MARSONS ENERGY









THE FUTURE OF ENERGY









01 Our Business

Marsons Energy is a pioneer in manufacturing highest quality Power & Distribution and Special-Application electrical Transformers. Product Range- from 10 kVA upto 10 MVA within 36 kV Voltage –Class. With over 30 years of experience, we use the latest designs, material and technologies to manufacture high quality & LOW-LOSS, energy efficient Transformers, while achieving the lowest cost possible for Customers . With a team of over 100 technicians and engineers, we ensure that our Customers' experience is delightful as we entrench ourselves completely in customers' project achieving product quality as per customer specification, timely deliveries and support for Installation, Commissioning and Services.



Transformers manufactured by Marsons Energy are used across industries for Urban & Rural electrification, High-Voltage Distribution Systems, Solar & Wind farms, Commercial complexes, Metros and Railways. All products are duly Type Tested and NABL-accredited Laboratories in India & Abroad in accordance to all standards like- IEC, BS, IS, DIN, ANSI and EcoDesign of European Commission.



Manufacturing plant of Marsons Energy is located in Jaipur (INDIA), a city of manufacturing excellence and low-cost resources. Our factory's quality standards are certified ISO9001:2008 by INTERTEK

02 Our Vision

Transformer manufacturing business by adopting latest Design and manufacturing methods, training and developing highly skilled and motivated work-force, pursuing a total "Customer-centric Approach" and delivering most durable and cost-effective products & services to customers across the world in order to maximise their ROI on electrical infrastructure. Adopting to all international standards and new energy efficient specifications is our passion and we shall continue our research & Development efforts rigorously.



DEEPAK JAINManaging Director

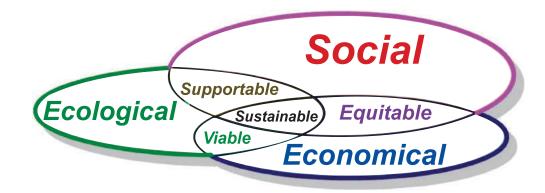
03 Customer-Centric Approach



The phenomenal growth of Marsons Energy is due of its ability to meet Customers' requirement and specifications, "on-time Delivery" and "optimum Quality" resulting in lowest cost, high quality transformers. With adoption of stringent documented Quality management systems, we maintain highest levels of Quality and "Customer satisfaction". A "24 X 7", aftersales network of Marsons Energy supports every transformer supplied across India and abroad.

04 Sustainability

Our guiding philosophy upholds "SUSTAINABILITY" as supreme; whereby Social Demands, Care for Environment & Financial Aspects of manufacturing help us produce best quality & durable transformers.



05 Energy Efficiency Ecosystem

Marsons Energy is taking Energy Efficiency drive into the heart of Power Industry. With LOW-LOSS & Zero-maintenance quality Transformers, the power delivery ecosystem is expected to benefit tremendously. Environment challenges of today's times demands such energy saving measures, hence, a complete Energy Efficient Ecosystem. Marsons Energy presents Low Loss Transformers at Sub-transmission levels of 36KV Voltage-class and below.



01 General

MARSONS ENERGY has aligned itself with the global mission of- "ELECTRICITY FOR ALL". Households in small towns, villages or remote areas, farmers with water-pumping stations, Telecom stations, Mines or rural commercial centres....all need access to electricity and we have committed ourselves to it. Historically, providing electrical connections in the remote distant area was seen as economically unviable, however, with our energy efficient and durable transformers we assure it is not so. With a range of protection features, our transformers are designed to perform for a long duration of time.



We understand the harsh site conditions in rural areas which require transformers to be protected from line faults, surges, overloading, theft and lighting. We provide protection to transformers by Oil immersed internal circuit breaker & MCCB in an externally mounted box. Our products are also fitted with features which sense problems and communicate the same to the control room.

02 Basic Technical Data

Ratings	5 kVA to 200 kVA
Voltage Class	Upto and including 36 kV
Phase	One, Two and Three
Frequency	50 Hz
Winding Material	Copper/ Aluminum
Tapping	As per customer requirement
Vector Group	li0, Dyn11, Dyn5, etc. or as per customer requirement
Insulation Class	Class A; Class B
Temperature Rise	As per relevant Standards /As per Customer Requirement
Cooling	ONAN
Insulating Fluid	Mineral Oil/ Synthetic Ester Oil to relevant standard
Applicable Standards	IS: 2026, IEC: 60076, BS, SANS, ANSI, DIN or equivalent
Fittings & Fixtures	Standard or as per customer requirement





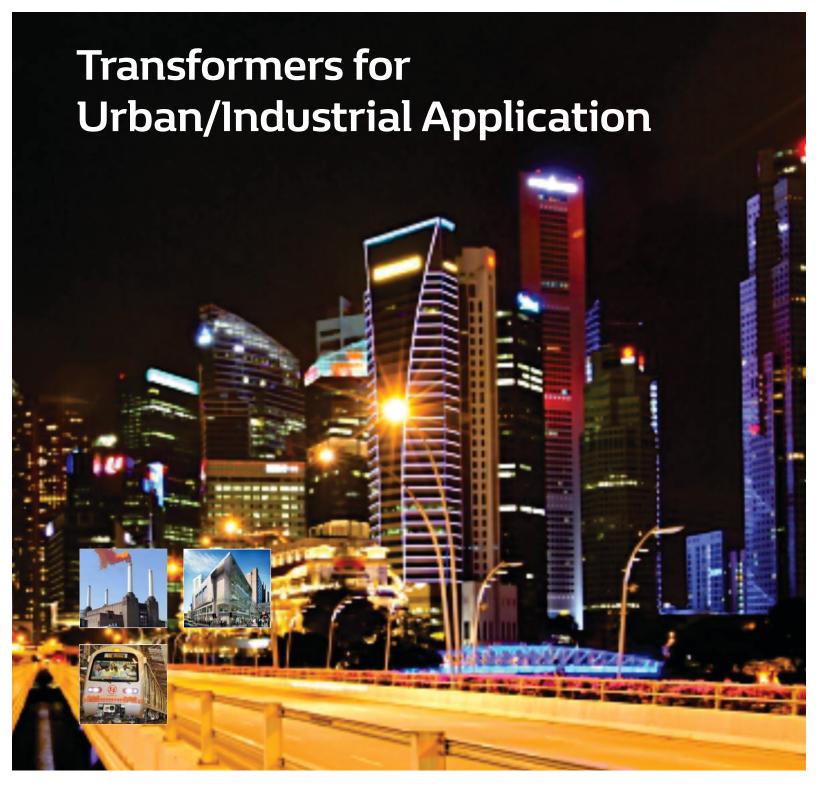








- Anti Vandal features to deter unauthorized opening and siphoning of oil, breakage of parts etc.
- Completely Self Protected (CSP) features to protect against Line faults / surges, overloading, lightning etc. Oil immersed circuit breaker provided for tamper-free operation.
- Designed to minimize the risk of accidental short circuit caused by animals, birds or vermin.
- ▶ Pole Mounting arrangement for sturdy mounting on pole or mounting structure.
- In-built metering option available to monitor consumption.
- Mountable Distribution Box to provide consumer connections.
- Transformers are designed to withstand maximum fault level, short circuit conditions and capable of carrying its full normal rating continuously at any tap.



01 General

MARSONS ENERGY transformers are robust, durable, energy efficient and leak-proof. This is achieved through a highly mechanised, automated manufacturing process; controlled by a strict Quality inspection regime. With large populations moving into cities every day, electrical infrastructure is under tremendous pressure to keep electrified the buildings, hospitals, shopping complexes, transport systems etc. Virtually every aspect of human life demands electrical power and, hence, need for reliable electrical grid. The answer is...MARSONS ENERGY



02 Basic Technical Data



Ratings	100 kVA to 10 MVA
Voltage Class	Upto and Including 36 kV (step up or step down)
Phase	Three
Frequency	50 Hz
Winding Material	Copper/ Aluminum
Tapping	OCTC / OLTC as per customer requirement of range and steps
Vector Group	Dyn11, Dyn5, Yd11 etc or as per customer requirement
Insulation Class	A, B, F or H
Temperature Rise	As per relevant Standards /As per Customer Requirement
Cooling	ONAN - Corrugated Finwall or Pressed Steel Radiators
Insulating Fluid	Mineral Oil/ Synthetic Ester Oil or as per relevant standard/requirement
Applicable Standards	IS: 2026, IEC: 60076, BS, SANS, ANSI, DIN or equivalent
Fittings & Fixtures	Standard or as per customer requirement

03 Salient Features



- Compact design to minimize space requirement especially in Unitised/Packaged substations within enclosures.
- Health and Safety features as per regulations
- Tapping can be Off-Circuit Tap Changer or ON Load Tap Changer depending on the variation and steps required.
- ▶ Remote Terminal Control Panel (RTCC) to control the tap changing remotely, to monitor performance with remotely placed alarm and trip features.
- Transformers are designed to withstand maximum fault level, short circuit conditions and capable of carrying its full normal rating continuously at any tap
- Various customized solutions based on customers' requirement such as space constraints, incoming and outgoing terminations, harmonics suppression, protection features etc.
- Free Breathing or hermetically sealed as per requirement
- High durability, Long hassle free operational life.



1500 kVA, 11/0.433kV, 3 Phase Compact Station Transformer with RMU Mounting



2x1150 kVA (2000 kW), 3 Phase Transformer for 12 pulse bridge rectifier of Induction Furnace



315 kVA, 11/0.433kV, Pole Mounting Transformer as per Tier 1 losses of Ecodesign

01 General

The revolution of renewable energy industry has "minimization of carbon emissions" at its underlying principle, and AT&C losses of the electrical grid are a major contributor to carbon emissions. Hence, our energy efficient low-loss transformers ensure that more is achieved with every unit of power produced. Solar and Wind Energy farms powered by Marsons Energy Transformers are good for energy eco-system and global environment as whole.



SMART CITY initiatives across the globe shall be powered by energy efficient transformers of Marsons Energy.

02 Basic Technical Data

Ratings	500 kVA to 10 MVA
Voltage Class	Upto and including 36 kV
Phase	Three
Frequency	50 Hz
Winding Material	Copper
Tapping	Off Circuit Tap Changer/OLTC
Vector Group	Dyn11/ Dyn5 etc
Insulation Class	A
Temperature Rise	As per relevant Standards or as per Customer Requirement
Cooling	ONAN
Incoming Terminations	Single to Six Windings
Insulating Fluid	Mineral Oil/Synthetic Ester Oil to relevant standard
Applicable Standards	IS: 2026, IEC: 60076, BS, SANS, ANSI, DIN or equivalent
Fittings & Fixtures	Standard/As per customer requirement





2000 kVA, 2x0.400/33 kV, Oil Cooled Transformer for Solar Application



1250 kVA, 2x0.400/33 kV, Hermetically Sealed Transformer for Solar Application



1750 kVA, 0.690/33 kV, Oil Cooled Transformer for Wind Application







- Voltage Step Up Transformers.
- Design suitable to handle un-steady / Variable loads
- Designed to suppress Harmonics for better Power quality.
- Neutral may be Float type or solid earthing to suit Inverter requirement.
- Capable to design and manufacture 2/3/4/5/6 winding Solar Transformers
- Transformers are designed for durability and to withstand maximum fault level, short circuit conditions and capable of carrying its full normal rating continuously at any tap



Marson energy has a certified quality management system as per ISO 9001:2008. Every aspect of manufacturing, supply and service is covered by our well laid out quality plan. A dedicated team of quality control engineers ensures meaningful data collection and analysis for continuous improvement aiming towards zerodefect. Our quality assurance is made more effective by regular customer feedback. Effective training is provided to all personnel to ensure that they are updated with new evolving technologies, manufacturing methods and customers' product & statutory requirement.

The In-house testing facilities are state -of the- art and able to perform all tests on transformers up to 36kV Voltage Systems of max up to 10MVA.

All routine tests are performed on each transformer as per relevant standard. special /type tests are also performed on each design for its validation.











Clientele

























Research and Development:



At Marsons Energy we understand the importance of continuous improvement and innovation in product. Our In-House R&D Department with its constant innovation in designs is able to cater successfully to the changing needs of the industry over the years.

Our designs are type tested in NABL accredited laboratories such as CPRI and ERDA, India and in VEIKI-VNL Electric Large Laboratories, Hungary.



All standard ratings of transformers up to 5 MVA in 33 kV class have been type tested. These tests include Temperature Rise, Lightning Impulse and Short Circuit Test.

We are proud manufacturing partners to Schneider Electric, UK for their requirement of transformers. This range of transformers are type tested from VEIKI-VNL Electric Large Laboratories, Hungary for Short Circuit and Lightning Impulse Tests.



We are approved vendor in most of the Distribution Utilities in India and abroad and this is because of our compliance with customers' specifications coordinated with latest versions of international standards like IEC, BS, ANSI, IS and EN etc.

Marsons Energy is ready to supply transformers as per Tier 1 and Tier 2 of the new ECODESIGN Specifications from the European Commission (EN 50588 – 1).



Every minute & downtime in power supply due to transformers fault has multiplier effect as financial loss is incurred by not only customer but also electricity supplier.

Our dedicated team of technicians supports the breakdown maintenance in minimum response time. Through network of engineers & channel partners, this support is available 24x7 in India and across the globe.

















Countries Exported

- United Kingdom
- Kenya
- Mozambique
- Zambia
- Nigeria
- Uganda
- Yemen
- The Gambia and more

MARSONS ENERGY PRIVATE LIMITED

REGD. OFFICE: 403, Paradise Garden, A-25, Tilak Nagar, Vidyalaya Marg, Jaipur-302004 (India) WORKS: E-17, Bassi Extension, RIICO Industrial Area, Bassi, Jaipur-303301 (India) PHONE: +91 1429 227291, 226821 | FAX: +91 1429 226620 | E-MAIL: info@marsons.co.in