PRODUCTS PORTFOLIO

TEC has built an electric traction system platform for EMUs with a speed of 120-380 km/h.

We provides our clients with three main types of products: EMU traction converter, auxiliary converter and network control systems.

We have also developed train-ground wireless communication devices, axle temperature monitoring devices, water supply and sanitation systems, detection devices, laminated busbars and sensors detecting bogie instabilities and other auxiliary products suitable for EMUs.

CHINESE STANDARD EMU
TOLLING MODE

PAST PROJECTS

1 ARGENTINA ROCA LINE EMU
THE FIRST PROJECT EXPORTS IN BATCHES, 86 VEHICLES
WIDE GUAGE

Technical Features
Integrated traction and auxiliary converter
Passing through neutral sections
Water cooling

Propulsion system parameters
Input Voltage(V): AC 970
Middle DC voltage(V): DC 1800
Capacity for Auct(kVA): 180
Output power(kW): 4×250

EMU Parameters
Power:AC25kV / 50Hz
Formation of EMU:2M2T / 2M1T
Maximum speed:120 km/h

2 MACEDONIA EMU
CERTIFIED BY TSI

Technical Features
Integrated traction and auxiliary Converters
No secondary filter loop for main circuit
Axle control
Articulated bogie

Propulsion system parameters
Input Voltage(V): AC 970
Middle DC voltage(V): DC 1800
Capacity for Auct(kVA): 170
Output power(kW): 4×475
Weight(kg): No more than 2600

EMU Parameters
Power:AC25kV / 50Hz
Formation of EMU:Mc1-T-Mc2
Maximum speed:160 km/h

3 DUAL VOLTAGE EMU
DUAL VOLTAGE

Technical Features
Integrated traction and auxiliary converters
Modular distributed TCN system
Water cooling

Propulsion system parameters
Input Voltage(V): AC 970 / DC 1500
Middle DC voltage(V): DC 1800 / DC 1500
Capacity for Auct(kVA): 205
Output power(kW): 4×322

EMU Parameters
Power:AC25kV / 50Hz & DC1500V
Formation of EMU:2M2T
Maximum speed:140 km/h

VERY HIGH SPEED EMU CRH 380 AM
HIGHEST EXPERIMENTAL SPEED 605 km/h

ARGENTINA ROCA LINE EMU
WIDE GUAGE

4 350KM EMU
TOLLING MODE

Technical Features
Integrated traction converter, auxiliary converter, cooling system and secondary filter loop
Bogie control

Propulsion system parameters
Input Voltage(V): AC 1900
Middle DC voltage(V): DC 3600
Capacity for Auct(kVA): 260
Output power(kW): 4×625
IGBT: 6500V/750A

EMU Parameters
Power:AC25kV / 50Hz
Formation of EMU:4M4T
Maximum speed:350 km/h

5 VERY HIGH SPEED EMU CRH 380 AM
HIGHEST EXPERIMENTAL SPEED 605 km/h

Technical Features
Auxiliary inverter parallel power supply without network
6500v high power IGBT convertor
Harmonic performance of line side is good

Propulsion system parameters
Input Voltage(V): AC 2121
Middle DC voltage(V): DC 3500
Capacity for Auct(kVA): 280
Output power(kW): 4×600
IGBT: 6500V/600A

EMU Parameters
Power:AC25kV / 50Hz
Formation of EMU:6M
Experimental speed: 605 km/h

6 PERMANENT MAGNET MOTOR EMU
PERMANENT MAGNET MOTOR

Technical Features
Separate traction converter and auxiliary converter
Double 4QC
Bogie control
Integrated traction main circuit and cooling system

Propulsion system parameters
Input Voltage(V): AC 2121
Middle DC voltage(V): DC 3500
Capacity for Auct(kVA): 270
Output power(kW): 4×630
IGBT: 6500V/600A

EMU Parameters
Power:AC25kV / 50Hz
Formation of EMU:4M4T
Experimental speed:350 km/h

7 CRH6F-160 INTERCITY EMU

Propulsion system parameters
Input Voltage(V): AC 970
Middle DC voltage(V): DC 1800
Capacity for Auct(kVA): 185
Output power(kW): 4×322

EMU Parameters
4M4T, 160km/h
Start acceleration(0-40km/h): 0.8m/s^2
average acceleration: 0.38m/s^2
traction effort: 431kN