High Voltage Live Tank Circuit Breakers and Disconnecting Circuit Breakers
Products and Applications listing

High Altitudes
Products
DCB 72.5 - 550 kV | LTB 72.5 - 420 kV | HPL 72.5 – 550 kV

Why ABB?
- Lower cost and more reliable installation with:
  - single breaking chamber units up to 300 kV, 1250 LIWL
  - two breaking chamber units up to 550 kV, 1950 (+430) LIWL
  - 550 kV circuit breakers with only 2 breaking chambers suitable for installations up to 3400 m.a.s.l.
- Modular design that enables easy fulfillment of high insulation requirements.

Seismic withstandability
Products
DCB 72.5 - 550 kV | LTB 72.5 - 420 kV | HPL 72.5 – 550 kV

Why ABB?
- Reinforced support structure and insulators with industry leading capabilities.
- Patented and typetested damping solution for seismic withstandability.
- Shaking table tests as per standards IEEE 693 and ETG 1.020 standards (0.5g) and IEC 62271-300 performed on many voltage levels.
- Our Live Tank Breakers withstand the highest seismic spectra, as described in IEEE 693 and ETG 1.020 standards (0.5 g) and IEC 62271-300.

HVDC
Products
DCB 72.5 - 420 kV | HPL 72.5 kV - 550 kV AC | HPL 245 - 1100 kV DC

Why ABB?
- Complete portfolio 72.5 - 1100 kV.
- Complete offering on both AC and DC side.
- Controlled switching for all applications within the HVDC spectra.
- Type-tests performed to verify the demanding requirements associated with HVDC switchgear (filter bank switching, dielectric withstand tests etc).
- Designed for DC current commutation.
- DC Neutral switch: Commutation capability increased up to 5000 A DC.
- AC Filter: TRV capability: ccap > 1.6 at 550 kV.
- Largest installed base for HVDC switchgear world wide.
Smart Grid
Products
DCB 420 with integrated Fibre Optic Current Sensor (FOCS)

Why ABB?
- More intelligent protection and control due to smart process bus interface, as per IEC 61850-9.
- Fully redundant system, with hot swappable opto electronics.
- More than five years service experience at 420 kV with DCB+FOCS and smart process bus interface.

Railway
Products
LTB D 72.5 kV - 170 kV | LTB E up to 420 kV | LTB D DCB72.5 - 145 kV

Why ABB?
- Frequency 16 2/3 Hz and 25 Hz available for railway applications.
- Two-pole operated.

HPL — maximum capability and highest performance

Why ABB?
- Extremely high ratings, electrical endurance which meets highest demands.
- Two cycles break time.
- 0 - 80 kA, up to 420 kV/80 kA with only two breaking chambers, up to 245 kV/80 kA with one breaking chamber.
- Most experienced supplier for switching demanding HVDC-applications.
- For switching in SVC-applications (when high short-circuit and high rated currents are required).
- For large power plant switchyard applications, delayed current zero (high X/R).
- Switching of series compensated lines, high TRV requirements (Transient Recovery Voltage).

DCB LTA — eco-efficient solution with maximum availability, less need for maintenance and no SF₆-handling

Why ABB?
- Easy ownership with ABB’s green technologies and eco-efficient solutions.
- Helping companies minimizing their environmental footprint. The LTA is enhancing eco-efficiency over the life-cycle by 18% and by 60% for the DCB-LTA-solution.
- By replacing SF6 with CO₂, handling of SF₆ is completely eliminated. No certificates, monitoring or special training are needed for using CO₂.
- Can withstand temperatures as low as -50 ºC, suitable for climates all over the world.
- ABB’s green solutions are ideal for all substation applications; indoor, outdoor, greenfield or refurbishment.
- An economic, and safe, solution ownership with reduced need for maintenance ideal for all substation applications; indoor, outdoor, greenfield or refurbishment.

For more information please contact:
ABB AB
High Voltage Breakers
SE-771 80 Ludvika, SWEDEN
Phone: +46 (0)240 78 20 00
E-Mail: circuit.breaker@se.abb.com

© Copyright 2014 ABB, All rights reserved
NOTE! ABB AB is working continuously to improve the products. We therefore reserve the right to change designs, dimensions and data without prior notice.