



**FUSION OF
TECHNOLOGY
INNOVATING
QUALITY**

COMPLETE RANGE OF
**PROTECTION
DEVICES**
FOR YOUR POWER SYSTEMS

PRODUCT CATALOG





Company Profile

Our company "Ship Switchgears (India)" started operations in the year 1987 in a very humble way with the sole objective of manufacturing and marketing world-class Electrical Switchgears & Protection Equipments as per latest IS/IEC standards under the brand name "SHIP", "SAFER" & "SENIOR". Over a period of time the company has grown into multi-product organisation adding LT Control Switches, HRC Fuses, Bakelite Fuse Fittings, RCCBs, Oil Immersed Starters and Shunt Capacitors etc. In addition, a wide range of LED Lightings are also being marketed under our brand name "ELSHINE". Our product are BIS marked.

Today "SHIP" brand products are manufactured in our plant at Jalandhar (India) using state-of-the-art technology. Our company is ISO 9001 certified. The "SHIP" brand of products are tested at CPRI, Bhopal (India) and ERDA, Vadodara (India). In addition, we have our own in-house R&D & Quality Assurance Department so as to ensure that each and every product which comes out of our plant meets the national & international standards.

We have a very strong presence in the Indian market. Our complete range of products is used all over India by leading Architects, Consultants, Panel Builders, OEMs, Builders, Govt. Departments & Contractors etc. in addition to leading industries. The company has a very vibrant & committed network of dealers all over India and it is a matter of pride for "SHIP" that all our dealers and clientele are fully satisfied with the aesthetics and performance of our products resulting in repeat business and adding new clients regularly. Consequently our market share is increasing consistently. "SHIP" brand is also well accepted overseas & we are exporting our products to a very large number of countries such as Sri-Lanka, Syria, Yemen, Nepal & to various African countries to name a few. We are also branding products for leading multi-national brands.

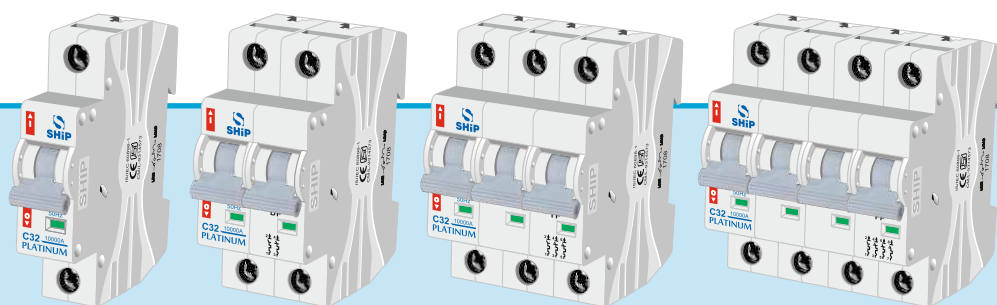
Mr. N.K. Sharma, Managing Director of the company has a crystal clear vision to offer world-class quality products to our esteemed and valued customers at most reasonable prices. To achieve this objective our road map is "Quality Improvement" & "Value Engineering" in a continuous manner and any suggestions in this regard are always welcome.



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NOTE :

Development is a continuous process at SHIP SWITCHGEARS, hence Product Design, Technical Data & Dimensions subject to be changed without any prior intimation.



Miniature Circuit Breakers – MCB

Platinum Series

IS/IEC 60898-1



Introduction

SHIP SWITCHGEARS has created innovative low voltage electrical products since 1985 in electrical systems that contribute to the quality of life. Our products are mainly focus on protection, control and conservation of energy aspect of Electrical systems.

SHIP SWITCHGEARS have impressive track record in innovative design and development of the products. To ensure that SHIP customers benefit fully from this technical expertise. We work closely with the users. We committed to offer our clients a unique combination of personal safety, reliability and trouble free service.

SHIP SWITCHGEARS is engaged in the manufacturing of low voltage electrical switchgear products to meet the international quality conforming to latest National and International standards.

Salient Features

Standards : SHIP MCBs are conformed to the latest IS / IEC 60898-1 & IEC 60898-1

Energy Saving : SHIP MCBs has low power loss as stipulated values in IS / IEC 60898-1

Low let through energy : Let through energy under short circuit conditions is minimum in SHIP MCBs which ensure longer life of contacts and reduced thermal stresses and also ensures that the energy let through and any subsequent damage is minimized.

Shock Proof : SHIP MCBs prevent direct touch with live parts ensuring protection against electric shock.

Perfect Connecitons : SHIP MCBs have been provided terminal design with serrated box type with combination head screws with deep serrations for perfect connections of wire. It Torque withstand capacity is more than 2Nm.

Push Fit Two Step Mounting Clip: Thermoplastic mounting clip with 2 step provides convenient mounting and removal of MCBs.

Contacts : Fixed contact is made with Hard Electrolytic Copper with Silver Point spotted to ensure longer life of contacts and prevent contact welding during operations. Both contacts are designed to have zero bounce during closing operation.

Operating Mechanism : SHIP MCBs have quick make –break operation and trip free mechanism. In the event of an over load & short circuit conditions MCBs automatically trip internally even if the MCB knob is held in ON position.

Tripping mechanism : SHIP MCBs are designed to give over load and short circuit protection by thermal bimetal and electromagnetic systems.

ON/OFF Indication : SHIP MCBs are designed to give On/Off Indication with Red & Green Color..

Constructional Features

Housing / Cover : Housing & Cover are made from injection moulded thermoplastic polyester (PBT) /Nylon + GF material as per international standards. This material is fire retardant, anti tracking and non-hygroscopic.

Mounting Arrangement : SHIP MCBs are directly installed on 35mm DIN Rail in MCB distribution boards and control panels.

Back up Protection : SHIP MCBs are capable of withstand fault level of current 10000A. However, where the fault level is more than 10kA, back up can be achieved by using 100A, gG type SHIP HRC Fuse links.

Low Power Loss : SHIP MCBs have been designed to minimize power loss through unique contact configuration and reduction of hot spot. Power loss of MCB is lower than the specified range in IS / IEC 60898-1.

Rated Current (A)	Maximum allowable Power Loss per pole as per IS / IEC 60898-1	SHIP MCB power loss per pole
$\leq I_n 10$	3.0	2.0
$10 < I_n \leq 16$	3.5	2.5
$16 < I_n \leq 25$	4.5	3.0
$25 < I_n \leq 32$	6.0	4.0
$32 < I_n \leq 40$	7.5	4.5
$40 < I_n \leq 50$	9.0	5.0
$50 < I_n \leq 63$	13.0	8.0

Potential Free Mounting Clip

SHIP MCBs have insulated mounting clip which ensure electrical safety and mechanical strength.

Working Principle

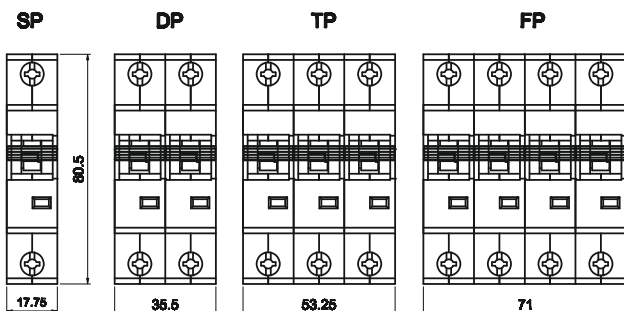
SHIP MCBs are based on thermal and electromagnetic system technology and its design is based on current limiting device. It protect against overload and short circuit current. The protection is provided by combining a temperature sensitive device (Bimetal) and current sensitivity by electromagnetic system. Both the systems trigger the mechanism mechanically.

APPLICATIONS

B-Type : This type of MCB is suitable for protection of Resistive loads such as bulbs, heaters etc.

C-Type : This type of MCB is suitable for protection of Inductive loads such as motors, Air conditioners etc.

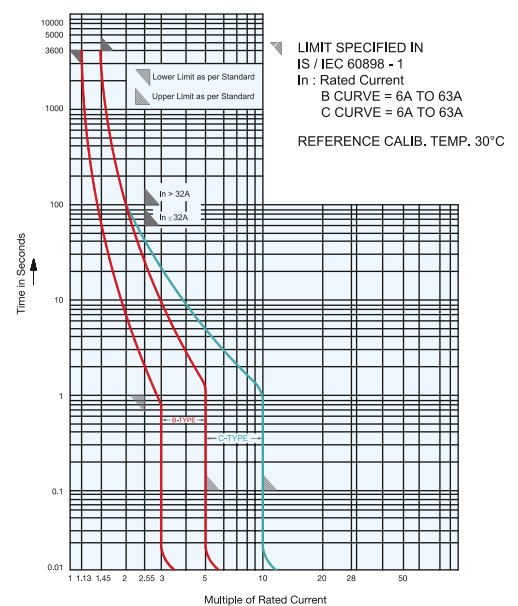
Dimensions : 0.5A-63A

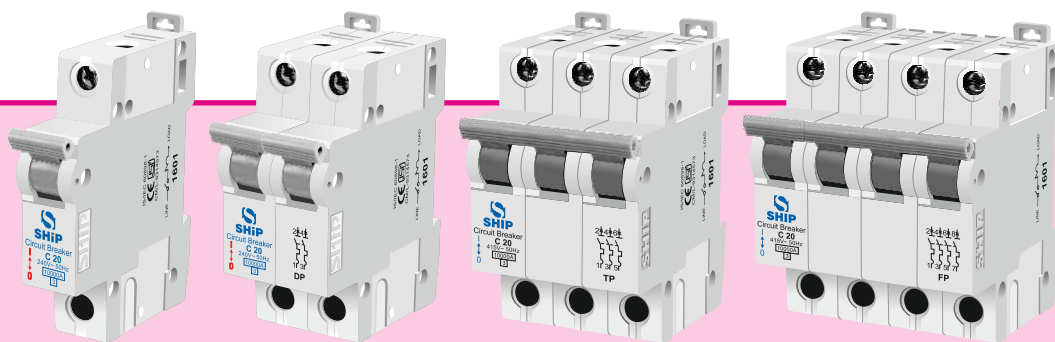


Gen Tol. ± 1.5

Technical Specifications

Specifications	: IS/IEC 60898-I
Number of Poles	: 1, 1+N, 2, 3, 3+N & 4
Tripping Characteristic & Rated Currents (In)	: B characteristics - 6A to 63A C characteristics - 0.5A to 63A
Rated breaking capacity (Icn)	: 10000A
Energy Limiting Class	: Class 3 as per BS EN 60898-I
Rated Voltages (Ue)	
Single Pole	: 240V AC
Rated Voltages (Ue)	
Multi Pole	: 415V AC
Insulation Voltage (Ui)	: 500V
Rated Frequency	: 50Hz
Impulse withstand voltage (Uimp)	: 4kV
Impulse power frequency voltage	: 2kV
Housing material	: Polybutylene Terephthalate in Grey Colour / Nylon + GF
Degree of Protection	: IP 20 as per IS/IEC 60898-I
Mounting	: Quick snap on DIN rails, 35 mm
Connecting Terminals	: Combination box terminals on incoming & outgoing sides. Suitable for single-core, stranded and flexible conductors upto 35 Sq.mm
Electrical Service Life	: Min. 20,000 make/break operations
Ambient Temperature	: -5°C to 40°C





Miniature Circuit Breakers – MCB

Introduction

SHIP SWITCHGEARS has created innovative low voltage electrical products since 1985 in electrical systems that contribute to the quality of life. Our products are mainly focus on protection, control and conservation of energy aspect of Electrical systems.

SHIP SWITCHGEARS have impressive track record in innovative design and development of the products. To ensure that SHIP customers benefit fully from this technical expertise. We work closely with the users. We committed to offer our clients a unique combination of personal safety, reliability and trouble free service.

SHIP SWITCHGEARS is engaged in the manufacturing of low voltage electrical switchgear products to meet the international quality conforming to latest National and International standards.

Salient Features

Standards : SHIP MCBs are conformed to the latest IS / IEC 60898-1 & IEC 60898-1

Energy Saving : SHIP MCBs has low power loss as stipulated values in IS / IEC 60898-1

Low let through energy : Let through energy under short circuit conditions is minimum in SHIP MCBs which ensure longer life of contacts and reduced thermal stresses and also ensures that the energy let through and any subsequent damage is minimized.

Shock Proof : SHIP MCBs prevent direct touch with live parts ensuring protection against electric shock.

Perfect Connecitons : SHIP MCBs have been provided terminal design with serrated box type with combination head screws with deep serrations for perfect connections of wire. It Torque withstand capacity is more than 2Nm.

Push Fit Two Step Mounting Clip: Thermoplastic mounting clip with 2 step provides convenient mounting and removal of MCBs.

Contacts : Both contacts are made with Silver –in laid copper to ensure longer life of contacts and prevent contact welding during operations. Both contacts are designed to have zero bounce during closing operation.

Operating Mechanism : SHIP MCBs have quick make –break operation and trip free mechanism. In the event of an over load & short circuit conditions MCBs automatically trip internally even if the MCB knob is held in ON position.

Tripping mechanism : SHIP MCBs are designed to give over load and short circuit protection by thermal bimetal and electromagnetic systems.

Construational Features

Housing / Cover : Housing & Cover are made from injection moulded thermoplastic polyester (PBT) /Nylon + GF material as per international standards. This material is fire retardant, anti tracking and non-hygroscopic.

Mounting Arrangement : SHIP MCBs are directly installed on 35mm DIN Rail in MCB distribution boards and control panels.

Back up Protection : SHIP MCBs are capable of withstand fault level of current 10000A. However, where the fault level is more than 10kA, back up can be achieved by using 100A, gG type SHIP HRC Fuse links.

Low Power Loss : SHIP MCBs have been designed to minimize power loss through unique contact configuration and reduction of hot spot. Power loss of MCB is lower than the specified range in IS / IEC 60898-1.

Rated Current (A)	Maximum allowable Power Loss per pole as per IS / IEC 60898-1	SHIP MCB power loss per pole
$\leq I_n 10$	3.0	2.1
$10 < I_n \leq 16$	3.5	2.6
$16 < I_n \leq 25$	4.5	3.0
$25 < I_n \leq 32$	6.0	4.1
$32 < I_n \leq 40$	7.5	4.6
$40 < I_n \leq 50$	9.0	5.2

Potential Free Mounting Clip

SHIP MCBs have insulated mounting clip which ensure electrical safety and mechanical strength.

Working Principle

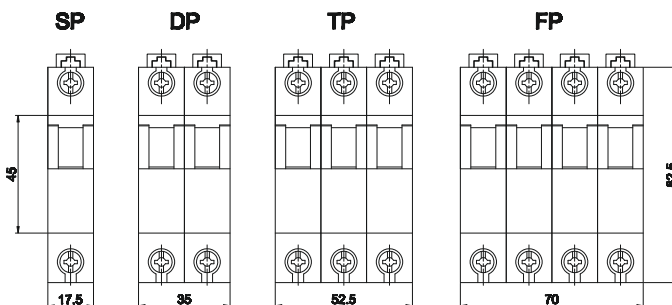
SHIP MCBs are based on thermal and electromagnetic system technology and its design is based on current limiting device. It protect against overload and short circuit current. The protection is provided by combining a temperature sensitive device (Bimetal) and current sensitivity by electromagnetic system. Both the systems trigger the mechanism mechanically.

APPLICATIONS

B-Type : This type of MCB is suitable for protection of Resistive loads such as bulbs, heaters etc.

C-Type : This type of MCB is suitable for protection of Inductive loads such as motors, Air conditioners etc.

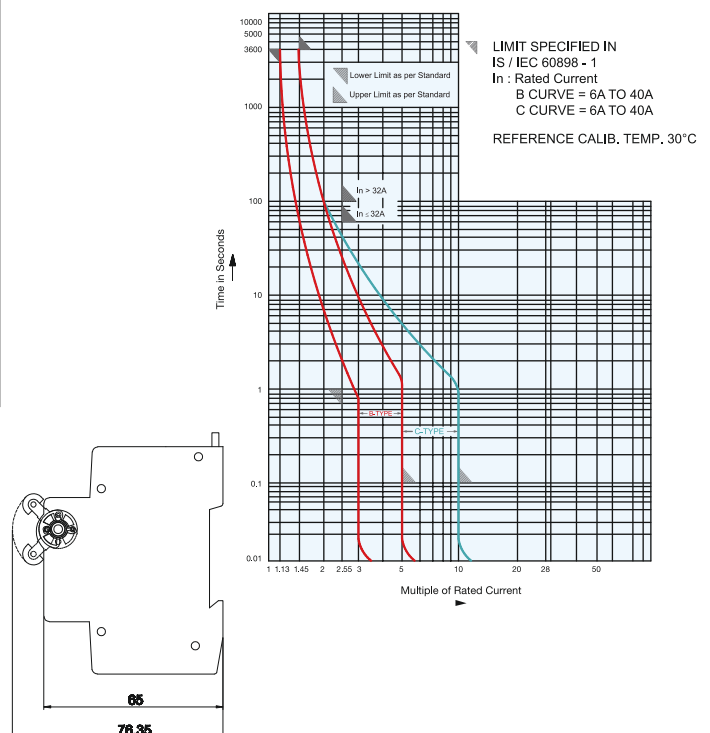
Dimensions : 0.5A-40A



Gen Tol. ± 1.5

Technical Specifications

Specifications	: IS/IEC 60898-I
Number of Poles	: 1,1+N, 2, 3, 3+N & 4
Tripping Characteristic & Rated Currents (In)	: B characteristics - 6A to 40A C characteristics - 0.5A to 40A
Rated breaking capacity (Icn)	: 10000A
Rated Voltages (Ue) Single Pole	: 240V AC
Rated Voltages (Ue) Multi Pole	: 415V AC
Insulation Voltage (Ui)	: 500V
Rated Frequency	: 50Hz
Impulse withstand voltage (Uimp)	: 4kV
Impulse power frequency voltage	: 2kV
Housing material	: Polybutylene Terephthalate in Grey Colour / Nylon + GF
Degree of Protection	: IP 20
Mounting	: Quick snap on DIN rails, 35 mm
Connecting Terminals	: Combination box terminals on incoming & outgoing sides. Suitable for single-core, stranded and flexible conductors upto 25 Sq.mm
Electrical Service Life	: Min. 10,000 make/break operations
Ambient Temperature	: -5°C to 40°C





Isolators – MCB Type

Salient Features

Standards : SHIP Isolators are conformed to the latest IS / IEC 60947-3.

Energy Saving : SHIP Isolators has low power loss.

Shock Proof : SHIP Isolators prevent direct touch with live parts ensuring protection against electric shock.

Perfect Connecitons : SHIP Isolators have been provided terminal design with serrated box type with combination head screws with deep serrations for perfect connections of wire. It Torque withstand capacity is more than 2Nm.

Push Fit Two Step Mounting Clip: Thermoplastic mounting clip with 2 step provides convenient mounting and removal of Isolators.

Contacts : Both contacts are made with Silver –in laid copper to ensure longer life of contacts and prevent contact welding during operations. Both contacts are designed to have zero bounce during closing operation.

Operating Mechanism : SHIP Isolators have quick make –break operation.

Construational Features

Housing / Cover : Housing & Cover are made from injection moulded thermoplastic polyester (PBT) /Nylon + GF material as per international standards. This material is fire retardant, anti tracking and non-hygroscopic.

Mounting Arrangement : SHIP Isolators are directly installed on 35mm DIN Rail in MCB distribution boards and control panels.

Low Power Loss : SHIP Isolators have been designed to minimize power loss through unique contact configuration and reduction of hot spot.

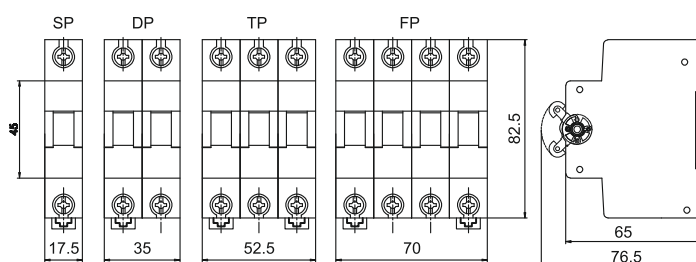
Potential Free Mounting Clip

SHIP Isolators have insulated mounting clip which ensure electrical safety and mechanical strength.

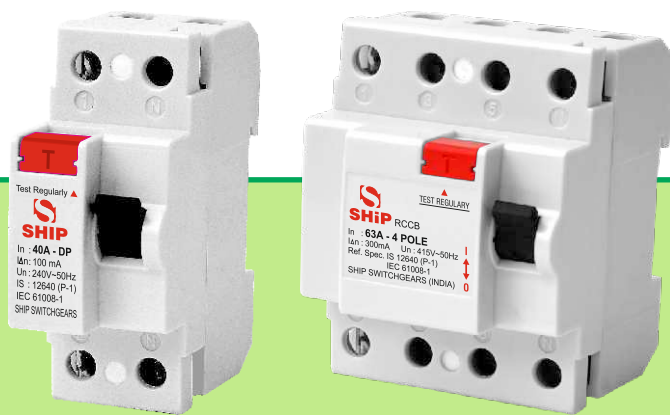
Technical Specifications

Specifications	: IS/IEC 60947-3
Rated Current	: 40, 63, 80, 100, 125A
Number of Poles	: SP, DP, TP & FP
Utilization Category	: AC - 22A
Rated Voltages (Ue)	: 240V / 415V AC
Insulation Voltage (Ui)	: 500V
Rated Frequency	: 50Hz
Impulse withstand voltage (Uimp)	: 4kV
Impulse power frequency voltage	: 2kV (50 Hz)
Housing material	: Polybutylene Terephthalate in Grey Colour / Nylon + GF
Degree of Protection	: IP 20
Mounting	: Quick snap on DIN rails, 35 mm
Connecting Terminals	: Combination box terminals on incoming & outgoing sides. Suitable for single-core, stranded and flexible conductors upto 25 Sq.mm
Electrical Service Life	: 10,000 operations

Dimensions : 40A-125A



Gen Tol. ± 1.5



IS/IEC 61008-1



Residual Current Circuit Breakers – RCCB

Introduction

SHIP SWITCHGEARS has created innovative low voltage electrical products since 1985 in electrical systems that contribute to the quality of life. Our products are mainly focus on protection, control and conservation of energy aspect of Electrical systems.

SHIP SWITCHGEARS have impressive track record in innovative design and development of the products. To ensure that SHIP customers benefit fully from this technical expertise. We work closely with the users. We committed to offer our clients a unique combination of personal safety, reliability and trouble free service.

Salient Features

Standards : SHIP RCCBs are conforms to the latest IS 12640-1 / IEC 61008-1.

Applications :

- Domestic and Industrial use.
- Double Pole used for Single Phase and neutral electrical connections.
- Four Pole used for three phase and neutral connections

Range : Two Pole and Four Pole.

Sensitivity : 30mA, 100mA & 300mA

High Sensitivity : In the RCCB use of special materials for the toroidal core balance transformer and a specially developed highly sensitive miniature relay ensure positive detection of earth leakage current as low as 30mA in less than 40ms thereby acting as a life saver.

Housing : SHIP RCCB's are housed in high quality thermoplastic insulating material. The materials used are fire retardant, anti tracking, impact resistant and can withstand high temperatures.

Reliable Mechanical Operation : The moving contacts of the phases are put on a moving arm, actuated by a rugged toggle mechanism. Hence the closing and opening of all the three phases simultaneously.

Shock Proof : SHIP RCCB's have been provided terminal design with serrated box type with combination head screws with deep serrations for perfect connections of wire. It's Torque withstand capacity is more than 2 Nm.

Constructional Features

Mounting Arrangement : SHIP RCCB's are directly installed on 35mm DIN Rail in MCB distribution boards and control panels.

Suitability as Main Switch : SHIP RCCB incorporate advanced neutral i.e., neutral makes first and last break than phases, which ensures complete discharge of line inductance and capacitance. It also has safe interrupting clearances as per IS/IEC 60947-1

Positive Contact Indication : I & O position is clearly engraved on the Knob.

Operating Mechanism : SHIP RCCB have a quick make, quick break and trip-free mechanism i.e. even if the RCCB knob is held in "ON" position, the RCCB will trip in case of sensitivity current passed.

Ease of Cabling : Terminals are suitable for Aluminum and Cooper conductors.

Working Principle : SHIP RCCB is designed to trip on a leakage current 30mA, 100mA & 300mA. It gives protection against leakage current only. Any RCCB will not give protection against overload and short-circuit current. To protect against overload and short-circuit current use SHIP MCB in the circuit along with RCCB.

Precautions for installations

- Wiring should be done by a trained & qualified electrician as per the wiring diagram. SHIP MCB must be used as a backup of RCCB to protect overload and short circuit current.
- All wiring necessary for operation shall be passed through the RCCB and ensure proper connection i.e. connect the incoming at Line side and Outgoing at Load side and do not change Phase and Neutral.
- The neutral conductor must be insulated against earth to the same extent as the live conductors.) The neutral conductor must be insulated against earth to the same extent as the live conductors.
- All equipments used must be properly earthed.
- To ensure correct functioning care must be taken that the neutral conductor on the load side of the RCCB must not be connected to earth, otherwise nuisance tripping may occur or tripping may be impaired.
- SHIP MCB shall be used for short circuit and overload protection of the circuit under installation.
- Don't expose the RCCB to direct sunlight, rough weather and keep it away from the influence of magnetic field.

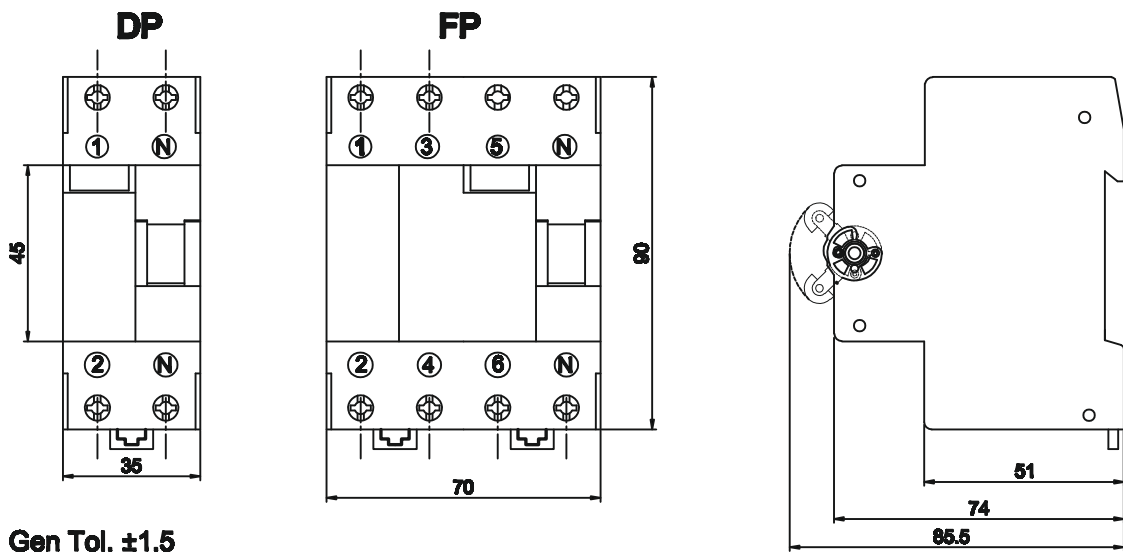
SHIP RCCBs are completely type tested in accordance with latest specification and also BIS mark.

Technical Specifications

Fault current sensitivity	: AC type & A type
Type class	: AC type & A type
Specification	: IS 12640-1 / IEC 61008-1
No. of modules	: 2 for 2 Pole, 4 for 4 Pole
No. of poles	: 2 Pole & 4 Pole
Rated current (In)	: 16A,25A,32A,40A,63A,80A,100A
Sensitivity (In)	: 30mA, 100mA, 300mA
Rated voltage (Un)	: 2 Pole - 240V , 4 Pole - 415V AC
Max operating voltage	: 415V AC
Working range of testing device	: 140V ~ 240V
Frequency range	: 50Hz
Rated short circuit withstand capacity	: 6kA with SCPD
Back-up fuse	: HRC Fuse Link 80 A gG.
Protection class	: IP 20
Max. ambient temperature	: -5°C to 40°C
Climate resistance	: According to IS 12640-1
Position of use	: Vertical
Shock proof capacity	: According to IS 12640-1
Service life	: > 5000 switching cycles
Terminal capacity	: 1.0 - 35 mm sq.
Mounting	: Din rail mounting
Break time	: < 0.04 seconds

Dimensions

16A-100A





Moulded Case Circuit Breaker (MCCB)

Introduction

SHIP SWITCHGEARS is one of the largest manufacturers of switchgears. The company has vast experience of manufacturing customary switch fuse units with the help of advanced technology and skillful HR management team.

The company has emerged as a pioneer in the electrical arena. SHIP SWITCHGEARS also enjoys the reputation of being the market leader with the help of strong R&D and skillful labour, the company satisfy the customers by maintaining the quality and standard.

Features

SHIP Moulded Case Circuit Breakers (MCCBs) are designed for circuit protection for low voltage distribution system. MCCBs are suitable for protection of Main branch and feeder circuit & connected equipments / load.

SHIP MCCBs provide fixed type overload and short circuit protection for all circuit elements. It is designed for use in Switchboards, Control Panels and in separate enclosures to meets the requirements of lighting, distribution and power circuits. Trip Free Mechanism - The MCCB trips internally in case of fault, even if the knob is in the ON position

SHIP SWITCHGEARS offers a comprehensive range of MCCBs in world class technology and fully conforms to the latest standards IEC-60947-1&2 / IS-13947-1&2.

The insulating Housing & Cover made of high strength, heat resistant, flame retardant resin bonded thermo setting material which provides Interphase insulation of a high dielectric strength and high withstands capacity against thermal and mechanical stresses. Protection against secondary fire hazards and increased safety of operating personnel.

Constructional Features

Mounting Arrangement : SHIP MCCB's are directly installed on distribution boards and control panels.

Suitability as Main Switch

SHIP MCCB incorporate advanced neutral i.e., neutral makes first and last break than phases, which ensures complete discharge of line inductance and capacitance. It also has safe interrupting clearances as per IS/IEC 60947-1

Positive Contact Indication

I & O position is clearly engraved on the Knob.

Operating Mechanism

SHIP MCCB have a quick make, quick break and trip-free mechanism i.e. even if the MCCB knob is held in "ON" position, the MCCB will trip in case of overloading or short circuit current occur.

Ease of Cabling

Copper extended terminals are provided for termination of Aluminum and Copper conductors.

Precautions for installations

- Wiring should be done by a trained & qualified electrician only.
- All wiring necessary for operation shall be passed through the MCCB and ensure proper connection i.e. connect the incoming at Line side and Outgoing at Load side.
- Ship MCCB shall be used for short circuit and overload protection of the circuit under installation.

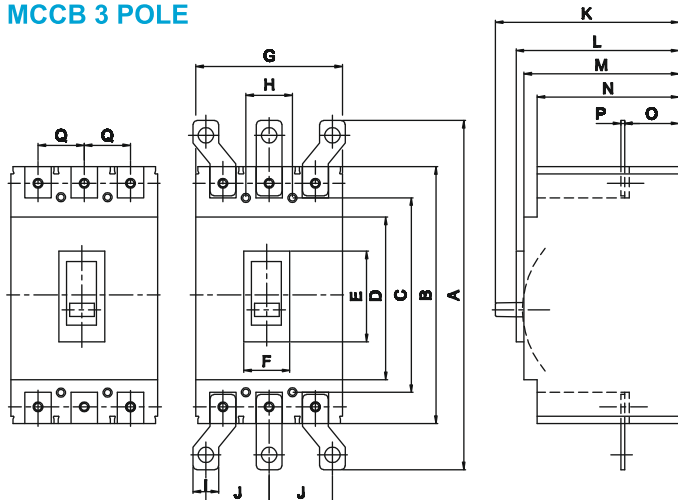
Technical Specifications

Specifications	: IS/IEC 60947-2
Number of Poles	: 1, 2, 3 & 4
Rated Currents (In)	: 16, 20, 25, 32, 40, 50, 80, 100, 125, 160, 200, 250, 315, 400, 500, 630, 800
Rated short circuit breaking capacity (Icu)	: 10kA, 18kA, 25kA, 35kA & 50kA
Rated service short circuit capacity (Ics)	: 50% / 75% of Icu
Utilization Category	: Type A
Impulse withstand voltage (Uimp)	: 8 kV

Rated Voltages (Ue)	
Single Pole	: 240V AC
Rated Voltages (Ue)	
Multi Pole	: 415 VAC
Insulation Voltage (Ui)	: 660V
Rated Frequency	: 50 Hz
Impulse power frequency voltage	: 3 kV (50 Hz)
Mounting	: Directly installed on panel boards
Electrical Service Life	: Min. 5000 operations
Ambient Temperature	: 40°C

Dimensions

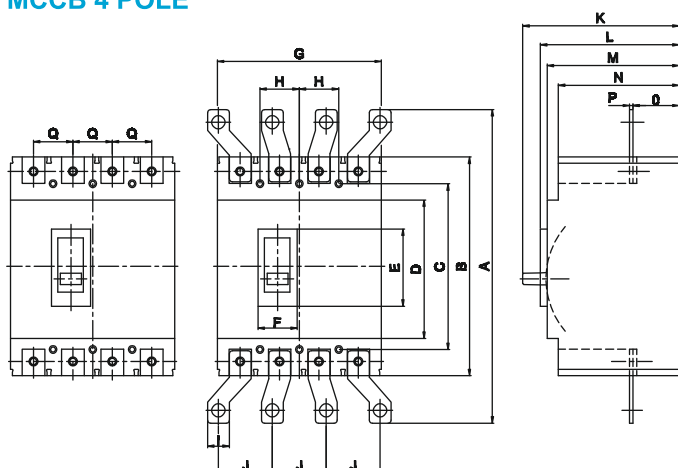
MCCB 3 POLE



RATINGS	A	B	C	D	E	F	G	H	I
63A	194	136	102	85	48	22.5	78	24.5	13.5
100A	230	150	106	88	51	23	92	30.5	20
200A	270	165	120	101.5	51	22	106	36	25
400A	365	257	196	128	88.5	65	150	46	30
630A	392.5	271.5	215.5	134.5	88	65	183	60	30
RATINGS	J	K	L	M	N	O	P	Q	
63A	37	87.5	76	71	65	20	2	25	
100A	45	87.5	73.5	69	62	26.5	2.5	30.5	
200A	50	108	90	85.5	81	25	3.5	36	
400A	60	152	112.5	106	98	40	5	49	
630A	70	155	117	111	103	42	6	59	

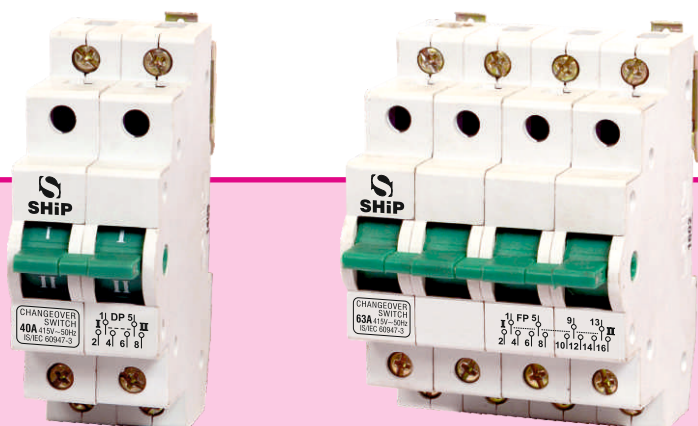
GEN. TOL. - ±1.5mm

MCCB 4 POLE



RATINGS	A	B	C	D	E	F	G	H	I
63A	195	136	117	86	48	22.5	103	25	13.5
100A	228	150	130	88	50	22	121.5	30	20
200A	270	165	126	101.5	50	22	141	35.5	25
400A	365	257	196	128	88.5	65.5	196.5	50	30
630A	392.5	271.5	215.5	134.5	88	65	241	58.5	30
RATINGS	J	K	L	M	N	O	P	Q	
63A	37	97	86	82	75	28	2	25.5	
100A	44	105	90	86	79	24	2.5	30	
200A	50	126	107	103	98	24	3.5	36	
400A	55	155	112	106.5	98	44	5	48	
630A	70.5	155	117	111	103	46	6	59	

GEN. TOL. - ±1.5mm



Modular Changeover Switch

Introduction

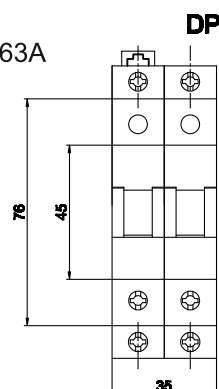
SHIP Switchgears Modular Changeover Switches 25A to 63A are a unique solution for the control between two power supplies.

SHIP Modular Changeover Switches can be fitted into any standard DIN rail. Our design is compatible with all other modular device of SHIP such as MCB's and RCCB's. The modular changeover switches are available in both 2 & 4 pole versions for single and three phase applications.

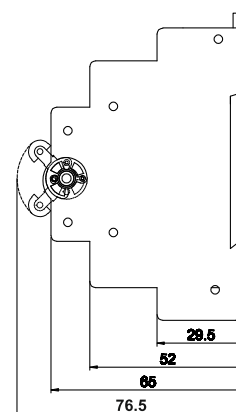
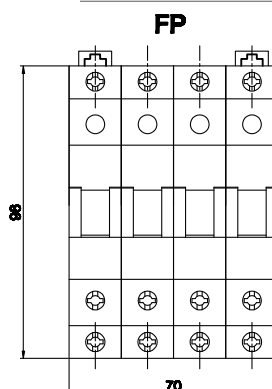
Constructional Features

- Modular changeover switch can be fitted into any standard DIN-rail mounted enclosure.
- Design is compatible with all other modular devices such as MCBs and RCCBs.
- Switch comes in 2P and 4P version for single and three phase applications.
- The incoming side must be protected against short circuit and for isolation with MCB/HRC Fuses.
- The changeover switch comes with a centre-off position.
- Non-flammable thermoplastic body.
- High grade ETP-Copper used for better conductivity & longer life.
- Double break contacts per pole.

Dimensions : 25A-63A



Gen Tol. ± 1.5



Technical Specifications

Specifications	: IS/IEC 60947-3
Rated Current	: 25A, 32A, 40A, 63A
Number of Poles	: DP, TP & FP
Utilization Category	: AC - 21A
Rated Voltages (Ue)	: 240V / 415V AC
Insulation Voltage (Ui)	: 500V
Rated Frequency	: 50Hz
Impulse withstand voltage (Uimp)	: 4kV
Impulse power frequency voltage	: 2kV
Housing material	: Polybutylene Terephthalate in Grey Colour / Nylon + GF
Degree of Protection	: IP 20
Mounting	: Quick snap on DIN rails, 35 mm
Connecting Terminals	: Combination box terminals on incoming & outgoing sides. Suitable for single-core, stranded and flexible conductors upto 25 Sq.mm
Electrical Service Life	: 10000 operations



IS/IEC 60947-3



Rewirable Switch Fuse Unit & Isolator Switch

Introduction

Ship Switchgears manufacturers of complete range of Rewirable Switch Fuse units are offered to suit power distribution applications. The heavy duty switches are fully type tested with short circuit breaking capacity of 2kA & 4kA at 240V & 415V suitable for utilization category AC-22/23A & B.

Four frame in deep drawn sizes covering the rating from DP/TP/TPN/FP - 16A to 32A and other ratings in fabricated frames.

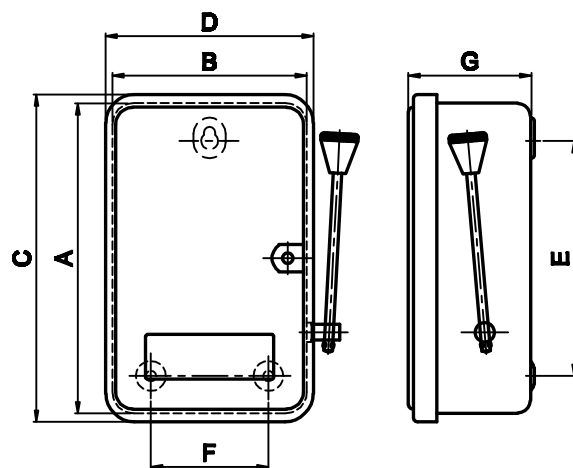
Construction & Features

- Quick make and break operation
- Complete range ISI marked.
- Enclosure made of CRCA Sheet Steel duly pretreated and powder coated.
- Hard bright tin plated contacts for high conductivity & longer life.
- Terminals suitable for Al & Cu conductors.
- Knock-outs are provided at the top, bottom & rear side.
- All live parts are fully shrouded with porcelain material
- Door interlocking facility available.
- Also available in iron clad weather proof switches. Rating from 16A to 63A
- Available in single pole and neutral, double pole, triple pole and neutral with rewirable type or HBC type fuse carriers.
- Type tested as per IS/IEC 60947-3.
- Hard bright tin plated contacts for high conductivity and longer life.
- Fully shrouded live parts.
- Rigorous anti-rust conditioning with seven tank process to ensure smooth and lasting paint finish against corrosive atmosphere.
- Entry holes provided at top and bottom and also at the rear side to facilitate cable connections from any side.
- Terminals suitable for accomodating aluminium / copper conductors.
- Quick make and break mechanism, independent of the speed of operating handle with door interlocking.

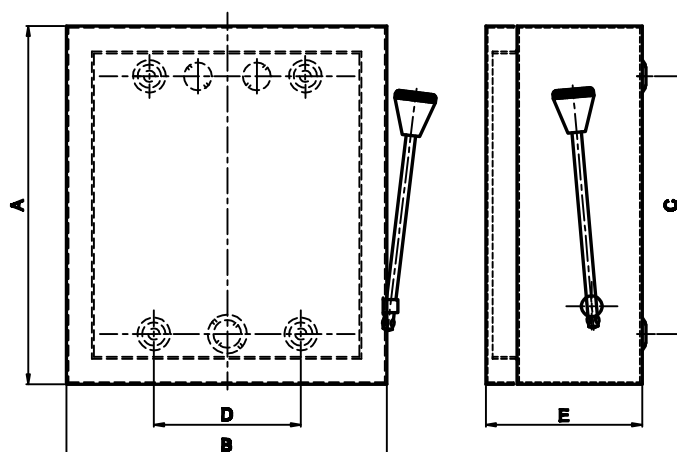
Technical Specifications

Specifications	: IS/IEC 60947-3
Rated Current	: 16A, 32A, 63A, 100A, 200A, 320A
Number of Poles	: SPN, DP, TP, TPN & FP
Utilization Category	: AC - 22/23A&B
Rated Voltages (Ue)	: 240V / 415V AC
Insulation Voltage (Ui)	: 660V
Rated Frequency	: 50Hz
Impulse withstand voltage (Uimp)	: 4kV
Impulse power frequency voltage	: 2.5kV (50Hz)
Housing material	: Sheet Steel Enclosure
Degree of Protection	: IP 23, 40, 43
Connecting Terminals	: Combination box terminals on incoming & outgoing sides. Suitable for single-core, stranded and flexible conductors upto 63A rating & above ratings with box terminal at outgoing side and strip terminal at incoming side.
Electrical Service Life	: 10000 operations

Dimensions



RATINGS	A	B	C	D	E	F	G
SPN/DP-16A	136.5	94.5	146	103	106	60.5	61
SPN/DP-32A	217.5	136	230	146	167	82	80.5
TP/TPN-16A	217.5	174	230	186	170	87	80.5
TP/TPN-32A	260.5	207.5	272	217	225	121.5	86
FP-32A	260.5	260.5	272	272	212.5	212.5	83



RATINGS	A	B	C	D	E
DP-32A	260	160	205	105	75
DP-63A	330	201	269	136.5	120
TP/TPN-63A	330	283	260	147	120
FP-63A	330	330	267	192.5	120
TP/TPN-100A	405	330	369	175	145
FP-100A	405	430	375	330	145
TP/TPN-200A	505	330	430	175	145
FP-200A	505	430	430	275	145
TP/TPN-320A	550	450	495	430	160



IS/IEC 60947-3



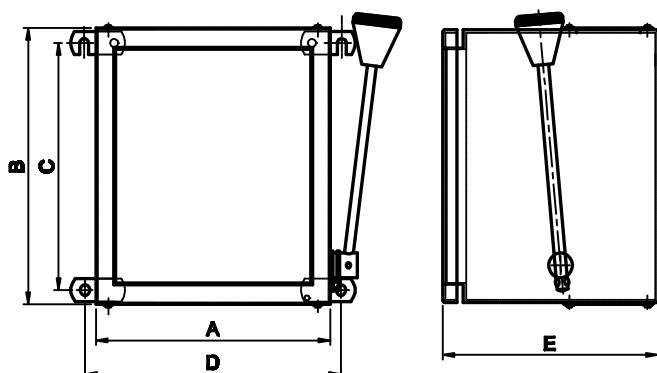
Fuse Switch (Double Break)

Introduction

SHIP Switchgears is the manufacturer of complete range of heavy duty Fuse Switch Units which are offered to suit varied power distribution applications. The heavy duty Fuse Switches are fully tested with short circuit breaking capacity of 80kA at 415V.

Constructional Features

- Quick make and break operation.
- Complete range ISI Marked (TPN-63A, 100A, 200A, 300A & 400A).
- Bases are made of phenolic material with fire retardant shrouds.
- Tin plated contacts for high conductivity & longer life.
- Enclosure make of CRCA sheet steel duly pretreated and powder coated.
- Terminals suitable for A.I. & CU conductors.
- Door interlocking facility available.
- Double break isolation per pole.
- CRCA sheet steel cable entry boxes are also available on request.
- Contact suitable for bolted type HRC fuses.



Technical Specifications

Specifications	: IS 60947-3, IEC 60947-3
Number of Poles	: TPN, FP
Rated Currents	: 63, 100, 200, 300, 400, 500, 630A
Rated Voltages	: 415V AC
Utilization Category	: AC 22 / 23A & B
Rated Insulation Voltage	: 660V
Rated Frequency	: 50Hz
Impulse withstand voltage (Uimp)	: 4 kV
Impulse power frequency voltage	: 3 kV
Enclosure	: CRCA Sheet Steel enclosure duly pretreated & powder coated
Degree of Protection	: IP 20, 40, 43
Electrical Service Life	: Min. 3000 make/break operations
Mechanical Service Life	: Min. 10000 make/break operations

Dimensions

RATINGS	A	B	C	D	E
TPN - 63,100A	365	265	335	288	223
TPN - 200,300A	425	330	375	350	290
TPN - 400A	470	420	415	440	320



Off Load Changeover Switch

Introduction

SHIP Switchgears is leading manufacturer of OFF-Load Changeover Switches with side handle operation with wide application in all industrial and residential where individual system required safe and reliable transfer of power supply from main to standby supply and vice-versa. Wide range available from 32A to 1250A.

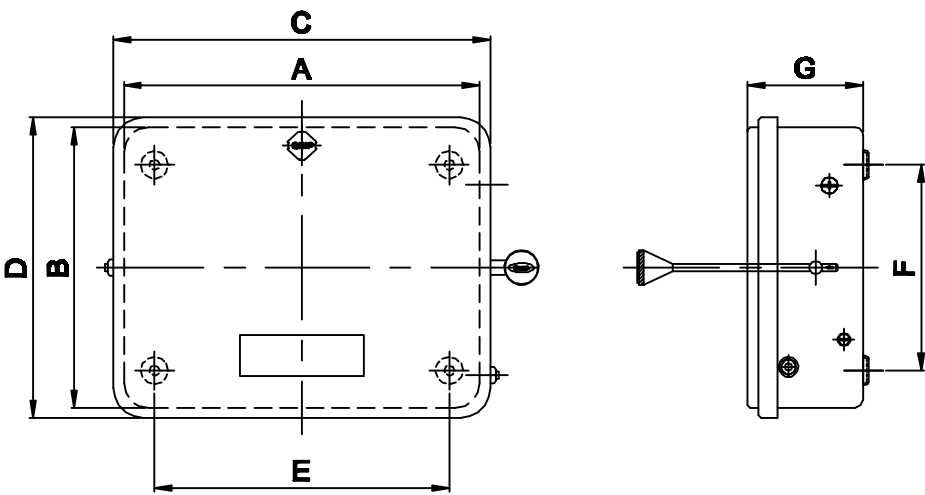
Constructional Features

- Porcelain terminal blocks upto 63A rating are provided for cable termination having excellent mechanical, thermal and dielectric properties.
- Also 63A and above ratings are available with knife type blade contacts.
- High grade ETP Copper used for better conductivity and longer life.
- Quick make & break operation.
- High mechanical endurance.
- Side handles operation.
- Enclosed housing to avoid dust ingress.
- Double break contacts per pole.
- Terminals suitable for Al and copper conductors.
- Door interlock facility.

Technical Specifications

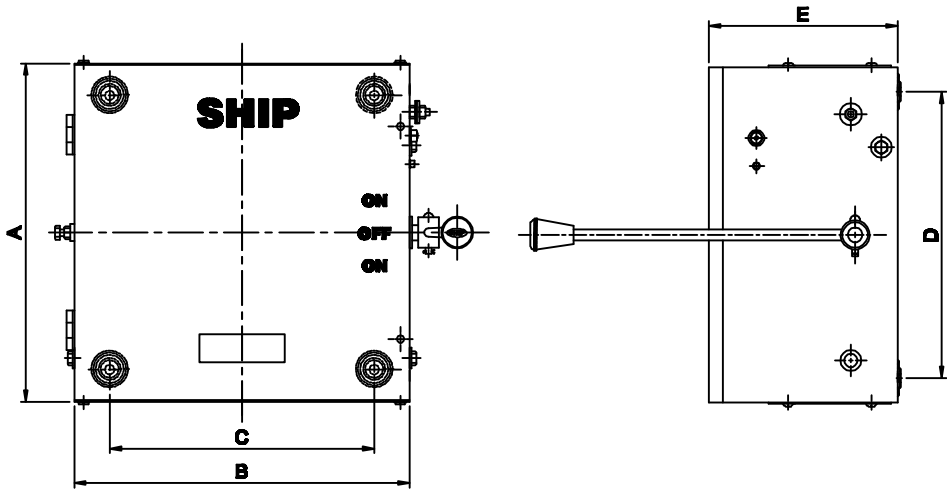
Specifications	: IS 60947-3, IEC 60947-3
Number of Poles	: DP, FP
Rated Currents	: 32, 63, 100, 200, 300, 400 500, 630, 800, 1000, 1250A
Rated Voltages	: 415V AC
Utilization Category	: AC 21A & B
Rated Insulation Voltage	: 660V
Rated Frequency	: 50Hz
Impulse withstand voltage (Uimp)	: 4 kV
Impulse power frequency voltage	: 3 kV
Housing material	: CRCA Sheet Steel enclosure duly pretreated & powder coated
Degree of Protection	: IP 20, 40, 43
Electrical Service Life	: Min. 5000 make/break operations

Dimensions



OFF LOAD CHANGE OVER SWITCH (DEEP DRAWN BODY)

RATINGS	A	B	C	D	E	F	G
DP - 16A	136.5	94.5	146	103	108	67.5	66
DP - 32A	208	157	220	165	163.5	111.5	97
FP - 32A	260	208	275	220	212	159	97



OFF LOAD CHANGEOVER SWITCH

RATINGS	A	B	C	D	E
DP - 63A	330	200	270	135	120
FP - 63A	330	285	260	220	120
FP - 100A	355	355	285	275	200
FP - 200A	495	425	430	355	250
FP - 400A	510	425	455	445	290
FP - 800A	610	560	555	545	355



Busbar Chamber

Introduction

SHIP Switchgears is a manufacturer of sheet metal fabricated Busbar chambers as per customer requirements / specification. Sheet metal fabricated body and cover rust protected and phosphated in 8 tank process. Cover of busbar chamber is detachable to facilitate easy wiring. We are using electrolytic copper material for busbars. Our busbar designed ensure the correct rating of current.

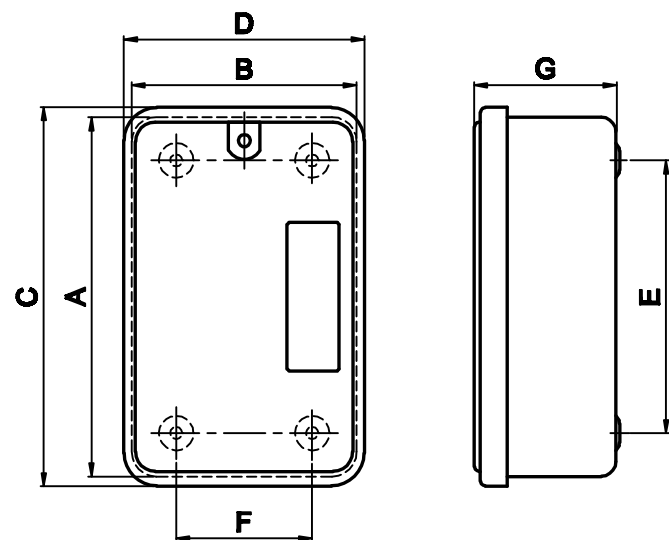
Constructional Features

- Busbar chamber made with electrically live parts do not get exposed.
- High grade copper busbar dully hard bright tin plated used.
- Weather proof design - Perfect fitted gaskets which ensure ingress protection.
- Suitable for flush and surface mounting.
- 32A rating is available in deep drawn CRCA sheet steel enclosure.

Technical Specifications

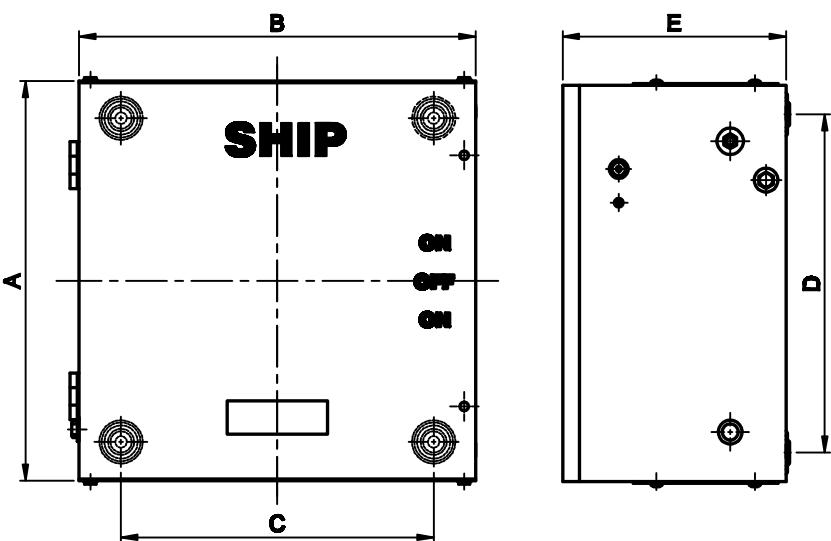
Specifications	: IS 8623, IEC 60439-1
Number of Poles	: SPN, DP, TPN, FP
Number of Ways	: 4, 6, 8, 10, 12
Rated Currents	32A to 800A
Rated Voltages	: 240V, 415V AC
Rated Insulation Voltage	: 660V
Rated Frequency	: 50Hz
Impulse withstand voltage (Uimp)	: 4 kV
Impulse power frequency voltage	: 3 kV
Housing material	: Sheet Steel enclosure duly pretreated & Powder coated
Degree of Protection	: IP 20, 40, 43

Dimensions



BUSBAR CHAMBER (DEEP DRAWN BODY)

RATINGS	A	B	C	D	E	F	G
DP - 32A	220	135	235	145	183	99.5	78.5
FP - 32A	260	220	275	230	215	160	81.5



BUSBAR CHAMBER

RATINGS	A	B	C	D	E
FP - 63A	320	280	275	220	120
FP - 100A	390	330	330	260	155
FP - 200A	415	390	350	330	155
FP - 400A	560	415	445	345	155



Distribution Fuse Board

Introduction

SHIP Switchgears is the manufacturer of complete range of Distribution Fuse Boards. Distribution Fuse Boards are offered to suit varied power distribution applications. Fuse bases and carriers are made from High class porcelain material.

Constructional Features

- Porcelain fuse base and carrier are provide for out going cable termination have excellent.
- High mechanical, thermal and dielectric properties.
- High grade ETP Copper Busbar used.
- Weather proof design - Perfect fitted gaskets which ensure ingress protection.
- Suitable for flush and surface mounting.
- Enclosure made from CRCA sheet steel duly pretreated & powder coated.
- Porcelain fuse base & carrier conforms to IS:2086.

Technical Specifications

Specifications	: IS 8623, IS 2086
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Number of Poles	: SPN / TPN
-----------------	-------------

Rated Current	: 16, 32, 63, 100A
---------------	--------------------

No. of Ways	: 2, 3, 4, 6, 8, 10
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Rated breaking capacity	: 2kA & 4kA for porcelain base & carrier
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Rated Voltages	
Single Pole & Neutral	: 240V AC

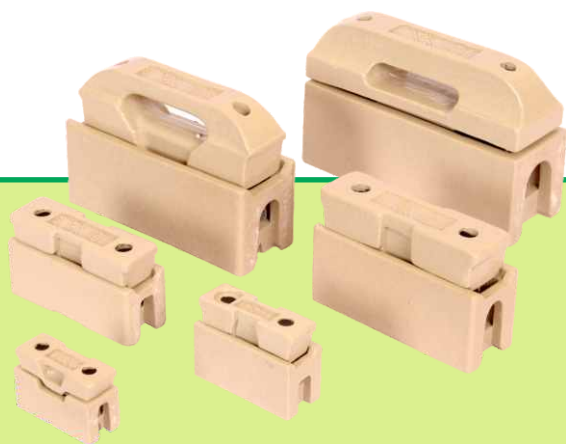
Rated Voltages	
Three Pole & Neutral	: 415V AC

Insulation Voltage	: 660V
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Rated Frequency	: 50Hz
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Impulse withstand voltage (Uimp)	: 4kV
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Degree of Protection	: IP 20, 23, 40, 42
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Porcelain Fuse Base & Carrier (Kitkat)

Introduction

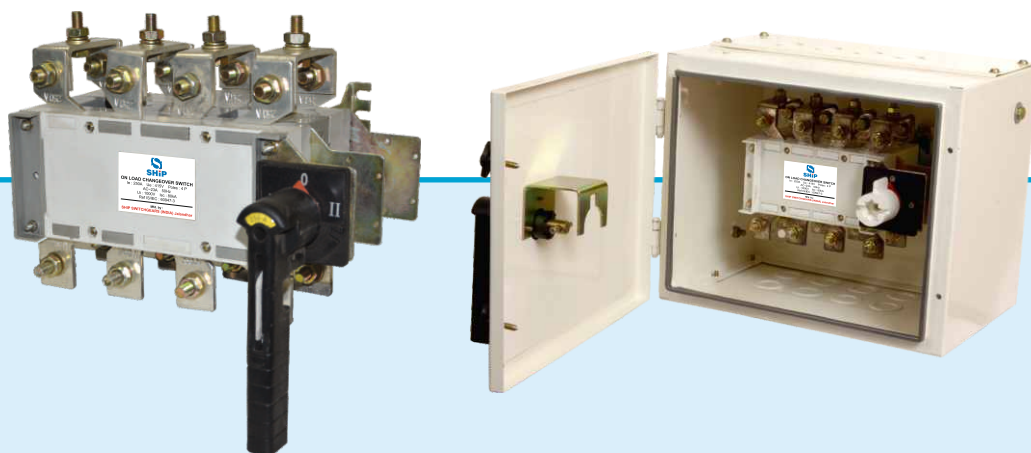
SHIP Switchgears is one of the largest manufacturers of high quality, reliable performance and low maintenance of rewirable type porcelain fuse unit (kitkat). We get our range checked and tested on various parameters as per Indian standard with the help of our technical professionals to ensure best quality products.

Constructional Features

- Complete range available.
- Hard bright tin plated contacts for high conductivity & longer life.
- Terminals suitable for Al & CU conductors.
- Base and Carrier made of electrical grade porcelain material for longer life.
- Also available with and without extended terminals.
- 32 & 63A rating also available in handle type carrier.

Technical Specifications

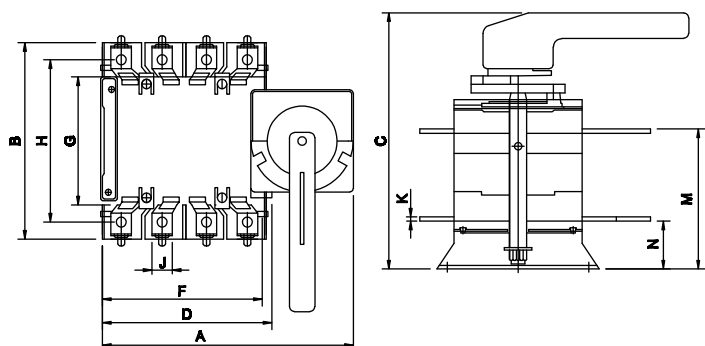
Specifications	: IS 2086
Rated Current	: 16, 32, 63, 100, 200 320, 400, 500A
Rated breaking capacity	: 2kA, 4kA
Rated Voltages	: 240V, 415V AC
Insulation Voltage	: 660V
Rated Frequency	: 50Hz
Impulse withstand voltage (Uimp)	: 4kV
Impulse power frequency voltage	: 3kV



ON Load Changeover Switch

Constructional Features

- Compact in size.
- Quick make & break operation.
- High electrical & mechanical endurance.
- Advance neutral design.
- Enclosed housing to avoid dust ingress.
- Four break contacts per pole.
- Load and line reversibility.
- Door interlock and padlock facility.
- Available in open execution & sheet steel enclosure.
- Enclosure made from CRCA sheet steel duly pretreated & powder coated.



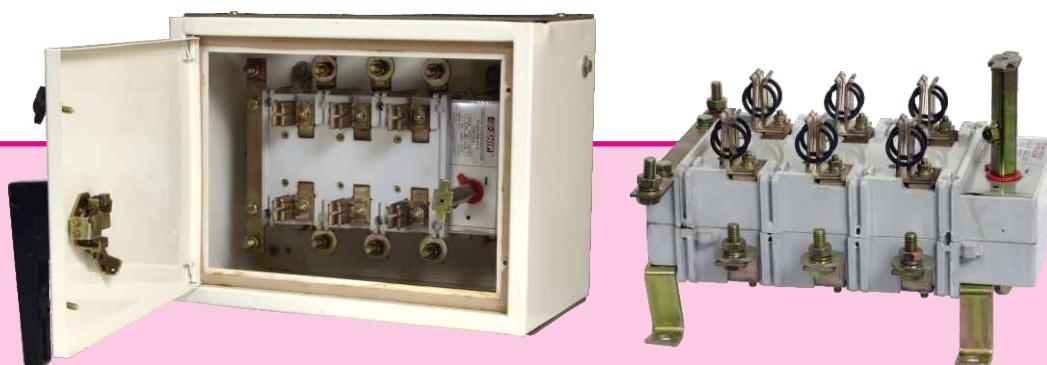
Technical Specifications

Specifications	: IS 60947-3, IEC 60947-3
Number of Poles	: FP
Rated Currents	: 63, 100, 125, 160, 200, 250, 320, 400, 630, 800, 1000, 1250A
Rated Voltages	: 415V AC
Utilization Category	: AC 23A
Rated Insulation Voltage	: 660V
Rated Frequency	: 50Hz
Impulse withstand voltage (Uimp)	: 4 kV
Impulse power frequency voltage	: 3 kV
Enclosure	: CRCA Sheet Steel enclosure duly pretreated & powder coated
Degree of Protection	: IP 20, 40, 43
Electrical Service Life	: Min. 5000 make/break operations
Mechanical Service Life	: Min. 10000 make/break operations

Dimensions

RATINGS	A	B	C	D	F	G	H	J	K	N	M
63A	144	115	150	96	86	75	95	12	2.5	28	82
100A	144	115	150	96	97	75	95	14	2.5	28	82
125A	225	155	165	170	145	95	115	22	3	50	120
160A	225	155	165	170	145	95	115	25	3	50	120
200A	225	155	165	170	145	95	115	25	4	50	120
250A	280	200	180	230	210	112	130	32	4	60	140
320A	280	200	180	230	210	112	130	32	4.5	60	140
400A	360	250	255	290	260	175	200	40	5	85	195
630A	360	250	255	290	260	175	200	55	5	85	195

GEN. TOL. = $\pm 1.5\text{mm}$



Switch Disconnect Fuse

Introduction

SHIP Switchgears is the manufacturer of Switch Disconnect Fuses with Front Handle operation with wide application in all industrial and residential installations where individual system requires safe and reliable operation. Wide range available from 63A to 630A.

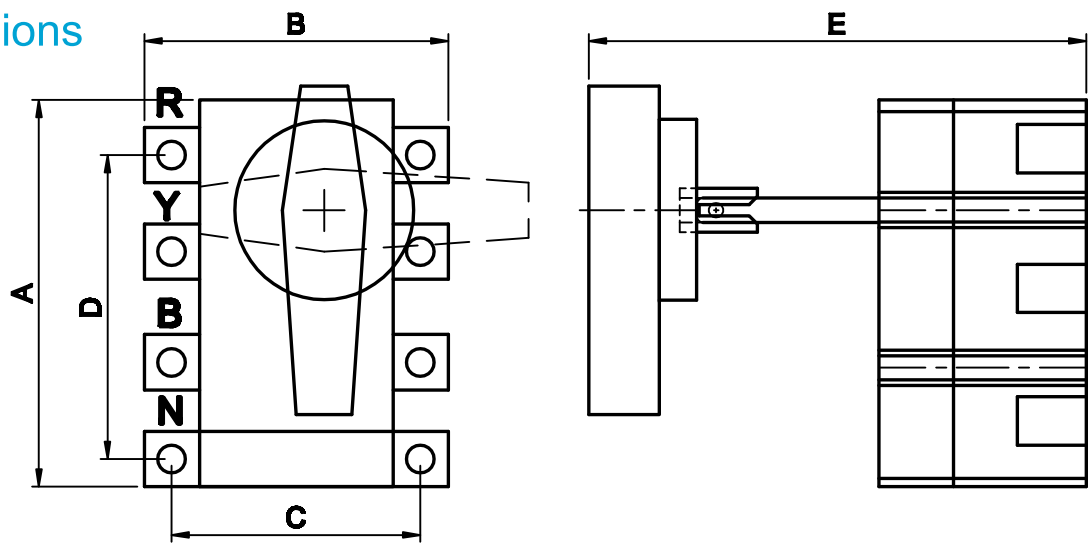
Constructional Features

- Quick make and break operation. 4 breaks per pole for longer life.
- High making and breaking capacity. No Line/Load restriction.
- Fuse contacts available suitable for bolted / knife type HRC fuses.
- Suitable for horizontal and vertical position mounting.
- Handle provided with door interlocking, padlocking & defeat mechanism facility.
- Suitable for Power Control Centers & Motor Control Centers.
- Also suitable for D.C. and Capacitor application.
- Available in open execution and in sheet metal enclosure.
- Enclosure made of CRCA sheet steel duly pretreated and powder coated.

Technical Specifications

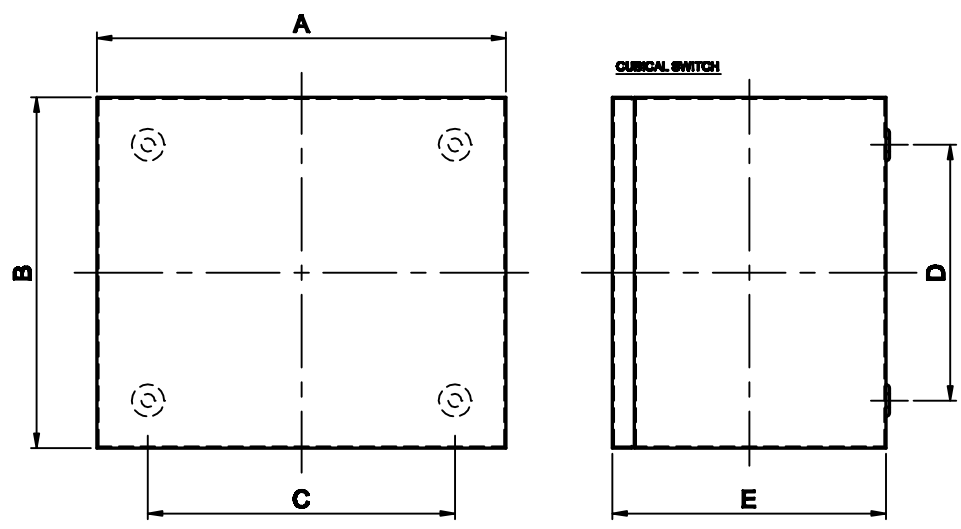
Specifications	: IS 60947-3, IEC 60947-3
Number of Poles	: TPN, FP
Rated Currents	: 32, 63, 100, 125, 200, 250, 320, 400, 630A
Rated Voltages	: 415V AC
Utilization Category	: AC 23A
Rated Insulation Voltage	: 660V
Rated Frequency	: 50Hz
Impulse withstand voltage (Uimp)	: 4 kV
Impulse power frequency voltage	: 3 kV
Enclosure	: CRCA Sheet Steel enclosure duly pretreated & powder coated
Degree of Protection	: IP 20, 40, 43
Electrical Service Life	: Min. 5000 make/break operations
Mechanical Service Life	: Min. 10000 make/break operations

Dimensions



OPEN EXECUTION

RATINGS	A	B	C	D	E
32, 63A	140	110	90	110	180
100, 125A	205	120	90	110	170
250, 320, 400A	325	240	190	250	195



WITH ENCLOSURE

RATINGS	A	B	C	D	E
32, 63, 125A	280	240	210	175	200
250, 320, 400A	420	320	350	250	240



MCB Distribution Boards

Introduction

SHIP MCB Distribution Boards are the basis of development and growth in meeting all the needs for a residential, commercial and infrastructure segments. The wide range of Distribution Boards enables each customer to select an individual and economical configuration according to his requirements and satisfaction.

SHIP MCB Distribution Boards have been designed using the latest available technology and conforms to the latest standards : IS 13032, IEC/BSEN 60439-1&3.

Constructional Features

Available in Single Door / Double Door.

Masking (Cement & Water Guard) : This arrangement keeps water and cement dust away during construction flexibility during installation. The entire door need not be dismantled thus saving valuable installation time. Also ensures that electrically live parts do not get exposed.

Reversible Doors : Doors can be reversed and fitted on to the right side also by the user.

Weather proof design : Perfect fitted gaskets which ensure ingress protection.

Suitable for flush and surface mounting.

Enclosure made from CRCA sheet steel duly pretreated & powder coated.

Type / Series : Single Door, Double Door, Whiteline, Euroline, Euro Supreme, Plastic Enclosure, Vertical Design, Consumer Unit and Rotary type MCB distribution boards.

Technical Specifications

Specifications	: IS 13032, IEC/BSEN 60439-1&3
Rated Currents (In)	63A / 100A
Rated Voltages (Ue)	
Single Phase	: 240V AC
Three Phase	: 415V AC
Insulation Voltage (Ui)	: 660V
Rated Frequency	: 50Hz
Impulse withstand voltage (Uimp)	: 4kV
Impulse power frequency voltage	: 3kV
Housing material	: CRCA Sheet Steel enclosure duly pretreated & powder coated
Degree of Protection	: IP 20, 40, 42 as per IS/IEC 60898-I
DIN Bar for Mounting	: DIN rails, 35 mm



Distribution Board
Plastic
1 / 2, 3 / 4 Pole



Distribution Board
(Single Door)
SP : 1, 2, 3, 4, 6 Poles
SPN : 4, 6, 8, 10, 12, 16 Ways



Distribution Board
(Single Door)
TPN : 4, 6, 8, 10, 12 Ways



Distribution Board
Consumer Unit
SPN : 2+4, 2+6, 2+8,
2+10, 2+12 Ways



Distribution Board
Euroline Series
SPN : 4, 6, 8, 10, 12, 16 Ways
TPN : 4, 6, 8, 10, 12 Ways



Distribution Board
Eurosupsreme Series
SPN : 4, 8, 12, 16 Ways
TPN : 4, 6, 8 Ways



Distribution Board
Vertical Type
TPN : 4, 8, 12 Ways

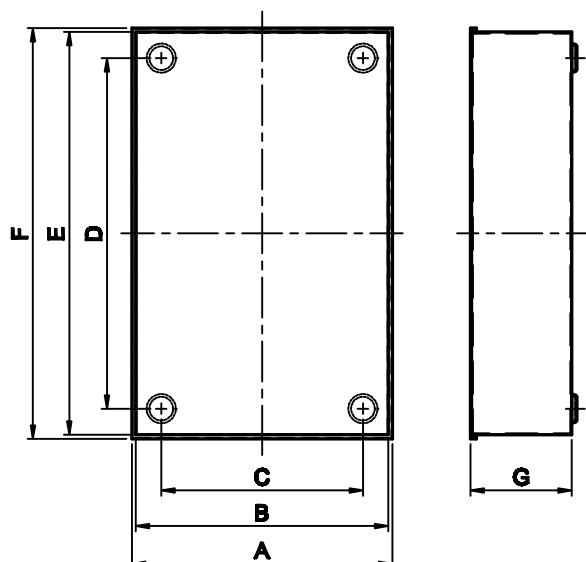


Distribution Board
Phase Selector
TPN-40A : 4, 6, 8 Ways
TPN-63A : 4, 6, 8 Ways



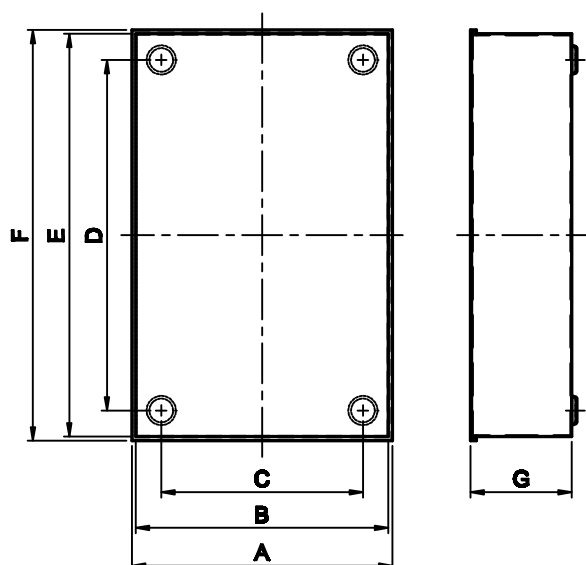
Distribution Board
Loadline
TPN : 4, 8, 12 Ways

Dimensions



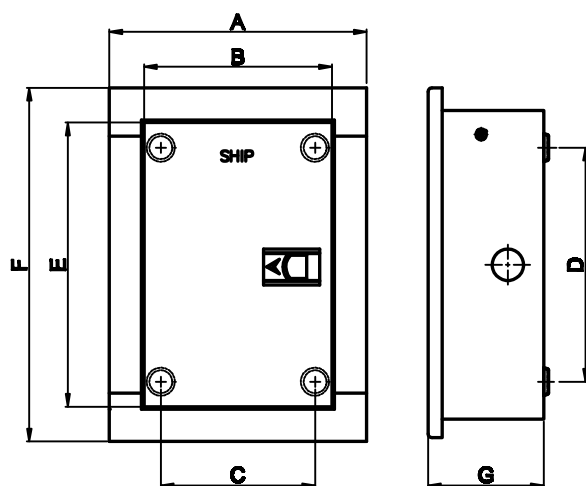
MCB DISTRIBUTION BOARD (SINGLE DOOR)

WAYS/POLE	A	B	C	D	E	F	G
SSP / 1 & 2	75	65	40	120	155	160	63
SSP / 3 & 4	110	100	65	155	190	200	63
SSP / 6	145	135	100	155	190	200	63
SENS/4-SPN	145	135	85	125	180	190	63
SENS/6-SPN	180	170	120	125	180	190	63
SENS/8-SPN	215	205	155	125	180	190	63
SENS/10-SPN	250	240	190	125	180	190	63
SENS/12-SPN	285	275	225	125	180	190	63
SENS/16-SPN	355	345	295	125	180	190	63



MCB DISTRIBUTION BOARD (SINGLE DOOR)

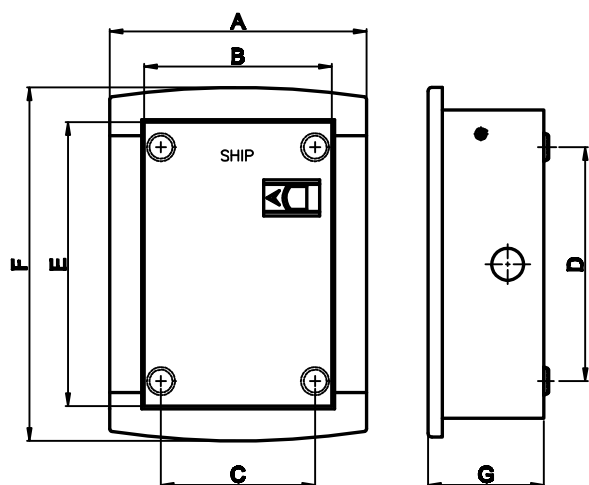
WAYS/POLE	A	B	C	D	E	F	G
SENT/4-TPN	265	255	180	300	375	385	90
SENT/6-TPN	340	330	250	300	375	385	90
SENT/8-TPN	410	400	310	300	375	385	90
SENT/10-TPN	480	470	380	300	375	385	90
SENT/12-TPN	550	540	450	300	375	385	90



**MCB DISTRIBUTION BOARD - PHASE SELECTOR
(ROTARY SWITCH DB) (DOUBLE DOOR) - TPN**

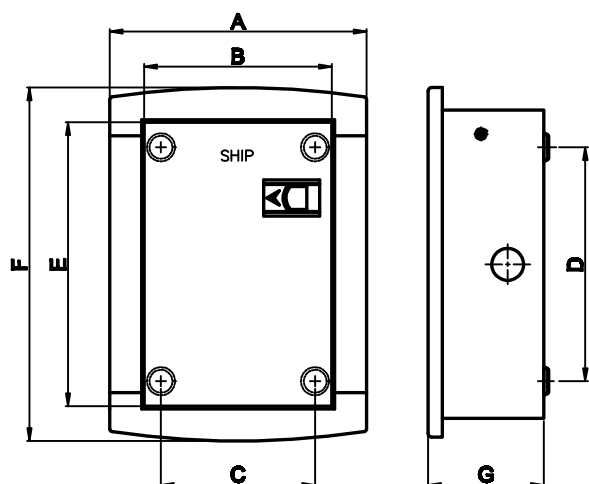
WAYS/ RATING	A	B	C	D	E	F	G
4 / 40A	390	375	260	535	595	610	155
4 / 63A	390	375	260	535	595	610	155
6 / 40A	390	375	260	535	595	610	155
6 / 63A	390	375	260	535	595	610	155
8 / 40A	390	375	260	535	595	610	155
8 / 63A	390	375	260	535	595	610	155

Dimensions



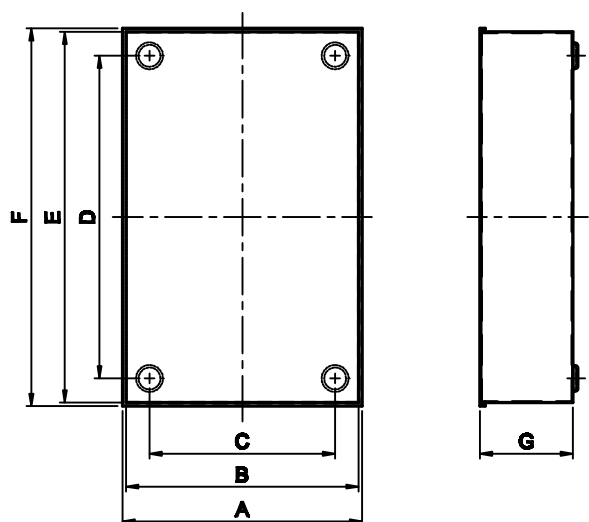
MCB DISTRIBUTION BOARD (EUROLINE SERIES) (DOUBLE DOOR)

WAYS/ POLE	A	B	C	D	E	F	G
4-SPN	167	137	90	155	215	225	90
6-SPN	202	172	120	155	215	225	90
8-SPN	235	205	150	155	215	225	90
10-SPN	270	240	190	155	215	225	90
12-SPN	305	275	225	155	215	225	90
16-SPN	375	350	290	155	215	225	90
4-TPN	280	225	185	300	380	400	102
6-TPN	350	325	255	300	380	400	102
8-TPN	420	395	325	300	380	400	102
10-TPN	490	465	395	300	380	400	102
12-TPN	560	525	465	300	380	400	102



MCB DISTRIBUTION BOARD (EURO SUPREME SERIES) (DOUBLE DOOR)

WAYS/ POLE	A	B	C	D	E	F	G
4-SPN	200	180	120	180	240	270	95
8-SPN	270	250	195	180	240	270	95
12-SPN	340	325	270	180	240	270	95
16-SPN	445	390	340	180	240	270	95
4-TPN	270	255	180	300	380	410	102
6-TPN	340	325	250	300	380	410	102
8-TPN	410	395	320	300	380	410	102



MCB DISTRIBUTION BOARD - VERTICAL TYPE (SINGLE DOOR) - TPN

WAYS	A	B	C	D	E	F	G
4	355	325	255	375	475	450	102
8	355	325	275	430	530	555	102
12	355	325	275	485	585	605	102



Metal Clad Plug & Socket

Introduction

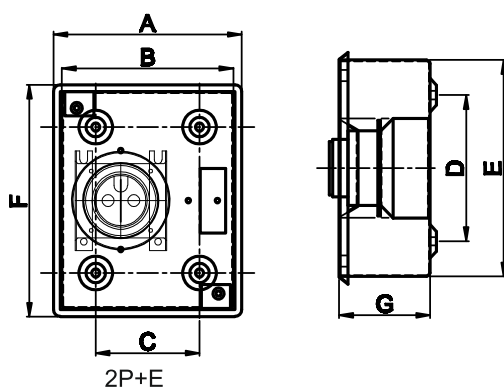
SHIP Metal Clad Plug and Sockets have been designed & made using the latest technology & conforms to the latest standards.

Constructional Features

SHIP Metal Clad Plug and Sockets, outer casing is made of non-corroding die cast aluminium alloy. Interior insulated material moulded of superior grade phenolic/polyester compound. The earth connection makes first & breaks last. Deep recessed socket contact tubes and shrouded plug pins for complete human safety and against accidental contacts.

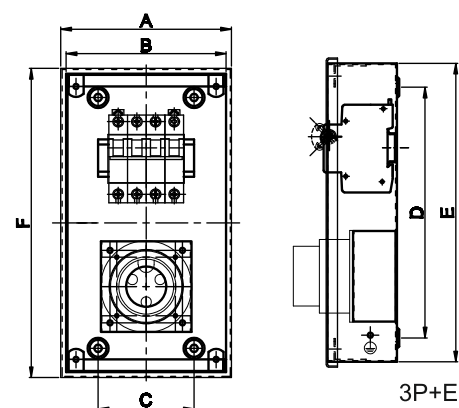
Uniform contact pressure is maintained due to highly conductive and resilient material of the sleeve contacts.

Dimensions

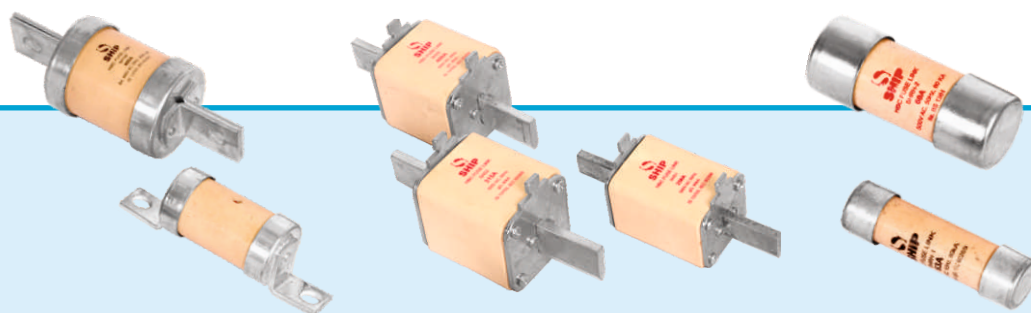


Technical Specifications

Number of Poles	: 2P+E, 3P+E
Rated Currents	20A, 30A
Rated Voltages Single Pole & Neutral	: 240V AC
Rated Voltages Three Pole	: 415V AC
Insulation Voltage (Ui)	: 660V
Rated Frequency	: 50Hz
Impulse power frequency voltage	: 2kV
Housing material	
Plug & Socket	: Aluminium Die Casting
Enclosure	: CRCA Sheet Steel duly pretreated & powder coated
Degree of Protection	: IP 20



RATINGS	A	B	C	D	E	F	G
SPN+E - 10A	125	120	80	100	125	135	63
SPN+E - 20A	125	120	80	100	125	135	63
TP+E - 20A	125	120	—	245	280	290	63
TP+E - 30A	125	120	—	245	280	290	63



HRC Fuse Links (High Breaking Capacity Fuses)

Introduction

SHIP Switchgears offers the new generation of low watt loss HBC fuse links, also known as HRC Fuse Links designed as per the latest Indian and International standards i.e. IS 13703 / IEC 60269 / BS standards.

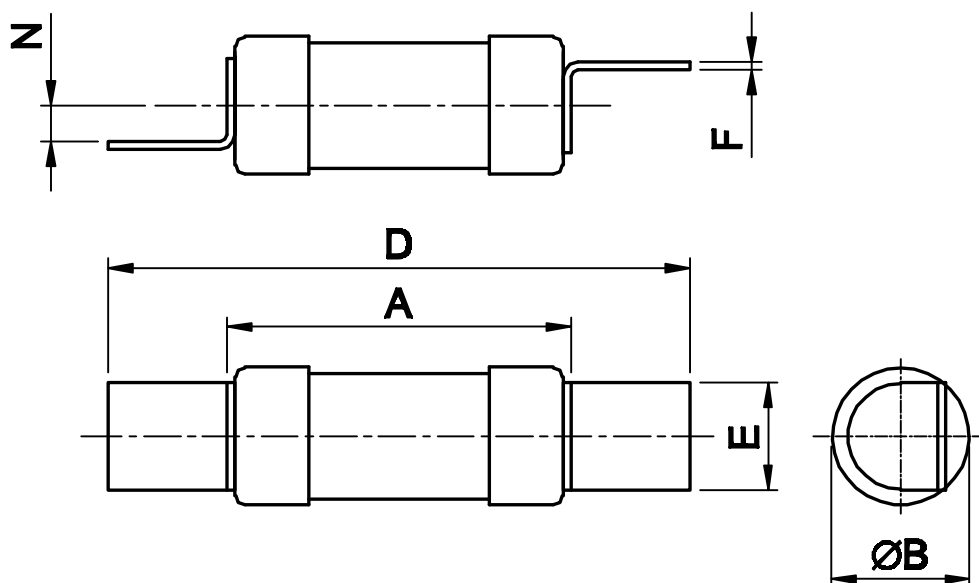
Constructional Features

- Rated breaking capacity of 80/100 kA at 500V.
- Higher breaking capacity is also possible.
- Low power loss ensures cool running & longer life.
- No-deration required for connected equipment.
- Reduction electromagnetic stress as a result of low cut off current thus providing ideal short circuit protection.
- Reduced thermal stress because of lower let through fault energy thus eliminating mechanical damages.
- Reduced power consumption because of low watt losses.
- Suitable for motor started and switching ON power transformer due to superior surge withstand capability.
- Ideal discrimination between major and minor fuse rating.
- Absolutely no emission of gas or flames during operation.
- Utilization category : gG, gL and also available gM on request.
- Interchangeability with all compatible brands.
- Total safety for the equipments.

Technical Specifications

Specifications	: IS 13703 (Part I&2), IEC 60269, BS 88, BS 1361
Rated Currents	: 2A to 630A
Rated breaking capacity	: 80kA, 100kA
Rated Voltage	: 415V, 500V AC
Category	: gG
Bolted Type	: 2, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63, 80, 100, 125, 160, 200, 250, 315, 350, 400, 450, 500, 630A
DIN Type	: 6, 10, 16, 20, 25, 32, 40, 50, 63, 80, 100, 125, 160, 200, 250, 315, 350, 400, 450, 500, 630A
Cylindrical Type	: 6, 10, 16, 20, 25, 32, 40, 50, 63, 80, 100
Insulation Voltage	: 660V
Rated Frequency	: 50 Hz
Ambient Temperature	: 40°C

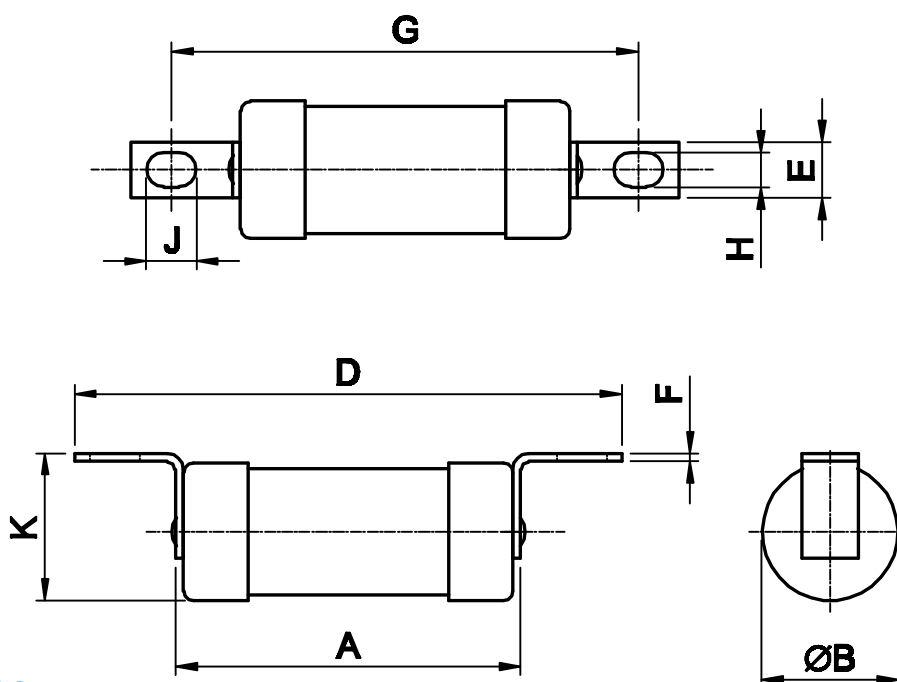
OFFSET PLAIN TAGS



Dimensions

Ref. Size as per IS/IEC/BS	CODE	RATINGS	A	B	D	E	F	N
F1	SHNS	2,4,6,10,16 20,25,32A	35.5	14	59.5	11	0.8	3.7

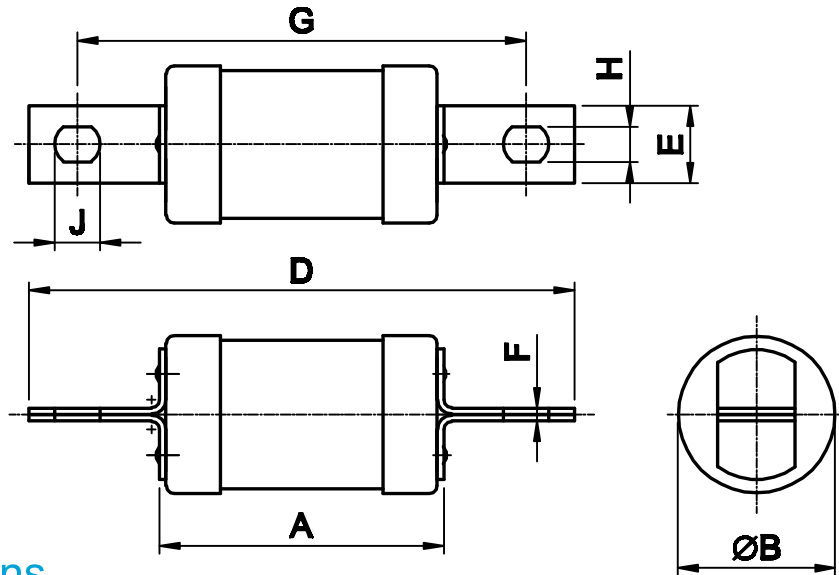
OFFSET TAGS



Dimensions

Ref. Size as per IS/IEC/BS	CODE	RATINGS	A	B	D	E	F	G	H	J	K
A2	SHTIA	2,4,6,10,16 20,25,32A	53.5	21.5	85	8.7	1.2	73	5.5	8	23
A3	SHTIS	35,40,50,63A	53.5	21.5	88.5	13	1.2	73	5.5	10.5	23
A4	SHTCP	80,100,125A	63	31.5	109	17	2.6	94	8.7	10	30.5
A4	SHTFP	125,160,200A	—	—	—	—	—	—	—	—	—

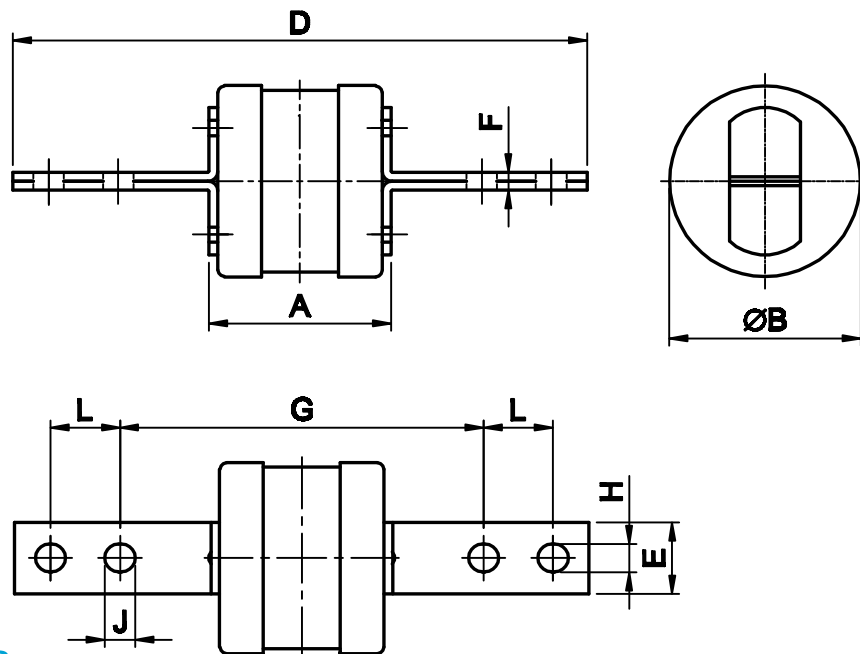
CENTRAL TAG WITH TWO HOLES FIXING



Dimensions

Ref. Size as per IS/IEC/BS	CODE	RATINGS	A	B	D	E	F	G	H	J
B1	SHTC	80,100,125A	61	31.5	135.5	17	3.2	111	8.7	11
B2	SHTF	125,160,200A	70.5	39	135	19	3.2	111	8.7	11
B3	SHTKF	250,300,315A	68.5	50	136	25	3.2	111	8.7	11
B4	SHTMF	355,400A	72	50	136	25	5	111	8.7	11

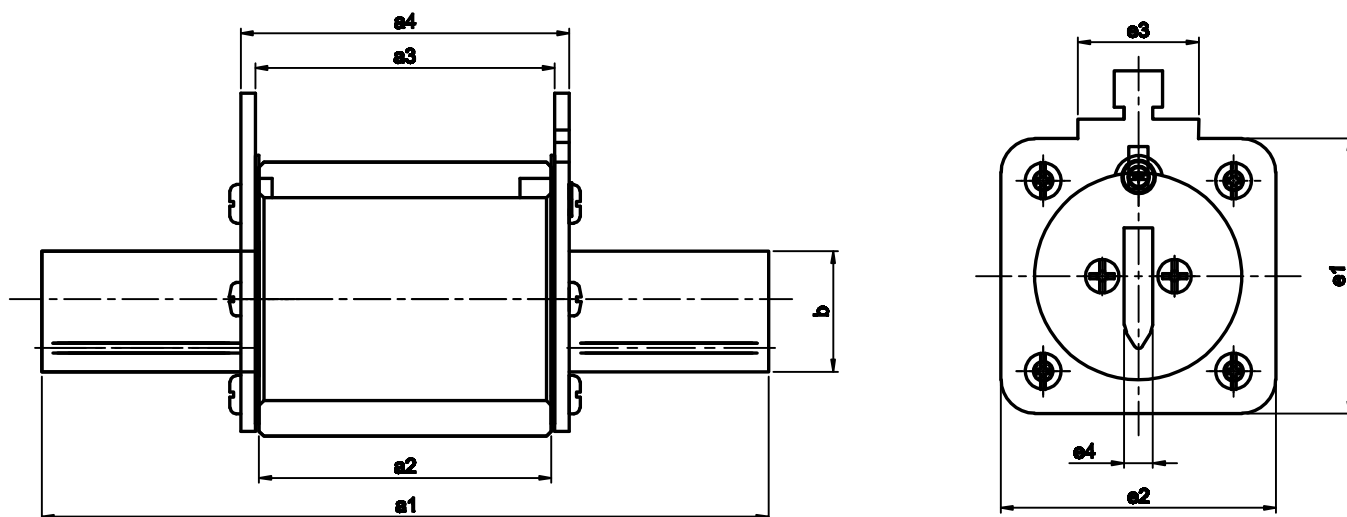
CENTRAL TAGS WITH FOUR HOLES FIXING



Dimensions

Ref. Size as per IS/IEC/BS	CODE	RATINGS	A	B	D	E	F	G	H	J	L
C2	SHTLM	450,500A	66.5	70	210	26	6.4	133	10.5	11	25.5
C2	SHTLM	560,630A	66.5	70	210	26	6.4	133	10.5	11	25.5

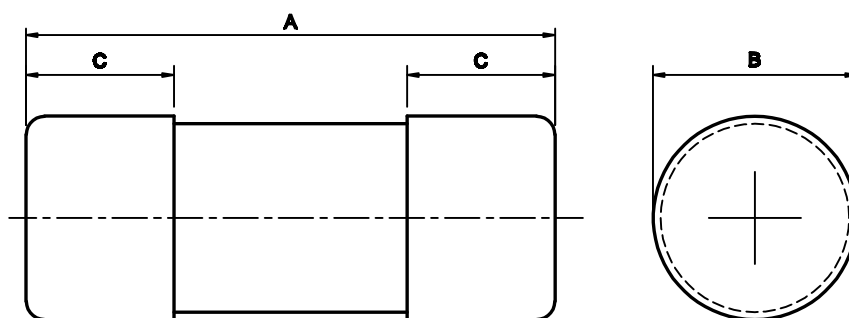
DIN TYPE (KNIFE TYPE)



Dimensions

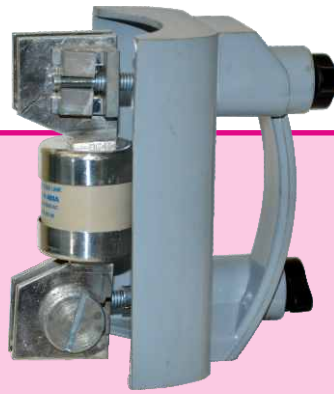
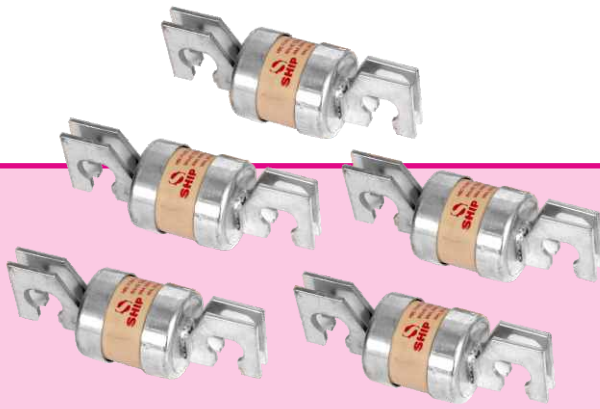
Ref. Size as per IS/IEC/BS	CODE	RATINGS	a1	a2	a3	a4	b	e1	e2	e3	e4
000	SHS000	6, 10, 16, 20, 25 32, 40, 50, 63, 80, 100A	79	44.5	46	49	15	43	21	15	6
00	SHS00	6, 10, 16, 20, 25, 32, 40, 50 63, 80, 100, 125, 160A	79	43	46.5	49.5	15	43	30	20	6
1	SHS1	32, 40, 50, 63, 80, 100, 125, 160, 200, 250A	135	62.5	63	67	20	46	46	22	6
1C	SHS1C	32, 40, 50, 63, 80 100, 125, 160A	135	61	62.5	66.5	15	43	30	20	6
2	SHS2	100, 125, 160, 200, 250, 315, 355, 400A	150	60.5	62	68	25	57	57	25	6
2C	SHS2C	100, 125, 160, 200, 250A	150	61.5	63	67	20	46	46	32	6
3	SHS3	315, 400, 500, 630A	150	60	67.5	67.5	33	72	72	25	6

CYLINDRICAL TYPE



Dimensions

Ref. Size as per IEC/BS 1361	CODE	RATINGS	A	B	C
14 x 51	SHRH1	2, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63A	51	14	10
IIa	SHRH2	15/16, 20, 25, 30/32, 40, 50, 60/63, 80A	57	22	16
IIb	SHRH3	15/16, 20, 25, 30/32, 40, 50, 60/63, 80, 100A	57	30	16



Wedge Type HRC Fuses & Carrier

Introduction

SHIP Wedge Type HRC Fuses and Carriers have specially been designed and conforms to the latest BS standards. Special pure silver elements of low watt losses are custom built for specific customers. They have been designed for interrupting short circuits of more than 80kA.

Constructional Features

- Entire range conforms BS/IEC standards.\
- Low cut-off current of HRC Fuses.
- Lower let through fault energy of HRC Fuses.
- Low power losses of the fuses.
- Superior surge with stands capability.
- Interchangeability with all compatible brands.
- Special grade Copper / Silver elements used in HRC Fuses.
- Carrier housing made of glass fiber reinforced polyester (DMC) having high electrical and mechanical properties. Available in fixing centre 82mm or 92mm.

Technical Specifications

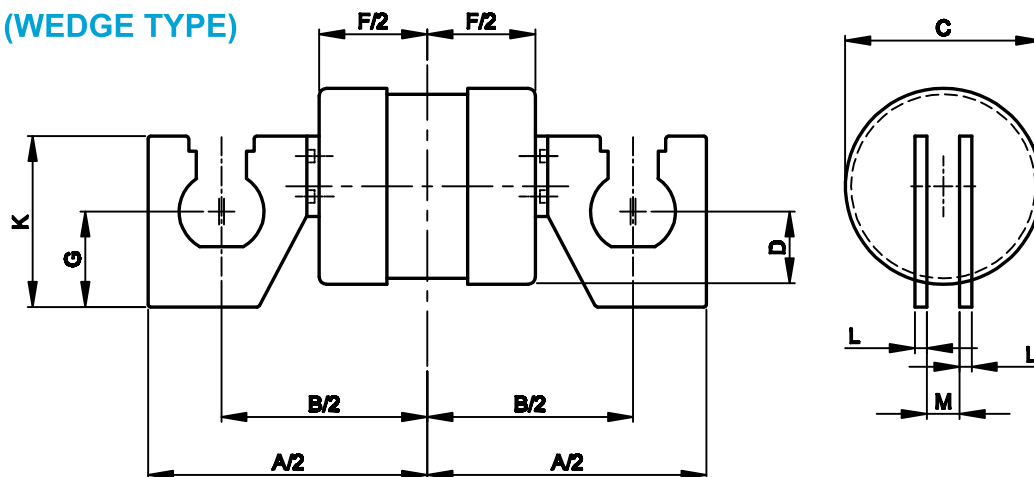
HRC FUSES

Specifications	: BS 88-5
Type & Rating	:
SHJ-82	: 32, 63, 80, 100, 125, 160 200, 250, 315A
SHJ-92	: 32, 63, 80, 100, 125, 160 200, 250, 315A
SHJP-82	: 32, 63, 80, 100, 125, 160 200, 250, 315, 400A
SHJP-92	: 32, 63, 80, 100, 125, 160 200, 250, 315, 400A
Rated breaking capacity	: 80kA
Rated Voltage	: 415V, 500V AC
Fixing Center	: 82mm, 92mm
Insulation Voltage	: 660V
Rated Frequency	: 50 Hz
Ambient Temperature	: 40°C

HRC FUSE CARRIER

Specifications	: BS 88-1
Rating	: 32 - 400A
Rated breaking capacity	: 80kA with HRC Fuses
Rated Voltage	: 500V AC
Fixing Center	: 82mm, 92mm
Insulation Voltage	: 660V
Rated Frequency	: 50 Hz
Ambient Temperature	: -5°C to 55°C

HRC FUSE (WEDGE TYPE)



Dimensions

	RATINGS	A	B	D	E	F	G	K	L	L
SHJ-82	20,25,32,40,50,63,80,100, 125,160,200,250,315A	111	82	39	14.5	43	19	34	2.4	6.5
SHJ-92	20,25,32,40,50,63,80,100, 125,160,200,250,315,400A	128	92	39	14.5	41	24	39	3.2	8.1
SHJP-82	20,25,32,40,50,63,80,100, 125,160,200,250,315A	112	82	50	15	43	19	34	2.4	6.5
SHJP-92	20,25,32,40,50,63,80,100, 125,160,200,250,315,400A	128	92	50	11.5	41	24	39	3.2	8.1

DMC Fuse Carrier

Suitable for : Wedge Type HRC Fuse with fixing centre - 92mm



DMC Fuse Carrier

Suitable for : Wedge Type HRC Fuse with fixing centre - 82mm





Bakelite Fuse Fittings

Introduction

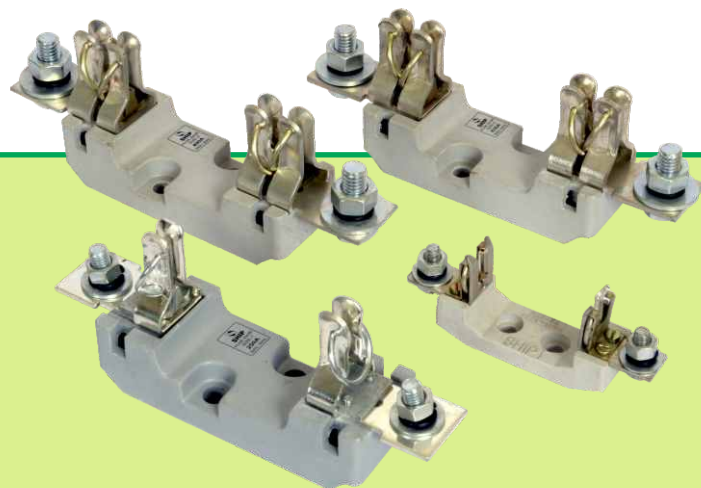
SHIP Switchgears is a manufacturer of Fuse Holder and Carrier to suit the bolted type HRC Fuses. Housing made of electrical grade bakelite powder material having High Electrical and Mechanical properties. Non-Inflammable, Fire retardant and Self-Extinguishing. Terminal holes size for cable connection are adequate to accommodate aluminium cable also.

Constructional Features

- Housing made of bakelite having high electrical and mechanical properties, non-inflammable, fire retardant and self extinguishing.
- Contacts of electrolytic brass / copper, Hard bright tin plated with back up springs for contact pressure, copper / silver plated with backup springs for contact pressure.
- Terminal suitable for Al. and Cu. conductors.
- Suitable for bolted type HRC fuse links.

Technical Specifications

Specifications	: IS 13703 (Part I), IEC 60269, BS 88
Type & Rating	: Front Connection 20 / 32A, 32A, 63A, 100A, 125A
Rated breaking capacity	: 80kA
Rated Voltage	: 500V AC
Insulation Voltage	: 660V
Rated Frequency	: 50Hz
Impulse withstand voltage (Uimp)	: 4kV
Impulse power frequency voltage	: 3kV
Ambient Temperature	: 40°C



DMC Fuse Bases (DIN Type Fuse Bases)

Introduction

SHIP Switchgears is a manufacturer of DIN type HRC Fuse Bases. HRC Fuse Bases are designed by electrical experts who understand the needs of the clients and by using latest technology. Use of latest technology and unique design makes DIN type HRC Fuse Bases.

Constructional Features

- Housing of glass fiber reinforced polyester (DMC) having high electrical and mechanical properties, non-flammable, fire retardant and self extinguishing.
- Contacts of electrolytic Copper, Tin plated with backup springs for contact pressure.
- Terminal bolt sizes are 10mm for 250A and 400A and 12mm for 630A.
- Suitable for Blade contact type / DIN type HRC fuse links in size 000, 00, 1, 2 & 3.

Technical Specifications

Specifications	: IS 13703 (Part I), IEC 60269, BS 88
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Type & Rating	:
Size 00	: 100, 125, 160A
Size 1	: 250A
Size 2	: 400A
Size 3	: 630A

Rated breaking capacity	: 80kA
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Rated Voltage	: 500V AC
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Insulation Voltage	: 660V
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Rated Frequency	: 50Hz
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Impulse withstand voltage (Uimp)	: 4kV
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Impulse power frequency voltage	: 3kV
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Ambient Temperature	: 40°C
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Oil Immersed Starters (DOL & Star-Delta)



Introduction

SHIP Switchgears is the manufacturer of an extensive range of Oil Immersed Motor Starter such as Direct on Line, Star Delta manually operated (Handle Type), Semi-Automatic and Fully Automatic Oil Immersed Starters.

Constructional Features

- Oil Tank deep drawn from CRCA sheet steel pre-treated and powder coated for elegant finish.
- Silver/Tin plated copper contacts for high conductivity and longer life.
- Making & breaking of contacts in oil for quick quenching of arc.
- Individually tested Magnetic / Bi-metallic overload relays for complete protection of your motor.
- Available in Directo-on-Line , Star Delta, Semi-Automatic and Fully Automatic models.
- Body made from CRCA sheet steel duly pretreated & powder coated / painted.

Technical Specifications

Specifications : IS/IEC 60947-4

Type & Ratings :

Direct Online	: 3 - 35HP
Star-Delta Manual Operated	: 5 - 60HP
Star-Delta Semi-Automatic	: 5 - 30HP
Star-Delta Fully Automatic	: 5 - 30HP

Rated Voltages : 415V AC

Insulation Voltage : 660V

Rated Frequency : 50 Hz

Impulse withstand voltage (Uimp) : 4kV

Impulse power frequency voltage : 3kV

Electrical Service Life : Min. 10000 make/break operations

Ambient Temperature : 40°C



Motor Starters & Submersible Pump Control Panels

Introduction

SHIP Switchgears is the manufacturer of an extensive range of Motor Starters & Submersible Pump control panels.

Constructional Features

- Silver/Tin plated copper contacts for high conductivity and longer life.
- Making & breaking of contacts for quick quenching of arc.
- Individually tested for complete protection of your motor.
- Available motor starter in 3 Phase & Single Phase, Direct-on-Line models & Submersible Pump Control Panels in single phase.
- Body deep drawn from CRCA sheet steel, duly pretreated & powder coated.

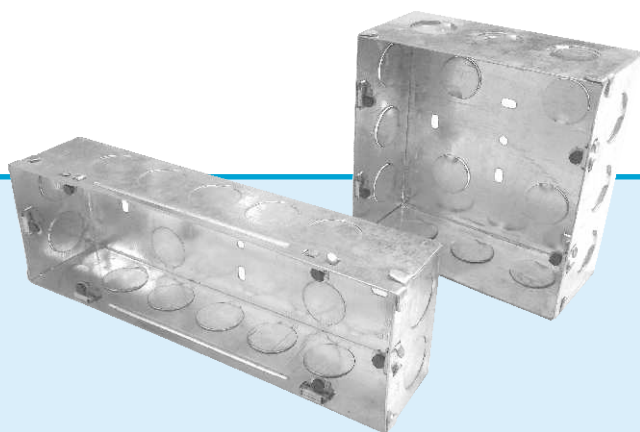
Technical Specifications Motor Starters

Specifications	: IS/IEC 60947-4
Ratings	:
Direct Online (Single Phase)	: 1 - 5HP
Direct Online (Three Phase)	: 1 - 12.5HP
Rated Voltages	:
Single Phase	: 240V AC
Three Phase	: 415V AC
Insulation Voltage	: 660V
Rated Frequency	: 50 Hz
Impulse withstand voltage (Uimp)	: 4kV
Impulse power frequency voltage	: 3kV
Electrical Service Life	: Min. 10000 make/break operations
Ambient Temperature	: 40°C



Technical Specifications Submersible Pump Control Panels

Specifications	: IS/IEC 60947-4
Ratings	:
With Relay	: 0.5, 1, 1.5, 2, 3, 5HP
Without Relay	: 0.5, 1, 1.5, 2, 3, 5HP
Rated Voltage	: 240V AC
Insulation Voltage	: 660V
Rated Frequency	: 50 Hz
Impulse withstand voltage (Uimp)	: 4kV
Impulse power frequency voltage	: 3kV
Electrical Service Life	: Min. 10000 make/break operations
Ambient Temperature	: 40°C



G.I. Concealed Metal Boxes

Introduction

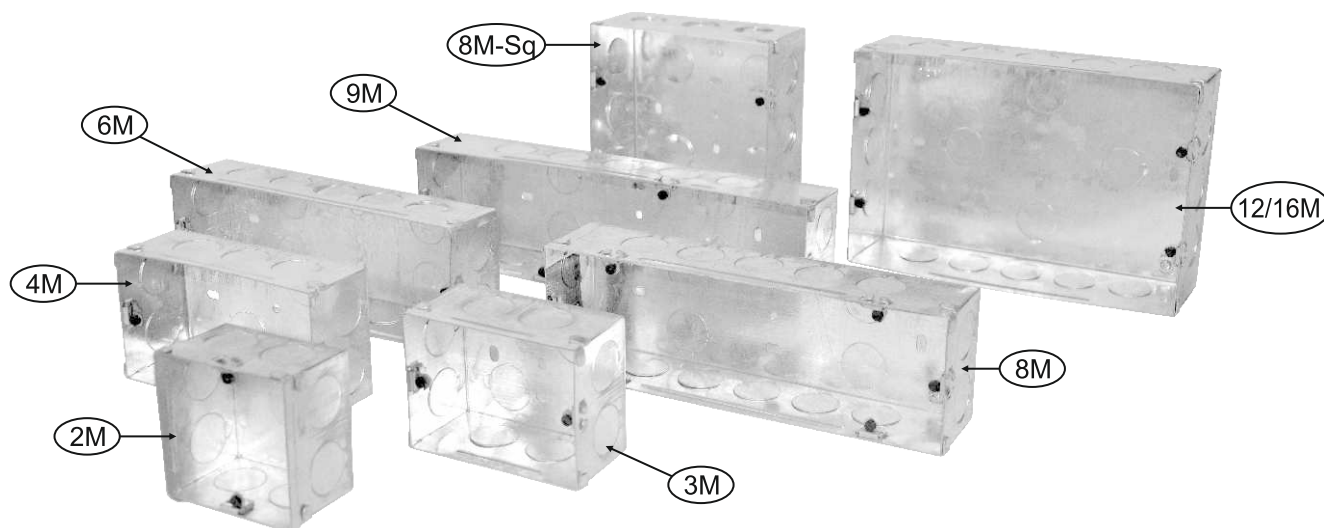
SHIP G.I. Modular Boxes have specially been designed and complies to the latest technology. Special galvanized iron sheets are used.

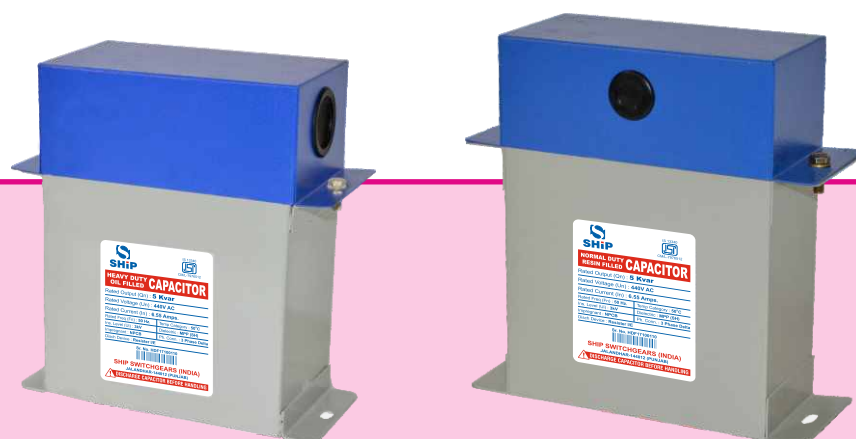
Constructional Features

- Ship Modular Boxes are made from more than the best metal G.I. Sheets.
- Rust resistant and long life.
- Weldless fabrication, folded type design.
- Adjustment provision made in the boxes for front plate alignment.
- Insulated cap provided for threads protection.
- 26mm dia of knockouts provided to suit conduit provision given on each side of boxes.
- Fixed earth terminal provided.

Technical Specifications

MODULES	SIZE
2M	3"x 3"
3M	4"x 3"
4M	5"x 3"
6M	8"x 3"
8M Sq	5"x 5"
8M	9"x 3"
9M	11"x 3"
12/16M	8"x 5"
16M	—
18M	—





IS 13340



Power Capacitors

Introduction

SHIP Power Capacitors Square Type, Oil filled & Resin filled have specially been designed and complies to the latest technology & specifications.

Constructional Features

- Manufactured by using high thickness zinc alloy, MPP dielectric.
- Withstands higher over voltage & overloads.
- “Low heating” property ensures long life.
- Low energy consumption i.e. Watt Loss.
- Fire Retardant, Resin encapsulation for better safety.
- CRCA Sheet Steel Body, duly pretreated & powder coated.

Technical Specifications

Specifications	: IS 13340
Type & Rating	:
Heavy Duty Oil filled	: 1 Kvar to 25 Kvar (Single Unit)
Normal Duty Resin filled	: 1 Kvar to 25 Kvar (Single Unit)
Rated Voltage	: 440V AC
Working Voltage	: 400V to 1000V AC
Permitted Over Voltage	: 1.15 times of rated voltage.
Permitted Over Current	: 1.20 times of rated current.
Installation	: Indoor Floor Mounting.
In-rush Current	: 150 times of rated current.





Research & Development Department



Circuit Breaker Division



Fabrication Division



Press Shop Division



Tool Room



Press Shop Division



SHIP

SWITCHGEARS



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