## Products, systems and services to reduce emissions, improve reliability and increase safety

### High Voltage Products North America

<table>
<thead>
<tr>
<th>Product line</th>
<th>Description</th>
<th>Key contact</th>
</tr>
</thead>
</table>
| Capacitors                   | Capacitor units (2.4 – 24.94 kV) and capacitor banks (2.4 – 800 kV) for improving the performance, quality and efficiency of electrical systems. In transmission systems, reactive power is needed to maintain the voltage to deliver active power. A lack of reactive power leads to an inefficient use of the electrical network and results in voltage sags, overloaded transformers, lines, cables, etc. In industry, motor loads and other electrical loads require reactive power to convert electrical energy into useful work. | John Farnsworth  
Marketing Manager - US  
(919) 856-3937 office  
(919) 349-3397 mobile  
john.farnsworth@us.abb.com |
| Circuit Breaker Monitoring   | Condition based monitoring and reporting (e.g. SF₆) for 34.5 – 800 kV dead tank circuit breakers, live tank circuit breakers, generator circuit breakers and gas insulated switchgear. Features include reliability dashboards, device and system integration, network and communications architectures, IT security (NERC-CIP) and data validation. Sensor technology can be retrofitted to existing field breakers and/or added to factory breakers, regardless of the manufacture. | Jeff Barker  
Business Development Manager  
(207) 646-9449 office  
(207) 232-7670 mobile  
jeff.barker@us.abb.com |
| Dead Tank Breakers           | A complete portfolio with ratings from 72.5 – 800 kV, for protection of power networks. Breakers offer solutions for every application in today’s power grid, and are designed to excel where high TRV, extreme power loads or high X/R ratios are present. Features include factory pre-assembly (filled with SF₆ gas) enabling short installation times, rugged structure and specialized bushing designs for the capability to withstand high seismic and altitude conditions. | Kurt Dahinden  
Marketing Manager  
(724) 696-1378 office  
(724) 554-5718 mobile  
kurt.dahinden@us.abb.com |
| Gas Insulated Substations    | Gas Insulated Switchgear (GIS) ranges from 72.5 to 1,100 kV with short circuit ratings 31.5 – 80 kA and 4000 A and 5000 A. ANSI/IEEE and IEC rated GIS features rating-dedicated designs with very small SF₆ volumes, controlled switching and monitoring packages, short installation time, and containerized solutions. | Thomas Schulz  
Marketing Manager  
(732) 932-6286 office  
(732) 939-5366 mobile  
thomas.schulz@us.abb.com |
| Generator Circuit Breakers   | GCB for generators rated 50 – 1400MW with 50 – 300 kA short circuit ratings and voltages up to 30 kV. Features include a 20 year maintenance cycle on HECS type breaker, replacement and retrofit programs, and GMS monitoring system. | Jae Lee  
Marketing Manager  
(732) 932-6387 office  
(732) 371-3935 mobile  
jae.lee@us.abb.com |
| HV Instrument Transformers   | Available from 25 – 800 kV for measurement, protection and control. Current Transformers, Inductive Voltage Transformers, Capacitive Voltage Transformers, Combined Current/Voltage Transformers and Station Service Voltage Transformers are tailored for specific applications, either to operate accurately at steady state conditions or to maintain reasonable accuracy reading up to extreme fault level conditions. | Nick Powers  
Marketing Manager  
(859) 219-6060 office  
(859) 361-6126 mobile  
nicholas.s.powers@us.abb.com |
| Gas Insulated Instrument Transformers | 72.5 – 800 kV gas insulated systems for metering and protection include: head type CT’s to 800 kV, Inductive VT’s to 420 kV, combined CT/VT to 245 kV and station Service to 525 kV. These designs feature explosion proof SF₆ insulation, gas leakage <0.1% per year, corrosion resistant housings, pressure gauge with alarm and lockout, shielded uniform field control, and no partial discharges | Nick Powers  
Marketing Manager  
(859) 219-6060 office  
(859) 361-6126 mobile  
nicholas.s.powers@us.abb.com |
**Product line** | **Description** | **Key contact**
--- | --- | ---
Live Tank and Disconnecting Circuit Breakers | ABB Live Tank and Disconnecting Circuit Breakers are available from 72.5 – 800 kV, 31.5 – 80 kA short circuit rating and for ANSI / IEEE and IEC. Features include being tested to C2 and M2 class, -50° C performance using mixed gas, spring-spring mechanisms for all ratings, Motor Drive as an alternative to spring drive, available for high seismic regions, and controlled switching capability. The DCB model is for optimum space requirements. | Kurt Dahinden  
Marketing Manager  
(724) 696-1378 office  
(724) 554-5718 mobile  
kurt.dahinden@us.abb.com |
Low Voltage Power Quality Solutions | A comprehensive portfolio for addressing power quality problems. LV capacitor and filter solutions are designed in compliance with the strictest power quality regulations on reactive power and harmonics, reduce and/or eliminate utility penalties for a low power factor and/or harmonics, off-load and reduce power losses in cables and transformers, reduce production downtime and/or commercial system downtime and increase system efficiency and reduction of CO₂ emissions | Othmane Alaoui  
US Market Manager  
(418) 650-4488 office  
(514) 651-4833 mobile  
othmane.o.aloui@ca.abb.com  
RFQ: capacitors-lv@us.abb.com |
PASS and Hybrid Switchgear | PASS (Plug and Switch System) from 72.5 – 420kV encloses all functions of a complete switchgear bay in a single module. The hybrid design makes use of traditional air-insulated busbars to connect with other equipment in the substation while enclosing the following bay functions in a single-phase gas-insulated housing: circuit breaker, combined disconnector and earthing switches, voltage transformers and voltage sensors, current transformers, and fast earthing switch options. PASS is available in numerous configurations including single busbar, double busbar, double circuit breaker, wind and railway application, pre-assembled H-configured switchgear bay, and various other customized configurations. | Andrea Martello  
Marketing Manager - US  
(609) 243-7563 office  
(609) 218-9943 mobile  
andrea.a.martello@us.abb.com |
Service | Installation and commissioning, maintenance, overhaul, parts, repair, training, diagnostics, radiography, extensions, retrofit, refurbishment, upgrades, SF₆ gas management services and monitoring for ABB and legacy products. Support for 34.5 – 800kV; dead and live tank circuit breakers, generator circuit breakers, gas insulated switchgear, instrument transformers and capacitors. | Todd Padezanin  
Marketing and Sales Manager  
(724) 696-1414 office  
(724) 989-5609 mobile  
todd.padezanin@us.abb.com |
SolidGround™ grid stability and harmonics mitigation system | SolidGround™ automatically blocks DC currents from flowing in the neutrals of large power transformers. The system helps to protect the grid against the effects of Geomagnetic Induced Currents (GIC) resulting from space weather and Electromagnetic Pulses (EMP). It is designed to work on HV and EHV class transformers, features electronics for breaker control, monitoring and communications with SCADA systems, triple redundant fault protection, and is engineered and shipped pre-assembled from the factory. | Michael Godfrey  
Marketing and Sales Manager  
(724) 696-1394 office  
(878) 295-7740 mobile  
michael.r godfrey@us.abb.com |
Surge Arresters | Primary protection against atmospheric and switching over voltages. ABB offers a complete range of surge arresters for high and medium voltage applications. The range comprises of AC and DC solutions up to 1,100kV and arresters for special applications like railways, DC-voltage limiting devices and many other purposes. The designs comply with the IEC 60099-4 and ANSI/IEEEC62.11 | Daniel Ridder  
Marketing and Sales Manager  
(724) 696-1517 office  
(724) 396-6016 mobile  
daniel.ridder@us.abb.com |