

Save Your **Energy**.

# **Energy Efficiency with Power Factor Correction**







The company was founded over fifty years ago as a manufacturer of single-phase <u>capacitors</u>. Over the years it has acquired the experience and know-how that lead it to be a leader in the sector for the production of single-phase and three-phase capacitors, as well as an international point of reference for <u>power factor correction</u> systems, in LV. and M.T.

Since 2000, the firm has focused on <u>power quality</u> solutions, so as to optimize the efficiency of electrical utilities, both through the reactive energy compensation and the reduction of harmonic content.





Valsamoggia (Bologna) - ITALY





We believe in a future where companies and individuals use their energy at their best, avoiding useless waste. A greener, cleaner and more sustainable world that we will leave to our children.

Our part, in this ambitious but necessary challenge, is <u>to design and build the best PFC capacitors</u> and equipment in the world, which increase the efficiency of power supply, while reducing the energy consumption and delivering cost savings on electricity.







Power factor correction means not only eliminating penalties, but also optimizing the efficiency of electrical systems, as well as photovoltaic, wind, cogeneration, ...

Energy efficiency professionals, as well as electrical installers and maintenance technicians, must make the most of the opportunities deriving from power factor correction, explaining the advantages to their customers, both in terms of cost reduction (economic benefit) and improved plant efficiency (technical benefit).

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In addition, the power factor correction:

- Improves the operation of transformers
- Improves the use of electrical conduits
- Reduces voltage drops
- Reduces maintenance interventions
- Reduces energy losses
- Reduces heat dissipation
- Reduces CO2 emissions

# **Quality Only**



Our metallized polypropylene film capacitors are approved by <u>IMQ, VDE, CL-UL-US and KEMA</u>, while Power Factor Correction equipment for LV and MV applications received approvals from <u>CESI, SVEPPI and DEKRA</u>.





All our products are <u>100% made in Italy</u> and the whole production is under control thanks to our quality management system certified with <u>ISO 9001, ISO</u> <u>14001 and it is ROHS compliant</u>.



## Associations



We are part of strategic Italian <u>associations and federations</u> for industrial and market development:



Italian Electrotechnical Committee (CEI)





This allows COMAR to remain constantly updated on market trends, as well as actively participate in the development of sector policies.

## **COMAR Solutions**



COMAR Condensatori's offer boasts the widest range in the catalog of fixed and automatic power factor correctors available on the market, as well as complementary power quality products, such as active and passive filters: <u>www.comarcond.com</u>.



## Capacitors



The <u>capacitor</u> is a fundamental yet critical component: this is why COMAR makes sure that each capacitor offers the best performance in terms of <u>safety</u>, <u>reliability</u>, and <u>durability</u>. In addition, the design choices – such as the exclusive use of oil and resin as dielectric – together with the Made in Italy marking, guarantee the best quality of the component.



Power Electronics · Power Factor Correction · Lighting & Motor Running



<u>Capacitor and power factor controllers</u> are the fundamental part of power factor correction systems: these components ensure maximum efficiency, effectiveness, and safety of the equipment. Furthermore, thanks to the quality standards of design and manufacturing, they ensure the <u>best durability on the market</u>.



PFC Racks · Three-phase Capacitors · PFC Regulators



Power factor correction equipment are the most complete and effective solution to compensate for reactive energy. Through an excellent division of the steps, the power of the capacitor banks allow producing the most accurate quantity of reactive power, thus guaranteeing the <u>highest</u> <u>achievable power factor</u> (cosphi).



Fixed & Automatic PFC · APFC with Static Insertion · APFC with Blocking Reactors



The <u>Cloud Control System</u> is the solution for the <u>remote monitoring</u> of the Automatic Power Factor Correction Equipment and the electrical system. It is equipped with an <u>IoT VPN technology</u> with a secure connection all over the world, that does not affect the Customer's connectivity while tracking real time data of the capacitor banks.



IoT device, with online platform and Cloud storage, for real time monitoring of APFC

## **Harmonic Filters**



<u>Harmonic filters are designed for the suppression of harmonic distortion</u>, as well as for the partial power factor correction of the loads. In fact, an increasingly widespread problem for power distribution are overloads due to harmonic currents introduced by electronic equipment for motors and drives, UPS, welders, air conditioning systems, and some types of PV installations.



Active Filters · Automatic Tuned Passive Filters · MV Tuned Passive Filters



The design capacity and specialized skills obtained in many years of worldwide activity, today allow COMAR Condensatori to create turnkey solutions for power factor correction in Medium Voltage, supplying <u>automatic equipment up to 24 kV and fixed equipment up to 33 kV</u>.



Automatic PFC · Banks & Reactors · Single and Three-phase Capacitors

## **COMAR Services**

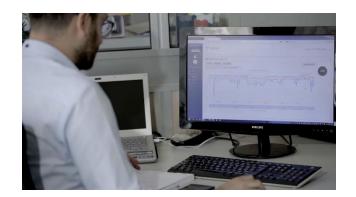


The offer is completed with <u>essential and complementary services</u> to our solutions, which you will find listed on <u>www.comarcond.com/en/servizio/</u>.



#### **Network Analysis**

Thanks to the presence of specialized technicians, COMAR is able to perform on-site network quality analysis and measurements, to help Customers analyze complex data relating to energy quality, issuing energy audits.



#### Remote Energy Monitoring

Thanks to the <u>Cloud Control System</u> service, COMAR is able to perform, remotely and in real time, the adjustment of the automatic power factor correctors, to achieve the best safety and efficiency status.

## **COMAR Network**



We take care of our Customer in every situation, thanks to our sales & service representatives operating in <u>over 90 countries, among 5 different continents</u>.





## **COMAR References**



COMAR references are leading companies in different sectors, such as the Oil & Gas, EPC, Mining, Logistics, Healthcare, Ports and Airports, Wind Farms, Photovoltaic, Real Estate, Transportation, Manufacturing...



# **COMAR's latest projects**



COMAR has delivered two semi-automatic power factor correction systems in <u>Medium Voltage at 5.5kV</u>. These PFC equipment, installed at one of the largest cement plants in the world, compensate for the high-power motors of the shredders.

COMAR delivered two Medium Voltage automatic power factor correction systems, each of <u>2800kvar 13.8kV 60Hz</u>. This supply has been installed at Al Khobar 2 desalination plant, Saudi Arabia.







# Why COMAR?



In addition to the supply capacity, our company stands out for:



The uniqueness of our power factor correction systems lies in the manufacturing know-how used to create the key component of this technology: the capacitor.



The streamlined and highly specialized organization allows us to provide effective responses very quickly, ensuring maximum flexibility to satisfy every request.



Our commercial policy is clear: to provide durable and safe energy saving solutions that ensure minimum payback times, and a lasting gain in the following years.

# **To Find Out More**



You can stay updated on **COMAR Condensatori** news through various official channels:



Website www.comarcond.com



Academy www.comarcond.com/academy/



LinkedIn

www.linkedin.com/company/comar-condensatori-s-p-a-/



### Contacts



Contact us for a free consultation:

