

 **MARSZ**
ELECTRICALS PVT. LTD.
FROM VISION TO REALITY

www.marszelectricals.com

TRANSFORMERS

Distribution & Power Transformer

A distribution transformer provides the final voltage transformation in the electric power distribution system, stepping down the voltage used in the distribution lines to the level used by the customer. The invention of a practical efficient transformer made AC power distribution feasible; a system using distribution transformers was demonstrated as early as 1882.

If mounted on a utility pole, they are called pole-mount transformers. If the distribution lines are located at ground level or underground, distribution transformers are mounted on concrete pads and locked in steel cases, thus known as pad-mount transformers.



Furnace Transformer

A high current furnace transformer is provided by having the low-voltage windings arranged in a closed delta configuration within the transformer enclosure. Bus bar terminals are mounted exterior to the enclosure for providing electrical connection with the low-voltage windings.

MARSZ Furnace transformers are used to step down from voltages between 11 and 33 kV to levels of several hundred volts only. This results in massive secondary currents. As an example a 30 MVA unit at 150 V would result in a secondary current of 115 kilo Ampere. For these high secondary currents special bushings are required to connect to the bus-bars. These bushings are specified with very specific arrangements to suit the bus-bar arrangement and cooling system. Furnace bus-bars are mostly water cooled. Due to the high secondary currents and resistive losses the furnace layout is such as to limit the bus-bar length.



Varivolt

"VARIVOLT" is the most effective device meant for operation from a nominal input voltage of 240V 1Ph & can give output voltage anywhere between 0 to 240V or 0 to 270V 1Ph by simple transformer action. Three such "VARIVOLT" connected electrically in star and mechanically in tandem, become suitable for operation from a nominal input voltage of 415V 3Ph and can give output anywhere between 0 to 415V or 0 to 470V 3Ph.

"VARIVOLT" AUTO TRANSFORMER is a continuously variable voltage auto transformer, having a movable carbon tip, fixed to brush arm sliding on a silver plated commutator. Rotation of the brush arm by either manual or motor drive, delivers an output voltage from zero to or above line voltage. "VARIVOLT" conforms to I.S. 5142.



Current Transformer

Current Transformers are made in a range of measuring and protection type considering quality, accuracy and reliability as prime factors. MARSZ Current Transformers can be used for metric and imperial size bars. Current Transformers are made from high magnetic performance prime CRGO Silicon Electrical Steel. The performance of the core is checked to meet final parameters such as ratio, rating and accuracy.

The Current Transformer is finally completed by placing PVC washers on top and bottom and then taped closely with polyester film and polyvinyl chloride tape. Proper lugs are provided on secondary terminals with S1 and S2 markings. Anodized name plate is slipped within outer tape mentioning specifications and P1, P2 direction.



Low Tension Power Transformer

Natural Air-cooled transformers are supplied in sheet steel ventilated case, with screwed top cover. Input and output terminals are provided on the top side of the transformer, inside the Terminal Box. Cable entry holes are provided on the bottom side of the Terminal Box. The transformers are suitable for floor mounting and are also supplied with M.S. Rollers for easy portability in case of large size transformers.

Natural oil cooled transformers are supplied in M.S. tanks. In some cases, the tanks are provided with cooling radiators on two or all the four sides. As a standard practice, the tank is provided with oil fitting hole with cap, oil level indicator, drain plug, and earthing terminals. Input and output terminals are brought out generally on two opposite sides, either from the sides of the tanks or from the top of the tank. Plain unidirectional M.S. rollers are fitted on M.S. channels for base mounting.



DIESEL GENERATORS

MEG 6500

Technical Specification

- Rated Output at 50 Hz(VA) – 5000 VA
- Maximum Output at 50 Hz(VA) – 5500 VA
- Starting System – Recoil/ Electric Start
- Oil Alert System – Available
- Fuel – Diesel
- Fuel Tank capacity (Ltr) – 15
- Continuous Run (Hrs)* Diesel – 12
- Engine Type – Perfect, Single cylinder, 4 Stroke, OHV, forced air cooling

MEG 3200B C2

Super Silent Portable set ideal for running household appliances such as Fans, Tube Lights, CFL Lights, LED Lights, T.V, Computer, Refrigerator, etc. Technical Specification

- Rated Output at 50 Hz(VA) – 3000 VA
- Maximum Output at 50 Hz(VA) – 3300 VA
- Starting System – Recoil/ Electric Start
- Oil Alert System – Available
- Fuel – Petrol
- Fuel Tank capacity (Ltr) – 18
- Continuous Run (Hrs)* Petrol
- Engine Type – Perfect, Single cylinder, 4 Stroke, OHV, forced air cooling

Eicher TMTL Generators

At MARSZ Electricals Pvt. Ltd., power generation for our country is all we do. As India is taking giant strides in industrial & economic development, we want to assist this with our cutting edge product development, our network of experienced in house customer support & service team. MARSZ believes in singularity of focus & commitment to provide reliable power solutions, which is unmatched in this industry.

MARSZ diesel generators provide power solutions to every requirement of industrial generators. Our industrial generators are available in a range of sizes to meet any application. MARSZ Industrial generators have a high dependability and reliable mechanical and electrical performance. Our industrial generators are developed to ensure a continuous supply of power in the event of failure of the grid systems. If you are looking for an industrial generator for uninterrupted power supply, then MARSZ Industrial generators are the right option.

BAUDOUIN Generators

MARSZ Electricals Pvt Ltd is India's leading provider of alternative power solutions that include power generators and renewable energy solutions. Our vast expertise in the business has driven us to achieve excellence in manufacturing power generators and servicing customers across a wide range of industries.

From telecom and retail to government and defence, MARSZ enjoys a distinguished reputation for consistently delivering best in class alternative power solutions that are manufactured to international standards. Our facility is DBQA, Defence organisation approved. MARSZ plants are ISO 9001, 14001 and OHSAS 18001 certified.

Mobile Lighting Tower

As a pioneer manufacturer and supplier of portable lighting and energy solutions, we, from MARSZ Electricals Pvt. Ltd. have come a long way. We have created mobile light towers that are of great use in any construction site or at a mining site or excavation site. Our portable light towers are bright and easy to transport to any spot at any time of the day.

These lighting towers offer temporary lighting solutions especially for mining areas, construction sites, civil engineering works, Solar & Wind EPC Projects, Road projects, defence requirements and industrial operations.



INDUSTRIAL PANELS

PCC/MCC

Electrical PCC panels are modular structured electrical control panels used to control power supply in large industrial as well as commercial units. The power supplied to heavy machineries, equipment's, motors and transformers are controlled as per the requirement of electrical loads using these PCC panels. PCC panels cater the needs of various industries like chemicals, plastic, paper, power, oil and natural gas, medicine, Dairies etc. The main quality of panel is to protect and control power Suitable for Containerized capacitor switched panel and for SSR (solid state relay) switched panel on demand.

- Minor effects of harmonics on performance.
- Intelligent switching for bank selection.
- Other switching on demand.

PLC & SCADA

We live in the computer age. One of the many ways to minimize energy and other operating costs for our customers is by incorporating our considerable mechanical engineering knowledge into computerized control and monitoring (SCADA) systems that we design, develop and implement in-house.

At Kveetech, we have several hundred in-house engineered control and monitoring systems operating successfully in India & out of India. Significant practical experiences have taught Kveetech electrical engineers what works, what makes control systems reliable and what type of control is best suited to the refrigeration or air conditioning system in question. The intellectual property in our PLC and SCADA systems is cumulative and is like a common DNA in all plants.

PLC PANEL

PLC operated control panels: We expertise in industrial automation. Our experienced and skilled engineers developed PLC programming, its logic, incorporate for the smooth running of machinery with panel with regards to its industrial functions and logic so as to ensure complete process reliability, precision functionality and continuous operations.

We offer PLCs of Siemens, Allen Bradley, Mitsubishi, Schneider and with also PLC operated Control Panel & Scada Systems. PLC Panel finds wide application in different industries for controlling electrical power supply using programmable Control Logic Processor. The PLC Panel, offered by us, is engineered with utmost precision for easy monitoring and controlling which makes process error free. Our PLC Panel has both the input and output connectors of high quality.

APFC Panel

Equipped with advanced technologies and features, our Automatic Power Factor Correction Panels (APFC Panels) / Power Factor Improvement Panels are fully automated in operation, having capacity to achieve industry-required power factor in diverse situations. These panels are quality-tested components that undergo a wide variety of electrical load.

Flame Proof Panel

We offer high performance and latest technology based flameproof panels what find use in varied industry sectors like Automobile industry, Petrochemical industry, Chemical industry, Pharmaceutical industry among others. Featuring superior engineered finish, these panels come in precise construction standards that provide for optimum usage and longer functional support. These panels are also resistant towards fire, low/high temperatures and corrosion possibilities and can also be custom modified as per the specific requirements of the customers.



OUR PRODUCTS

STEADYVOLT

The highly fluctuating A.C. Mains supply is a very common phenomenon in India and the difficulties caused by them are known too well and need not be enumerated. The emergence of the sophisticated computer era has created the need for a stable input supply as a basic necessity. The absence of stable supply creates problems in many equipment's. Unsteady voltage supply conditions result in the total breakdown of sensitive and sophisticated equipment's. The hope of getting a stable supply is very remote in our country and keeping this in view, MARSZ Electricals have developed microcontroller based STEADYVOLT Servo Controlled Voltage Stabilizers. STEADYVOLT conforms to I.S. 9815.



ENERGY SAVER

Mixed Load Energy Saver (MLES) suitable for Industrial applications e.g. Motors, Pumps, HVAC, Air conditioners, Blowers, Fans and other load. MLES is to be connected in series with the load and will act as like Low pass Filter. In the interest of reducing losses and wastage of energy our MLES plays a vital roll by converting these losses and wastage of energy in the Energy saving band. Our Energy saver acts like filter and create low impedance path to establish energy saving.

Energy Efficiency Improvement

Energy losses can be filtered through our MLES. Our experts design the system to suit the required Load & Energy Efficiency.

Guaranteed Energy saving

We establish 8 % Energy Saving despite Load variation with improved Power Quality.



Rectifier Units for Electroplating and Anodising

A variable voltage D. C. source is required for the Electro deposition process of electroplating, anodizing etc. The various ratings of voltages and currents required for the process depends upon the metal to be deposited and the process adopted. MARSZ Rectifiers are designed in standard voltages of 8 V to 24 V, and in current ratings varying from 100 Amps up to 10000 Amps. Up to 24V DC 10000 Amps for Electroplating and Anodising.



Hybrid Harmonics Filter

Harmonics are unwanted currents that overload wiring and transformers, creating heat (or Fire) and interfere with utility Load. It can also hamper operations and cause equipment failure. The increased use of nonlinear devices/equipment's has become a concern in most utility power system. Non linear Loads draw a current but unable to measure by normal electrical instruments.

Harmonics suppression

Harmonics are waveform distortion. Removal of Harmonics required Filters. The designated Filters has to be designed as per client site requirement. Site assessment for Harmonics is must.

Dominant Harmonics

Various types of Harmonics are multiple integer of Positive Sequence, Negative Sequence & Zero sequence Harmonics.



Solar Power Solutions

MARSZ takes its vision to become India's #1 provider of eco-friendly & renewable power solutions very seriously. This has been reflected in our move towards providing sustainable renewable energy solutions to our customers across industries spanning Defence, Government, Corporate and Retail through various business models like Opex, Capex and RESCO.

MARSZ End-to-End EPC Solutions

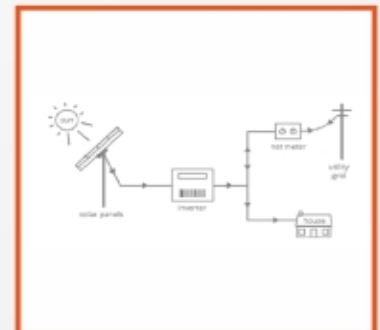
MARSZ offers Solar PV Plant customers end-to-end servicing and solutions for:

Rooftop Solar Power Plants

Roof PV system have photovoltaic modules, mounting systems, cables, solar invertors, and other electrical accessories. These electricity-generating systems are mounted on rooftops of residential buildings, commercial buildings, or other structures.

Utility Scale Power Plants

These plants are suitable for government, commercial, institutional and residential buildings, as well as for banks, with financing starting 1KW onwards.



OUR PRODUCTS

H. V. Tester

Every electrical apparatus or machine is provided with insulation between live part and earth or between two different sections of live parts. This insulation is required to be tested at high voltage values recommended by applicable relevant standards.

The standard Specification for various electrical apparatus specifies Power Frequency Voltage withstand test at different levels depending upon working voltage of electrical apparatus. It is observed from the various standards for electrical equipment's that the minimum power frequency voltage withstand test level for electrical insulation is 2kV for one minute.

We have, therefore, standardized on manufacture of 'MARSZ High Voltage Breakdown Testers with rated voltage of 5kV.



Ring Main Unit / HT Switch Gear

- Characterized by their reliability and operational safety, the SF6 insulated ring main unit range includes fully extensible and non-extensible options for secondary distribution applications up to 24 kV.
- Featuring the most advanced vacuum switching technology, the units are compact, flexible and easy to install and operate. The range is fully weatherproof for outdoor use, has a long service life and requires virtually no maintenance in the most extreme conditions.
- Built upon the strong RMU heritage and offers a multiple of additional features and benefits. The automation ready units now has integrated Remote Terminal Units (RTUs) in the form of the next-generation Gemini 3, enabling instant smart grid functionality.
- Available in 12, 17.5 and 24 kV options with up to 630A ratings, It has been thoughtfully developed for easy installation, operation and includes a number of additional safety features. These include electrical and mechanical interlocking, as well as AFL / AFLR internal arc ratings.



LED Light Fixtures

Established in 2009, LEGERO has had an incredible journey aiming at being the most sought-after LED Lighting Brand in India

- Inspired by quality, our journey started a decade ago with passion of providing superior quality within client's budget. We have always believed and envisioned working as lighting solution providers which reflects in our range of products, developed for almost any given application.
- With localized ecosystem, handpicked vendors, in-house research & testing and indigenous manufacturing, we believe in being market leaders in lighting solutions both at National and International platform.

Ladder Type Cable Tray (LTCT)

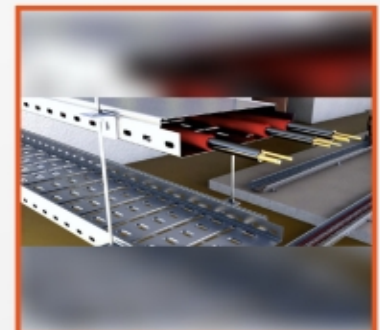
Ladder type cable trays are manufactured from M.S / G.I sheet in 1.2 mm to 3 mm thick in sizes of 100 mm to 1500 mm width, length of 2.5 meter each. Consisting 40 mm to 150 mm height channel as side rail and rung of 35 mm to 50 mm in width welded with side rail at the space of 250 mm to 300 mm c/c. Complete with coupler plate and hardware. We also supply LTCT in painted form, hot dip galvanized, powder coated, FRP coated as per client requirement.



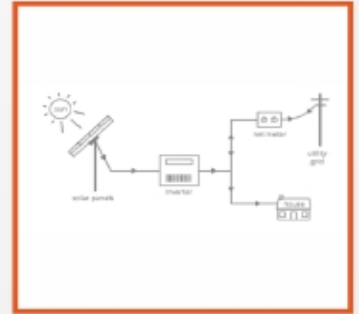
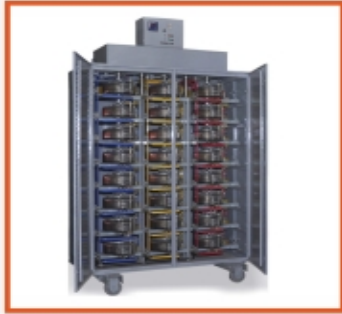
Perforated Cable Tray (PCT)

Perforated type cable tray manufactured from M.S / G. I sheet in 0.8 mm to 3 mm thick in size of 50 mm to 1000 mm width, length of 2.5 meters each. With collar height of 20 mm to 150 mm complete with coupler plate and hardware. Extra heavy duty PCT with additional bend of 15 mm can be made. We also supply PCT in painted, hot dip galvanized, powder coated, FRP coated or as per client requirement.

Customized Accessories like bend, T-junction, cross, reducer, vertical bend are also manufactured.



OUR PRODUCTS



CONTACT US



Balaji Tower, C-607, Sector 30 Vashi,
Opp Sanpada Stn West, Navi Mumbai 400705

Call Us : +91 93221 33738

Email : sales@marszelectricals.com