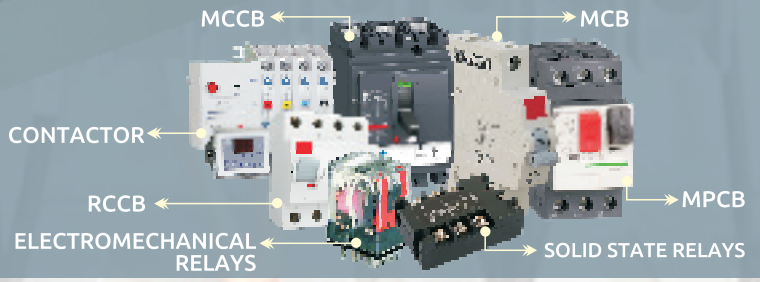
VOL - 3

DEC. 21-JAN. 22

The Electric Merchants Association

R. No. 7 & 12, 2nd Floor, Shreeji Bhuvan, EMA Chowk, 51-Mangaldas Lane, Lohar Chawl, Mumbai 400002.
Phone : 022-22060625, 22088141 | Talkfree : *7202 | *7203 • E-mail: office@emamumbai.com | Website: www.emamumbai.com

SWITCHGEAR



LAPTRON®

Approved by ROSH CE cULus LISTED

Address : 9/11, Picket 'X' Road, G.T. Building, Lohar Chawl, Mumbai - 400002.
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Contact : 022 2206 4807/8/9 | **Whats App :** +91 98338 24773
Email id : sale@dodiaelectricals.com

DODIA ELECTRICALS

22.5MM DIGITAL PANEL METER ROUND & SQUARE

LED INDICATOR FLASHER WITH BUZZER & PANEL NDICATOR LAMP Ø22.5MM 12-285V AC DC

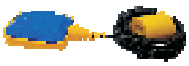
PENDENT PUSH BUTTON STATION WEATHER PROOF

LIMIT SWITCHES

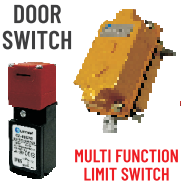
MICRO SWITCH

TOGGLE SWITCH

Water Level Controller Sensor



DOOR SWITCH



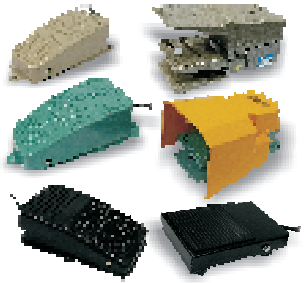
MULTI FUNCTION LIMIT SWITCH

PROXIMITY SENSORS

WARNING LIGHTS

SIGNAL TOWER LIGHTS

FOOT SWITCHES



STAINLESS STEEL TYPE PUSH BUTTON 16.5MM WITHOUT LED

SDL 16-11 PUSH BUTTON 16.5MM ϕ

STANDARD VOLTAGE 24V AC-DC/220V AC FOR 2NO+2NC & 12V AC DC

LAY5 PUSH BUTTON 22.5MM ϕ

PUSH BUTTONS SPRING RETURN

WATER PROOF TWIN PUSH BUTTONS

WATER PROOF LED LAMPS IP66/67

CHNT CHNT ELECTRIC

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NC1 Series (Contactor) (9A-95A 3P&4P) AC/DC

NC2 Series (Contactor) (115A - 800A) AC/DC

NR2 Series / NXR Series Thermal Overload Relay (0.1A~630A)

NXC Series Contactor (6A~630A) 3P

MCCB NM1

MCCB NXM

NCK3-40-3-sm

eb (4.5ka), NB1-63H (10ka) Series (MCB)

YBLX Series Limit Switch

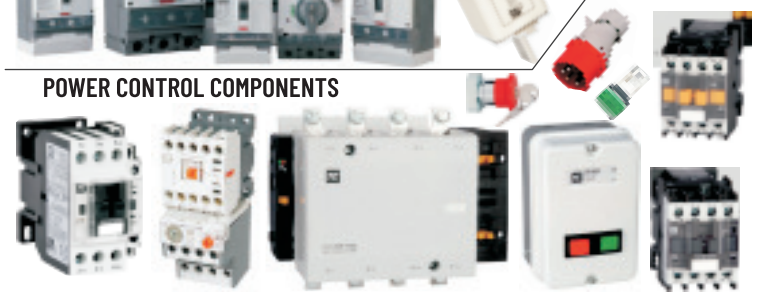
CJ20 Series (Contactor) (Up to 630A)

Accessory For Contactors

C&S electric

POWER DISTRIBUTION COMPONENTS

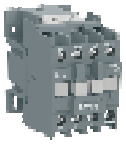
POWER CONTROL COMPONENTS



Schneider Electric

MCB

MPCBS



TeSys LC1F
Thermal Overload Relay

TeSys LC1-K
Contactors

Acti9
MCB

TeSys LRD
Thermal Overload Relay

TeSys LC1D
Power Contactors

TeSys GV3 MPCB

TeSys GV2
MPCB

LV5 MCCB

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HOUSE OF SWITCHGEAR & AUTOMATION BRAND

SIEMENS
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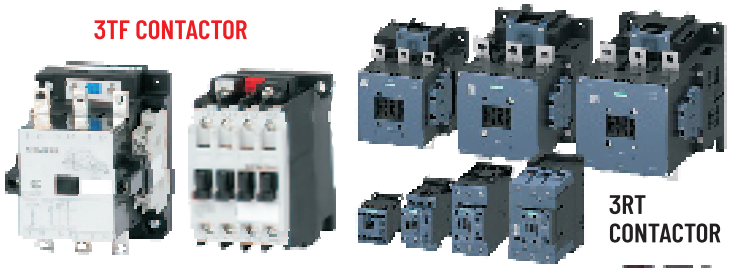
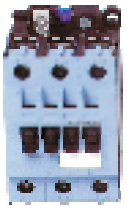
3TF CONTACTOR



3RT CONTACTOR

3RV MPCB

3VS 1300

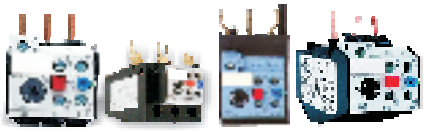


3TS CONTACTOR

3VM MCCB

DOL Starter / STAR Delta

3UA / 3US Series Thermal Overload Relay



3KL Series SDF

5SL6 / 5SI4 SERIES MCM

3KL Series SDF

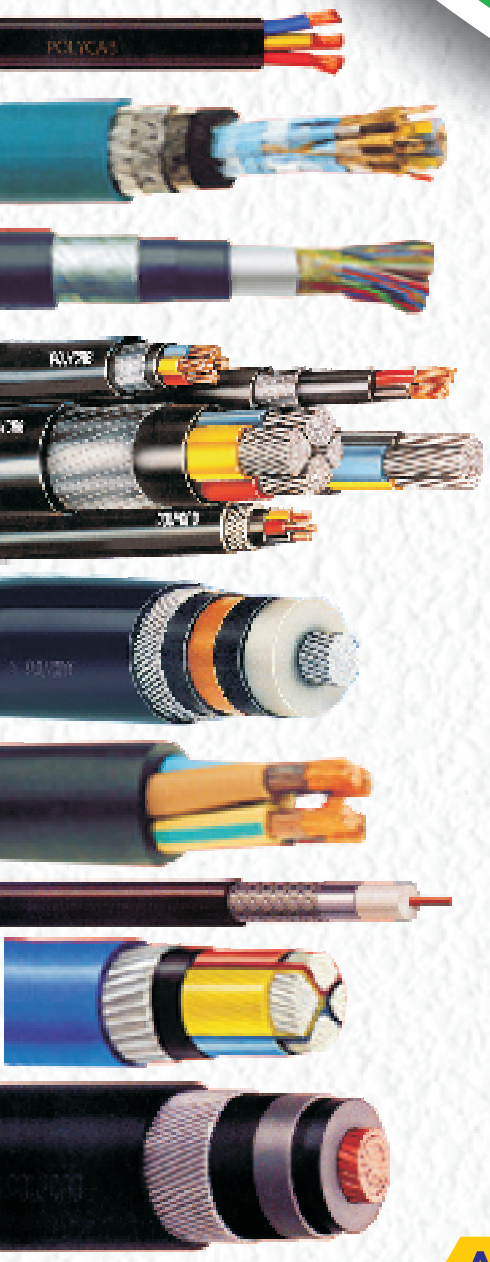
LIMIT SWITCH

3SB5 Push Buttons Series

Authorised Distributors :

POLYCAB

WIRES & CABLES



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Website : www.prabhatwires.in

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The Electric Merchants Association

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+91 7700065111 emamumbai

EMA BANK DETAILS

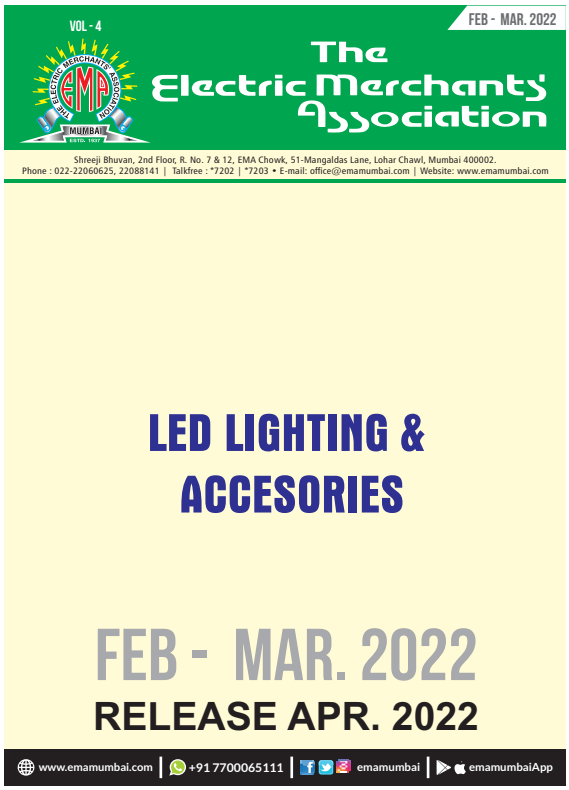
Bank Name	:	UNION BANK OF INDIA
Branch	:	PRINCESS STREET
A/C. No.	:	319102010077272
IFSC CODE	:	UBIN0531910

Bank Name	:	HDFC BANK
Branch	:	CRAWFORD MARKET
A/C. No.	:	50200056831717
IFSC CODE	:	HDFC0000143

AFFILIATION

FAM | IMC Chamber of Commerce and Industry | Electrical Contractors Association of Maharashtra ESTD - 1925 | CAIT

TOPICS FOR OUR NEXT BI-MONTHLY JOURNALS FOR THE YEAR



HARD WORK ALWAYS PAYS

This is a true story we would like to share with you.

It began in the year 1992, when we were facing lots of trouble from the Labour Union with their unrealistic demands. The Electric Merchants' Association went to Labour Court in the year 1977 for the settlement of D.A (Dearness Allowance) and other pending issues, matter did not settle and later we appealed in High Court. All this happened 3 times for our case was transferred from High Court to Labour Court and vice-a-versa in between 1977 to 1992.

At that time Mr. Parwaney was the President of EMA and **Mr. Yogesh Dharia** was elected, so the responsibility came on the shoulders of **Mr. Yogesh Dharia of M/s. Crescent Electricals.**

He then formed the committee of 12 prominent members and started the negotiations with the Labour Union. The settlement was filed in Labour Court which resulted in the benefit of both the parties.

Many members contributed the funds for the legal expense and hired Two (02) Advocates and One (01) Solicitor.

Bank account with Kapol Co-op Bank, Picket Cross Road, Lohar Chawl was opened for the same in joint names of

1.	**Mr. Indubhai C. Mehta**	**M/s. A.Harilal & Co (P) Ltd.**	**(Deceased as on date)**
2.	**Mr. Manubhai Sanghavi**	**M/s. Raichand & Sons**	**(Deceased as on date)**
3.	**Mr. G G Damani**	**M/s. Damani Vidyut Kendra**	**(Deceased as on date)**
4.	**Mr. Ramkumar R Daga**	**M/s. Tracomin (P) Ltd.**	
5.	**Mr. Yogesh Dharia**	**M/s. Crescent Electricals**	

Later it was decided to keep some balance amount approximate of Rs. 43,000/- (Rupees Forty-Three Thousand Only) for future expenses required if any. Same funds were transferred to fixed deposit.

On later stages, everybody knew that Kapol Bank was in doldrums and could not function as a bank and our amount was stuck.

After all these years... 1997 ~ 2021 (Span of 44 Years)

With lots of hard work, hassles and long trail of paper work, by Mr. Yogesh Dharia and his staff members he was able to retrieve the funds from Kapol Bank in the name of Mr. Ramkumar R Daga.

Mr. Ramkumar Daga, being Senior Citizen with age of 80+ years took the trouble to personally come to the bank to fulfil the compliances for requirements all the way from Rajasthan.

In good faith and benefit of EMA members we have received the whooping amount of Rs. 1,98,451.81 (Rupees One Lakh Nighty Eight Thousand Four Hundred Fifty One and Eighty-One Paisa Only).

This fund would be exclusively used for the welfare of EMA members.

Likewise, we would appreciate **Mr. Yogesh Dharia** for all his efforts and he was felicitated in our 85th Half-Yearly Annual General Meeting.

Message

FROM THE PRESIDENT

Hello Friends and my fellow EMA members!!!

We are coming out with our 3rd journal of my tenure on the topic of Switchgear. As we are aware, switchgear is very interesting and old topic associated with us since the start of Electrical business. Everyone who is in this market either directly or indirectly sells switchgear products either it be LV or HV. We are majorly into the LV business there is vast variety of products like from small MCB to ***Industrial Switchgear.***

There is a lot to say about switchgear but if we start writing then there is no end to it. So to cover the major part of switchgear we have compiled a few pages in this edition.

Hope you all like this edition as you have liked our previous edition of automation.

Thank You.

Prashant Parikh

President-2021-2022

INSIDE HIGHLIGHTS

UPCOMING EVENTS

NEW INDIA TRADING CORPORATION

kerawala bldg, 1st Floor, 61, Mangaldas Road, Lohar Chawl,
Mumbai-400 002. Maharashtra, India
Phone : 022-49741849 / 3956 7729 • Mobile : 9967021466 / 7715079384
Email : newindia@gmail.com • Website : www.newindiatrading.co.in
GSTIN : 27AAAFN1069N1Z1

APPRECIATION

To,

The Office Bearers of
The Electric Merchant's Association
Lohar Chawl,
Mumbai-400002

Date : 25-12-2021

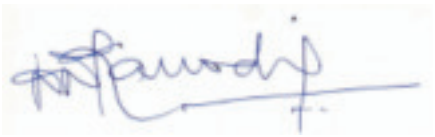
TO WHOME SO EVER IT MAY CONCERN

THIS IS TO PUT ON RECORD THAT WE NEW INDIA TRADING CORPORATION PROSUDELY THANK ELECTRIC MERCHANT ASSOCIATION OFFICE BEARERS FOR HELPING US IN RECOVERING OUR OUTSTANDING AMOUNT @ 30759.00 STUCK WITH ONE OF OUR CUSTOMERS AND LONG OVERDUE WITH THE CONSTANT EFFORTS BY THE EME.

WE WOULD LIKE TO SEND THIS LETTER OF APPRECIATION TO THE EMA.

Thanking You,

For NEW INDIA TRADING CORPORATION



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REPORT YOUR DISPUTES / DEFAULTER REQUEST

STEPS TO REPORT YOUR DISPUTES / DEFAULTER REQUEST –

STEP 1

Collect all documentation relating to disputes

STEP 2

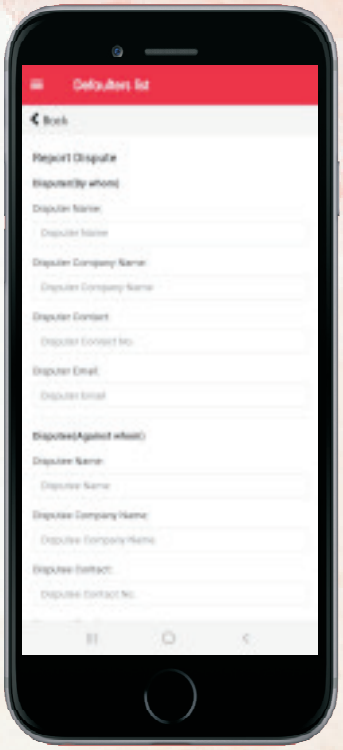
Do Member Login through – Website Member Login or EMA Mobile App

STEP 3

Go to - Defaulter List Tab, click on report issue and submit your details along with supporting documents.

STEP 4

EMA Dispute Committee will review the issues and make suggestions accordingly.



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REPORT

REPORT ON GENNEXT & OPENING CEREMONY OF FCM

On 23rd December, 2021 a new chapter was written in the Electrical Merchant's Associations' history. It was for the first time ever an event was organized purely for the new generation . The idea of meet and greet the future generation entrepreneurs was conceptualize

and designed by our young EMA committee members in guidance of our senior members.

Every year, many new faces enter the industry either by joining their family business or starting a new venture in a bit different and upcoming segment. The new entrance have to make their own way in knowing people and introducing themselves in the market. To break this chain and giving an opportunity to the new generation to introduce themselves and knowing others in the market the event was planned. The main

purpose behind this event was purely to meet the young guns (generation) and welcome them to the world of possibilities in Electrical market. Our aim is to bring all of them under one roof to share their ideology, methodology and technology. EMA has always tried and is trying to give their members an occasion to flourish themselves and along with the association. The opportunity was provided with ample time and without any restrictions. Post ceremony, everyone had a gala time chit chatting and exchanging business cards.

The technology is upgrading and so are we! We know each other by the company name but never met face to face, so we wanted to create a platform for everyone to know each other personally. Well some may be knowing each other only through their voices or may be personally, but meeting each other becomes really impossible considering the hectic schedule of Mumbai where the maximum time is eaten away by travelling to offices. This kind of event, helps us to relax, have an evening different from our daily routine along with a prospect for business growth.

There were mixed bag of people who attended the event with great enthusiasm and energy, people had gathered to make history for EMA in a true sense. Some of them

were entrepreneur themselves, some had joined their father existing business while some are running a legacy from their forefathers. We can proudly say, some are running a huge business from a small shop in Lohar Chawl while some have set up a factory of Electrical Products. After meeting the member we came to know that, some are 12th pass while some have graduated in commerce, few are engineers and some have done engineering and MBA and have joined the business. It's rightly said, “Diversified knowledge but accumulated at one market”.

EMA MEET & GREET 23TH DEC 2021

Apart from the meet and greet event, an opening ceremony for EMA cricket league was also organized, which was a huge success and was loved by all the sponsor's, team owners and the players. For the 1st time the team players were selected through "Luck of Bowl" where every members presented were part of the selection process. A grand T-shirt and Trophies reviling ceremony was organized along with a live band of

musicians for entertainment. A lovely and refreshing speech was delivered by our young committee members which was appreciated by all the attendees. A felicitation ceremony was planned, to honor our main sponsors – Polycab Industries, Co- sponsors - Connect Well, Diamond Pipes (Karan Electricals), BDM Infotech - media partners and IDFC First Bank. The committee who laid the stepping stone for the digitization of EMA was also honored with dignitaries.

Last but not the least, a token of thanks was presented to one and all members who attended the event and helped us in the making it a grand success!

We are overwhelmed by the feedback received from the members, this motivates us to put in extra efforts and organize the events in future!

~Pranay-K Enterprises

Chintan bhai and youth team, amazing function, superb handling. Thank you for inviting us. Keep up the good work and do tell us if you need any kind of help. Will be obliged to help, KUDOS TO EMA

22:24

~Parth-Dhara Cables

Good initiative by EMA, Thanks for having us

22:26

~Vivek Shah-Sumati Enterprises

Superb function
Thanks your for EMA team

22:26

~Parth Shah-Kalpesh Electricals

Great intiative
It was worth meeting everyone

22:26

~Vrajesh Bhai-Eaglesh Sales Corporation

Young team, great job done, perfect planning & & comparing, excekkent design mementos, good venue & food, keep it up
Congratulations for perfect planned event

22:27

~Romil Doshi- H R Enterprises

Had amazing fun guyz.... Congratulations for tonyts success

22:29

Abdeali Sehorewala - Reliable Power Control

Chintan bhai thank you for inviting, got to know so much about what EMA is, it was an excellent program, it was worth meeting everyone.
Thankyou

22:33

~Chirag Doshi-Abhinandan Enterprises

Thank you Chintan bhai for inviting us awesome event by EMA Team.

22:35


POLYCAB






POLYCAB



POLYCAB


DIAMO









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enNEXT

POLYCAB
GREEN WIRE



POLYCAB
GREEN WIRE




DIAMOND

POLYCAB

EMA MEET & GREET 23TH DEC 2021

~Harsh Desai-Tradelink
Thank you EMA for organizing this event had a great time with you all
22:24

~Karan-Rajuta Enterprises
Congratulation EMA!
Well organised event!
Good Food! Good venue!
Keep it up!
22:26

~Narendra Kataria- C R Kataria & Co.
Thank you EMA for ormanizing the event, excellent design momentos
22:26

~Harsit Ved - Suraj Electric
Fantastic Oraganization!
All the best team EMA
23:18

~Prashant Matalia - Hazloc Equipment P. Ltd.
Young team very well planned & excellent design mementos, good venue & food, keep it up
23:20

~Varun Rathod-Varun Electric
Chintan bhai n team you have a very Young team, pefect planning, excellent design mementos, good venue & food, Keep it up
Congratulations for perfect planned event
Thank for invitee
23:31

~Pratham Shah - Kalpesh Switchgear
Had a great evening meeting everyone
Thankyou EMA team
22:35

~Nirav-S V Enterprises
Excellent event.... great effort by the young team... hoping to attend many such more events in the future
23:48

~Pradeep Goliya - Kusum MECO
Very good event
23:48

~Shalin - Spanco Electronic
Chintan bhai n team...thanks for inviting us.. was great metting everyone..fantastic event. looking forward for en exiting cricket tournament...!!
22:24

~Prashant Parikh - Apex Services
Heartly congratulation young team,
Excellent event, everything well planned
23:54

~Jigar - V N Earthmark
Congratulation EMA, fantastic event.
Good Food. Best wishes to the young team for future. Chintan / Manav / Parin / Prem
Keep it up
00:07

~Chirag Shah - Aayushi Enterprises
Superb event...Superb organisation
G2/G3 guys keep it up
Congratulation to Team Ema
00:09

~Kevin Dharia - Kenne Electronic Pvt. Ltd.
Congratulation EMA, fantastic event. Best wishes to the young team for future..
Chintan / Manav / Parin / Prem
08:27

~Chintan Shah-Shree Krishna Enterprises
Fantastic Event
Good Food, superb organisation
09:35

Tanmay Desai-Eagle Sales Corporation
Thank you all, great event
10:08

Tanmay Desai-Eagle Sales Corporation
10 on 10 for the thought of having an event for the next gen. Would like to see some ice breaking and engaging activities in the near future which may make the process of networking even smoother.
10:08

~Roohil Sanghavi - S. Kant & Co.
Many congratulations to the vibrant and dynamic team at EMA for such a grand opening and launching event.We are proud to be a part of it.Keep it up Guyz.. Team SKANT
11:00

REPORT
ON 85TH HALF YEARLY ANNUAL GENERAL MEETING

The **85th Half Yearly AGM** was held on **23rd December 2021**, at **EMA Hall** at 4.00p.m. more than **42 Members** including **Past Presidents** attended this meeting The president, **Shri. Prashant Parikh** welcomed the members and requested the Hon. Secretary, **Shri. Samir Mehta** to proceed with the agenda of the meeting. Minutes of the **84th AGM** held on Wednesday **30th June 2021** at EMA Hall were passed. The performance report of the Managing Committee for Six Months **(1st April 2021 to 30th September 2021)** was discussed at length. Senior members present in the meeting advised committee to put their efforts in increasing the membership of the association. House congratulated the committee for the successful organization of events and also for creating **Brand EMA** at the **National Level.** Members were informed that the list of holidays, selected for the year 2022, was as per the gazette issued by the state government. The same were approved by the house.

Minutes of the **85th Half yearly Annual General Meeting** will be placed in the **85th AGM in June 2022.**

TECH KNOWLEDGE | SWITCHGEAR

WHAT IS SWITCHGEARS ?

The apparatus used for controlling, regulating and switching on or off the electrical circuit in the electrical power system is known as switchgear. The switches, fuses, circuit breaker, isolator, relays, current and potential transformer, indicating instrument, lightning arresters and control panels are examples of the switchgear devices.

The switchgear system is directly linked to the supply system. It is placed in both the high and low voltage side of the power transformer. It is used for de-energizing the equipment for testing and maintenance and for clearing the fault.

When the fault occurs in the power system, heavy current flow through equipment due to which the equipment get damaged, and the service also get interrupted. So to protect the lines, generators, transformers and other electrical equipment from damage automatic protective devices or switchgear devices are required.

The automatic protective switchgear mainly consists of the relay and circuit breaker. When the fault occurs in any section of the system, the relay of that section comes into operation and close the trip circuit of the breaker which disconnects the faulty section. The healthy section continues supplying loads as usual, and thus there is no damage to equipment and no complete interruption of supply.

SWITCHGEAR TYPES

There are three types of switch gears namely

LV (Low Voltage)

MV (Medium Voltage) and

HV (High Voltage) Switchgear.

LOW VOLTAGE SWITCHGEAR (LV)

The power system which deals up to 1KV (1000V) is called as LV or low voltage switchgear. This kind of equipment mainly includes switches, LV circuit breakers, HRC fuses, earth leakage (EL) circuit breakers, offload electrical isolators, MCBs (miniature circuit breakers) and MCCBs (moulded case circuit breakers), etc.

MEDIUM VOLTAGE SWITCHGEAR (MV)

The power system which deals up to 36 kV is called MV (medium voltage switchgear). These are available in different types like without metal enclosure outdoor type, metal-enclosed indoor & outdoor type, etc. This kind of equipment includes substation devices like minimum oil CBs, bulk oil CBs, SF6 gas-insulated, air magnetic, gas-insulated, vacuum, etc.

HIGH VOLTAGE SWITCHGEAR (HV)

The power system which deals above 36KV is called HV (high voltage) switchgear. When the level of voltage increases then the arcing will be generated as the switching operation is extremely high. As a result, during the designing of this equipment, special care has to be taken. The main component of this equipment is the High Voltage (HV) circuit breaker.

What is the difference between a switchboard and switchgear?

Generally, the switchboard is used for less voltage under 600 volts, whereas the switchgear for high voltages up to 350 kV.

These are classified into two types mainly like HV (high voltage) & LV (low voltage).

High-voltage switchgear was invented at the end of the 19th century for operating motors and other electric machines. The technology has been improved over time and can now be used with voltages up to 1,100 kV.

The two classifications of high voltage switchgear are gas-insulated indoor type switchgear and air-insulated outdoor type switchgear. The major classification of high voltage circuit breakers is oil circuit breakers and oil-less circuit breakers.

Switchgear is as old as electricity generation. The first models were very primitive: all components were simply fixed to a wall. Later they were mounted on wooden panels. For reasons of fire protection, the wood was replaced by slate or marble. This led to a further improvement, because the switching and measuring devices could be attached to the front, while the wiring was on the back.[4] The tumbler switch with ordinary fuse is the simplest form of switchgear and was used to control and protect lights and other equipment in homes, offices etc. For circuits of a higher rating, a high-rupturing capacity (H.R.C.) fuse in conjunction with a switch may serve the purpose of controlling and protecting the circuit. However, such switchgear cannot be used profitably on a high-voltage system.

CIRCUIT BREAKER TYPES

OIL

Oil circuit breakers rely upon vaporization of some of the oil to blast a jet of oil along the path of the arc. The vapor released by the arcing consists of hydrogen gas. Mineral oil has better insulating property than air.

The oil circuit breaker is one of the oldest types of circuit breakers.

AIR

Air circuit breakers may use compressed air (puff) or the magnetic force of the arc itself to elongate the arc.

Circuit breakers are usually able to terminate all current flow very quickly: typically, between 30 milli-seconds and 150 milli-seconds depending upon the age and construction of the device.

GAS

Gas (SF6) circuit breakers sometimes stretch the arc using a magnetic field, and then rely upon the dielectric strength of the SF6 gas to quench the stretched arc.

HYBRID

Hybrid switchgear is a type which combines the components of traditional air-insulated switchgear (AIS) and SF6 gas-insulated switchgear (GIS) technologies. It is characterized by a compact and modular design, which encompasses several different functions in one module.

VACUUM

Circuit breakers with vacuum interrupters have minimal arcing characteristics. Vacuum circuit breakers are frequently used in modern medium-voltage switchgear to 40,500 volts they are inherently unsuitable for interrupting DC faults.

DIFFERENT TYPES OF LV SWITCHGEAR PRODUCTS

1. MINIATURE CIRCUIT BREAKERS (MCB)

A miniature circuit breaker (MCB) is an Electrical Switch which automatically switches off the electrical circuit during an abnormal condition of the network means in overload condition as well as faulty condition.

Nowadays we use an MCB in a low voltage electrical network instead of a fuse. The fuse may not sense it but the miniature circuit breaker does it in a more reliable way. MCB is much more sensitive to overcurrent than a fuse.

Handling an MCB is electrically safer than a fuse. Quick restoration of supply is possible in case of a fuse as because fuses must be re-wirable or replaced for restoring the supply. Restoration is easily possible by just switching it ON. Let's look at the working of the miniature circuit breaker.

The working principle of MCB

Whenever continuous overcurrent flows through MCB, the bimetallic strip is heated and deflects by bending. This deflection of bi-metallic strip releases a mechanical latch. As this mechanical latch is attached with the operating mechanism, it causes to open the miniature circuit breaker contacts, and the MCB turns off thereby stopping the current to flow in the circuit. To restart the flow of current the MCB must be manually turned ON. This mechanism protects from the faults arising due to overcurrent or overload and short circuit.

But during short circuit condition, the current rises suddenly, causing electromechanical displacement of plunger associated with a tripping coil or solenoid. The plunger strikes the trip lever causing immediate release of latch mechanism consequently open the circuit breaker contacts. This was a simple explanation of a miniature circuit breaker working principle.

An MCB is very simple, easy to use and is not generally repaired. It is just easier to replace. The trip unit is the main part, responsible for its proper working. There are two main types of trip mechanism. A bi-metal provides protection against overload current and an electromagnet provides protection against electric short-circuit current.

MCB OPERATION

If the circuit is overloaded for a long time, the bi-metallic strip becomes overheated and deformed. This deformation of Bi-metallic strip causes, displacement of latch point. The moving contact of the MCB is arranged by means of spring pressure, with this latch point, that a little displacement of latch causes, release of spring and makes the moving contact to move for opening the MCB.

The current coil or trip coil is placed so that during short circuit fault the magneto-motive force (mmf) of the coil causes its plunger to hit the same latch point and make the latch to be displaced. Again, when operating lever of the miniature circuit breaker is operated by hand, that means when MCB goes off position manually, the same latch point is displaced as a result moving contact separated from fixed contact in the same manner.

It may be due to deformation of a bi-metallic strip, or increased mmf of a trip coil or maybe a manual operation, the same latch point is displaced and same deformed spring is released, which ultimately responsible for movement of the moving contact. When the moving contact separated from fixed contact, there may be a high chance of arc. This arc then goes up through the arc runner and enters arc splitters and is finally quenched. When we switch it on, we reset the displaced operating latch to its previous on position and the MCB is ready for another switch off or trip operation.

2. MOULDED CASE CIRCUIT BREAKER (MCCB)

MCCB is an automatic electrical device used to protect the electrical equipment from overload, short circuit, instantaneous over current and earth fault. It is an advanced version of MCB (Miniature circuit breaker). It is available from 32 Amps to 1600 Amps with the voltage range of 230V to 1.1kV.

The main advantage of MCCB (Moulded case circuit breaker) is that we can tailor it as per our requirement by installing with new future such as remote closing, UV trip etc. It is the best replacement for an air circuit breaker in terms of cost as well as better function. Also, you can adjust the current setting as well as the time setting in the moulded case circuit breaker.

CONSTRUCTION:

MCCB Consists of 9 different parts such

1. Arc chute
2. Moving Contact
3. Operating mechanism
4. Base cover
5. Terminal Connector
6. Overload trip or Bimetallic contact
7. Handle knob
8. Manual trip button
9. CT – Current Transformer assembly

WORKING PRINCIPLE:

The MCCB working principle is simple. Let us take three different fault conditions such as Overload, short circuit, and earth fault.

OVERLOAD TRIP

A flow of current that exceeds the rated current with predefined time limit such a fault is called overload. Actually, it is not a fault, it is a condition.

The bimetallic contact involves in overload operation of the breaker; under the normal condition, it allows the current flow. If the current flow exceeds the predefined value, then it will get bend and finally, it will engage the tripping mechanism. The trip mechanism opens the breaker.

Also, bimetallic contact will not allow the breaker to reset instantly. Since it takes some time to reach its original state.

Over Load, the setting will be 80% to 100% of the full load current and the dame depending upon your load demand. But the time delay will be 10 to 15secs.

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SHORT CIRCUIT / INSTANTANEOUS/EARTH FAULT TRIP:

An electromagnetic coil involves short circuit/instantaneous/earth fault protection of the breaker. Under normal conditions, the CT generates less current hence the electromagnetic field is generated by the coil is not enough to pull the plunger. Therefore, the breaker does not trip.

During short circuit or instantaneous fault conditions, the CT generates high current and the coil creates a strong magnetic field. Hence the coil pulls the plunger and it will trip the circuit instantly.

The typical setting of a short circuit will be 2.5Times of the overload setting and the time delay will be 0.2 to 0.5 secs.

The typical setting of an instantaneous fault will be 4 Times of the overload setting and the time delay will be zero.

EARTH FAULT LEAKAGE TRIP:

Earth leakage protection is quite different from other protection. It a tailor-made one. It requires additional CT which has to be installed in the moulded case circuit breaker.

The output of the current transformer will be connected in star. Under normal conditions, the current flow through the star's neural point will be zero. if the leakage found in the line means, the same will be sensed at the star terminal. if the leakage flow is higher than the allowable limit means, the MCCB trip the circuit.

TYPES OF MCCB

According to the tripping types, the MCB is divided into five categories.

TYPE B : They are operating at the fault current reaches 3 to 5 times the full load current. It is used for domestic applications such as resistive load, lighting loads, etc. The available operating time of this beaker is 0.04 to 15 seconds

TYPE C : Type C breaker specially used for inductive loads, such as transformers, welding machines, electromagnets etc. it has an operating range of 5 to 8 times the full load current with the time delay of 0.04 to 5seconds.

TYPE D : Suitable for heavy starting current applications such as motors, pumps, lifts, etc. It has an operating range of 10 to 15 times with the time duration of 0.04 to 3 seconds

TYPE K : Operates when the current goes to 8 to 10 times its full load current. Operating time for type K MCCB is 0.04 to 5 Seconds. They are the best suitable feeder protection.

TYPE Z : Type Z MCCBs are very sensitive and they can able to allow 1.5 to 3 times the full load current. Type Z is suitable for electronics load, whereas high-speed tripping required.

MCCB Rating

The manufacture provides some technical data that is used to understand the characteristics of the MCCB. Let us see.

Inm – rated Frame current => the maximum allowable current through the MCCB whereas MCCB operates under the stable region

In => Rated current => Functional tripping range of the breaker.

Ui => Rated Insulation Voltage => the maximum allowable voltage ranges of the breaker.

Ue => Rated Voltage => Functional voltage of the breaker

Uimp => Rated Impulse Withstand voltage => Surge Voltage of the MCCB, the standard size for impulse testing is 1.2/50µs

Ics => Short circuit Breaking Capacity => The maximum amount of short circuit current where the breaker can break the circuit without physical damage.

Ics => Unlimited short circuit breaking capacity => The maximum breaking capacity of the MCCB whereas the MCCB can break the circuit with the physical damage. Beyond that limit, it will not operate

CONTACTORS

Contactors are electrically controlled switching devices which are used for switching electrically. The basic operation of this is similar to a relay, but the only difference is that contractors can carry large current compared to relay up to 12500A. They cannot provide short circuit or overload protection but can break the contact when coil excites.

CONSTRUCTION OF A CONTACTOR

The contactor consists of two iron cores, where one is fixed and the other one is the movable coil and it is an insulated copper coil. Where the copper coil is located on the fixed core. There are six main contacts for power connection, where three are fixed cores and the other three are movable cores. These contacts are made from pure copper, and the contact points are made from special alloy to withstand high starting current and temperature. A spring which is located between coil and the movable core, auxiliary contacts it could be normally open or closed. The main contacts cut on and off the light current loads such as contactors coil, relays, timers, and many other control circuit parts are linked to contact mechanism. A three-phase AC power supply provided to the circuit

IT CONSISTS OF THREE MAIN PARTS THEY ARE

COIL

It provides a force which is required to close the contact. The coil is also named as an electromagnet. An enclosure is used to safeguard the coil and contactor.

ENCLOSURE

It acts like an insulator and protector, which protects the circuit form any electrical contact, dust, oil, etc. They are made up of different materials like Nylon 6, Bakelite, Thermosetting plastic, etc.

CONTACTS

The main function of this is that it carries the current to various parts of the circuit. There are classified into contact springs, axillary contacts, and power contacts. Where each of the contacts has its own functions, which is explained in principle of operation of the contactor.

TYPES OF CONTACTORS

These are classified based on three factors they are

- The load being used
- The current capacity and
- The power rating.

MANUAL CONTACTOR

The disadvantages of knife blade contractors are overcome using a manual contactor. Some of the features of these are,

- The operation performed is safe
- They are properly encased in order to protect from external environment problem
- The size of the manual connector is small
- Only a single break is used
- The switches are controlled using a contactor.

WORKING PRINCIPLE OF CONTACTORS

An electromagnetic field is generated whenever current flows where the moving coils attract each other. A large amount of current is drawn initially by an electromagnetic coil. The moving contact is pushed forward by moving core, as a result, the force created by the electromagnet holds the moving and fixed contacts together.

- On de-energizing, the contactor coil gravity or spring moves back the electro-magnetic coil to its initial position and there is no flow of current in the circuit.
- If contactors are energized with AC current, a small portion of the coil is the shaded coil, where the magnetic flux in the core is slightly delayed. This effect is too average as it prevents the core from buzzing at twice line frequency. There are internal tipping point processes to ensure rapid action so that contactors can open and closed very rapidly.
- From the figure the supply is given using a switch, that is when the switch is closed current flows through the contactor coil and attaches the moving core. The contactor attached to the moving core closes and the motor starts running. When the switch is released the electromagnetic energizes spring arrangement pause the moving coil back to its initial position and power supply to the motor is cut off.

MAGNETIC CONTACTOR

It operates electromagnetically that is it can be operated remotely, less amount of current is enough to make a connection and remove the connection. It is the most advanced contactor.

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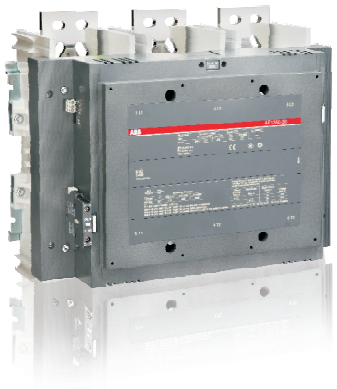

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Difference between AC Contactors and DC Contactors

AC CONTACTORS	DC CONTACTORS
They are designed for the contactors with self-extinguishing arc is drawn whenever the contact opens	They are specially designed to suppress electrical arching when there is switching in the DC circuit.
They don't use freewheel diode	They use freewheel diode
Separation time is less	Separation time is higher if the load is heavy a shunt load is attached to the main contact.

MOTOR PROTECTION CIRCUIT BREAKER OR MPCB

Motor protection circuit breakers are a specialized type of electrical protection device that is designed specifically for electric motors, like their name implies. Electric motors have plenty of applications and are used to drive mechanical devices of all types, so it is very important to protect them adequately with MPCBs. The following are just a few examples of devices driven by electric motors in commercial and industrial buildings:

- Rooftop air conditioners, chillers, compressors, heat pumps and cooling towers.
- Extraction and injection fans, as well as air handling units.
- Water pumping systems.
- Elevators and other hoisting devices.
- Industrial conveyor belts and other machinery used in manufacturing processes.

In all of these industrial and commercial applications of electric motors, the MPCB has the key role of providing electrical protection.

WHAT IS A MOTOR PROTECTION CIRCUIT BREAKER AND WHAT ARE ITS FUNCTIONS?

A motor protection circuit breaker, or MPCB, is a specialized electromechanical device that can be used with motor circuits of both 60 Hz and 50 Hz. It has several functions that allow it to provide a safe electrical supply for motors:

- Protection against electrical faults such as short circuits, line-to-ground faults and line-to-line faults. The MPCB can interrupt any electrical fault that is below its breaking capacity.
- Motor overload protection, when a motor draws electric current above its nameplate value for an extended period of time. Overload protection is normally adjustable in MPCBs.
- Protection against phase unbalances and phase loss. Both conditions can severely damage a three-phase motor, so the MPCB will disconnect the motor in either case as soon as the fault is detected.
- Thermal delay to prevent the motor from being turned back on immediately after an overload, giving the motor time to cool down. An overheated motor can be permanently damaged if it is turned back on.
- Motor Circuit Switching – MPCBs are normally equipped with buttons or dials for this purpose.
- Fault Signalling – Most models of motor protection circuit breakers have a LED display that is turned on whenever the MPCB has tripped. This is a visual indication for nearby personnel that a fault has occurred and the electric motor must not be connected again until the fault is addressed.
- Automatic Reconnection – Some MPCB models allow a cool down time to be input in case there is an overload, after which the motor will restart automatically.

  Electric motors are expensive equipment, so the role of the motor protection circuit breaker is very important. If a motor is not protected correctly, it may be necessary to carry out costly repair works or even replace the equipment completely. An electric motor that is adequately protected with an MPCB will have a much longer service life.

MOTOR PROTECTION CIRCUIT BREAKER WORKING PRINCIPLE

The motor protection circuit breaker can be considered a subtype of a thermal magnetic circuit breaker, but with additional functions that are specially designed to protect electric motors. The basic working principle is similar to all other circuit breakers.

- Thermal protection is used to guard the electric motor against overload. It is based on an expanding and contracting contact that disconnects the motor if excessive current is detected. It is very important to know that thermal protection has a delayed response, to allow the high inrush currents when a motor starts. However, if the motor is unable to start for some reason, thermal protection will trip in response to the extended inrush current.
- Magnetic protection is used when there is a short circuit, line fault, or other high current electric fault. Unlike thermal protection, magnetic protection is instantaneous; to immediately disconnect the dangerous fault currents.
- The main difference between the MPCB and other circuit breakers is that the MPCB can provide protection against phase unbalance and phase loss. Three-phase circuit motors require three live conductors with balanced voltages in order to operate effectively. An unbalance of more than 2% will be detrimental to the motor's service life. If one of the phase voltages is suddenly lost, the effect is even more damaging because the motor will keep on running with only two phases. The motor protection circuit breaker is capable of detecting these conditions by measuring the differences among phase voltages, and disconnects the motor immediately when they occur. It is important to note that phase current unbalance is normal in three-phase systems that power separate single-phase loads, but is unacceptable when the three-phase circuit powers an electric motor.
- MPCBs are also equipped with a manual interruption mechanism, allowing disconnection of electric motors for replacement or maintenance.
- Motor protection circuit breakers are available in a wide variety of current ratings, and one of their best features is that many models allow the current rating to be adjusted. This means that the same MCPB can be configured to protect motors of different capacities.

TYPE OF RELAY

1 ELECTROMECHANICAL RELAYS

Electromechanical relays are switches that typically are used to control high power electrical devices.

Electromechanical relays are used in many of today's electrical machines when it is vital to control a circuit, either with a low power signal or when multiple circuits must be controlled by one single signal.

Advantages of Electromechanical relays include lower cost, no heat sink is required, multiple poles are available, and they can switch AC or DC with equal ease.

Some of the electromechanical relays are

a) General Purpose Relays,
b) Power Relay,
c) Contactor and
d) Time Delay Relay.

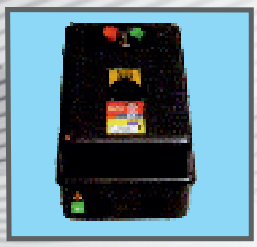
One main difference between them is electromechanical relays have moving parts, whereas solid state relays have no moving parts. In addition to them there are different types of protective relays available in the industry.

Basic parts and functions of electromechanical relays include:

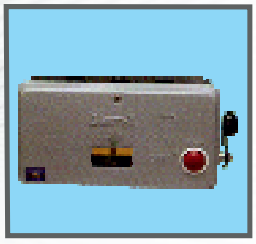
- Frame: Heavy-duty frame that contains and supports the parts of the relay.
- Coil: Wire is wound around a metal core. ...
- Armature: A relays moving part. ...
- Contacts: The conducting part of the switch that makes (closes) or breaks (opens) a circuit.

2. SOLID STATE RELAYS

- A solid-state relay (SSR) is an electronic switching device that switches on or off when a small external voltage is applied across its control terminals.

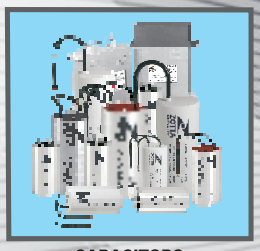


DOL STARTER (BSDL)
1 H.P. TO 15 H.P.



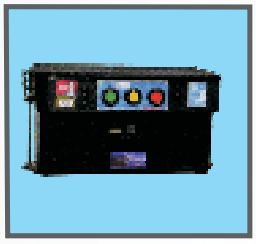
FLOUR MILL STARTER (SDM)
3 H.P. TO 35 H.P.

DOL STARTER (BU)
7.5 H.P. TO 20 H.P.



CAPACITORS

OIL IMMERDED STARTER
3 H.P. TO 20 H.P.



OIL IMMERDED S/D STARTER
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OIL IMMERDED S/D STARTER
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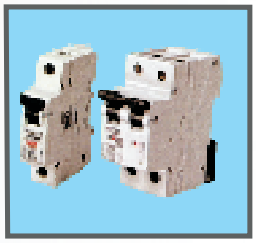
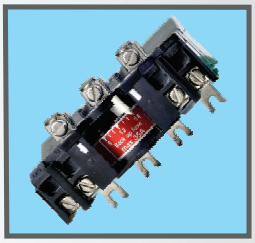
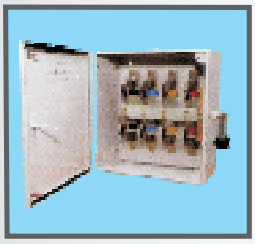


MCB, ELCB, MCB + ELCB

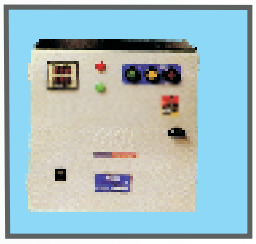
MAIN SWITCH



THERMAL OVERLOAD RELAY



CHANGE OVER SWITCHES



MOTOR CONTROL PANEL

OIL IMMERDED SUBMERSIBLE
CONTROL PANEL

AIR BREAK
CONTACTOR

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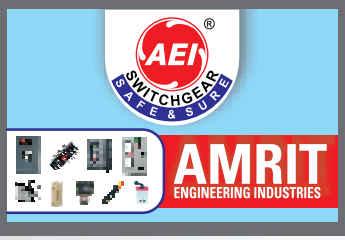

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Manhar Bldg., Shop No. 5-7, Picket X Road,
187, Lohar Chawl, Mumbai 400002.

- SSRs consist of a sensor which responds to an appropriate input (control signal), a solid-state electronic switching device which switches power to the load circuitry, and a coupling mechanism to enable the control signal to activate this switch without mechanical parts.
- The relay may be designed to switch either AC or DC to the load. It serves the same function as an electromechanical relay, but has no moving parts. The figure below shows a three phase solid state relay.

AIR CIRCUIT BREAKER (ACB)

Air circuit breaker is a circuit breaker for the purpose of protecting low voltage circuit, mainly for energizing and cutting off high current.

In air blast circuit breaker fire hazard is eliminated unlike in oil circuit breakers. Short and consistent arcing time and therefore, less burning of contacts. Air blast circuit breakers require less maintenance. They are suitability for frequent operation.

ADVANTAGES OF AIR BLAST CIRCUIT BREAKER:

- Cheapness and free availability of the interrupting medium, chemically stable and inertness of air
- Air blast circuit breakers have advantage of high speed operation
- In air blast circuit breaker fire hazard is eliminated unlike in oil circuit breakers
- Short and consistent arcing time and therefore, less burning of contacts
- Air blast circuit breakers require less maintenance
- They are suitability for frequent operation
- Facility for high speed re-closure

DISADVANTAGES OF AIR BLAST CIRCUIT BREAKER:

- An air compressor plant has to be installed and maintained
- In air blast circuit breaker upon arc interruption, the air blast circuit breaker produces a high level of noise when air is discharged to the open atmosphere
- In air blast circuit breaker current chopping problem exists
- There is a problem of re-striking voltage

AUTOMATIC TRANSFER SWITCH (ATS)

Low-voltage automatic transfer switch assemblies provide a reliable means of transferring essential load connections between primary and alternate sources of electrical power. Data centers, hospitals, factories and a wide range of other facility types that require continuous or near-continuous uptime typically utilize an emergency (alternate) power source such as a generator or a backup utility feed when their normal (primary) power source becomes unavailable.

HOW DOES AN AUTOMATIC TRANSFER SWITCH WORK?

An automatic transfer switch (ATS) is a self-acting, intelligent power switching device governed by dedicated control logic. The principal purpose of an ATS is to ensure the continuous delivery of electrical power from one of two power sources to a connected load circuit (electrical equipment – lights, motors, computers, etc.).

The control logic or automatic controller is typically microprocessor-based and constantly monitors the electrical parameters (voltage, frequency) of primary and alternate power sources. Upon failure of the connected power source, the ATS will automatically transfer (switch) the load circuit to the other power source (if it is available). As a general rule, most automatic transfer switches seek connection to the primary power source (utility) by default and will only connect to the alternate power source (engine-generator, backup utility) when required (primary source failure) or requested to do so (operator command).

A TYPICAL TRANSFER SEQUENCE INCLUDES:

1. The normal utility power source fails.
2. The transfer switch shifts the load to the emergency power source when power from the generator or backup utility feed is stable and within prescribed voltage and frequency tolerances. Depending on a facility's needs and preferences, the transfer process is self-acting or manually-initiated.
3. The transfer switch returns the load from the emergency power source to the normal power source when utility power is restored. The retransfer process is self-acting or manually-initiated.

DIFFERENT ATS TRANSITION TYPES

Transfer switches transition loads between normal and emergency power sources with open or closed options. The specific functions performed by a given load and the importance of those functions to safety or security play an important role in determining which kind of transition is required.

OPEN TRANSITION

An open transition is a break-before-make transfer. The transfer switch breaks its connection to one power source before making a connection to the other. Open transitions include open-delayed and open in-phase.

CLOSED TRANSITION

A closed transition is a make-before-break transfer. The transfer switch makes a connection to a second power source before breaking its connection with the first power source. As there's no gap between disconnection and connection, downstream loads receive continuous power throughout the transfer process.

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IMPORTANT NEWS

Important Amendments in GST rules w.e.f. 01.01.2022

Notification No. 40/2021 – Central Tax dt. 29.12.2021 has been issued to amend the CGST Rules, 2017 to compliment the amendments made in the CGST Act, 2017 that has been brought into force w.e.f. 01.01.2022. The given amendments in the Rules shall also apply w.e.f. 01.01.2022. The detailed analysis of the amendments in the Act is again attached for ready reference. The summary of the amendments in the Rules is as follows:

1. ITC – COMPULSORY MATCHING WITH GSTR 2B

Readers will recall that a new condition by way of clause (aa) to Sec. 16(2) of the CGST Act, 2017 has been brought into force w.e.f. 01.01.2022. As per the said clause, the eligibility of the ITC shall be contingent upon the vendors furnishing the invoice/debit note details in their GSTR 1. Now Rule 36(4) that provided for the availment of ITC upto 5% beyond the eligible ITC for which the details are reported by the vendors in GSTR 1 has been amended w.e.f. 01.01.2022 to withdraw the said benefit of 5%. The amended rule provides that no ITC shall be availed in respect of invoice/debit note unless the (a) details of such invoice/debit note have been furnished in GSTR 1 or IFF and (b) such details have been communicated in GSTR 2B. Hence from 01.01.2022, the ITC in respect of invoice/debit note can be claimed only if the details of the same are reflected in GSTR 2B. It may be noted that the said condition does not apply to availment of ITC in respect of imports/RCM (unregistered vendor)/ISD.

2. EXTENSION OF DUE DATES FOR GSTR 9/9C

Due dates for the filing of the GSTR 9 as well as GSTR 9C for FY 2020-21 has been extended till 28.02.2022. Rule 80 has been amended to that effect.

3. E-WAY BILL VIOLATIONS

Readers will recall that the provisions contained u/s 129 & 130 of the CGST Act, 2017 dealing with the detention, seizure, release as well as confiscation of goods or conveyance in respect of the contravention of the E-way bill requirements have been amended w.e.f. 01.01.2022. Corresponding amendments have also been made in the CGST Rules, 2017 w.e.f. 01.01.2022 as under:

Rule 142 that provides for the issuance of notice and order for demands under the Act has been amended to the effect that if the concerned person makes the payment of penalty as specified in the notice issued u/s 129(3) (200% of the tax payable in the general case) within a period of seven days from the date of issuance of notice but before the issuance of the order and intimate the officer in FORM DRC 03 then the officer shall issue an order in FORM DRC 05 concluding the proceedings in respect of the given notice. It must be noted that the said option is required to be considered only if the given person is not desirous of contesting the demands. If the person intends to contest the demands, it must seek order in FORM GST MOV 09. An appeal is accordingly required to be filed against the said order.

New Rule 144A has been inserted to provide for the recovery of the penalty imposed u/s 129 (E-way bill violations) if not paid voluntarily within 15 days from the receipt of the order. The said recovery shall be made by way of an auction of the goods/conveyance that has been seized. Similarly, Rule 154 has been substituted to provide for the appropriation of the sale proceeds.

4. PROVISIONAL ATTACHMENT

The draconian powers of provisions attachment have been widened w.e.f. 01.01.2022. Rule 159 has been amended to provide that the copy of the order of provisional attachment in FORM GST DRC-22 shall also be sent to the person whose property is being attached. Further FORM GST DRC-22A has been notified in which the person whose property is being attached can file the objections before the Commissioner against the given attachment.

5. REFUND CLAIMS OF FOREIGN DIPLOMATIC MISSIONS AND EMBASSIES

Rule 95 has been amended to provide that the refund claims filed by the foreign diplomatic missions and embassies in FORM GST RFD-10 in respect of the tax charged on the invoice for their inward supplies shall be supported by the copy of the invoice, duly attested by the authorized representative of the applicant if the said invoice do not bear the Unique Identity Number of the applicant

IMPORTANT NEWS

VACCINATION FOR 15-18 AGE GROUP:

CoWin registration set to begin from 03 January 2022

India is all set to begin CoWin registrations for the Covid-19 vaccination for children aged 15 to 18 years from Saturday. The government has said both walk-in and online registration will be available for vaccination of children, who would start getting doses against Covid-19 on January 3. While the CoWin registrations will begin from Saturday, the onsite registration will commence from the day of vaccination i.e. January 3 itself.

According to the government's guidelines, children can book slots on the CoWin app using their ID cards from January 1.

Dr R S Sharma, Cowin platform chief, had earlier said that besides Aadhaar and other national identity cards, children can use their class 10th ID card for registration.

On Tuesday, Union health secretary chaired a workshop through video conference with all states and union territories (UTs) to review the rollout of vaccination for the age group 15-18 and precautionary third dose for vulnerable categories - healthcare workers (HCW), frontline workers (FLW), and those in the 60 age group who have co-morbidity.

Prime Minister Narendra Modi, in a televised address on December 25, 2021, announced that children aged 15-18 years will begin getting a vaccine against Covid-19 from January 3, 2022, and healthcare and frontline workers will start receiving precautionary doses from January 10.

Bharat Biotech's Covaxin, which has been granted approval for restricted use in an emergency situation in the age group between 12 and 18 years, is the only vaccine available for children.

The Centre has also advised states to establish separate dedicated Covid-19 vaccination centers for kids aged 15-18 while a separate vaccination team and separate queues to be maintained at all other CVCs.

EMA LOGO ON YOUR COMPANY'S LETTER HEAD

Dear Members,

The Electric merchants' Association in the recent past has made its brand not only in Mumbai but all over Pan-India. The circulation of the Proud Member Certification to all the members has created much required awareness among the members in regards to the strength and unity of EMA members. To make it a more powerful brand and to give more protection to the members from the defaulting customers, committee requests all members to print the EMA logo on their letter head along with **PROUD MEMBER OF EMA.**

EMA's prime objective is to work for the betterment of the members. We at the Managing Committee, request members to support the initiatives and give us valuable feedbacks to serve you.

For any clarification, feel free to contact office bearers of the Electric merchants' Association.

If you require CDR file of logo please apply in writing to EMA office. EMA will provide you logo in CDR Format.

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The Electric Merchants Association

ORGANISES

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The Electric Merchants' Association

Executive Diary 2022-2023

Form for Booking Advertisement

To,
The Hon. Secretary,
The Electric Merchants' Association,
Mumbai 400002.

Dear Sir,

We hereby request you to book our advertisement in **EMA's Executive Diary 2022-2023.**

Details as under :

Sr. No.	Description (Printing in Four Colour)	Tick Mark (✔)	Tariff (Rate in Rs.)	Amount (Rate in Rs.)
1	Back Cover		75,000.00	
2	Inside Front		50,000.00	
3	Inside Back		30,000.00	
4	Prestigious Front		10,000.00	
5	Prestigious Back		8,000.00	
6	Prestigious Middle		7,000.00	
7	Book Mark		10,000.00	
			Total Amount :	
			Add : CGST @ 9%	
			Add : SGST @ 9%	
			Final Amount Rs.	

Note:

Size of Advt.:
21cm x 16cm / 8.25" x 6.25" (Height x Width
Size of Bookmark:
16.5cm x 9cm / 6.50" x 3.50" (Height x Width)

TERMS :

1) Please tick mark properly in the box.
2) No Refund will be given under any circumstances.
3) Please pay full payment with booking of Advt. & Printing Matter in CDR (version 14) + PDF formats only.
4) Artwork to be provided by the Advertiser.
5) Please mail your artwork on : office@emamumbai.com.
6) **Last date of booking advertisement is 15th February 2022.**
7) Crossed Cheque should be drawn in favour of **"THE ELECTRIC MERCHANTS' ASSOCIATION"**

We, M/s. _____ GST No.: _____

are enclosing Cheque No. _____ for Rs. _____ dated _____

drawn on _____Bank, being the full payment of the advertisement. We undertake to abide by the terms for the acceptance of the above advertisement as per circular.

For further details please contact : ***PUBLICATION COMMITTEE***

Parin Parikh - 9821488843 **Nirav Jariwala - 9867363285**
Tarang Rathod - 9819198373 **Nayan Pandya - 7045566630**

Yours Truly,
Samir Mehta / Sachin Gandhi
Hon. Secretaries

(Please affix your company Rubber Stamp)

The Electric Merchants' Association

FEEDBACK FORM

Name of the firm : _____

Name : _____

Mobile No.: _____ Email : _____

1 Do you feel protected being a member of EMA?

Yes ☐ No. ☐ If no, why ☐

2 Do you get relevant information from EMA on time?

On Time ☐ Sometime Late ☐ Often Late ☐ Not Receiving ☐

3 Do you get Bi-Monthly Journal on time?

On Time ☐ Sometime Late ☐ Often Late ☐ Not Receiving ☐

4 Do you get Bi-Monthly Journal informative and interesting?

Very Interesting ☐ Not so Interesting ☐ Not at all interesting ☐

5 Would you like to support EMA's green initiative for circulars through E-mail?

Yes ☐ No ☐ Both ☐

6 How effective EMA is in resolving Members disputes & grievances?

Very effective ☐ Not so effective ☐ Not at all effective ☐

7 What initiative should EMA take for betterment of Members?

_____

_____

_____

Any other suggestions? _____

_____

_____

Fill and send this form with company rubber stamp & signature within one month to avail free gift from EMA office.

Stamp & Signature

Your's Truly,

Mr. Samir Mehta / Mr. Sachin Gandhi

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One Day	₹ 6,050/-
Two Day	₹ 10,000/-
Three Day	₹ 15,000/-

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For 3 Hours Sessions	₹ 3,000/-

The Association is please to inform all members that EMA Hall is available on Rent. The tariff for the same has been fixed against refundable Deposit Rs. 2500.00 (Two thousand five hundred only)

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Hall booking will be subject to availability of date

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One Page	Two Pages	Three Pages	Four Pages	Five Pages
₹ 1,500	₹ 2,000	₹ 2,500	₹ 3,000	₹ 3,500

Beside, if there are more than 5 pages, the Additional cost will be ₹ 1,000 per pages.
Pls send 1050 copies for Distribution purpose.

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2	Big Banner Advt. on Home Page	60,000	6	Brand Listing on Just Click+1 Co. Listing	₹ 1,500
3	Small Banner Advt. on Home Page	15,000	7	Company Listing under Category	₹ 700
4	Prime Just Click Sponsorships	50,000	8	Price List on Just Click	₹ 1,500

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2	Half Page	3,000
3	Article + Advertisement (Full Page)	7,000
4	Article + Advertisement (Half Page)	5,000
5	2 Full Page Advertisement	9,000
6	2 Half Page Advertisement	5,000
7	3 Full Page Advertisement	12,000
8	3 Half Page Advertisement	7,000
9	6 Full Page Advertisement	24,000
10	6 Half Page Advertisement	14,000
11	Inside Front Full Page For 1 Year	1,25,000
12	Inside Back Full Page For 1 Year	1,00,000
13	Back Cover For 1 Year	2,00,000
14	Plastic Folder (Front & Back) For 1 Year	2,50,000

PLEASE NOTE :

Non-Members will be charged 25% extra on all the above tariffs.

18% GST will be charged extra as applicable on all above tariffs.

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Email : goldwinled438@gmail.com
GST No. : 27BQFPM7010Q1ZF

M/s. BDM INFOTECH
B -202, 2nd Floor, Om Shiv Kripa Building,
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Kandivali (West), Mumbai – 400 067.

Mr. Basudev Mahato
Mob : 9967937930
Email : basudev@bdminfotech.com
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M/s. ELEPROJ ENGINEERS
Shop No. 6, Raja Bhavan Building,
Daulat Nagar Road No. 04,
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Mr. Bhavesh Kumar L. Purohit
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Mr. Pradip Chandmal Goliya
Mob : 9869478593
Email : avirajinstruments@gmail.com
GST No. : 27ADKPG9240M1Z4

M/s. PREMIERE ELECTRICAL SOLUTIONS LLP
C-47, Pravari Industrial Estate,
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Mumbai – 400 063.

Mr. Kunal Sonawat
Tel.: 49720834 • Mob : 9978986343
Email : kunal@premiereelectrical.in
GST No. : 27AAUFP2296B1ZX

CHANGE OF NOMINEE

M/S. MINAKSHI CABLES
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2nd Dhobi Talao Lane, Mumbai – 400 002.
GST No. 27AAOPJ2686D1ZI
Old Nominee : Mr. Madanraj B. Bhansali
New Nominee : Mr. Bhavesh M. Bhansali

M/s. PRAYOSHA AUTOMATION
Room No. 2, Mohan Bharwad, Chawl, Raidongri
C. R. No. 3, Borivali (E), Mumbai – 400 066.
GST No.: 27AARPW5544Q1ZG
Old Nominee : Mr. Ashwin A. Waghela
New Nominee : Mr. Dilip A. Waghela

M/s. NIRAV ELECTRICALS
21-A, Bulakidas Building, 2nd Floor
9, Vithaldas Road, Lohar Chawl, Mumbai – 400 002.
GST No. : 27AABPK9684P1ZT
Old Nominee : Mr. Dinesh N. Kadakia
New Nominee : Mr. Nirav D. Kadakia

M/s. DARSHAN ELECTRICAL INDUSTRIES
B/20, Shukla Industrial Estate, Opp. Ajit Glass
S. V. Road, Jogeshwari (West), Mumbai – 400 102.
GST No.: 27AADPS3566J1ZA
Old Nominee : Mr. Manhar N. Shah
New Nominee : Mr. Abhay M. Shah

M/s. THE NUTRONE ELECTRICALS
Dwarkadas Building, 1st Floor, 72, Mangaldas Road
Lowar Chawl, Mumbai – 400 002.
GST : 27AABPD5791N1ZC
Old Nominee : Mr. Prakash M. Dhoka
New Nominee : Mr. Kalpesh P. Dhoka

M/s. SHIV SHAKTI ENTERPRISE
Khakhar Building, Shop No. 5, Nanubhai Desai Road
C. P. Tank Road, Mumbai – 400 004.
GST : 27AMEPK2431P1ZU
Old Nominee : Mr. Shital Khakhar
New Nominee : Mr. Krish S. Khakhar

M/s. V. N. EARTHMAT
R. No 257, 2nd Floor, Mangaldas Bldg No. 3/B,
Mangaldas Road, Mumbai – 400 002.

GST No. 27AQKPP3367M1Z4
Old Nominee :- Mr. Pratik Parikh
New Nominee :- Mr. Jigar Parikh

RELINQUISHMENT

One of our Member M/s. Hem Traders, 19/21, Picket X Road, 2 nd Floor, Lohar Chawl, Mumbai – 400 002. Has informed us that their employee, Mr. Vikas Chavan had left their firm w.e.f. 01.12.2021. please note that Mr. Vikas Chavan does not represent the said firm anymore and as such no one should deal with him on behalf of M/s. Hem Traders.

EMA POLICY, VISION & OBJECTIVE

POLICY

We at EMA care committed to achieve satisfaction of our members by all such means as may be deemed necessary within legal framework and acceptable to all interested parties. We will try to achieve our objectives by adhering to applicable requirements and try to continually improve the effectiveness of the quality management systems

VISION

1) To become a one stop solution for the members to resolve all their business related issues.
2) To be associated with other similar institution and other allied associations across the globe for the betterment of the members.

SCOPE

Safeguarding interest of the Members, keeping them up to date with relevant information, providing a platform to the members for exchange of ideas, resolving trade disputes of the members providing them with legal administrative and technical support, engaging them in various recreational activities.

ACHIEVEMENT

Provided a meeting place for conference, exhibition, demonstrations, lectures, seminars and other relevant functions for exchange of views of members and other interested parties.

PURPOSE

To promote co-operation among persons, firms, companies connected with the electric trade and industry in India, whether as importers, exporters, wholesale or retail dealers, manufacturers, contractors, consultants or commission agents. With a view to their adopting a common policy and collectively taking such steps as may be considered necessary or expedient to further and safeguard the interest of trade and industry.

To frame and from time to time update and try to enact rules and bye-laws for the benefit of and binding on the Association and/or its members and non-mebers dealing with the members to promote and safeguard the interest of the Association and its members.

To elevate standard of business moral and promote system of preferential treatment to the members of the Association.

Providing facilities and machinery for the settlement of disputers by arbitration.

To take such steps which may be deemed necessary for promoting, supporting or opposing legislation or actions by the Government or any departments thereof or by any local body or bodies and in general to take the initiative to safeguard the interests of the Electrical Trade and Industry.

OBJECTIVE

To Organise in a calendar year at least one :

- Excursion
- Factory Visit
- Social Family Gathering
- Sports Event
- Medical Seminars
- Medical Camp for Members and Staff.
- Technical Seminar
- Taxation Seminar

To acquire, verify and circulate relevant notifications issued by regulatory authorities among the members within two weeks of their receipt.

To educate general public including members by all suitable means on the advantages and the utilities of electricity, electrical appliances and articles used for domestic, commercial and industrial purpose twice a year.

Establishing, equipping and maintaining a library for the benefits of the members.

Vashi

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