

For advanced protection against Residual Current High-performance Circuit Breaker.



RCCB (Residual Current Operated Circuit Breaker)

Construction & Features

- Elegant Appearance
- In case of leakage current in circuit, RCCB trips which enables a quick solution to the faulty line
- Provides protection against earth fault / leakage current
- Equipped with finger protected connection terminals
- Automatically disconnects the circuit when earth fault / leakage current occurs and exceeds the rated sensitivity.
- Visual On/Off indication
- Test Button 'T' is provided for periodic check up
- Truly current operated, operates even at very low voltage
- No nuisance tripping
- Trips within 300 milliseconds in the event of fault
- High short circuit current withstand capacity
- Bi-connect terminals for busbar as well as cable connection
- Simple and robust operating mechanism
- IP20 protection, finger touch proof

Item Codification

	Type	No. of Poles	Current Capacity	Sensitive Rated Current	No. of Elements	Country
BBD	R	2	25	3	0	H
	R: RCCB	2: DP 4: FP	25 : 25A 32 : 32A 40 : 40A 63 : 63A	3: 30 mA 4: 100 mA 5: 300 mA	0: 0E	H: India

Sensitivity Applications Selection Criterion of RCCB

	RCCB	Application
Fire Protection	30mA	Human protection / Domestic Installation
	100mA	Limited human protection / Machine protection
	300mA	Building / Fire

Even relatively insensitive RCCB's ($I_n = 300\text{mA}$) can be used to provide effective protection against fire caused by earth leakage faults. With residual currents = 300mA, the electrical energy released at the location of the earth fault is not sufficient to ignite normal building materials. With larger residual currents, the RCCB switches off the circuit in less than 200 milliseconds, thus limiting the amount of energy released to a harmless level.

RCCB Technical Information

Standard Conformity

IEC 61008-1
DIN 43-880

Technical Data

No. of Poles (Execution)	DP, FP
Rated Current (I_n)	25A, 32A, 40A, 63A
Rated Voltage (U_e)	DP: AC 240V, FP: AC 240/415V
Sensitivity	30mA, 100mA, 300mA
Short Circuit Current Withstand Capacity	DP: 10000A, FP: 6000A
Short Circuit Breaking Performance Rated Conditional Short-Circuit (I_{nc}) Rated Conditional Residual Short-Circuit Current ($I_{\Delta c}$)	DP: 10000A FP: 6000A
Rated Making And Breaking Capacity (I_m) Rated Residual Making And Breaking Capacity ($I_{\Delta m}$)	DP: 630A FP: 630A
Mode	Electro-Magnetic Type
Rated Impulse Voltage	4kV
Vibration Resistances	5G
Dielectric Strength	2000V for 1min
Protection Class	IP20
Mounting	On DIN Rail 35mm×7.5mm
Connections	1.5 sq.mm to 25 sq.mm

Mechanical & Electrical Endurance

Rated Load	Test Voltage	Test Current	Number of operating Cycles With I_n 2000
	DP: AC 240V FP: AC 240/415V	I_n	Without I_n 20000 ($I_n \leq 25A$) Without I_n 10000 ($I_n > 25A$) (I_n : Rated Current)

Dimensions: DP RCCB 90×35×50 (H×W×D) (In mm) / FP RCCB 90×70×50 (H×W×D) (In mm)

