



**icpe SAERP s.a.**

societate de acționări echipamente și redresoare de putere



***ICPE SAERP S.A.***

***Company presentation***

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## WHO WE ARE

ICPE SAERP is a private Romanian company, focused on research, design, development and manufacture of urban traction driving equipment and railway coaches equipment, static converters for auxiliary services and many other power equipment used in various industrial fields.

We supply products and services for public transportation services, national and private railroads, and the supplier industries. Electrical equipment by ICPE SAERP is used in Romania and several countries over the world.

Our competence and experience is based on more than 20 years of company history and the extraordinary commitment of our staff at the company headquarters and production site in Bucharest





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## WHAT WE DO

For over 20 years, ICPE SAERP has been supplying innovative electrical systems used on road and rail vehicles operating on urban public transportation services. Our customized and efficient solutions address the ultimate quality requirements, with special emphasis on economic efficiency. The range includes integrated system solutions for new vehicles, the modernization of older vehicles and a wide array of services.

Electrical equipment from ICPE SAERP can be found on vehicles in Romania, Bulgaria, Hungary, Czech Republic, Brazil and Iran.





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## HOW WE DO IT

Dedicated recruiting department

Dedicated reporting department

Quality control department

Senior management with more than 30 years experience

Our team has 33 engineers,  
5 of them with PhD degree  
and 90 high-qualified technicians.





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## OUR PARTNERS



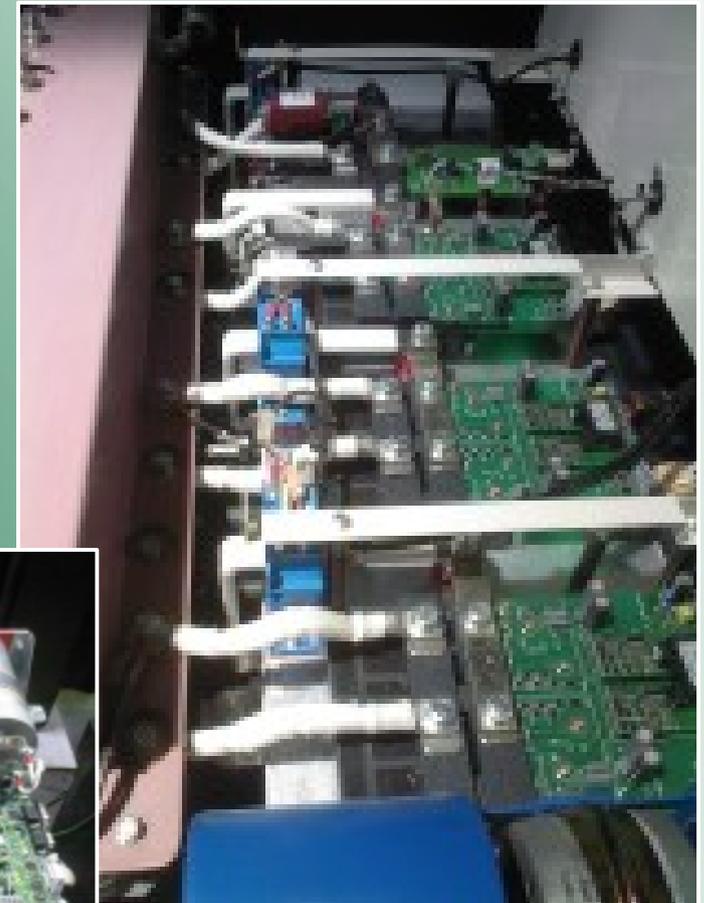


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## TECHNOLOGY

In the power equipment we use modern semiconductor devices (IGBT technology), controlled by drivers with protections, as well as SMD components with extended temperature range. For data security and integrity, we use RS485 or CAN interfaces for data communication.

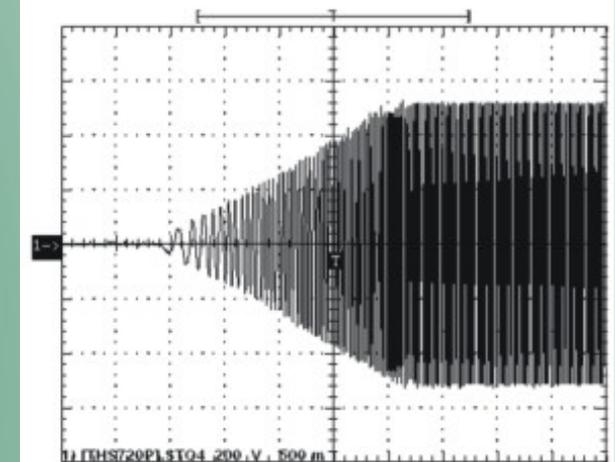
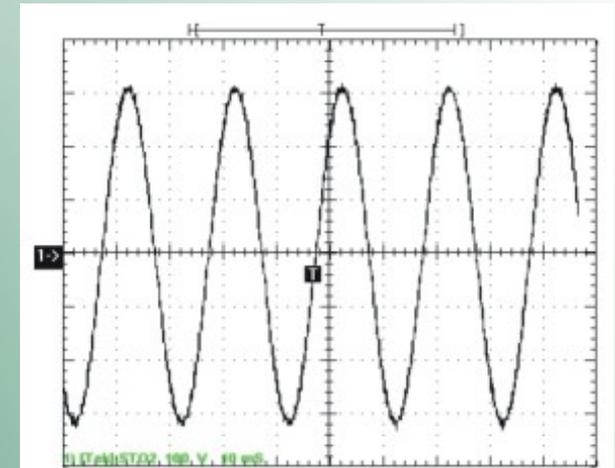
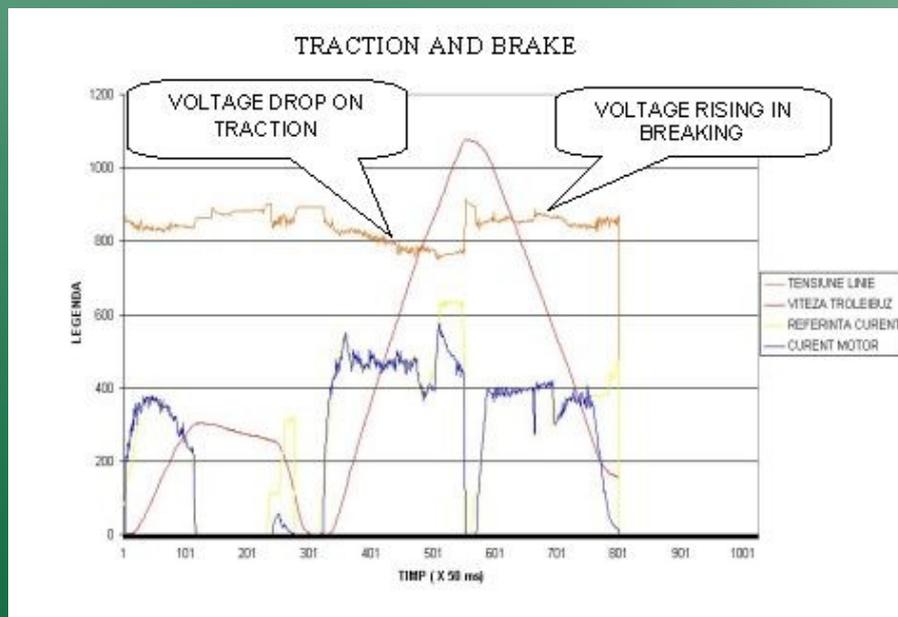




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## TECHNOLOGY



Digital control and diagnosis – PWM technique.



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## TECHNOLOGY

Our latest products are provided with touchscreen diagnosis and control display, an easy-to-use interface between the user and the equipment.

We delivered multi-functional terminals for speed-measurement, display and dataloggers recording to be used in tramcars and trolleybuses dashboard.





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## URBAN TRACTION EQUIPMENT



For trolleybuses:

- Frequency converters for induction motors.
- Static converters for auxiliary services.
- Microprocessor control and diagnose units.



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## URBAN TRACTION EQUIPMENT



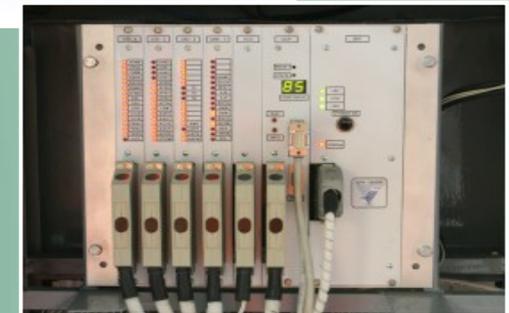
Over 400 trolleybuses driving equipment and static converters for trolleybuses auxiliary services delivered to public transportation companies in Bucharest, Cluj-Napoca, Constanta, Galati and Sofia (Bulgaria).



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## URBAN TRACTION EQUIPMENT



For tramcars:

- Frequency converters for induction motors.
- Static converters for auxiliary services.
- Microprocessor control and diagnose units.



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## URBAN TRACTION EQUIPMENT



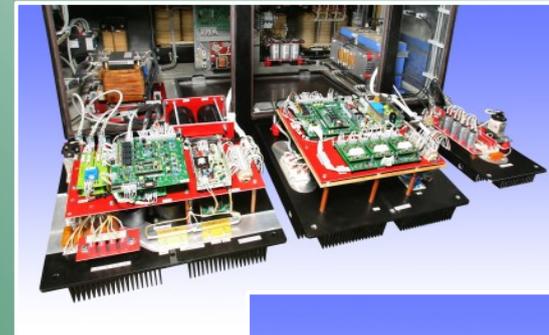
10 tramcars driving equipment and over 900 static converters for auxiliary services delivered to several public transportation companies in Romania (Bucharest, Timisoara, Iasi), Bulgaria (Sofia) and Hungary (Szeged).



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## RAILWAY EQUIPMENT



For railway coaches:

- Static converters with different input voltages for passengers, sleeping and bistro cars.
- Microprocessor control and diagnose units for air conditioning in passengers and sleeping cars.





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## RAILWAY EQUIPMENT

Static converter for international traffic passengers cars

- four input voltages ( $U_i = 1500\text{Vdc}, 3000\text{Vdc}, 1500\text{Vac } 50\text{Hz}, 1000\text{V } 16 \frac{2}{3}\text{Hz}$ ).
- output voltages ( $U_o = 3 \times 400\text{Vac } 50\text{Hz}, 24\text{Vdc}$ ) according to UIC requirements.
- total output power: from 50kW to 65kW.

More than 85 units delivered to:

- Regiojet - Czech Republic
- Arenaways - Italy
- Astra Vagoane Arad - Romania
- Atelierele Grivita - Romania





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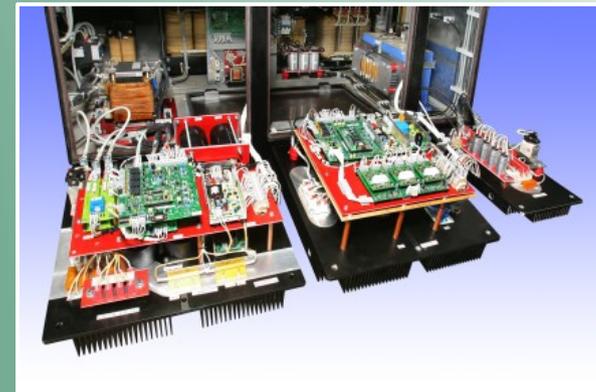
## RAILWAY EQUIPMENT

Static converter for domestic traffic sleeping and bistro cars

- input voltage  $U_i = 1500\text{Vac}$  50Hz.
- output voltages ( $U_o = 3 \times 400\text{Vac}$  50Hz, 230Vac 50Hz, 24 Vdc) according to UIC requirements.
- total output power from 40kW to 50 kW.

More than 440 units delivered to:

- Astra Vagoane Arad – Romania
- Atelierele Grivita – Romania
- Electroputere VFU Pascani - Romania





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## RAILWAY EQUIPMENT

Static converter for passengers cars:

- input voltage  $U_i = 3 \times 400 \text{Vac } 50 \text{Hz}$ .
- output voltages ( $U_o = 230 \text{Vac } 50 \text{Hz}$ ,  $24 \text{ Vdc}$ ) according to UIC requirements.
- total output power:  $13 \text{kW}$ .

More than 90 units delivered to:

- Astra Vagoane Arad – Romania for Vale - Brazil





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## RAILWAY EQUIPMENT

Microprocessor control and diagnose unit for air conditioning in passengers and sleeping cars.

The unit is provided with a diagnosis display and individual compartment controllers if necessary.

More than 300 units delivered to:

- Astra Vagoane Arad – Romania
- Atelierele Grivita – Romania
- Electroputere VFU Pascani - Romania





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## SERVICES

We have various testing facilities for traction equipment and the electronic and electromechanical equipment, like high voltage cabinets, climate chamber and precise measurement means.

This way we can increase the reliability of our products, being able to ensure a warranty period between 2 and 3 years.





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## SERVICES

For our equipment we ensure:

- Commissioning on-site.
- Training on-site for maintenance staff.
- Technical assistance during warranty and post-warranty.
- Spare parts provided for a minimum period of 10 years.





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ICPE SAERP participate at several technical and transport technology fairs, one of the most notable being INNOTRANS – Berlin (Germany). At the last three editions, our products were well received by visitors.





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ICPE SAERP has AFER  
certifications in quality  
systems according to the  
following standards:

**SR EN ISO 9001:2008**

**SR EN ISO 14001:2005**

**SR OHSAS 18001:2008**