

**Power to gear  
your business**



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Manufacturing Of LT  
Power Distribution Panels



## Why Us

We are an ISO 9001:2015 certified Company and have an experience of involvement in the field of Electrical Products of over three decades and manufacturing experience of LT Panels from the past 15 years. The array of Electrical Panels we cater to are in accordance to industrial quality standards and specific requirements of the clients.

## Our Motto

Our agenda is 100% Client satisfaction with focus on no compromise in quality and timely delivery of product as per our commitment. Long term relationship with Government and Private Institutions for as long as 30 years with no complains whatsoever speaks for our work efficiency.

## Our Vision

Our vision underpins the growth and development of our organisation into a nationally renowned manufacturing unit of Electrical Panels.

## Our Team

We have a dedicated drawing department where expert personnel take care of each and every minute detailing and customization based on client's requirement. Later on, our experts float suggestions to make the overall project cost effective and technically and commercially feasible. Our skilled technicians and a labour involved are diligent, hard working and very well versed with all types of LT Panels. They make sure that our product is delivered on time and even before time on few instances. Quality assurance team assures optimum quality of our product by keeping a strict vigil over the various stages of production right from the beginning i.e. procurement of raw materials till the delivery of the final product.

## OUR PRODUCTS

### Power Control Centre (PCC) Panel

Basic function of PCC Panels is to control power supply to various units and equipment in the industry as per the load requirement. It is designed based on the needs of the client depending upon the incoming and outgoing ACB/MCCB/SFU/MCB.

Normally, PCC Panels comprise of either Breaker Panels only or Breaker and MCC Panel coupled together. They are installed near power source and hence fault level is very high. Busbar system inside PCC Panels are designed to safety against the fault level, change in climatic conditions (temperature), short circuit, over voltage, etc. to ensure safety to all machineries and equipment. We offer PCC Panels with Current carrying capacity of upto 6300 Amps integrated with necessary protection to meet all safety standard as required in various industries.



### Motor Control Centre Panels or MCC Panels

MCC Panels are used in majority of industrial applications. LT Power is distributed using these panels. They are effectively used to control motors or submersible pumps to provide sufficient protection from overloads and short circuits. These are high on performance, require low maintenance and can withstand extreme temperature variations. We offer MCC Panels as per customer requirement using ACB/MCCB/SFU/MCB, DOL, Star Delta Starters or ATS for Automatic/Manual means of starting & stopping the motor. Our MCC can be operated via Local/Remote/DCS.





# OUR PRODUCTS

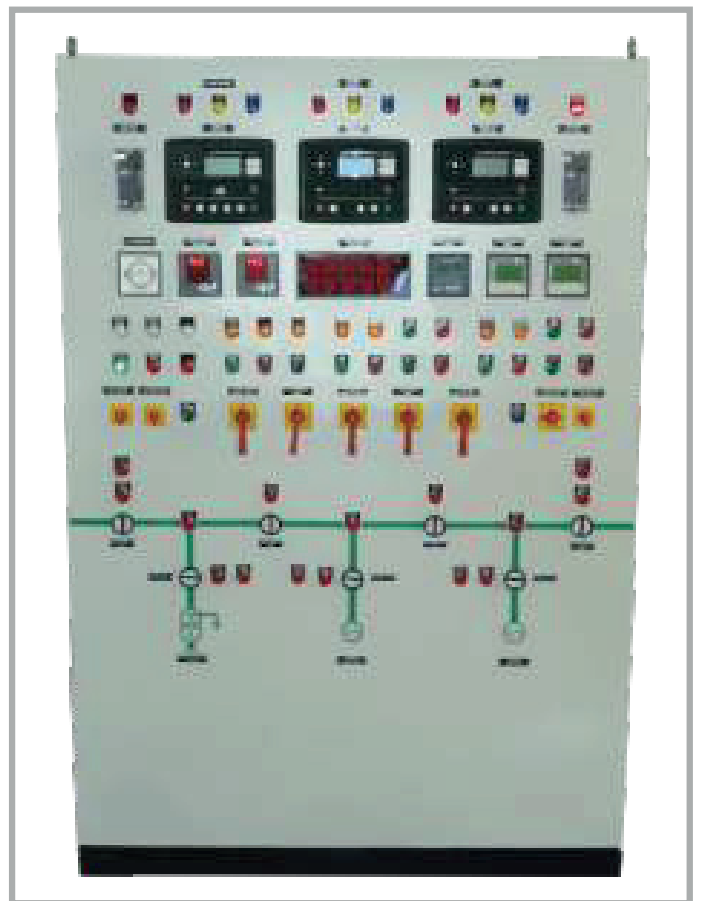


## Automatic Power Factor Control Panels or APFC Panels

Modern power networks consist of a wide variety of electrical and power electronics loads, in case of which, the power factor also varies as a function of the load requirements depending upon the type of machineries, cooling plants and other devices installed. APFC Panels are therefore used in commercial buildings and industries due to their capacity to automatically control load power factor by sensing various parameters like current, power and KVAR without any manual intervention. In addition, the occurrence of leading power factor will be thus prevented, minimising the loss and wastage of energy and heavy penalties by various electricity boards. Our APFC panels are manufactured using APP/MPP Heavy Duty capacitors banks as per characteristics of electric loads.

## DG Synchronizing Panel

Synchronizing Panel works between two or more different power sources like DG sets to manage power supply. Synchronization helps in making different DG sets behave as a single virtual unit and eliminates subdivision of total load. It helps in transferring load from one unit to another as during service period, so that the



unit requiring service can be easily shut off. In this way the critical load need not be interrupted and thus there is no production loss. They can be controlled both manually and automatically based on the client requirements. As special features we provide Synchronising Panel with AMF and PLC so that it can be controlled and monitor from control room.



## OUR PRODUCTS

### Variable Frequency Drive Panel or VFD Panel

The VFD Panels (Variable Frequency drive panels), also known as VFD Control Panels or AC Drive Electrical Control Panels, are designed to control the speed of electric motor and feed pump. They are widely used in drilling, pumping and other large machine applications like rolling Mills, tube mills, paper mills, cable industry and CTL Lines. Basic use of VFD Panels include: power switching and protection, adjustable speed of the transmitted command signals to the motor, it can display the panel's operational status visually and reduce the impact of external environment to the electrical components. As a special feature we can provide DOL/SD Starter so that in case of VFD breakdown one can run the motor without any trouble.



### Soft Starter Panel

Soft starter panels are fully equipped with all necessary switch-gears like MCCB, Bypass Contactor and Soft Starters. They protect the mechanical power-transmitting elements of the machines during start-up and ramp down. They guard the network against high inrush peaks through reduced power input efficiently and

provide safety against Over Load, Over Current, Under & Over Voltage etc. Soft Starter Panels have a graphic display and a logical keypad which enables advanced setup and viewing of operational status.



### Feeder Pillar Panels

The feeder pillar panels are used to terminate and distribute the control circuits. They provide local isolation to the electrical distribution equipment, protecting both the cabling and the transformer from faults. These are used in almost all the industries, townships and housing as they allow simple and local maintenance to our equipment, reducing site downtime and reducing overall maintenance costs.



# OUR PRODUCTS



## Fire Alarm Panel

A fire alarm control panel (FACP), fire alarm control unit (FACU), or simply fire alarm panel is the controlling component of a fire alarm system. The panel receives information from devices designed to detect and report fires, monitors their operational integrity and provides for automatic control of equipment, and transmission of information necessary to prepare the facility for fire based on a predetermined sequence. The panel may also supply electrical energy to operate any associated initiating device, notification appliance, control, transmitter, or relay. Main components of a fire alarm panel include interface, battery, SLC Loops, Notification



## Automatic Mains Failure Panels or AMF PANELS

Also referred to as automatic transfer switch (ATS) panels - AMF Panels make the power switch to emergency standby generators in the event of a significant loss of mains power or total blackout. Without AMF panels, generators need to be operated manually and that can lead to loss in data, potential damage to electrical equipment and huge amounts of disruption. Once the generator is ready to accept the load, the motorised switches or contactors in the AMF panel will switch the building load from mains supply to the generator. When the mains is restored, the opposite will happen. The AMF panel will put the building load back on to the mains supply and then stop the generator (once it has performed its cool down process).

appliance circuits (NACs), Relays, Phone Jacks, Power conditioner, cabinet and main circuit board. Large buildings or campuses have multiple panels installed that are linked with Local Area Network or LAN. All integrated detection systems can be addressed and monitored from a single panel or monitoring station.



## MANUFACTURING PROCESS OF LT PANELS

# 1

### Designing

Our Electrical Design Engineers are well versed with Auto-CAD and execute designing and drawing the initial panel and its components along with the circuit based on the client's demand.

The design procedure followed is as follows:



Before the production begins, our team is ready with:

- 1) Cover Sheet
- 2) Table of Contents
- 3) Product Datasheets for each provided part
- 4) Enclosure Layout, Power Schematic, Control Schematic, Field Connection drawings for each panel
- 5) Bill of Material for each panel



# MANUFACTURING PROCESS OF LT PANELS

# 2

## Sheet Cutting and Painting

Based on the final approved drawings, sheets of metals are cut in accordance with the given dimensions. Painting is done on the sheet metal in order to avoid rust and make it look aesthetic.

All components enlisted in the Bill of Materials or BOM is acquired by our selected list of trusted vendors. Branded and standard products are used with no compromise on quality whatsoever.

# 3

## Assembling

The sheet metal cut in the required dimensions have to be assembled in the assembling phase. Here the panel joining and base channel fittings are done. Door channels are fit along with gaskets on outer frame to ensure proper seal of the doors from external environment. Necessary locking arrangement is fit as and how required.

After a basic frame of the panel has been prepared, busbar is fitted into the frame of the designed dimensions.

# 4

## Component and Hardware Fitting

Panel components, Terminal Channels, MCB Channels, Duct and Name plate fitting are done. Wiring is carried out with insulated, flexible wires of distinct size and colors. Suitable terminals are provided for equipment. All other hardware accessories such as lugs, glands, locks, etc. are fit inside the panel under strict quality measures.

# 5

## In- House Testing

Once the fitting is over, the panel is now put under various tests based on the type of panel manufactured. After a series of tests, the panel is ready for dispatch. Inspection call can also be raised by client if necessary in which the client can visit our factory and a trial run of our product is done. Any suggestion(s) made by our client is put into consideration following which, the panel is ready for dispatch.



## OUR PRODUCTS RANGE

PCC Panel   MCC Panel   PLC Panel   Soft Starter Panel

APFC Panel   AMF Panel   Instrument Panel   VFD Panel

Synchronizing Panel   SOV Panel   Bus Duct   PDB Panel

## POWER & CONTROLS PRODUCTS SPREAD IN INDUSTRIES

Steel Industries/ Foundries

Tea Plant

Power Plants

Water and Waste Industries

Plastics

Water Management

Textile

Multiplexes

Commercial Complexes

Housing Projects

Infrastructure viz. Ports,  
Dam Sites, Airports

Petrochemical Industries

Refinery

Hospitals

Hotels



# RECOGNITIONS



## Certificate of Registration

This is to certify that

### Power & Controls

Correspondence Address : 55 Ezra Street, Basement AC Market, Suit No. 20,  
Kolkata - 700 001, West Bengal, India  
Site Address :  
Kalagachia, Sakaripota Main Road, Thakurpukur,  
Kolkata - 700 063, West Bengal, India

has been assessed and registered by TCCPL as conforming to the requirements of:

### ISO 9001:2015

#### [Quality Management System]

The Quality Management System is applicable to:

**Design, Manufacture and Supply of HT and LT all kinds of Electrical Products Including all types of Electrical Panel Boards. EPC Contractors of all Kinds of Engineering, Mechanical, Electrical and Civil Projects. System House / Deals in all Kinds of Engineering, Electrical and Mechanical Products Including Cables, Motors, Starters, Battery and Battery Charger, UPS, Insulators, Pumps and Hardware Products.**

Certificate No: Q-911808760 | Certificate issue date: 18-08-2018 | Certificate valid till: 17-08-2021  
1<sup>st</sup> Surveillance due before: 17-08-2019 | 2<sup>nd</sup> Surveillance due before: 17-08-2020

  
 Managing Director

  
 TCCPL  
 TRANS CONTINENTAL CERTIFICATIONS PVT. LTD.

Accredited by **United Accreditation Foundation (UAF)** Full Member of IAF  
3510, Colmar, Norfolk, VA 23509, United States of America (USA)  
To check certification status: <http://uafaccreditation.org>

Trans Continental Certifications Pvt. Ltd.  
www.tccplcertifications.com  
To check certification status: <http://uafaccreditation.org>, [www.tccplcertifications.com](http://www.tccplcertifications.com) or write us at [info@tccplcertifications.com](mailto:info@tccplcertifications.com)  
Certificate is the Property of TCCPL and shall be returned immediately when demanded.  
Lack of fulfillment of conditions set out for the issuance of this certificate and timely completion of periodic surveillance audit may render this certificate invalid  
Head Office: S.C.O 393, Level II, Sector 8, Panchkula- 134 112 (Haryana) India



भारत सरकार  
Govt. of India

सूक्ष्म, लघु और मध्यम उद्यम मंत्रालय  
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES



सूक्ष्म, लघु और मध्यम उद्यम  
MICRO, SMALL & MEDIUM ENTERPRISES



उद्योग आधार



Udyog Aadhaar

A

Type of Enterprise	Micro	Small	Medium
Manufacturing	A	B	C
Services	D	E	F
UAN	WB10A0014510		

### Udyog Aadhaar Registration Certificate

Udyog Aadhaar Number: WB10A0014510  
Name of Enterprise: POWER AND CONTROLS  
Location of Plant Details:

SN	Flat/Door/Block No.	Name of Premises/Building Village	Road/Street/ Lane	Area/Locality	City	Pin	State	District
1	-	Kalagachia	Sakaripota Main Road	Thakurpukur, Behala	Kolkata	700063	WEST BENGAL	SOUTH 24-PRAGANAS

Official Address of Enterprise: 55, EZRA STREET , BASEMENT AC MARKET , SUIT NO. 20 , KOLKATA  
District: KOLKOTA State: WEST BENGAL PIN: 700001  
Mobile No: 9830160851 Email: power.kolkata@gmail.com

Date of commencement: 01/04/2017  
Major Activity: MANUFACTURING  
Enterprise Type: Micro  
Previous Registration details-if any: ::

National Industry Classification Code

SN	NIC 2 Digit	NIC 4 Digit	NIC 5 Digit Code	Activity Type
1	27	2710 - Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus	27104 - Manufacture of electricity distribution and control apparatus (electrical apparatus for switching or protecting electrical circuits (e.g. switches, fuses, voltage limiters, surge suppressors, junction boxes etc.) for a voltage exceeding 1000 volts; similar apparatus (including relays, sockets etc.) for a voltage not exceeding 1000 volts; boards, panels, consoles, cabinets and other bases equipped with two or more of the above apparatus for electricity control or distribution of electricity including power capacitors.)	Manufacturing

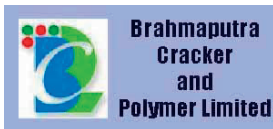
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MyMsme Mobile App (Beta Version) is available now for download. <https://play.google.com/store/apps/details?id=msme.mysmsme>



# OUR CLIENTS



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