



YOUR
POWER QUALITY
SOLUTIONS
PROVIDER

ORTEAN E

ORTEA SpA

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ABOUT US



Founded in 1969, ORTEA SpA is now a leading company in manufacturing and engineering Power Quality solutions.

ORTEA SpA offers a unique range of products and services for **Power Quality** and **Energy Efficiency** of low voltage electrical networks: voltage stabilisers, sag compensator, LV transformers and reactors, power factor correction systems, active harmonic filters and energy efficiency smart devices.

Beside standard production, ORTEA SpA is able to be extremely flexible in developing and manufacturing special equipment according to user's specifications.

QUALITY CERTIFIED

The belief that product quality and Customer satisfaction are the core of a modern organisation, led to the implementation of an **ISO9001** certified Company Managing System.

The achievement of the **ISO14001** and **OHSAS18001** accreditation was a natural integration in order to optimise the Company's performance, showing at the same time the commitment towards environmental and safety at work issues.



OUR MISSION

To provide a range of products and services of excellence in the field of Power Quality.

Companies are more and more sensitive to Power Quality issues because they can cause troubles and damages to equipments and processes. ORTEA SpA, thanks to synergy of Ortea, Icar and Enersolve solutions, meets customer needs for the quality of electricity.

GLOBAL PRESENCE

ORTEA is well established in the global market.

The ORTEA SpA products are installed and working in a large number of countries, and, thanks to strategically positioned offices and distributors, guarantee rapid and competent support.

CREATE A REINTERPRETED IN THE PROPERTY OF THE

EXPERIENCE
RELIABILITY
FLEXIBILITY
SPEED
RESEARCH&DEVELOPMENT
AFTER-SALES
QUALITY



ORTEA SpA branches (Russia, Ivory Coast, Kenya, Thailand, Venezuela)



DIGITAL VOLTAGE STABILISERS

Stable voltage supply independently from input fluctuation is one key feature to ensure electrical efficiency and reliability.

The voltage stabiliser is an effective solution able to prevent potentially dangerous situations created by input voltage instability.

Voltage stabilisers continuously monitor the incoming mains supply and if the mains voltage rises or drops, they will automatically control the output voltage.

This ensures the voltage reaching the load equipment always remains constant at the required requisite voltage.

ELECTRO-MECHANICAL DIGITAL VOLTAGE STABILISERS

Single-phase from 0.3kVA to 135kVA

Three-phase from 2kVA to 6000kVA

Input voltage variation range: ±10%, ±15%, ±20%, ±25%, ±30%, +15%/-25%, +15%/-35%, +15%/-45%

STATIC DIGITAL VOLTAGE STABILISERS

Single-phase from 4kVA to 40kVA Three-phase from 10kVA to 4000kVA Input voltage variation range: ±15%, ±20%, ±25%, ±30%







LV TRANSFORMERS AND REACTORS

High reliability and safety levels ideal for specific applications.

Using first rate materials and components, ORTEA SpA designs and manufactures low voltage transformers for a diverse range of applications: UPS, non-linear load, rectifiers, photovoltaic application, isolation, etc. Transformers can either be unprotected or housed inside a metallic enclosure. Although IP21 is the standard construction, other protection degrees are available on request.

ORTEA SpA designs and produces reactors for LV power factor correction systems, smoothing inductors, inrush current limiting reactors etc.

SAG COMPENSATOR

Voltage SAGs are the most common cause of equipment malfunctions in automated industry and in tertiary.

SAGs correction up to -50% for 1 min. Correction time: less than 3 millisecs.

No battery energy storage required: compared to a UPS, Oxygen solution is specific for voltage SAGs with considerable benefits in terms of:

- · Reduced cost
- · Less maintenance
- Smaller footprint and occupied space
- No specific climate room or air conditioning required

INPUT VOLTAGE COMPENSATION: ±10% CONTINUOUS / -40% FOR 1 MINUTE From 200kVA to 2500kVA

INPUT VOLTAGE COMPENSATION: $\pm 15\%$ CONTINUOUS / -50% FOR 1 MINUTE From 200kVA to 1600kVA









Harmonic current compensation.

Loads operated by electronic devices are increasingly adopted in more and more industrial and commercial applications.

These loads generate waveform distortions of the current, that become threat for network components and more losses due to the Joule effect.

Active filters achieve higher levels of efficiency in harmonics cleaning.

ORTEA SpA proposes the ACTIVEmatic FA40 to combine a high level of efficiency with flexibility of installation.

60A to 300A units, for three-phase systems with distributed / non-distributed neutral. Possibility of operating several equipments in parallel.

POWER FACTOR CORRECTION SYSTEMS

Instant saving of energy bills and electrical networks efficiency improvement.

The Electricity Authorities, force companies distributing electricity to apply financial penalties to utilities that have a substantial contractual power and low energy cos phi (generally 0,9). Economic benefits due to penalties elimination and the reduction of the "useless" inductive component of the current. ORTEA SpA designs and manufactures power factor correction systems with or without harmonics block reactors, with standard electromechanical contactors or SCR static fast switches.

FIXED POWER FACTOR CORRECTION SYSTEMS MICROfix from 5kvar to 110kvar

AUTOMATIC POWER FACTOR CORRECTION SYSTEMS

MICROmatic from 10kvar to 65kvar MINImatic from 45kvar to 225 kvar MIDImatic from 240kvar to 450kvar MULTImatic from 180kvar to 1000kvar



ENERGY EFFICIENCY SMART DEVICES

Energy efficiency is identified as a priority within the National Energy Strategy.

One of the factors that most affect energy saving is given by the fact that electrical appliances are usually designed to operate with an input voltage included in range rather than just one nominal voltage. Nevertheless, supplying a device a voltage higher than the rated one implies higher consumption and decrease of the expected life.

Energy efficiency improving:

- Energy saving of between 3% and 15% on the entire energy bill, depending on the type of plant.
- Elimination of penalties for reactive energy (PFC integrated version) and resulting drastic current reduction.

More options available: integrated power factor correction system, active filter, EMI / RFI filter, total protection kit, outdoor installation etc.



Energy saving always monitored.

Enersolve tools allow you to read and record the values of all the electrical parameters of the systems. It measure and process energy-saving data according to a calculation based on ESPRO protocol by ENEA and the international measurement protocol and results verification (IPMVP).



()ENERSOLVE





OUR BRANDS:



DIGITAL VOLTAGE STABILISERS SAG COMPENSATOR LV TRANSFORMERS

www.ortea.com



POWER FACTOR CORRECTION SYSTEMS ACTIVE HARMONIC FILTERS

www.icar.ortea.com



ENERGY EFFICIENCY SMART DEVICES ENERCLOUD

www.enersolve.it



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