



MSA
Engineering
the future

«Russian Electrotechnical Company Limited»

Group of companies LLC «NPK Morsvyazavtomatika» (MSA LLC)



ruselco.com

About Company

- ▶ Russian Electrotechnical Company Limited (REC Ltd) was founded on December 14, 2015. Our primary purpose was to design and manufacture static high power frequency converters (megawatt) based on up-to-date power electronics (IGBT transistors) for shipborne electric propulsion systems.
- ▶ REC Ltd - is an up-to-date fast-growing engineering and manufacturing company. We provide cutting edge solutions on energy generation, conversion, distribution and storage for the purposes of ship-building, car manufacturing, power and oil and gas industry and other areas of industries.
- ▶ REC Ltd employs qualified designers, technologists, and programmers, many of whom have scientific degree and who teach at leading Russian universities. The company employs production workers and specialists in commissioning and service. We have our own production facilities and test benches for equipment testing.



Our solutions



For oil and gas and oil-producing companies

- ❖ United electric power systems of oil drilling rigs based on a common DC bus with the use of static frequency converters on IGBT-transistors and energy storage systems on LFP (lithium-ferrum-phosphate) batteries
- ❖ Voltage distortion compensation system for industrial facilities
- ❖ Energy-efficient power supply modules for high-power electric consumers based on diesel generators with variable speed and energy storage systems on LFP batteries and frequency converters on IGBT-transistors

For transport

- ❖ Fast battery charging systems for vehicles (land, water) from 200 kW and higher
- ❖ The system of monitoring and control of the current state of vehicles online based on cloud solutions
- ❖ Unified electric power system for all-electric and hybrid ships based on a common DC bus and variable speed diesel generators

For the power industry

- ❖ Energy distribution and storage systems
- ❖ Local power systems based on a common DC bus with the use of renewable energy sources and energy storage systems of various types
- ❖ Power quality assurance and back-up systems for industrial facilities

Our products



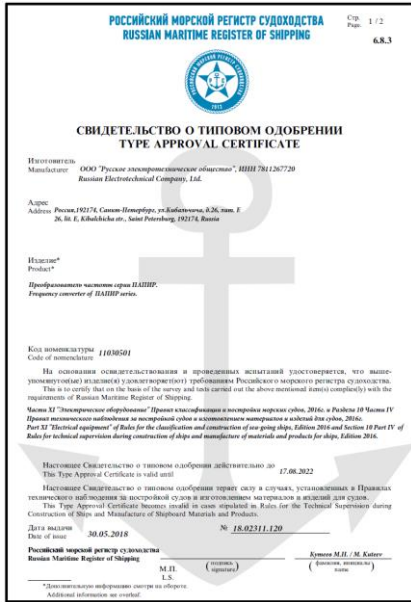
United electric power system, TRANIT series is one of the most promising trends among up-to-date e-transport. Breakthrough solutions in the area of converter equipment and electrochemistry enable to reach advanced functionality and reliability providing efficient local power distribution.

The system is certified in the Russian Maritime Register of Shipping, Russian River Register, undergoes certification by DNV.

Currently patented utility model on the compensation device of voltage and reactive power of the electrical network RU196125U1. Thereby a dynamic voltage compensator "Kanon" produced in power range up to 1 MW and intended for power supply to consumers at voltage variations (compensation of voltage sags, voltage generation at power failure using energy storage systems) was developed. The software is patented.



Our products



Frequency converter of "PAPIR" series is used in powerful power systems, including for various types of electric drive systems. Useful model patent RU174075U1. *These AC-AC converters serve as the basis for "island" power systems from 1 MW and above to convert and distribute power to multiple consumers.*



Bidirectional converter of "Bereza" series is used both for conversion of AC input voltage into regulated DC output voltage and on the contrary. It can be used both to power energy storage systems and as a powerful battery charger for road and water transport batteries. It is a step-up active rectifier based on powerful IGBT-transistors. *On the basis of this model there is a line of fast charging stations for any type of transport in the range of 200 kW - 2 MW.*

Our production



- 90% of the equipment is manufactured on the basis of our own production.
- Metal constructions for manufacturing products as well as electronic boards are manufactured by MSA LLC.

You are kindly welcome to visit us online

www.ruselco.com

www.unicont.com

www.emperium.ru

