

PRODUCT BROCHURE

Enviline™ DCGear

DC switchgear in DC traction power distribution networks



- Safety & reliability
- Compact design
- Low maintenance
- Flexibility

Enviline™ DCGear – DC switchgear

Modern construction, compact and high-end design of our Enviline™ DCGear are result of ABB's long-standing track record in the design and supply of DC traction substations.

Enviline™ DCGear is equipped with Gerapid high speed DC circuit breakers and is designed for protection of main DC circuits at Traction Power Substations. Gerapid breakers are well known and recognized globally as one of the best breakers in the market. All breakers are type tested as per GB, EN or IEEE standards and are certified by CQC, CESI, UL, and GOST organizations.

Key benefits

Safety and reliability

Use of proven technology components, such as DC high-speed circuit breakers type Gerapid, disconnecter, and high performance DC protection relay. Full compliance with GB, IEC, and EN standards. High active and passive safety for operation and maintenance personnel.

Compact design

Designed for railway applications in a harsh environment. Freestanding rigid metal enclosed cubicle with compact design, easy for installation and operation.

Low maintenance

Reduced wear-and-tear of main contacts of the DC HSCB Gerapid.

Flexibility

Variety of panels in different configurations for various applications.

Specifications

Feeder panels 750 V and Feeder panels 1500 V

Technical data	Enviline™ DCGear 750 V	Enviline™ DCGear 1500 V
Normal voltage	750 VDC	1500 VDC
Highest permanent voltage	900VDC	1800VDC
Rated Insulation Voltage	1800 V OV4	3000 V OV3
Power frequency withstand voltage 50 Hz, 1 min		
A: to earth and between phases	6.9 kV	6.9 kV
B: across isolation distance	8.3 kV	8.3 kV
Rated service current	up to 4000 A	up to 4000 A
Main busbar current	up to 6000 A	up to 6000 A
Rated short time withstand current	up to 90 kA	up to 90 kA
Protection degree	IP21/41	IP21/41
Dimensions in mm (WxDxH)	600x1550x2260	600x1550x2260
Ambient temperature range	- 5 40 °C	- 5 40 °C
Standards	GB/T 25890.6-2010, EN50123-6, IEC61992-6	

Enviline™

Reliability and efficiency on track

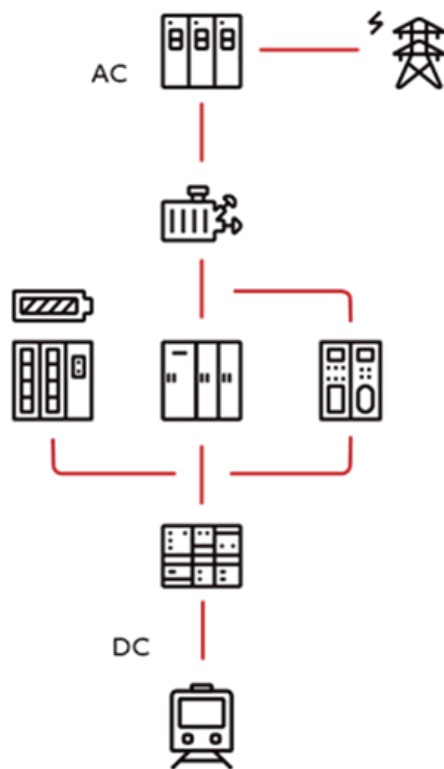


ABB – A single source supplier

Comprehensive product portfolio covering all functional requirements.

- Primary and secondary medium-voltage switchgear
- Rectifier and auxiliary transformers
- Diode rectifiers
- Controlled rectifiers and inverters
- DC switchgear
- Substation automation
- Energy management systems

Within Enviline™ product package, the following ranges are available:

Enviline™ TCR/TDR/WDR	Traction controlled rectifier/Traction diode rectifier/Withdrawable diode rectifier
Enviline™ ESS	Energy storage system
Enviline™ ERS	Energy recuperation system
Enviline™ ARU	Automatic receptivity unit
Enviline™ VLD	Voltage limiting device
Enviline™ DCGear	DC Switchgear

Additional information

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regards to purchase orders, the agreed particulars shall prevail. ABB AG does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB AG.



ABB Xiamen Switchgear Co., Ltd.

No.885, FangShanXiEr Road, Xiang'an District,
Xiamen, Fujian, 361101

Tel: 0592 602 6033

Fax: 0592 603 0505

ABB China Customer Service Hot Line

TEL: 800-820-9696 / 400-820-9696

mail: cn-ep-hotline@abb.com

www.abb.com