

STATIC CONVERTERS



Static Converters

For companies requiring power supply units and battery chargers with variable power and of different types, we can offer an entire range of solutions that can be installed in industrial environments or on mobile supports.

Correct operation of these devices is essential to optimize machinery performance in the rail and underground train sectors.

Our systems guarantee safety and protection in the operating phases, and thanks to the use of intuitive interfaces, offer the operator full control of the tasks and the opportunity of using the product for different purposes.



Multi Voltage Power Supply System for Traction Test

We realize static converters to feed rolling stocks in maintenance depots.

Solutions are available with outputs ranging from tens of kW through to 4 MW and above, on request.

The obtainable output voltages, adjustable as required by the standard EN50163, are as follows:

<u>25 kV 50 Hz</u>	<u>1,5 kVdc</u>
<u>15 kV 16 2/3 Hz</u>	<u>750 Vdc</u>
<u>1,5 kV 50 Hz</u>	<u>600 Vdc</u>
<u>3 kVdc</u>	

The converters can be powered at the following input voltages:

<u>400 Vac (on request 415 Vac)</u>	<u>25 kVac 50Hz single phase (directly from the overhead line)</u>
<u>Medium Voltage (11 kV - 15 kV – 20 kV)</u>	<u>15kVac 16 2/3 Hz (directly from the overhead line)</u>
<u>3 kVdc (directly from the overhead line)</u>	<u>Other power supply solutions on request</u>

The solutions mentioned can be installed in dedicated rooms or in containers. Solutions with a power lower than 500 kW can be provided on wheels.



Shore Supply

We realize static converters with multi voltage AC/DC - AC/ AC outputs at the four RIC voltages, adjustable as per standard EN50163:

1000 Vac at 16 2/3 Hz

1500 Vdc

1000 Vac at 50 Hz

3000 Vdc

1500 Vac at 50 Hz

The system is designed for testing coaches operating at the four RIC voltages. The operator can therefore check the proper operation of the automatic coach system for the detection of line voltage (and relative controller). The system is complete with equipment for the direct connection of the power supply unit to the coach HV line.



Power Supply Units for Test Rooms

We realize static converters for test rooms. The converter is dimensioned according to customer's needs and the rate goes from few kilowatts to 3 MW and more with the purpose of testing several train components.



Irmie Impianti realizes **battery chargers** designed for applications in the railway/metro market.

In particular, we produce trolley-mounted battery chargers, easily transportable, as well as battery charge/discharge benches.

Irmie Impianti realizes turnkey solutions for the management of batteries maintenance in the depots.

Charge/Discharge Benches

Complete solution for battery charging/discharging, for use in the railway/metro market.

It includes a support surface designed to properly collect drips during top-up operations and for the safe and protected extraction of vapours produced during the various operation phases.

Thanks to the use of industrial touch screens, the operator has a simple interface for command and control, as well as the option of registering and archiving the tests.



Mobile Battery Charger and Discharger

Input voltage on request from 400 V 50 Hz or 415 V 50 Hz.

Single or multiple range output voltages able to cover all battery voltages used in the railway/metro market.

Other voltages and outputs are available on request.

Power: various values are available on request.





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