

GreatWhite[®]
Electricals



GO SAFE
WITH: MCB's | RCCB's | DB's

INTERNATIONAL CATALOGUE

MCBs & RCCBs

great-white.in

GreatWhite[®]
THE FUTURE OF BRIGHT

GreatWhite FZCO
4E B 347, P.O BOX # 293620. Dubai Airport Free Zone, (DAFZA), Dubai, UAE.
Tel: +971 4 2340067, Email: sales@greatwhite.ae

GreatWhite Global Pvt. Ltd.
13th Floor, B-Wing, Peninsula Business Park, Senapati Bapat Marg, Lower Parel (W), Mumbai 400 013. Tel: 022 300 36565
E-mail: care@great-white.in, Web: www.great-white.in



MCBs & RCCBs

13th Floor, B-Wing, Peninsula Business Park, Senapati Bapat Marg, Lower Parel (W), Mumbai 400 013. Tel: 022 300 36565

CONTENTS

UNPARALLELLED QUALITY

Electricity is an inseparable part of our daily lifestyle. In residential, commercial and industrial sectors there are complex systems, equipment and sophisticated appliances that depend on electrical energy. Uncontrolled electrical power can be extremely dangerous. Overloads, crowded wiring, short-circuits and all kinds of interruptions in electric supply can lead to devastating losses, least of them being financial.

We at GreatWhite are proud to be known and respected for our range of superior quality electrical control and safety devices. Through these, we speak of our lasting concern for safety, economy and productivity for our customers.

The latest product of GreatWhite is the 10kA MCB which is an advance International design for high performance, current limiting and automatic switching to ensure complete control and protection of industrial, commercial & domestic electrical sub circuits. It meets the latest specifications of IS/IEC: 60898-1 / 2002 of B&C Characteristics.

GreatWhite MCB's ensure the safety of cables and other electronic peripherals with a dual protection system that safeguards against thermal overload and electromagnetic short circuit. Manufactured using quality components, like Silver Inlaid Copper, maximise contact reliability and provide increased energy savings. Housed in a high strength, flame retardant material with shock proofing and snap push technology improves safety and ease during mounting and demounting without interfering with other MCB's within the distribution board. Designed to surpass the highest international standards with a massive 10KA breaking capacity for the full range of 6A to 63A and a unique mid trip feature that allows instant identification of faulty circuits.



MINIATURE CIRCUIT BREAKER (MCB)



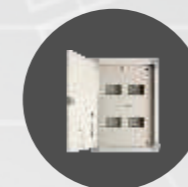
ISOLATOR



CHANGEOVER



**RESIDUAL CURRENT CIRCUIT BREAKER
(RCCB/ELCB)**



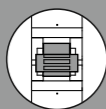
DISTRIBUTION BOARDS (DBS)

MINIATURE CIRCUIT BREAKER (MCB)

Presenting Greatwhite MCBs that ensure you are always in safe hands.



Dual Protection
(Overload/Short Circuit)



Mid-Trip Function



10kA Breaking Capacity



IP20 Protection
(Shock Proof)



Body made of Nylon-6



Flexible Snap Pusher
(Quick Mounting)

Features & Advantages

Advance Safety Design

MCB Promises Longer Electrical Life. Reduces electromagnetic stress resulting in increased contact life.

Guaranteed High Performance

Breaking capacity of 10kA in all the products from 6A to 63A in single pole and multi pole.

Mid Trip Function

Mid trip offers unique feature of knob coming to mid position in an event of electrical fault & MCB device tripping. This provides clear identification of faulty circuit.

Dual Protection (both overload & shortcircuit)

Thermal Overload Protection

Magnetic Short-circuit Protection.

In an event of an over current or short circuit, the MCB automatically interrupts all the poles even if the MCB knob is held in 'ON' position.

Larger Terminals

Dual terminal facility for incoming side that can take wire up to 25sq.mm across section. The wire may be of copper or aluminium.

Finest Housing Material

High Strength FLAME RETARDANT polyamide housing material.

Shock Proof-IP20

IP 20 degree protection. All live parts are out of human reach thus ensuring safety to installers.

Flexibility / Easy Installation

Innovative snap pusher for easy mounting & demounting of MCB without disturbing other MCBs when mounted in distribution board. GreatWhite MCBs can be mounted easily in any regular Distribution Boards.

Energy Saving

IS/IEC: 60898-1 have recognized the growing importance of limiting power loss in Switchgear devices and stipulated maximum. Permissible power loss values per pole of MCB. GreatWhite MCB contacts are made of silver inlaid copper ensuring long life, maximum safety, and low contact resistance. All these result in LOW WATT LOSS leading to ENERGY SAVING.

Certifications

IS/IEC60898-1



CM / L-4840771
For Bis Certification Details,
Log on to: www.bis.org.in

Functions & Features

► **Knob padlock feature**

MCB Knob can be locked either at ON position or at OFF position to prevent unwanted operation of the product.

► **Bi Connect terminal**

Choice to use Busbar and/or Cable in the same terminal, provides reliable termination.

► **Combination Head captive Screw**

Safe and provides the flexibility of both +/- head screw driver.

► **Current limiting design-Class 3**

Minimum let through energy under fault condition due to ultra fast contact separation and rapid quenching of the arc. This reduces the stress on connected loads and cables.

► **Air circulation**

When two poles are placed adjacent to each others, these channels form tunnel resulting in effective air circulation around individual poles.

► **Trip free mechanism**

MCB Trips even if held in ON Position

► **Low Watt Loss**

Power loss values are much lesser than IS/IEC Specified values; making it one of the most energy efficient MCB.

► **Energy Limiting Class : 3**

High current limiting performance under fault conditions achieved due to ultra fast contact opening and rapid quenching of arc.

Greatwhite MCB's Protect Against Overload And Short Circuits

Overload Protection

This is achieved by thermal operation of the bimetal strip which deflects when heated by the over current passing through it, thereby tripping the operating mechanism and causing the contact to open.

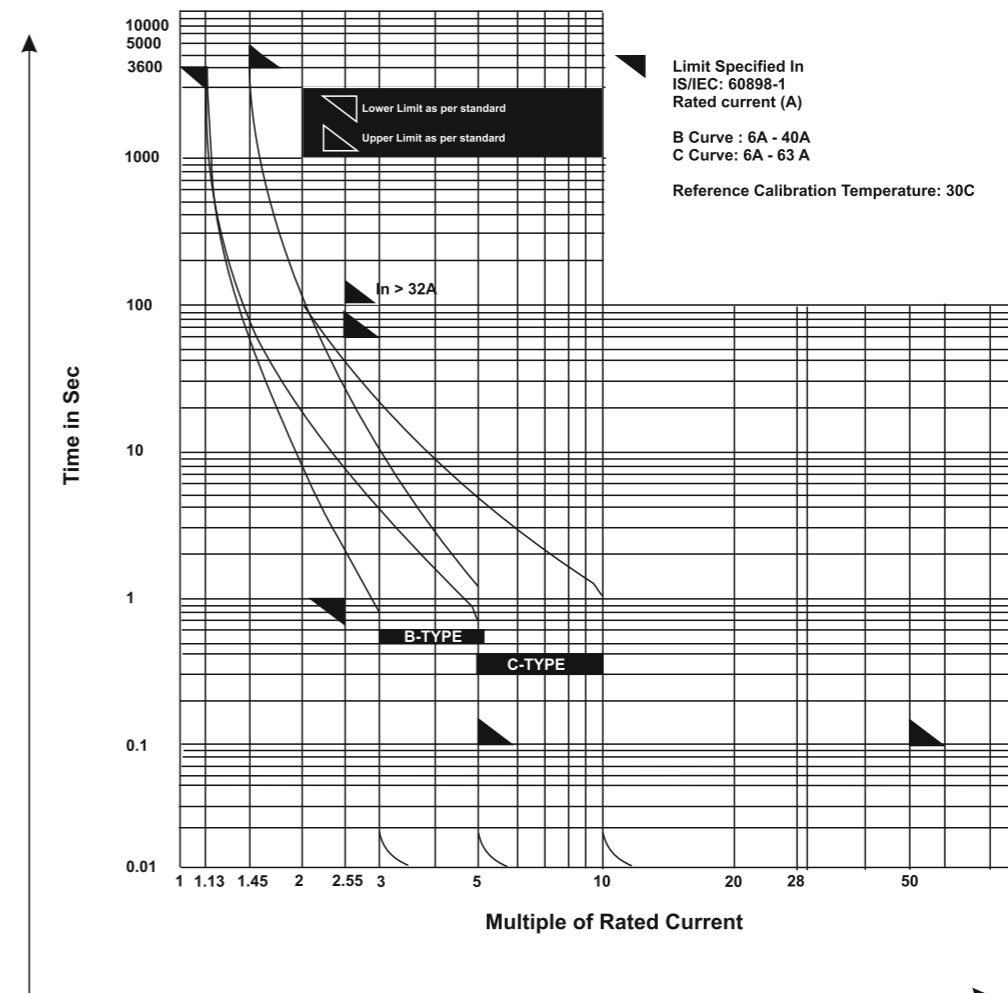
Thermostatic Bi-metal

It is a composite material comprising of two metallic layers of different co-efficients of thermal expansion. These are permanently bonded together by pressure welding.

Short Circuit Protection

In an event of short circuit, the high current - in the range of kA, energises the solenoid and a magnetic field is created. Due to this magnetic field, the anchor is pulled down which pushes the plunger to strike the inner latch causing instantaneous opening of the contacts.

Tripping Characteristic Curve B And C



Characteristic Curves

Thermal Tripping						
As per IS:60898-1	>T CWOUUOSM 4ZWWKSY	Tripping Current	Time Limit	Hold Current	Trip Current	Time Limit
B Curve	1.13 In		Above 1hr	3 In		Above 0.1s
		1.45 In	Within 1hr		5 In	Within 0.1s
C Curve	1.13 In		Above 1hr	5 In		Above 0.1s
		1.45 In	Within 1hr		10 In	Within 0.1s

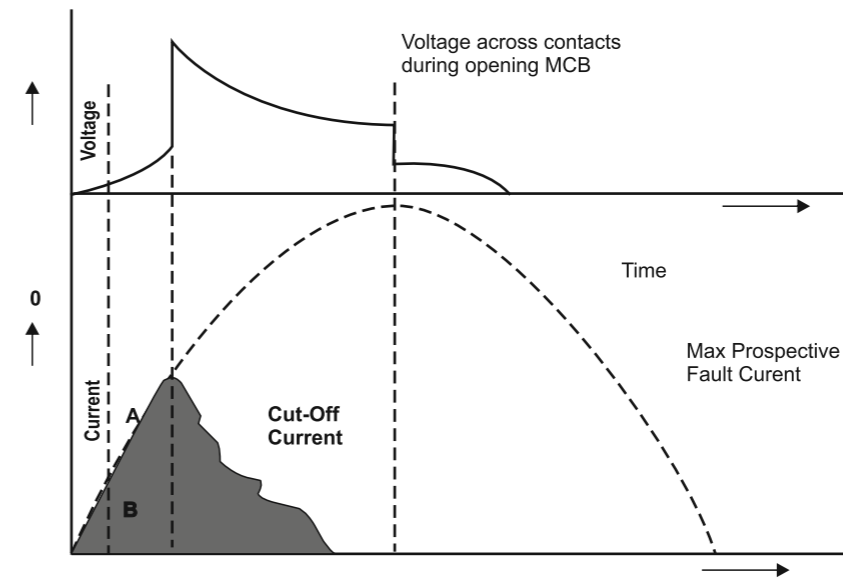
Time Current Characteristic Curves

- ▶ Based on the tripping characteristics, GreatWhite ORIX MCBs are available in 'B' and 'C' curves to suit different types of applications.
- ▶ 'B' Curve: for protection of electrical circuits with equipment that do not cause surge current (lighting and distribution circuits). Short circuit release is set to (3 - 5) In.
- ▶ 'C' Curve: for protection of electrical circuits with equipment that cause surge current (inductive loads and motor circuits). Short circuit release is set to (5 - 10) In.

Current Limiting Design

In a current limiting breaker, the tripping & arc control mechanism is so designed that under short circuit conditions, the contacts are physically separated and the electrodynamic forces, set up by fault current, assist the extinction in less than half cycle.

Current Limiting Graph



- 0-Point of fault initiation
- t_0 - Contact opening time (i.e. creation of arc)
- t_1 -Current/Voltage peak (i.e.current initiation)
- t_2 -Time to total extinction of arc (i.e.complete shutdown of fault current)

Power Loss Details

S. No.	Rating Ampere (A)	GreatWhite MCBs Power	Max. Permissible Power Loss (W) Loss (Watts) As per IS:8828/IEC:60898
1	6A	0.7	3.0W
2	10A	1.4	3.0W
3	16A	2.3	3.5W
4	20A	2.6	4.5W
5	25A	3.1	4.5W
6	32A	3.4	6.0W
7	40A	3.9	7.5W
8	63A	7.3	13.0W

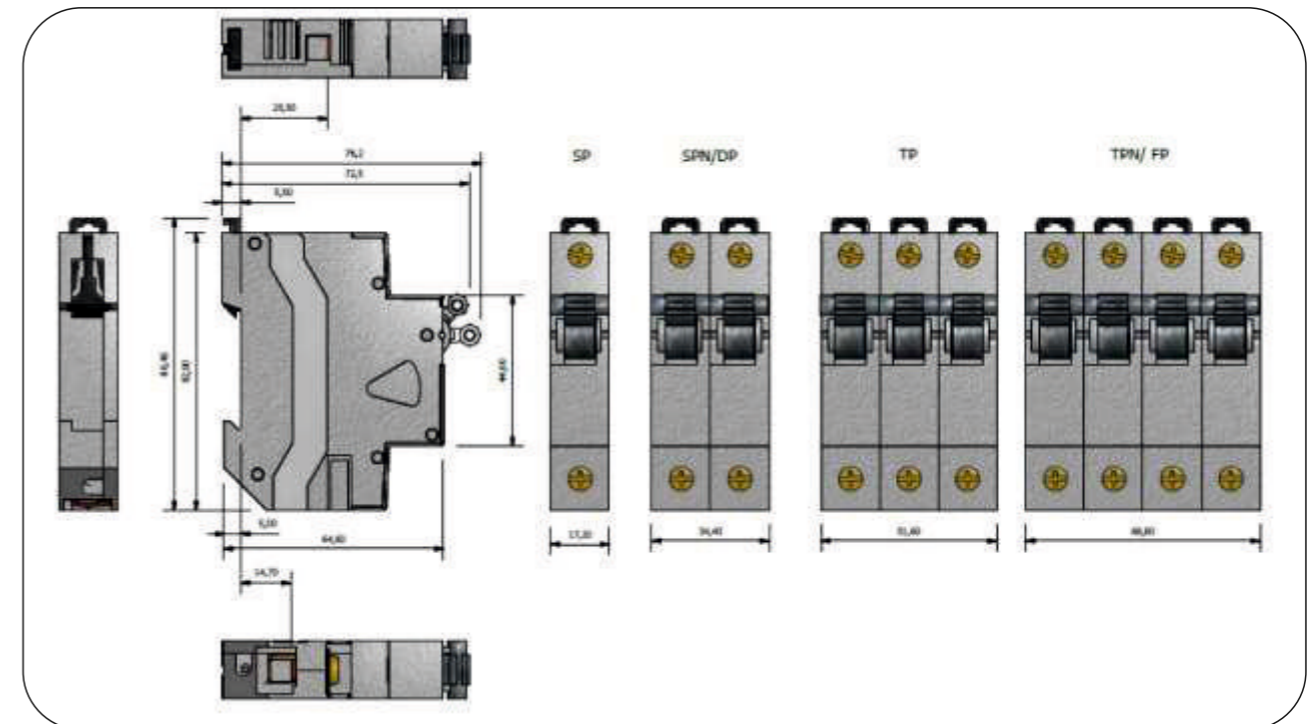
Technical Details

TECHNICAL INFORMATION	MCB	ISOLATOR
Standard Conformity	IS 8828 & IEC 60898:1	IS / IEC 60947-3
Type/Series	B C	NA
Rated Current (In) Amp. (A)	6 - 40 6 - 63	32 - 63
Rated Voltage (ac) (Ue) V	240/415	240/415
Rated Frequency (f) Hz	50	50
Nos. of Poles (Execution)	1P, 1P+N, 2P, 3P, 3P+N, 4P	1P, 2P, 3P, 4P
Rated Short Circuit	10	NA
Breaking Capacity	10	NA
Utilization Category	NA	AC 22A in 40A & 63A
Magnetic Release Setting	(3-5)In (5-10)In	NA
Rated Insulation Voltage (Ui) V	660	660
Rated Impulse Voltage (Uimp) kV	4kv	6kv
Electrical strength (High Voltage)	2KV (50Hz)	2KV (50Hz)
Electrical / Mechanical Endurance	4000	10,000
Less than 32A	20,000	
More than 32A	10,000	10,000
Ambient Temperature (OC)	-5 to +55	NA
Terminal Capacity (max) sq.mm	25	25
Energy Limiting class	3	3
Shock	40mm free fall	
Protection Class	IP-20	
Installation Position	Vertical / Horizontal	
Mounting	Clip on DIN Rail	
Case & Cover	Moulded, flame retardant thermoplastic material	

MCB Single Pole (SP)

Current Rating (Amps.)	Code	
	B-Curve	C-Curve
6A	601006MB	601006MC
10A	601010MB	601010MC
16A	601016MB	601020MC
20A	601020MB	601025MC
25A	601025MB	601025MC
32A	601032MB	601032MC
40A	601040MB	601040MC
63A		601063MC

Dimensions (in mm)



MCB Single Pole Neutral (SPN)



Current	Code
Rating (Amps.)	C-Curve
6A	601006MC
10A	601110MC
16A	601116MC
20A	601120MC
25A	601125MC
32A	601132MC
40A	601140MC
63A	601163MC

MCB Double Pole (DP)

Current	Code
Rating (Amps.)	C-Curve
6A	601206MC
10A	601210MC
16A	601216MC
20A	601220MC
25A	601225MC
32A	601232MC
40A	601240MC
63A	601263MC

MCB Four Pole Neutral (FP)

Current	Code
Rating (Amps.)	C-Curve
6A	601506MC
10A	601510MC
16A	601516MC
20A	601520MC
25A	601525MC
32A	601532MC
40A	601540MC
63A	601563MC



MCB Three Pole (TP)

Current	Code
Rating (Amps.)	C-Curve
6A	601306MC
10A	601310MC
16A	601316MC
20A	601320MC
25A	601325MC
32A	601332MC
40A	601340MC
63A	601363MC

MCB Three Pole Neutral (TPN)

Current	Code
Rating (Amps.)	C-Curve
6A	601406MC
10A	601410MC
16A	601416MC
20A	601420MC
25A	601425MC
32A	601432MC
40A	601440MC
63A	601463MC



MCB Selection Chart For Household Application

Appliances	Capacity / watt (Load) (240V~ 1ph)	Current Rating of MCB	Type of MCB
Air Conditioner	1.0 tonnes	10A	"C" Series
	1.5 tonnes	16A	"C" Series
	2.0 tonnes	20A	"C" Series
Refrigerator	165 litres	3A	"C" Series
	350 litres	4A	"C" Series
Oven cum Griller	4500W	32A	"B" Series
	1750W	10A	"B" Series
Oven only	750W	6A	"B" Series
Hot plate only	2000W	10A	"B" Series
Room Heater	1000W	6A	"B" Series
	2000W	10A	"B" Series
Washing Machine	300W	2A	"C" Series
Washing Machine (with heater)	1300W	8A	"C" Series
Water Heater (storage/Instant)	1000W	6A	"B" Series
	2000W	10A	"B" Series
	3000W	16A	"B" Series
	6000W	32A	"B" Series
Electric Iron	750W	6A	"B" Series
	1250W	8A	"B" Series
Auto toaster (2 slices)	1200W		"B" Series
Electric Kettle	1500W		"B" Series

"B" Series MCB Is Used For All Resistive load for e.g on Lighting Application

Lamp (Watt)	Number of Lamps	Rating (A)
20 W	8	1
	12	1.5
40 W	2	0.5
	10	2
60 W	12	2.5
	1	0.5
	4	1.5
80 W	8	3
	12	4
	1	0.5
	2	1
100 W	5	2
	8	4
	12	5
	1	0.5
100 W	2	1.5
	4	2.5

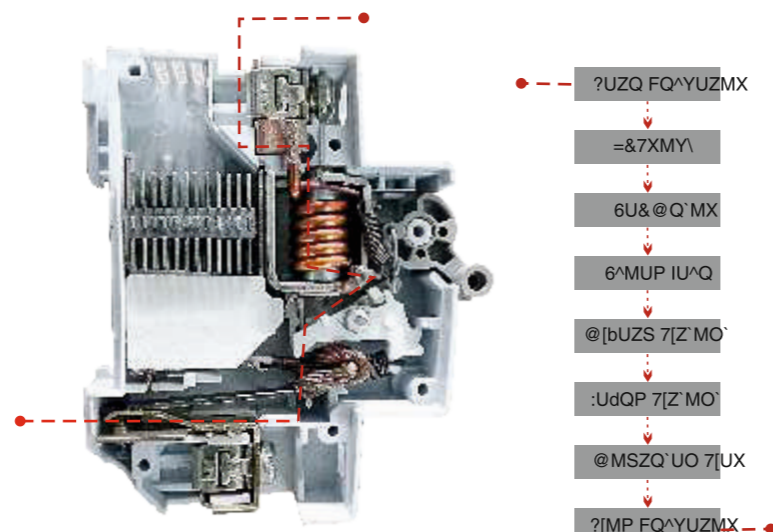
NOTE: One lighting circuit can have upto 800W or upto 10 lighting points
One power circuit can have upto 2000W or 1 power point

"C" Series MCB Is Used For All Inductive load for e.g Motor Application

Incomer Current Rating for Single Phase: $\frac{\text{Total Load in Watts}}{240V}$

Incomer Current Rating for Three Phase: $\frac{\text{Total Load in Watts}}{\sqrt{3} \times 240V}$

Currentflow of MCB



ISOLATOR



GreatWhite Isolators are switch disconnectors with independant manual operation, capable of making, carrying and breaking current under normal circuit conditions, which may includes operating under overload condition and also carry current under a specified abnormal circuit conditions such as those of short circuits for a specified time.

Greatwhite Isolators are provided with following features

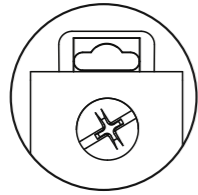
- ▶ Safety terminals to avoid improper cable termination
- ▶ Easy Snap pusher for mounting easily on Din Rail channel of DB's
- ▶ Large cable terminal to terminate cable size upto 25sq mm
- ▶ Cooler operation - Grooves provides on outer body on Isolator so that when individual poles are placed adjacent to each other in DB's It forms a very infective path for better air circulation resulting no over heating between two poles

Features

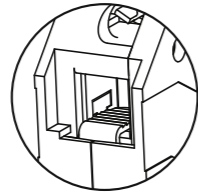
Low Watt loss • Longer Electrical life • Wide range • Value for Money
 Cost effective & Energy Saving



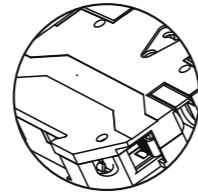
Safety Terminal



Easy Snap Pusher



Large Terminal



Cooler Operation

Technical Specifications

Current	Code	
Range	40 A & 63A	
Execution	SP, DP, TP & FP	
Specification	As per IS / IEC : 60947-3	
Rated Voltage / Frequency	240/415 VAC, 50 Hz	
Utilisation Category	AC 22 A in 40 A and 63 A	
Electrical Category	10000 operations	
Mechanical Endurance	20000 operations	
Terminal Capacity	Flexible	Solid
32A, 63A	16 sq. mm	25sq.mm

Isolator Single Pole (SP)

Rating (Amps)	Code
32A	NA
40A	602140IS
63A	602140IS

Isolator Double Pole (DP)

Rating (Amps)	Code
32A	6022321S
40A	602140IS
63A	602140IS

Isolator Three Pole (TP)

Rating (Amps)	Code
32A	NA
40A	602340IS
63A	602363IS

Isolator Four Pole (FP)

Rating (Amps)	Code
32A	602432IS
40A	602440IS
63A	602463IS

CHANGEOVER

TWO WAY CENTRE OFF - For Dual Electricity Supply Management (In accordance with IS/IEC 60947-3)

GreatWhite MCB Changeover Switch is a manual operated changeover switch for switching load between two power supplies. MCB Changeover switch finds wide applications in residential, commercial as well as in industries area. This switching device widely accepted For Individual Bungalow(IB) which is having low voltage distribution circuits. Changeover switches are used to shift from one source of supply to another source and vice versa.

GreatWhite MCB changeover switch comes in 2P (Double Pole) and 4P (Four Pole) versions, for single and three phase application respectively. It has three positions (I-O-II) with centre-off. They are switch disconnectors with independent manual operation, capable of making, carrying and breaking currents under normal circuit conditions. Which may include operating overload condition and carry under specified abnormal circuit conditions such as those of short circuit for a specified time.



TEHNICAL SPECIFICATIONS	
Reference Standard	IS/IEC 60947-3
No. of Poles	DP & FP
Current Rating (In)	25A, 40A & 63A
Rated Voltage (Ue)	240/ 415 V~
Rated Frequency	50Hz
Rated Insulation voltage	660V
Rated impulse voltage	4kV
Dielectric Strength	2.5kV
Utilisation Category	AC22A
Protection	IP20
Ambient temperature	-5° to 55°C
Mounting	Clip on Din Rail Vertical

TWO WAY CENTER OFF CHANGEOVER SWITCH

For Dual Electricity Supply Management (IS/IEC 60947-3)

Rating	DP Cat. No.	FP Cat. No	MRP
25A	605225CO	605425CO	1206/-
40A	605240CO	605440CO	1795/-
63A	605263CO	605463CO	2175/-

RESIDUAL CURRENT CIRCUIT BREAKER (RCCB)

Presenting Pioneering RCCBs that guarantee you stay out of harm's way.



RCCB/ ELCB

The flow of current through electrical facilities always involves risks. Poorly insulated equipment, faulty wires and incorrect use of electrical devices cause current to flow through the wrong path (i.e. through the insulation) to the earth. This current is called 'Leakage Current'. Earth leakage is an electrical hazard and is responsible for electrical shocks and fires. Earth leakage and its associated hazards can be prevented by Residual Current Circuit Breaker (RCCB) that is also popularly known as Earth Leakage Circuit Breaker (ELCB).

Features & Benefits

- ▶ Range 16A - 63A
- ▶ Sensitivity 30mA, 100mA, 300mA
- ▶ Execution Double Pole (2P) Four Pole (4P)
- ▶ Specification IEC 61008-1/IS 12640 - 1:2000 / EN 61008-1

Features

- ▶ Simple and Robust operating mechanism.
- ▶ Rotary handle with ON/OFF indication
- ▶ Dual termination for Bus Bar as well as cable connection
- ▶ Advance neutral
- ▶ Test button for regular inspection
- ▶ Positive contact indication

Protection Against Electrocutation

The use of exposed, substandard, badly wired, wrongly connected or damaged equipment as well as frayed or badly repaired cables reduces the safety of an installation and increases the risk of an electric shock.

Electrocution is the passage of current through human body, which no doubt is dangerous. The flow of current through human body effects vital functions like: a) Breathing
b) Heartbeat

A correctly chosen Greatwhite RCCB can detect small currents flowing to earth and can reduce the risk of electrocution.

However, electrocution should not be viewed in terms of "current" alone but in terms of "contact voltage" as well. A person gets electrocuted by coming in contact with an object that has a different potential from his/her own. The difference in potential causes the current to flow through the body.

The human body has known limits:

- Under normal dry conditions, voltage limit = 50V
- In damp surroundings, voltage limit = 25V

Protection Against Indirect Contact

Over current protection devices like MCBs are unable to act promptly on small earth leakage currents. To comply with wiring regulations, the earth fault loop impedance (in Ohms), multiplied by the rated tripping current of the RCD (in amperes) must not exceed 50.

For instance:

For a RCD with a rated tripping current of 30mA, the maximum permissible earth fault loop impedance is calculated as follows: $Z_s (\text{max}) = 50 / I_n = 50 / 0.03 = 1,666$

Rated Tripping Current of the RCD	Maximum permissible earth fault loop impedance in
30mA	1666
100mA	500
300mA	166

Protection Against Fire

Majority of fires which occur as a result of faulty wiring are started by current flowing to earth. A correctly chosen RCD will detect this faulty current and will interrupt the supply thus reducing the risk of fire.

TECHNICAL INFORMATION	TWO POLE	FOUR POLE
Standard Conformity	IS 12640-1: IEC 61008-1	IS 12640-1: IEC 61008-1
Rated Current (In) Amp. (A)	16, 25, 40, 63	25, 40, 63
Sensitivity (In) mA	30, 100, 300	30, 100, 300
Rated Voltage (ac) (Ue) V	240	415
Rated Insulation Voltage (Ui) V	660	660
Rated Frequency (f) Hz	50	50
Short circuit withstand Capacity kA	6	6
Residual Making Breaking Capacity A	500 A or 10 In whichever is greater	500 A or 10 In whichever is greater
Ambient Temperature oC	-25°C to + 55°C	-25°C to + 55°C
Shock Resistance	40 mm free fall	40 mm free fall
Vibration Resistance (g)	3	8A
Electrical /Mechanical operations	10000	10000
Mounting	Din Rail (35 x 7.5) mm	Din Rail (35 x 7.5) mm
Degree of Protection	IP 20	IP 20
Terminal Capacity (max) sq.mm	25	25



DISTRIBUTION BOARDS (DBs)

Presenting
Revolutionary DBs that ensure
you will always be on the safe side



Distribution Boards

GreatWhite makes Great Distribution Boards that provide flexibility and are a systematic approach to the ever increasing need for effective methods of the electrical distributions in domestic, commercial and industrial applications. GreatWhite Distribution Boards have been specially designed to meet all the technical requirements and ensure that the Distribution Boxes blend well with any decor.

Distribution Boards, with their features and their unique range offer a compact, practical and economic solution to any electrical network in residential, commercial complexes, industries etc. having single phase or three phase connections. Distribution Boards are not merely an enclosure but a complete system in itself comprising of Copper bus bar, brass neutral link, earth link, earthing studs, and interconnection wires for effective distribution of current.

Range:
Single Phase & Three Phase

Execution:
Horizontal & Vertical

Specification:
IS : 13032 & IEC : 439 & 529

Features

- ▶ Superior aesthetics that blends well with any decor.
- ▶ Made of special grade CRCA sheet steel to provide strength and longer life.
- ▶ Manufactured with latest technology- CNC Punch and Brake presses to assure the highest degree of perfection.
- ▶ Painted with epoxy polyester and polyester resin based powder paints of the latest techniques to ensure strong, scratch resistant coatings.
- ▶ Current carrying parts are made of electrolytic grade of copper having high conductivity and low resistivity thereby keeping temperature rises and distribution losses very low.
- ▶ Appropriate sizes of DIN rails to facilitate easy and fast mounting of MCBs, RCCBs, Isolators etc.
- ▶ Brass neutral and earth bars of suitable cross-sectional areas are provided to facilitate connections for each outgoing terminals.
- ▶ Adequate number of knockout holes of various sizes, are provided both at the top and the bottom This facilitates easy installation and connection of conducts of all sizes.
- ▶ Detachable upper and lower end plates for easy and flexible cables.
- ▶ Superior single phase bus bars which are completely insulated and fitted in PVC channel to avoid accidental touch.
- ▶ Suitable for both flush and surface mounting.
- ▶ Confirms to IS 13032 & IEC : 439 & 529

New Additional Features

Masking - (Cement & Water guard)

During the construction stage, the DBs can get ingressed with water & cement dust. This can spoil the decor and more importantly alter the performance parameters. Standard smart trek DBs come with a masking arrangement that keeps water and cement dust away.

Flexibility during installation

GreatWhite DBs are provided with an intermediate detachable door/plate fixed on the inner door to give flexibility of installation i.e. during installation or main-tenance, the entire door need not be dismantled this thus saves valuable installation time. Additionally, this also ensures that electrically live parts do not get exposed.

Reversible Doors

The outer DB doors are reversible. While the doors come fitted on the left side, these can be reversed and fitted on to the right side by the user.

Weather proof design

All Double door DBs are designed to ensure weather proof as per ingress protection IP-42 category.

Range

S. No.	TYPE	CONFIGURATION	APPLICATION
A	SPN	SPN	Simple, Economical & Safe Distribution. Consumer Simple, Economical & Safe Distribution.
B	TPN	TPN (Horizontal)	Three phase neutral incoming and outgoing can be only single phase.
		TPN (Vertical)	Three phase and neutral incoming, outgoing can be single phase as well as multi phase.
		Per Phase Isolation	DP RCCB in each phase is provided to avoid earth leakage fault exist gets isolated.
C	Special	Plug & Socket	Used for air conditioners and motor protection.
		MCB Enclosures	To isolate / connect electrical appliances independently.

Accessories

- Neutral Bar/Earth Bar
- DIN Channel
- Bus Bar with PVC Sleeve
- Blanking Plate ½

Ip Ratings

The IP (International Protection) rating given to an enclosure states the degree of protection it offers by means of two digits. A summary of these is shown below. For more details, see IEC 529:1989, BS EN 60529 : 1992.

First Digit

Protection against solid foreign objects and access to hazardous parts. The first digit covers protection against penetration by solid objects which includes hands and tools such as screwdrivers. At the lowest of seven levels, 0, no protection is offered either for the equipment from damage by intrusion, or to a person contacting live or moving parts. At the highest, there shall be no entry of dust.

Second Digit

Protection against ingress of water. On a progressive scale, the second digit covers the degree of protection against the entry of water. For example, number 1 indicates that dripping water shall have no harmful effect, while number 6 indicates that water projected in powerful jets against the enclosure from any direction shall have no harmful effects.



Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 9001:2015

This is to certify that:

Great White Global Private Limited
SURVAY NO 32 2 35 2 38 P1 39 P2,
N H NO 48, GUNDLAV,
VALSAD 396 035
Gujarat
India

Holds Certificate No:

FM 733450

and operates a Quality Management System which complies with the requirements of ISO 9001:2015 for the following scope:

The Manufacture of Electrical Switches, Plug & socket outlets, Change over switches, Isolators, wiring accessories, wires & cables, Electronics - Regulator, USB, & IT products and Trading of Conduit Pipes, PVC insulation tapes, LED panels, distribution box and fans.

For and on behalf of BSI:

Chris Cheung, Head of Compliance & Risk - Asia Pacific

Original Registration Date: 2021-05-29

Latest Revision Date: 2021-05-29

Effective Date: 2021-05-29

Expiry Date: 2024-05-28

Page: 1 of 2



...making excellence a habit.™

This certificate was issued electronically and remains the property of BSI and is bound by the conditions of contract.

An electronic certificate can be authenticated [online](#).

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Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: +44 345 080 9000
BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
A Member of the BSI Group of Companies.



Certificate of Registration

ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

Great White Global Private Limited
SURVAY NO 32 2 35 2 38 P1 39 P2,
N H NO 48, GUNDLAV,
VALSAD 396 035
Gujarat
India

Holds Certificate No:

EMS 733451

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

The Manufacture of Electrical Switches, Plug & socket outlets, Change over switches, Isolators, wiring accessories, wires & cables, Electronics - Regulator, USB, & IT products and Trading of Conduit Pipes, PVC insulation tapes, LED panels, distribution box and fans.

For and on behalf of BSI:

Chris Cheung, Head of Compliance & Risk - Asia Pacific

Original Registration Date: 2021-05-29

Latest Revision Date: 2021-05-29

Effective Date: 2021-05-29

Expiry Date: 2024-05-28

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Certificate of Registration

OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEM - ISO 45001:2018

This is to certify that:

Great White Global Private Limited
SURVAY NO 32 2 35 2 38 P1 39 P2,
N H NO 48, GUNDLAV,
VALSAD 396 035
Gujarat
India

Holds Certificate No:

OHS 733453

and operates an Occupational Health and Safety Management System which complies with the requirements of ISO 45001:2018 for the following scope:

The Manufacture of Electrical Switches, Plug & Socket outlets, change over switches, Isolators, Wiring Accessories, Wires & Cables, Electronics - Regulator, USB, & IT Products and Trading of Conduit Pipes, PVC Insulation Tapes, LED Panels, Distribution Box and Fans.

For and on behalf of BSI:

Chris Cheung, Head of Compliance & Risk - Asia Pacific

Original Registration Date: 2021-05-27

Latest Revision Date: 2021-05-27

Effective Date: 2021-05-27

Expiry Date: 2024-05-26

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A Member of the BSI Group of Companies.



Certificate of Registration

ENVIRONMENTAL MANAGEMENT SYSTEM - ISO 14001:2015

This is to certify that:

Great White Global Private Limited
Khasra No. 62-65
Dhanpura
Padartha
Haridwar 249 404
Uttarakhand
India

Holds Certificate No:

EMS 754508

and operates an Environmental Management System which complies with the requirements of ISO 14001:2015 for the following scope:

Manufacture of Electrical Switches, Plug & socket outlets, Miniature circuit breaker (MCBs), change over switches, Isolators, Wiring accessories, Electronics- Regulator, USB, & IT products & electrical goods & Trading of Conduit Pipes, RCCBs, PVC insulation tapes, LED panels, distribution box and fans.

For and on behalf of BSI:

Chris Cheung, Head of Compliance & Risk - Asia Pacific

Original Registration Date: 2021-07-26

Latest Revision Date: 2021-07-26

Effective Date: 2021-07-26

Expiry Date: 2024-07-25

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Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 9001:2015

This is to certify that:

Great White Global Private Limited
Khasra No. 62-65
Dhanpura
Padartha
Haridwar 249 404
Uttarakhand
India

Holds Certificate No:

FM 754510

and operates a Quality Management System which complies with the requirements of ISO 9001:2015 for the following scope:

Manufacture of Electrical Switches, Plug & socket outlets, Miniature circuit breaker (MCBs), change over switches, Isolators, Wiring accessories, Electronics- Regulator, USB, & IT products & electrical goods & Trading of Conduit Pipes, RCCBs, PVC insulation tapes, LED panels, distribution box and fans.

For and on behalf of BSI:

Chris Cheung, Head of Compliance & Risk - Asia Pacific

Original Registration Date: 2021-07-26

Latest Revision Date: 2021-07-26

Effective Date: 2021-07-26

Expiry Date: 2024-07-25

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Certificate of Registration

OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEM - ISO 45001:2018

This is to certify that:

Great White Global Private Limited
Khasra No. 62-65
Dhanpura
Padartha
Haridwar 249 404
Uttarakhand
India

Holds Certificate No:

OHS 754511

and operates an Occupational Health and Safety Management System which complies with the requirements of ISO 45001:2018 for the following scope:

Manufacture of Electrical Switches, Plug & socket outlets, Miniature circuit breaker (MCBs), change over switches, Isolators, Wiring accessories, Electronics- Regulator, USB, & IT products & electrical goods & Trading of Conduit Pipes, RCCBs, PVC insulation tapes, LED panels, distribution box and fans.

For and on behalf of BSI:

Chris Cheung, Head of Compliance & Risk - Asia Pacific

Original Registration Date: 2021-07-26

Latest Revision Date: 2021-07-26

Effective Date: 2021-07-26

Expiry Date: 2024-07-25

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