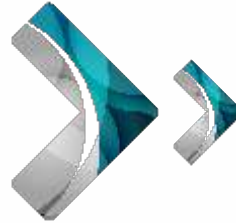




TAKING SAFETY TO  
**THE NEXT LEVEL**



RANGE CATALOGUE

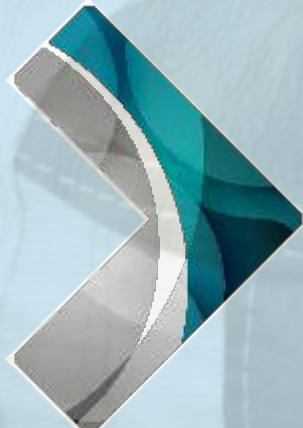
Superior  
**C**  
Curve

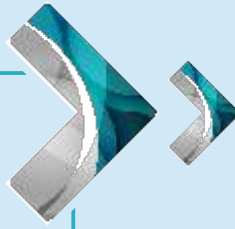


Energy Limiting Class 3

**10kA**







Microtek International Private Limited is one of the leading power product manufacturers with over three decades of experience and market reputation under the belt. Our range of power solutions make us India's Most Preferred Brand as they are designed using state-of-the-art innovation to cater to every need of the consumer.

We ensure that we maintain the top-of-the-line standard with our manufacturing plants and our teams. Our manufacturing plants are equipped with hi-tech machines, SMT, ICT, automatic assembly lines, etc. Microtek has won over 30 awards by serving more than 12 crore smiles across 5 continents. We take immense pride in our strong trusted dealer network which comprises of 62,060 channel partners, 1,935 Authorised Distributors, and 60,125 Authorised Dealers.





DESIGNED TO  
ENSURE COMPLETE  
PROTECTION,  
EFFICIENCY AND  
**UNPARALLELED SAFETY.**



**MINIATURE  
CIRCUIT BREAKER  
(MCB)**



**ISOLATOR**

Evolving electrical distribution and protection needs across sectors has raised the significance of continuity of service, enhanced operational safety, operating cost and consumer convenience tremendously.

We at Microtek design every product keeping safety as the priority. All of our products are made using cutting-edge technology to ensure high-level performance and safety. Microtek switchgear & protection devices such as MCBs, RCCBs & DBs ensure the same along with flexible functionality and superior aesthetics.

The distribution boards are designed to enhance the aesthetic appeal and blend well with their surroundings. The blended edge makes the boards look elegant while complementing your décor. These are precisely designed with high-grade metal sheets which prevent rusting and increase longevity.



**RESIDUAL CURRENT  
CIRCUIT BREAKER  
(RCCB)**



**DISTRIBUTION  
BOARD  
(DB)**



PRODUCT OVERVIEW	05
MINIATURE CIRCUIT BREAKER (MCB) FEATURES   TECHNICAL SPECIFICATIONS   DIMENSIONS   CHARACTERISTICS	06
ISOLATOR FEATURES   TECHNICAL SPECIFICATIONS   DIMENSIONS	12
RESIDUAL CURRENT CIRCUIT BREAKER (RCCB) FEATURES   TECHNICAL SPECIFICATIONS   CHARACTERISTICS   DIMENSIONS	16
DISTRIBUTION BOARD (DB) FEATURES   TECHNICAL SPECIFICATIONS   DIMENSIONS	22
ORDERING INFORMATION	29



PRODUCT OVERVIEW



**MCB RANGE**

6A to 63A - 'C' Curve

**Execution**  
Single Pole (1P), Single Pole & Neutral (1P+N), Double Pole (2P), Three Pole (3P), Three Pole & Neutral (3P+N) & Four Pole (4P)

**Specification**  
IS / IEC 60898-1

**ISOLATOR RANGE**

40A ,63A,100A

**Execution**  
Double Pole (2P)  
Three Pole (3P), & Four Pole (4P)

**Specification**  
IS / IEC 60947 – 3

**RCCB RANGE**

25A, 40A & 63A  
Type 'AC'

**Execution**  
Double Pole (2P), Four Pole (4P)  
30 mA, 100 mA, 300 mA

**Specification**  
IS 12640 Part 1  
IEC/EN 61008-1

**DB Range**

SPN, TPN, VTPN  
CONSUMER DB  
METAL/PLASTIC  
Encl.

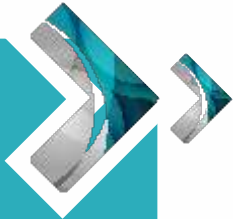
**Execution**  
Single door  
Double door

**Specification**  
IS 13032  
IS 8623



# MINIATURE CIRCUIT BREAKER (MCB)

Microtek Miniature Circuit Breakers are the solution to the ever-changing need of electrical distribution in different sectors like residential, commercial and industrial. They are designed to provide improved operational safety, better continuity of service, lower operating cost and greater convenience.



## FEATURES

- State-of-the-art design** – Microtek's design is aesthetically superior and built in with the features like centre dolly, clear marking of the technical parameters, On/Off symbols along with the brand and the range name. This marking also helps to enhance the design appeal of this range.
- Exceptional Endurance** – The products have been tested at high electrical mechanical endurance with the ambient temperature of -5 °C to +55 °C.
- Energy Limiting Class III** – To ensure low let through energy to limit thermal and mechanical stress on cables.
- Breaking Capacity** – The devices in the range have a breaking capacity of 10kA.
- Specially Designed Arc Chamber** – 13 plates arc chute for effective arc quenching.
- Contact Indication Window** – The products are designed by considering user friendliness into mind. The visual indications helps users to identify the positions of MCB. RED = ON, Green = OFF.
- Bi Connect Terminals** - The terminal size in devices adds convenience and flexibility while wiring. The 25 sq mm terminals are designed to hold cables tightly which avoids loose connection. The bi-connect terminals provides the flexibility by allowing the lines to be connected through wires and bus bars.
- Protection IP-20** – We realize the importance of safety and have designed the range in such a way that no live parts are exposed to human contact, thus making devices safe to use.
- Dual Position Clamp** – The dual position clamps helps in easy mounting and unmounting of the MCB.
- Trip-Free Mechanism** – The MCB trips even if knob held in on position.
- Air Flow Channel** – The special air flow channels on the MCBs allows the air to come out and helps to maintain the temperature inside while MCBs are adjoined with each other in the DBs.
- ISI / CE Marking** - The ISI marking on our range guarantees that our products have passed all quality checks and are the safest choice.



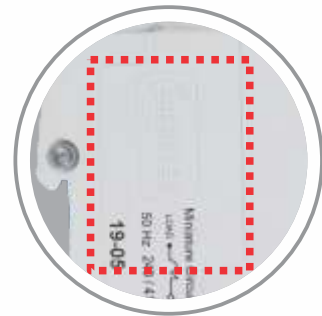
### CONTACT INDICATION WINDOW

The Products are Designed by considering user friendliness into mind. The visual indications helps users to identify the positions of MCB. RED = ON, Green = OFF.



### AIR FLOW CHANNEL

The special air flow channels on the MCB's allows the air to come out and helps to maintain the temperature inside while MCB's are adjoined with each other in the DB's.



### BI CONNECT TERMINALS

The bi-connect terminals provides the flexibility by allowing the lines to be connected through wires and bus bars.



### PROTECTION IP-20

We realize the importance of safety and have designed the range in such a way that no live parts are exposed to human contact, thus making devices safe to use.



## RANGE

6A to 63A - 'C' Curve

## EXECUTION

Single Pole (1P) | Single Pole & Neutral (1P+N) | Double Pole (DB) | Three Pole (3P)  
Three Pole & Neutral (3P+N) | Four Pole (4P)

## SPECIFICATION

IS / IEC 60898 – 1

## Construction

Miniature Circuit Breakers have precisely formed moulded case & cover of flame retardant high strength thermo-plastic material having high melting point, low water absorption, high dielectric strength and temperature withstand. The Switching Mechanism is independent, manual and trip free, i.e., the breaker trips internally even if the operating knob is held in ON position.

The Contact Mechanism comprises of fixed & moving contacts specially designed for reliability, long life and anti-weld properties.

The Arc Extinguishing Device comprises of 13 plates arc chute. The arc under the influence of the magnetic field and arc guide is moved into the arc chute where it is rapidly split and quenched. The tripping mechanism is Thermal Magnetic Type.

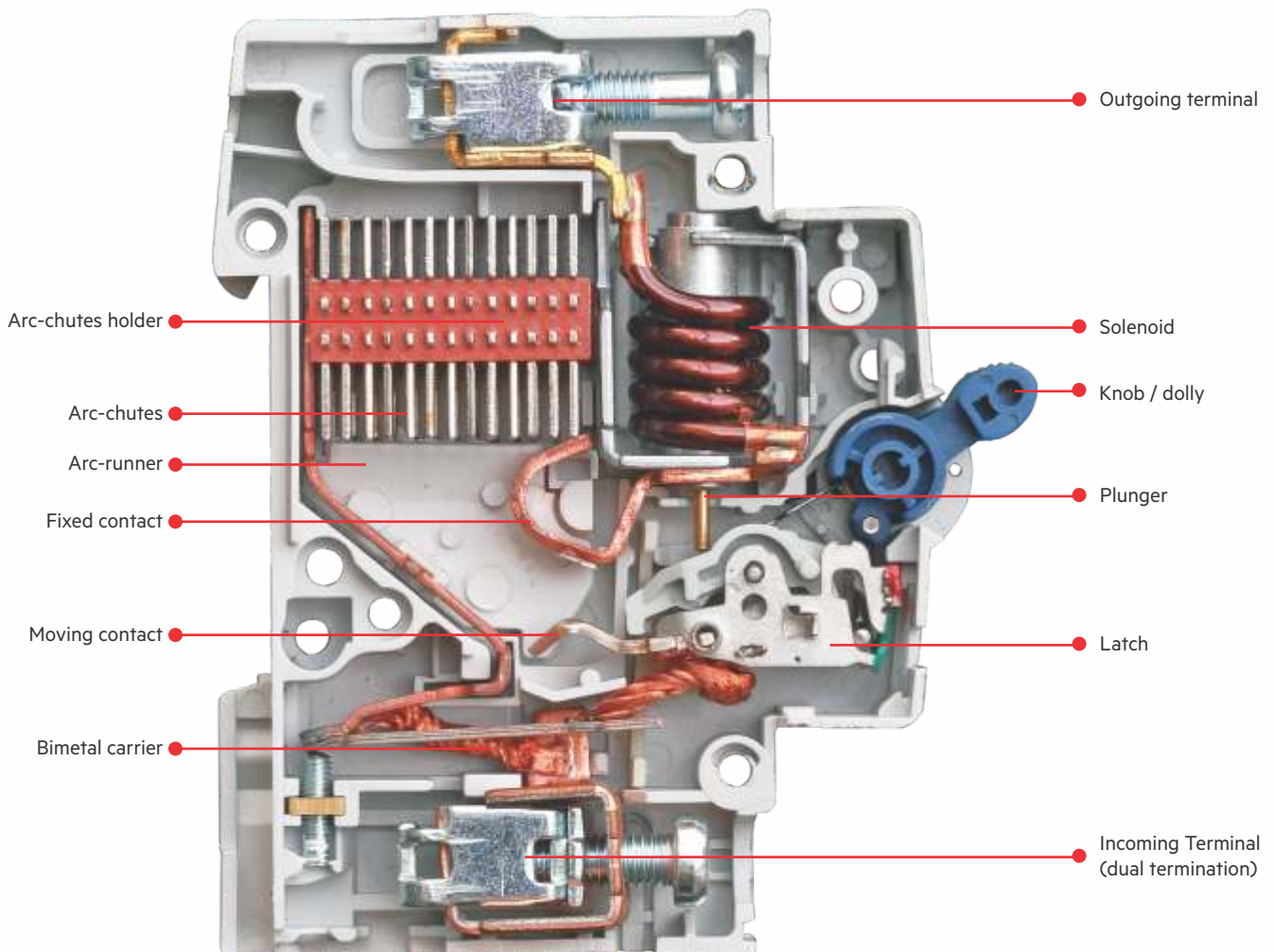
### THERMAL OPERATION

The thermal operation provides protection from moderate overloads. Under overload condition, a thermo-metallic element (bimetallic strip) deflects until it operates a latching mechanism allowing the main contacts to open.

### MAGNETIC OPERATION

In magnetic operation, large overloads or short circuit current actuates a solenoid causing a plunger to strike the latching mechanism rapidly opening the main contacts.

## Internal View



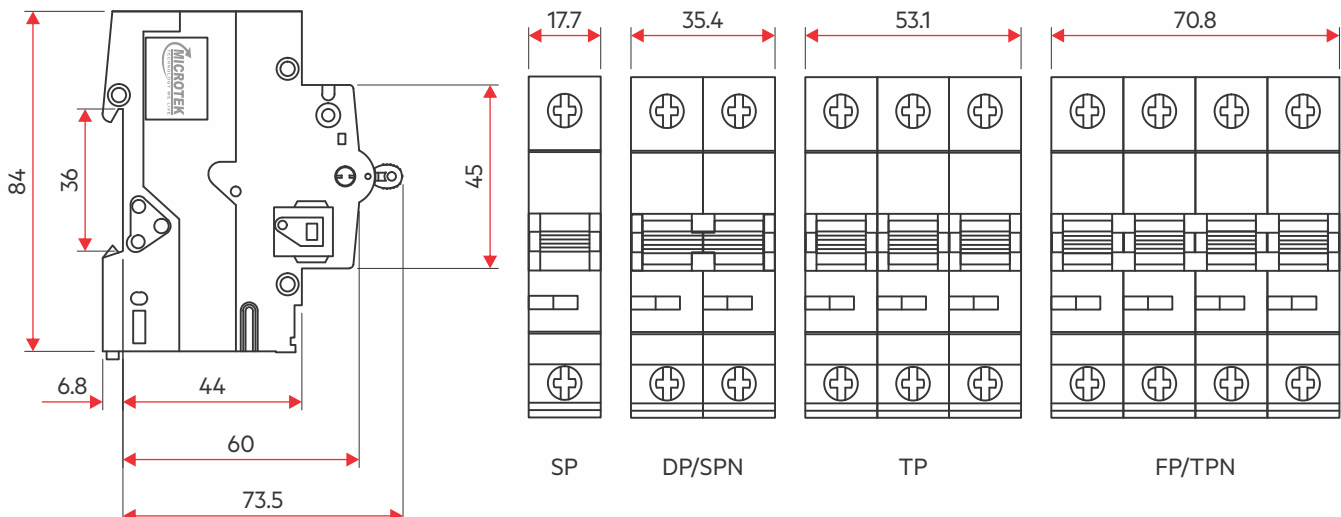
## Technical Specifications



# MINIATURE CIRCUIT BREAKER

STANDARD CONFORMITY		IS/IEC 60898-1
Type Series		C
Rated Current (In)	A	6-63
Rated Voltage (Ue)	V	240/415
Rated Frequency (f)	Hz	50
No of Poles (execution)		1P, 1P+N, 2P, 3P, 3P+N, 4P
Rated Short – circuit Breaking capacity	kA	10
Rated Insulation Voltage (Ui)	V	690
Rated impulse Voltage (Uimp)	kV	4
Electrical / mechanical Endurance (No. off Operations)		
≤ 32A		20000
≥ 32 A		10000
Ambient Working Temp.	C	-5 to +55
Terminal Capacity (max)	mm <sup>2</sup>	25
Vibration	g	3
Shock Resistance		40mm free fall
Protection Class		IP 20
Installation Position		Vertical/Horizontal
Mounting		Clip on DIN rail (35mm x 7.5mm)
Case & Cover		Moulded, flame retardant thermo plastic material

## Dimensions



## Characteristics

As per	Thermal Tripping			Magnetic Tripping		
	No Tripping	Tripping	Time	Hold	Trip	Time
IS / IEC 60898-1	Current	Current	Limits	Current	Current	Limits
	$I_1$	$I_2$	$t$	$I_4$	$I_5$	$t$
B Curve	$1.13 \times I_n$		$\geq 1h$	$3 \times I_n$		$\geq 0.1s$
		$1.45 \times I_n$	$< 1h$		$5 \times I_n$	$< 0.1s$
C Curve	$1.13 \times I_n$		$\geq 1h$	$5 \times I_n$		$\geq 0.1s$
		$1.45 \times I_n$	$< 1h$		$10 \times I_n$	$< 0.1s$
D Curve	$1.13 \times I_n$		$\geq 1h$	$10 \times I_n$		$\geq 0.1s$
		$1.45 \times I_n$	$< 1h$		$20 \times I_n$	$< 0.1s$
$I_3 = 2.55 \times I_n$	$1 s < t < 60s$ for $I_n$ (In $\leq 32A$ ) $1 s < t < 120s$ for $I_n$ (In $> 32A$ )					

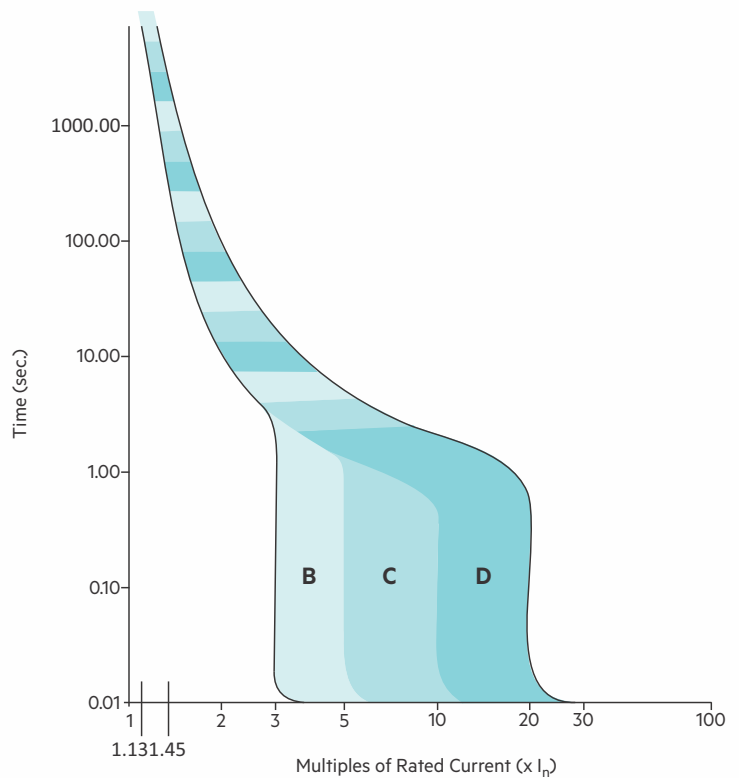
## Tripping Characteristics

Based on the tripping characteristics, MCBs are available in 'B', 'C' and 'D' curve to suit different types of applications.

'B' Curve: for protection of electrical circuits with equipment that does not cause surge current (lighting and distribution circuits). Short circuit release is set to (3-5)  $I_n$

'C' Curve: protection of electrical circuits with equipment that causes surge current (inductive loads and motor circuits). Short circuit release is set to (5 - 10)  $I_n$

'D' Curve: for protection of electrical circuits which causes high inrush current, typically 12 - 15 times the thermal rated current (transformers, X-ray machines etc.) Short circuit release is set to (10 - 20)  $I_n$



## Current Limiting Design

In a current limiting breaker, the tripping & arc control mechanism are 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.

The figure shows the current limiting effect of circuit breakers.

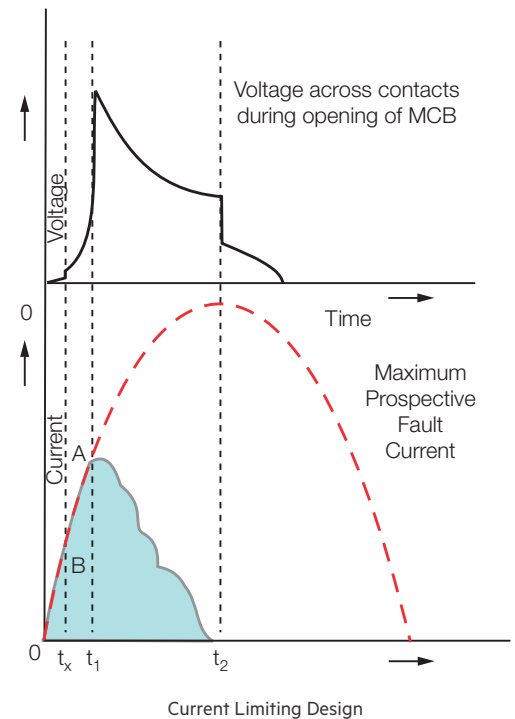
Fault Traces for Voltage & Current

0 = Point of fault initiation

$t_x$  = Contact opening time (i.e., creation of arc)

$t_1$  = Current / Voltage peak (i.e., current limitation)

$t_2$  = Time to total extinction of arc (i.e., complete shutdown of fault current)



## Energy Limiting Class 3

MCBs are designed to have low-let through energy during faults, thus ensuring a better protection of cables and equipment.

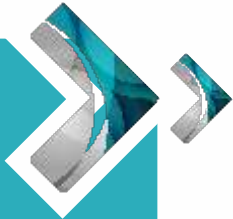
## De-rating of circuit-breakers:

Ambient Temperature / In (in A)										
In (A)	- 25 °C	- 10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
6	7.5	7	6.6	6.4	6.18	6	5.8	5.6	5.4	5.2
10	12.5	11.5	11.1	10.7	10.3	10	9.7	9.3	9	8.7
16	20	18.7	18	17.3	16.6	16	15.4	14.7	14.1	13.5
20	25	23.2	22.4	21.6	20.8	20	19.2	18.4	17.6	16.8
25	31.5	29.5	28.3	27.2	26	25	24	22.7	21.7	20.7
32	41	37.8	36.5	34.9	33.3	32	30.7	29.1	27.8	26.5
40	51	48	46	44	42	40	38	36	34	32
50	64	60	57.5	55	52.5	50	47.5	45	42.5	40
63	80.6	75.6	72.5	69.9	66.1	63	59.8	56.1	52.9	50.4

Reference temperature: 30°C according to standard IS / IEC 60898-1

# ISOLATORS

Microtek Isolators are high grade switch disconnectors used generally at both ends of circuit breaker. They make, carry, and break currents under normal circuit conditions including overload or specific abnormal circuit conditions such as short circuit for a specified time.



## FEATURES

- State-of-the-art design** – Microtek's design is aesthetically superior and built in with the features like centre dolly, clear marking of the technical parameters, On/Off symbols along with the brand and the range name. This marking also helps to enhance the design appeal of this range.
- Exceptional Endurance** – The products have been tested at high electrical mechanical endurance, with the ambient temperature of -5 °C to +55 °C.
- Contact Indication Window** – The products are designed by considering user friendliness into mind. The visual indications helps users to identify the positions of Isolator. RED = ON, Green = OFF.
- Bi Connect Terminals** - The terminal size in devices adapts convenience and flexibility while wiring. The 25/35 sq mm terminals are designed to hold cables tightly to avoid loose connection. The bi-connect terminals provides the flexibility by allowing the lines to be connected through wires and bus bars.
- Protection IP-20** – We realize the importance of safety and have designed the range in such a way that no live parts are exposed to human contact, thus making devices safe to use.
- Dual Position Clamp** – The dual Position clamps helps in easy mounting and unmounting of the Isolator.
- Air Flow Channel** – The special air flow channels on the Isolators allows the air to come out and helps to maintain the temperature inside while Isolators/MCBs are adjoined with each other in the DBs.

### BI CONNECT TERMINALS

The bi-connect terminals provides the flexibility by allowing the lines to be connected through wires and bus bars.



### CONTACT INDICATION WINDOW

The products are designed by considering user friendliness into mind. The visual indications helps users to identify the positions of Isolator. RED = ON, Green = OFF.



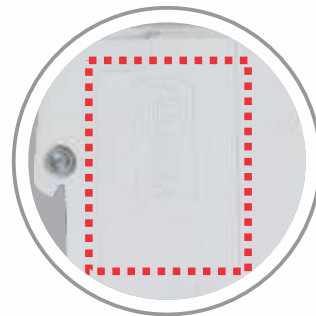
### PROTECTION IP-20

We realize the importance of safety and have designed the range in such a way that no live parts are exposed to human contact, thus making devices safe to use.



### COOLER OPERATION

Grooves are provided on outer body so that when individual poles are placed adjacent to each other in a distribution board it forms a very effective channel for better air circulation, resulting into a cooler operation



## RANGE

40A ,63A, 100A

## EXECUTION

Double Pole (2P) | Three Pole (3P) | Four Pole (4P)

## SPECIFICATION

IS/IEC 60947-3

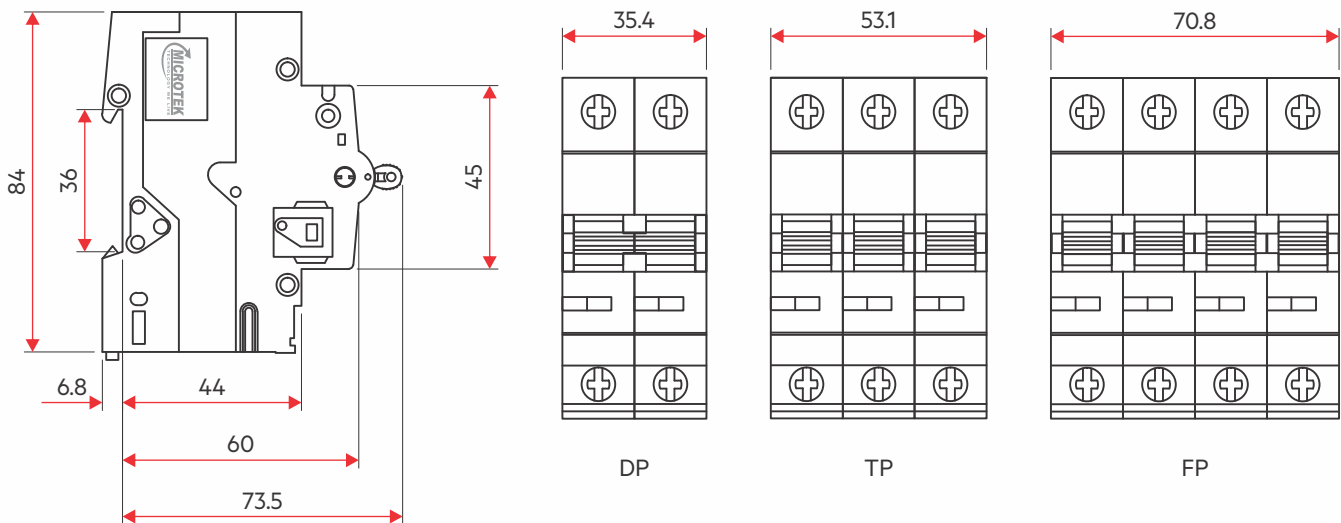
## Technical Specifications



# ISOLATORS

STANDARD CONFORMITY		IS / IEC 60947-3
Rated Current (In)	A	40 ,63, 100
Rated Voltage (Ue)	V~	240/415
Rated Frequency	Hz	50
No. of Poles (Execution)		2P, 3P,4P
Utilization Category		AC 22 A
Rated Insulation Voltage (Ui)	V	690
Rated Impulse Voltage (Uimp)	kV	4
Electrical / Mechanical Endurance (No. of operations)		10000
Ambient Temperature	°C	-5 to + 55
Terminal Capacity (Max)		25 mm <sup>2</sup> ≤ 63A, 35mm <sup>2</sup> ≥ 63A
Vibration	g	5
Shock Resistance		40mm free fall
Protection Class	IP-20	
Installation Position		Vertical/Horizontol
Mounting		Clip on DIN Rail (35mm x 7.5mm)
Case & Cover		Molded, flame retardant thermoplastic material

## Dimensions







# RESIDUAL CURRENT CIRCUIT BREAKER (RCCB)

## 25A – 63A

Microtek RCCB is one of our safety solution designed to protect the consumers from fatal electric shocks and prevent fire caused by earth faults. The RCCB is a mechanical switching device that carries and breaks current under normal service conditions and causes the opening of the contacts when the leakage current attains a given value under specified conditions. The high quality insulation and wires adds to the safety of the consumer.



### FEATURES

- **Trip Indication Window** – Provided with trip indication window which turns red in case of any trip due to faults, signalling to check the electrical circuit for any leakage.
- **Bi Connect Terminals** – The terminal size in devices adapts convenience and flexibility while wiring. The 25 sq mm terminals are designed to hold cables tightly to avoid loose connection. The bi-connect terminals provides the flexibility by allowing the lines to be connected through wires and bus bars.

- **Protection IP-20** – We realize the importance of safety and have designed the range in such a way that no live parts are exposed to human contact, thus making devices safe to use.
- **Test Button 'T'** – A test circuit included with the Residual Current device ensures that the reliability of RCCB is tested. When the test button is pushed, the current starts to flow through the test circuit. As it creates an imbalance on the neutral coil of the device, the RCCB trips and supply is disconnected thereby checking RCCB's reliability.

- **Superior Sensitivity and Rapid Operating Mechanism** – Superior sensitivity to the core to sense the faults and danger swiftly as they approach the circuit to occur with on time operation agility .

### TRIP INDICATION WINDOW

Provided with Trip Indication Window that turns red in case of any trip due to faults, signalling to check the electrical circuit for any leakage.



### TEST BUTTON 'T'

Test Button 'T' is provided for periodic check up



### BI CONNECT TERMINALS

The bi-connect terminals provide flexibility by allowing the lines to be connected through wires and bus bars.



### PROTECTION IP-20

We realize the importance of safety and have designed the range in such a way that no live parts are exposed to human contact, thus making devices safe to use.



## RANGE

25A – 63A

## SENSITIVITY

30mA, 100mA, 300mA

## EXECUTION

Double Pole (DP) | Four Pole (4P)

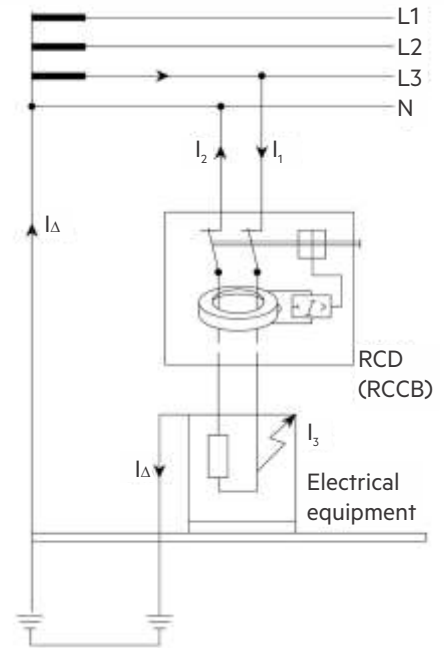
## SPECIFICATION

IS 12640 Part 1 | IEC/EN 61008 - 1

## Working Principle

The RCCB works on the current balance principle. The supply conductors, i.e. the phases and the neutral are passed through a toroid and form the primary windings of a current transformer. Its secondary winding is connected to a highly sensitive electromagnetic trip relay, which operates the trip mechanism.

In a healthy circuit, sum of the currents in phases is equal to the current in the neutral and the vector sum of all currents is equal to zero. If there is any insulation fault in the circuit and leakage current flows to earth, the currents do not balance and their vector sum is not equal to zero. This imbalance is detected by the core balanced current transformer, the RCCB is tripped and supply to load is interrupted. The trip mechanism is operated at a residual current between 50-100% of its rated tripping current.








## 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 person receiving an electric shock. Electrocutation is a passage of current through human body, which is dangerous. The flow of current through human body effects vital functions such as:

1. Breathing
2. Heartbeat

A correctly chosen RCCB can detect small currents flowing to earth and reduce the risk of electrocutation. Effect of electric current through human body has been well researched and following chart summarizes the results:

500 mA			Immediate cardiac arrest resulting in death
70-100 mA			Cardiac fibrillation; the heart begins to vibrate and no longer beats at a steady rate. This situation is dangerous since it is irreversible
20-30 mA			Muscle contraction can cause respiratory paralysis
10 mA			Muscle contraction : the person remains "stuck" to the conductor
1-10 mA			Prickling sensations

However, electrical shock should not be viewed in terms of 'current' alone, but in terms of 'contact voltage'. 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.

## Protection in the event of direct contact

To provide extra protection in the event of direct contact with an (unearthed) live part, extremely sensitive RCCBs with a rated residual operating current of 30 mA ( $I_{\Delta n} = 30 \text{ mA}$ ) are used instead of more conventional RCCBs with higher residual operating fault currents.

This extra protection is necessary in the following cases:

- The insulation of totally insulated devices or their load is damaged
- The earth wire is interrupted
- The earth wire and live wire have been accidentally transposed
- A component which is live in normal operation is touched during repair work
- In case of a socket outlet power circuit in rooms with bath or shower
- For caravans, boats and yachts and the power supply on camping or berthing sites
- For electrical appliances used in medical facilities

The drawn-in-switch-off characteristics of residual current devices with a rated fault current of 10 and 30 mA is proof that these are able to prevent the occurrence of dangerous heart chamber fibrillation. For this reason, residual current circuit breaker with rated fault current of 10 mA are used for protection of particularly exposed individually equipment.

Residual current circuit breaker with 30 mA rated fault current are already specified for many areas (bath, rooms with medical facilities, outside areas, agricultural land etc.

## Sensitivity Selection

- **30 mA**

A 30 mA RCCB will provide a high degree of protection against electrocution in an accidental shock hazard situation. The current flowing through human body could be between 80mA and 240mA depending on the resistance of the human body and the voltage across it.

To be within zone of IEC curve, it is necessary for the RCCB to operate within 50ms at 240 mA and 150ms at 80mA. Both these conditions are satisfied by 30mA RCCB. For households, individual outlets, wet areas and temporary installations, RCCB with sensitivity not exceeding 30mA is advisable.

- **100 mA**

A 100mA RCCB will normally give high degree of protection against electrocution but there is a possibility that the shock current could fall below the tripping level of RCCB. This could occur if additional resistances to that of human body are included in the earth path.

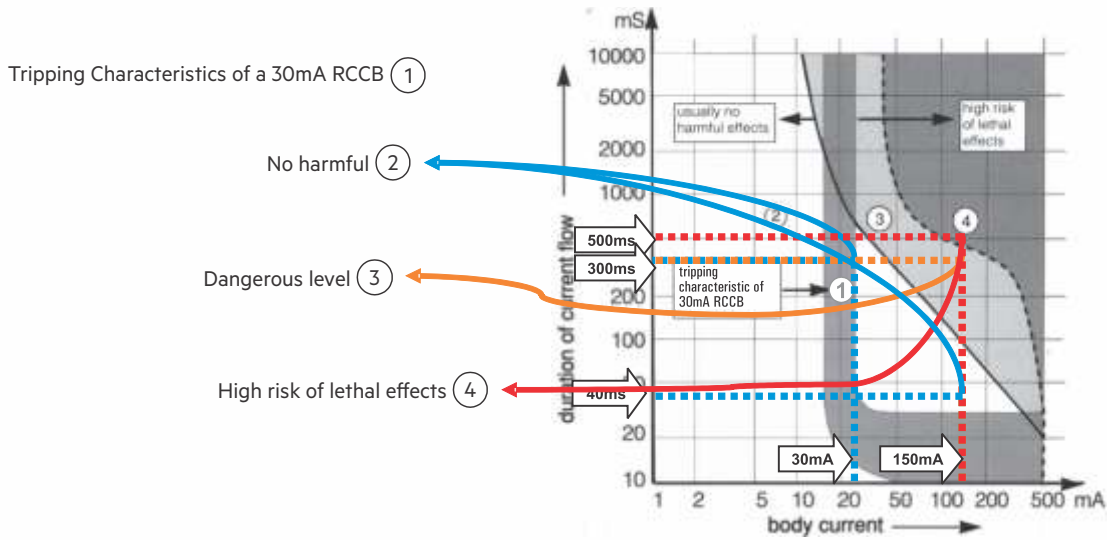
The 100mA RCCB protects against leakage currents and in direct contact with earth loop impedance up to 500 Ohms.

- **300 / 500mA**

A 300/500 mA RCCB may be used only where fire protection is required. For example, on lighting circuits where the risk of electric shock is small. 300/500mA RCCB will not give any protection against electrocution.

## Characteristics

### Tripping Characteristics



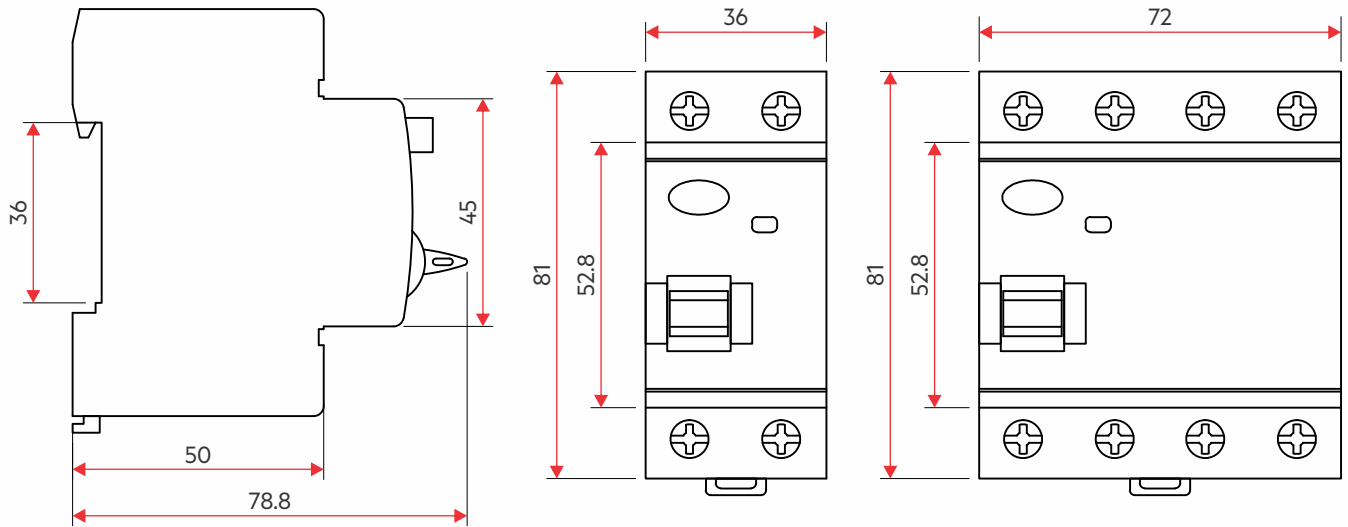
### Technical Specifications

## RESIDUAL CURRENT CIRCUIT BREAKER (25A – 63A)



Technical Specifications	DP	FP
Standard	IS 12640 Part 1/ IEC 61008-1/ EN 61008 - 1	IS 12640 Part 1/ IEC 61008-1/ EN 61008 - 1
Type	AC	AC
Rated Current (In)	A 25,40,63	25,40,63
Sensitivity (In)	mA 30, 100, 300	30, 100, 300
Rated Voltage (Un)	Vac 240	415
Rated Insulation Voltage (Ui)	V 690	690
Rated Frequency	Hz 50	50
Conditional short circuit Capacity (Inc)	kA 6	6
Residual Making Breaking Capacity	A 500 A or 10 In whichever is greater	A 500 A or 10 In whichever is greater
Ambient Temperature	°C -5 to +55	-5 to +55
Shock Resistance	40 mm free fall	40 mm free fall
Vibration Resistance	g 3	3
Electrical /Mechanical (No. of operations)	10000	10000
Mounting Din Rail	Din Rail (35 mm x 7.5 mm)	Din Rail (35 mm x 7.5 mm)
Degree of Protection	IP 20	IP 20
Terminal Capacity (max)	mm <sup>2</sup> 25	25

## Dimensions



## DISTRIBUTION BOARD (DB)

Microtek Distribution Boards are designed keeping in mind the performance and the looks. They ensure that current is properly distributed to all the devices allowing proper functioning.

Microtek Distribution Board are aesthetically elegant and blend well with walls. They make for a perfect fit for circuitry in homes, offices or any other place.



FEATURES





### MODERN DESIGN

The elegant and sleek design of our products blend well with the decor of every home to accentuate the looks.



### BOX INSERTION MARKS

The insertion marks are clearly placed on the products to help the mason in successful error-free installation. The right and left side marks help in identifying the brick and plaster level respectively.



### DURABLE SLIDING KNOB

The knob is made of superior quality plastic that prevents rust and also helps in smooth operation with just a little push of a finger.



### KEY TYPE MOUNTING HOLES

The flexibility of our product is enhanced with the key type mounting holes that allow the use of either screws or nails at the time of mounting of the distribution board.



### CIRCUIT IDENTIFICATION LABELS

The labels are provided with every distribution board that make it easier for users to identify the modular device linked to a particular circuit



### DETACHABLE GLAND PLATES

Each distribution board, depending on its size has certain number of knockouts to accommodate conduit. But in case you want to add more or bigger conduits, Microtek distribution boards facilitate removal of gland plate to accommodate conduits.



### REMOVABLE INNER SHIELD

DBs are provided with removable inner shield which helps in easy wiring and maintenance operations without removing the front door of the DB.



### REMOVABLE PAN ASSEMBLY

Completely removable Pan Assembly, which gives the freedom to fit the parts outside DB by installing on Pan assembly.



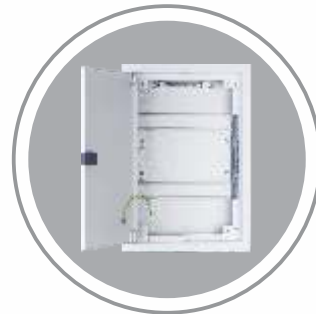
### CEMENT SPILL PROTECTOR

Each DB is provided with the cement spill protector to protect the components from cement during plastering.



### DOOR EARTHING

Ensure max safe working.



## RANGE

SPN, TPN, VTPN, CONSUMER DB, METAL/PLASTIC Encl.

## EXECUTION

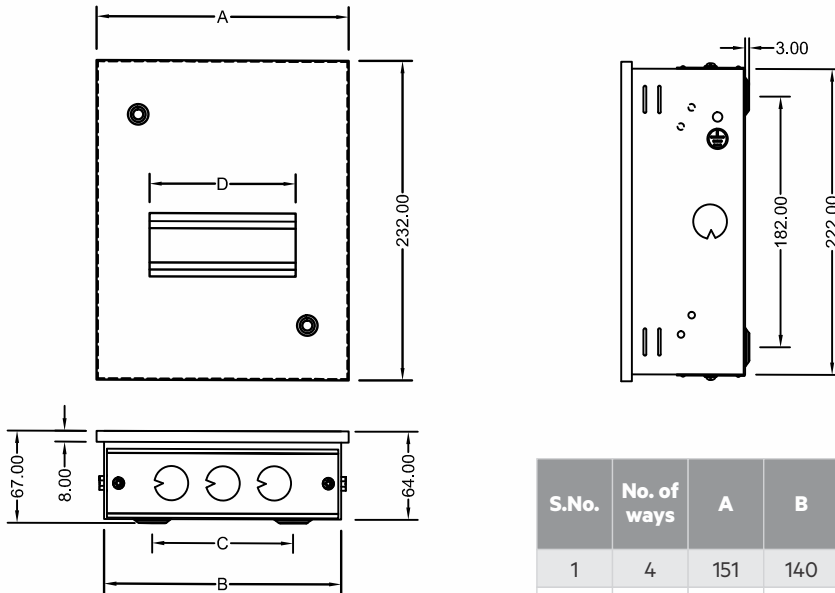
Single door | Double door

## SPECIFICATION

IS 13032 | IS 8623

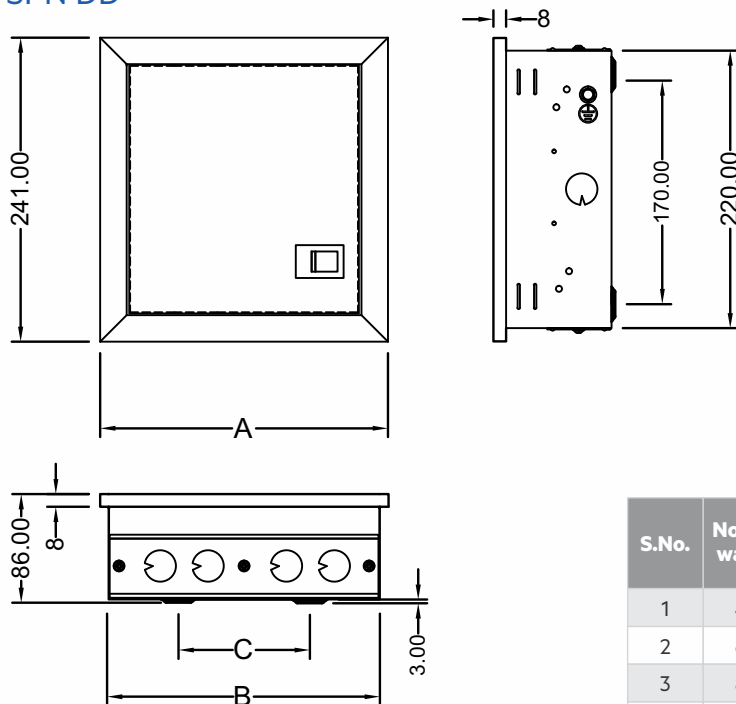
## Dimensions

### SPN SD



S.No.	No. of ways	A	B	C	D	Knockout Each Side in Box Ø-25	D-Plate Knockout Ø-25
1	4	151	140	68	72	1 Nos.	2 Nos.
2	6	186	175	104	108	1 Nos.	3 Nos.
3	8	221	211	140	144	1 Nos.	4 Nos.
4	10	256	247	176	180	1 Nos.	6 Nos.
5	12	291	283	212	216	1 Nos.	6 Nos.
6	16	326	319	248	288	2 Nos.	8 Nos.

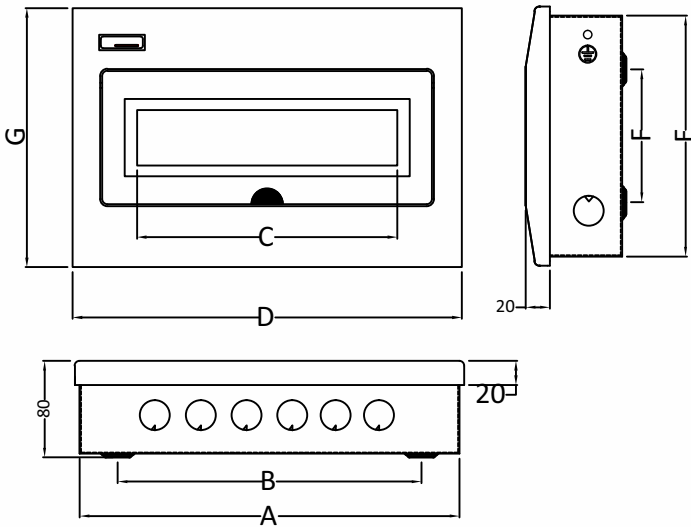
### SPN DD



S.No.	No. of ways	A	B	C	Knockout Each Side in Box Ø-25	D-Plate Knockout Ø-25
1	4	157	144	95	1 Nos.	2 Nos.
2	6	193	180	131	1 Nos.	3 Nos.
3	8	228	216	165	1 Nos.	4 Nos.
4	10	264	252	201	1 Nos.	6 Nos.
5	12	298	286	234	1 Nos.	6 Nos.
6	16	368	355	303	1 Nos.	8 Nos.

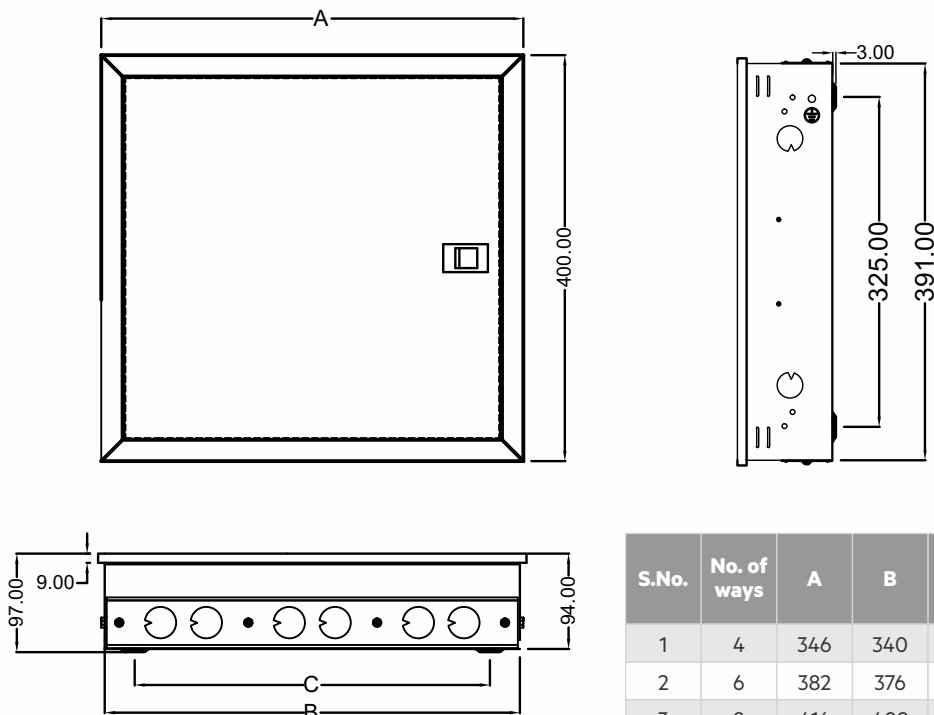
All dimensions marked are in mm.

### SPN ACRYLIC



S.No.	No. of ways	A	B	C	D	E	F	G	Knockout Top & Bottom In Box Ø-25	Knockout Each Side In Box Ø-25
1	4	140	88	72	76	146	72	161	1 Nos.	2 Nos.
2	6	208	150	108	216	185	110	200	1 Nos.	4 Nos.
3	8	240	180	144	248	200	110	215	1 Nos.	4 Nos.
4	12	315	252	216	323	200	110	215	1 Nos.	6 Nos.
5	16	389	324	288	397	230	120	245	1 Nos.	6 Nos.

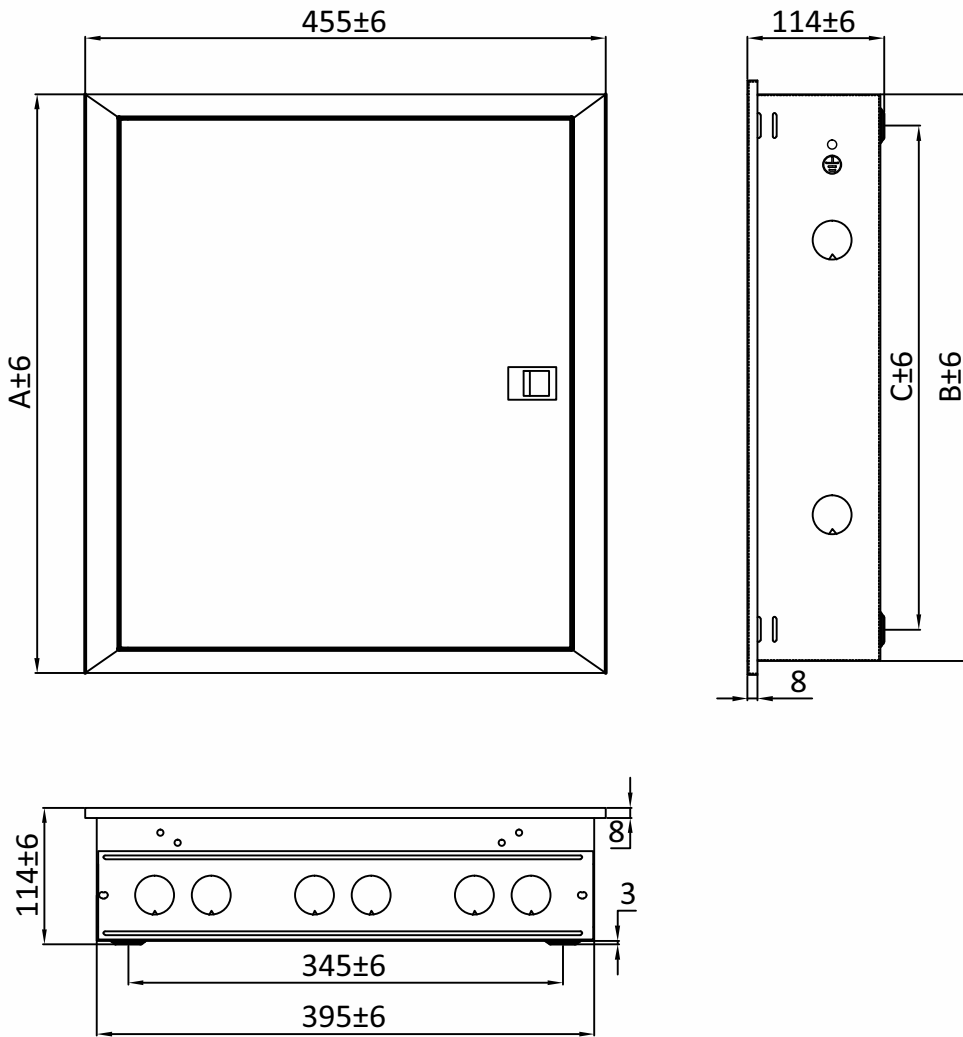
### TPN DD



S.No.	No. of ways	A	B	C	Knockout Each Side in Box Ø-31	D-Plate Knockout Ø-31
1	4	346	340	281	2 Nos.	4 Nos.
2	6	382	376	317	2 Nos.	6 Nos.
3	8	416	409	350	2 Nos.	6 Nos.
4	12	555	548	492	2 Nos.	6 Nos.

All dimensions marked are in mm.

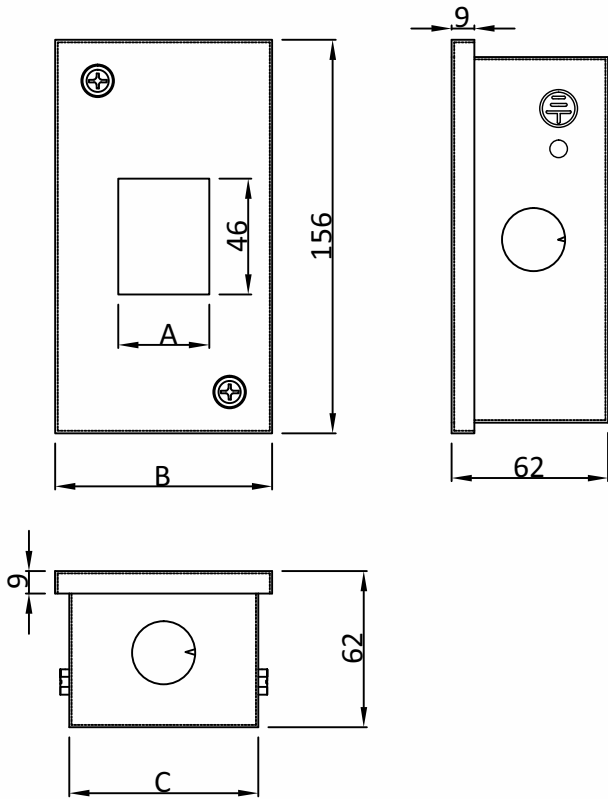
### VTPN DB



S.No.	No. of ways	A	B	C	Knockout Each Side in Box $\phi$ -31	D-Plate Knockout Top $\phi$ -31	D-Plate Knockout Bottom $\phi$ -38	D-Plate Knockout Bottom $\phi$ -31
1	4	510	450	400	2 Nos.	6 Nos.	1 Nos.	4 Nos.
2	6	564	504	454	2 Nos.	6 Nos.	1 Nos.	4 Nos.
3	8	618	558	508	2 Nos.	6 Nos.	1 Nos.	4 Nos.
4	12	720	666	616	2 Nos.	6 Nos.	1 Nos.	4 Nos.

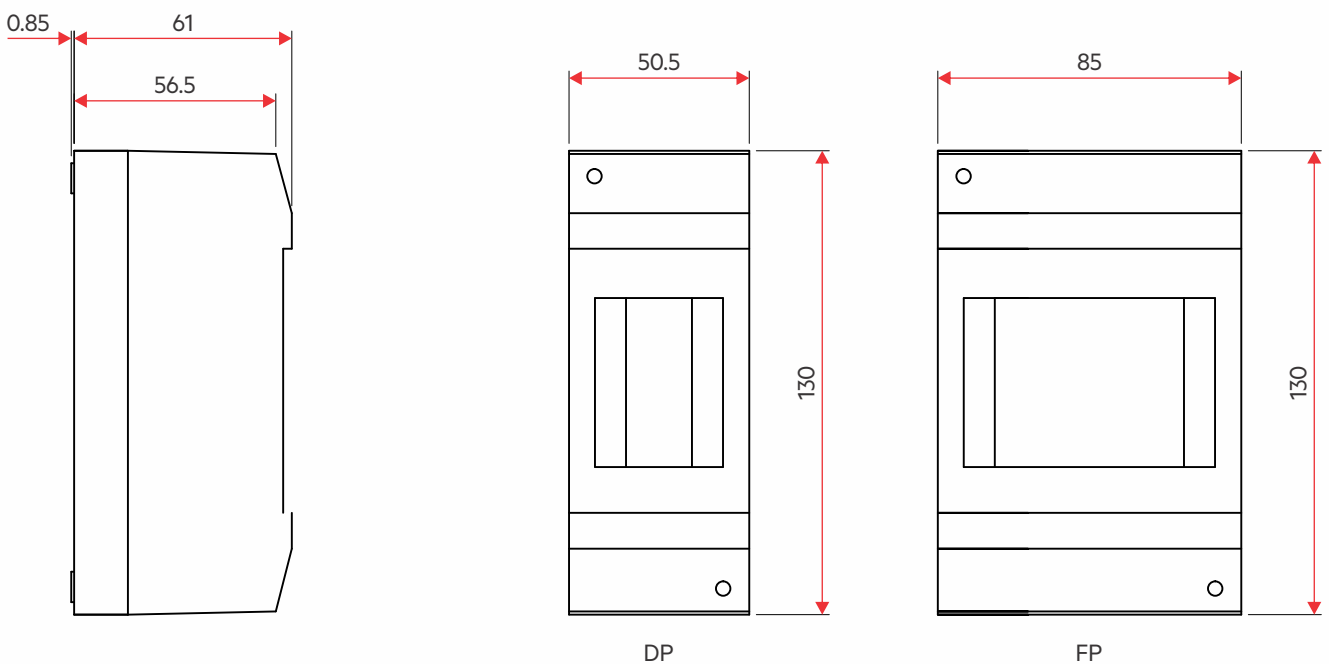
All dimensions marked are in mm.

### Metal Enclosure



S.No.	No. of ways	A	B	C	Knockout Each Side in Box Ø-25	Knockout Top & Bottom in box Ø-25
1	SP/DP	36	86	76	1 Nos.	1 Nos.
2	TP/FP	72	117	105	1 Nos.	1 Nos.

### Plastic Enclosure



All dimensions marked are in mm.

# ORDERING INFORMATION

## MINIATURE CIRCUIT BREAKER

In accordance with IS/IEC 60898-1) 240/415V, 50Hz, 10kA Breaking Capacity

### Single Pole (SP)



Standard Pkg. - 12 Nos  
Master Carton Qty. - 144 Nos

Current Rating (A)	Part Code	Model
6	899-591-006S	MCB 6A SP C
10	899-591-010S	MCB 10A SP C
16	899-591-016S	MCB 16A SP C
20	899-591-020S	MCB 20A SP C
25	899-591-025S	MCB 25A SP C
32	899-591-032S	MCB 32A SP C
40	899-591-040S	MCB 40A SP C
50	899-591-050S	MCB 50A SP C
63	899-591-063S	MCB 63A SP C

### Single Pole & Neutral (SPN)



Standard Pkg. - 6 Nos  
Master Carton Qty. - 72 Nos

Current Rating (A)	Part Code	Model
6	899-591-N06S	MCB 6A SPN C
10	899-591-N10S	MCB 10A SPN C
16	899-591-N16S	MCB 16A SPN C
20	899-591-N20S	MCB 20A SPN C
25	899-591-N25S	MCB 25A SPN C
32	899-591-N32S	MCB 32A SPN C
40	899-591-N40S	MCB 40A SPN C
50	899-591-N50S	MCB 50A SPN C
63	899-591-N63S	MCB 63A SPN C

### Double Pole (DP)



Standard Pkg. - 6 Nos  
Master Carton Qty. - 72 Nos

Current Rating (A)	Part Code	Model
6	899-592-006S	MCB 6A DP C
10	899-592-010S	MCB 10A DP C
16	899-592-016S	MCB 16A DP C
20	899-592-020S	MCB 20A DP C
25	899-592-025S	MCB 25A DP C
32	899-592-032S	MCB 32A DP C
40	899-592-040S	MCB 40A DP C
50	899-592-050S	MCB 50A DP C
63	899-592-063S	MCB 63A DP C

### Three Pole (TP)



Standard Pkg. - 4 Nos  
Master Carton Qty. - 48 Nos

Current Rating (A)	Part Code	Model
6	899-593-006S	MCB 6A TP C
10	899-593-010S	MCB 10A TP C
16	899-593-016S	MCB 16A TP C
20	899-593-020S	MCB 20A TP C
25	899-593-025S	MCB 25A TP C
32	899-593-032S	MCB 32A TP C
40	899-593-040S	MCB 40A TP C
50	899-593-050S	MCB 50A TP C
63	899-593-063S	MCB 63A TP C

### Three Pole & Neutral (TPN)



Standard Pkg. - 3 Nos  
Master Carton Qty. - 36 Nos

Current Rating (A)	Part Code	Model
6	899-593-N06S	MCB 6A TPN C
10	899-593-N10S	MCB 10A TPN C
16	899-593-N16S	MCB 16A TPN C
20	899-593-N20S	MCB 20A TPN C
25	899-593-N25S	MCB 25A TPN C
32	899-593-N32S	MCB 32A TPN C
40	899-593-N40S	MCB 40A TPN C
50	899-593-N50S	MCB 50A TPN C
63	899-593-N63S	MCB 63A TPN C

### Four Pole (FP)



Standard Pkg. - 3 Nos  
Master Carton Qty. - 36 Nos

Current Rating (A)	Part Code	Model
6	899-594-006S	MCB 6A FP C
10	899-594-010S	MCB 10A FP C
16	899-594-016S	MCB 16A FP C
20	899-594-020S	MCB 20A FP C
25	899-594-025S	MCB 25A FP C
32	899-594-032S	MCB 32A FP C
40	899-594-040S	MCB 40A FP C
50	899-594-050S	MCB 50A FP C
63	899-594-063S	MCB 63A FP C



## ISOLATORS

In accordance with IS 13947-3 & IEC 60947-3) 240/415V, 50Hz

### Double Pole (DP)



Standard Pkg. - 6 Nos  
Master Carton Qty. - 72 Nos

Current Rating (A)	Part Code	Model
40	899-702-040S	ISO 40A DP
63	899-702-063S	ISO 63A DP
100	899-702-100S	ISO 100A DP

### Three Pole (TP)



Standard Pkg. - 4 Nos  
Master Carton Qty. - 48 Nos

Current Rating (A)	Part Code	Model
40	899-703-040S	ISO 40A TP
63	899-703-063S	ISO 63A TP
100	899-703-100S	ISO 100A TP

### Four Pole (FP)



Standard Pkg. - 3 Nos  
Master Carton Qty. - 36 Nos

Current Rating (A)	Part Code	Model
40	899-704-040S	ISO 40A FP
63	899-704-063S	ISO 63A FP
100	899-704-100S	ISO 100A FP

## RESIDUAL CURRENT CIRCUIT BREAKER

TYPE 'AC'(In accordance with IEC 61008-1/IS 12640-1) 240/415V, 50Hz

### Double Pole (DP)



Standard Pkg. - 6 Nos  
Master Carton Qty. - 36 Nos

Current Rating (A)	Part Code	Model
25	899-652-025S	RCCB 25A DP 30mA
	899-662-025S	RCCB 25A DP 100mA
	899-672-025S	RCCB 25A DP 300mA
40	899-652-040S	RCCB 40A DP 30mA
	899-662-040S	RCCB 40A DP 100mA
	899-672-040S	RCCB 40A DP 300mA
63	899-652-063S	RCCB 63A DP 30mA
	899-662-063S	RCCB 63A DP 100mA
	899-672-063S	RCCB 63A DP 300mA

### Four Pole (FP)



Standard Pkg. - 3 Nos  
Master Carton Qty. - 18 Nos

Current Rating (A)	Part Code	Model
25	899-654-025S	RCCB 25A FP 30mA
	899-664-025S	RCCB 25A FP 100mA
	899-674-025S	RCCB 25A FP 300mA
40	899-654-040S	RCCB 40A FP 30mA
	899-664-040S	RCCB 40A FP 100mA
	899-674-040S	RCCB 40A FP 300mA
63	899-652-063S	RCCB 63A FP 30mA
	899-664-063S	RCCB 63A FP 100mA
	899-674-063S	RCCB 63A FP 300mA

## DISTRIBUTION BOARD

In accordance with IS/IEC 60898-1) 240/415V, 50Hz, 10kA Breaking Capacity

### SPN DB - Single Door

(In accordance to IS 13032 & IS 8623) RAL 7035, Fine Light Grey Texture

Code	Model	No. of Way	Incomer+Outgoing
899-803-004S	SPN SD	4	4
899-803-006S	SPN SD	6	6
899-803-008S	SPN SD	8	8
899-803-012S	SPN SD	12	12
899-803-016S	SPN SD	16	16



### SPN DB - Double Door

(In accordance to IS 13032 & IS 8623) RAL 7035, Fine Light Grey Texture

Code	Model	No. of Way	Incomer+Outgoing
899-804-004S	SPN DD	4	4
899-804-006S	SPN DD	6	6
899-804-008S	SPN DD	8	8
899-804-012S	SPN DD	12	12
899-804-016S	SPN DD	16	16



### SPN DB - Acrylic

(In accordance to IS 13032 & IS 8623) RAL 7035, Fine Light Grey Texture

Code	Model	No. of Way	Incomer+Outgoing
899-805-004S	SPN DD Acrylic	4	4
899-805-006S	SPN DD Acrylic	6	6
899-805-008S	SPN DD Acrylic	8	8
899-805-012S	SPN DD Acrylic	12	12
899-805-016S	SPN DD Acrylic	16	16



## TPN DB - Double Door

(In accordance to IS 13032 & IS 8623) RAL 7035, Fine Light Grey Texture

Code	Model	No. of Way	Incomer+Outgoing
899-807-004S	TPN DD	4	8+12
899-807-006S	TPN DD	6	8+18
899-807-008S	TPN DD	8	8+24
899-807-012S	TPN DD	12	8+36



## VTPN DB - Double Door

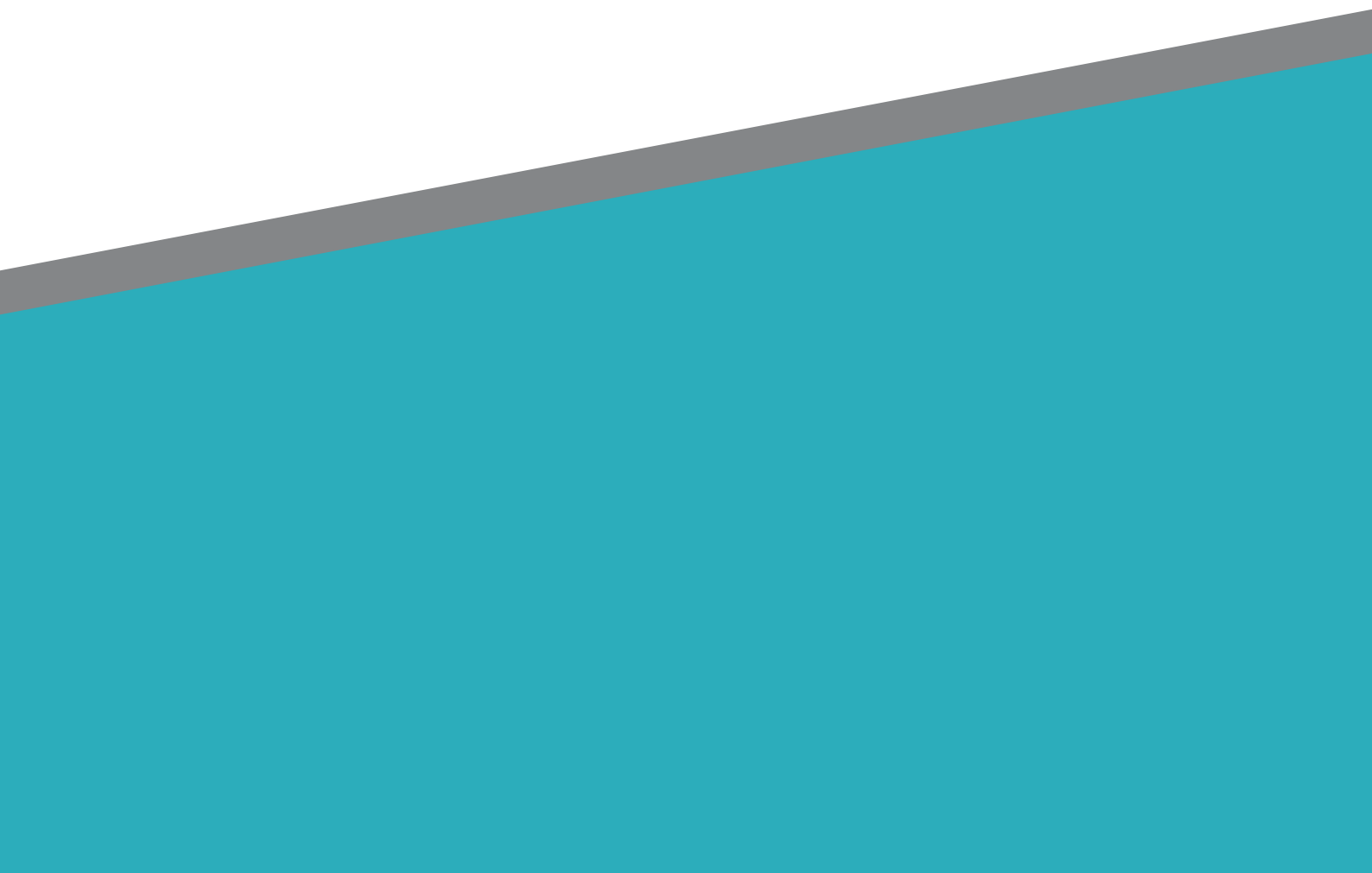
(In accordance to IS 13032 & IS 8623) RAL 7035, Fine Light Grey Texture

Code	Model	No. of Way	Incomer+Outgoing
899-809-004S	VTPN DD	4	8+12
899-809-006S	VTPN DD	6	8+18
899-809-008S	VTPN DD	8	8+24
899-809-012S	VTPN DD	12	8+36











As the leading name in India's largest power products manufacturer, Microtek International Pvt. Ltd. has always worked towards creating smartly designed offerings using advanced technology and state-of-the-art innovation. We plan to take safety to the next level with each of our product. Our range of MCBs, RCCBs, and DBs provide complete protection to our customers and deliver unmatched performance. They are designed with the best quality materials to provide superior durability and longevity. They are designed to enhance the aesthetic appeal of the space.

