A	
Amps 100A (red handle)	100C	

Dimensions (mm) for 63A & 125A version



Rating	X
63A	81mm
125A	90mm

Dimensions (mm) for 100A version

