

# ABB Low Voltage Disconnect Switches Contact us

## ABB Disconnect Switches

- Used to disconnect and isolate power to facilities, machines, motors, etc. Fusible versions offer overload and short circuit protection
- Suitable for service entrance and motor disconnect applications. Tested to UL98, UL508 and IEC Standards

## Product scope

- Non-fusible switch range 16 – 3150A. Fusible 30 – 1200A for class CC, J, L & IEC Fuses
- Enclosed versions range in Type 1, 12, 3R, 4 and 4X plastic, sheet steel and stainless steel enclosures
- Lines of changeover and transfer switches, motorized switches, and custom cam switches
- New offering of 1000 VCD 2 pole switches up to 200A for solar applications, 400A to available in Q3 2013
- New line of heavy duty safety switches from 30 – 1200A, fusible and non-fusible to launch in Q3

## Key selling arguments

- #1 in US market share for rotary operated non-fusible switches
- Globally accepted. Certification to UL, NEMA, CSA, IEC, CCC
- Compact size. Extremely compact designs mean reduced panel size, saving customers money
- Broad range. Complete line of switches, types and accessories

## Applications

- Used in majority of electrical power applications, especially where motors are used
- Typical for electrical service entrance, power transfer, branch feed, circuit protection, motor disconnect
- Common in HVAC, material handling, food and beverage, solar, machine OEM, critical power



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ABB Low Voltage  
Breakers & Disconnect Switches

Power and productivity  
for a better world™



Power and productivity  
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## ABB Breakers Molded Case Circuit Breaker (MCCB)

### ABB MCCB

- A circuit breaker is an automatically operated electrical switch designed to protect an electrical circuit from damage caused by overload or short circuit with the ability to be reset.
- Tested to UL489 - Must be able to operate without maintenance

### Product scope

- Formula family: up to 250A at 240V/250VDC
- Tmax family: up to 3000A at 600VAC/DC
- Tmax PV: complete breaker line dedicated to 1000VDC and solar applications

### Key selling arguments

- Certification to globally accepted standards: UL, IEC, CSA, NEMA, ABS, CE, and CCC
- Compact size to allow highest protection capability even in low spacing
- Thermal-magnetic and advanced electronic trip unit options
- Resistant to shock and vibration

### Applications

- Critical power & protection of data center
- Power generation & portable generators
- Wind turbines, solar
- General OEM, power distribution protection
- HVAC
- Mining



## ABB Breakers Power/Air Circuit Breakers (PCB/ACB)

### ABB PCB

- PCBs offer a two-step stored energy operating mechanism and perform the normal circuit protective functions of a MCCB, but have the ability to remain closed under certain fault conditions allowing for greater flexibility in selective coordination of downstream circuit breakers.
- Tested to UL1066 - Must be maintainable during operation.

### Product scope

- Emax family: from 100A to 6000A with ratings up to 200kA @ 480VAC
- Emax by X1: 800A with ratings up to 50kA @ 480VAC
- Emax DC: from 800A to 5000A with ratings up to 600V DC

### Key selling arguments

- Certification to globally accepted standards: UL, IEC, CSA, NEMA, ABS, CE, and CCC
- Compact size, same height and depth across all frames
- Cutting edge electronic trip units with advanced trip functions
- Versions suitable for AC or DC applications

### Applications

- UL1558 Low Voltage Switchgear
- Metal enclosed assemblies containing LV PCBs, switches, instrumentation and metering, protective and regulating equipment
- UL891 Switchboards
  - Power generation, portable generators
  - Wind turbines, solar
  - Motor control centers



## ABB Low Voltage Breakers and Switches Service

### ABB Service

- Retrofit-Retrofill for Older lines of PCB (available options are GE, Allis Chalmers, ABB/ITE and Federal Pacific)
- Repair and maintenance of PCB (Emax)
- Spare parts and consumable for LV Power and MCCB

### Product scope

- Retrofit retrofill:
  - Replacement of old UL1066 equipment in UL 1558 switchgear
  - Replacement of IEC old power circuit breakers in old IEC switchgear
- Repair and maintenance: the product scope is repair and maintenance of all the ABB UL1066 power circuit breakers (mainly Emax – but also Megamax and Otomax)
- Manage the older lines of products in the final stages of their life cycle.

### Key selling arguments

- Retrofit-retrofill: if a customer has old switchgear with old equipment from GE and other manufacturers, we can upgrade the breakers to the new technology, keeping the old switchgear (including the old bus-bar). This solution is more cost-effective than replacing the entire old switchgear
- Repair and maintenance: Existing ABB PCB's extend their life by performing regular and preventive maintenance