Arc flash

Electric arcs can occur for several reasons, such as human error or faulty connections. Accidents are quite unusual but when they do happen their consequences can be very severe. Operators are always exposed to these risks when working in the switchgear room. Flames, ejected parts, smoke and overpressure are the main effects of an arc fault in non-arc classified switchgear. Smoke is released into the room when faults occur in arc-classified switchgear without a gas outlet. The sound blast produced by the fault is very dangerous in all circumstances.

Solutions

ABB can provide remote racking apparatus onboard new MV circuit-breakers and contactors. It can also be integrated into hard-bus and cradle-in-cradle retrofill applications. A portable external driver can be applied in conversion and roll-in replacement solutions. Existing and new switchgear can be equipped with both devices, depending on the panel type. TruckMaster is a portable remote racking unit available in different variants for both cassette and floor-rolling apparatus with screw or ratchet racking systems.
Benefits

Safety
- Increased personnel safety thanks to the distance between the circuit-breaker and operator
- Enhanced switchgear operability prevents human errors due to manual operations
- Racking operations are performed by applying the recommended force, thereby preventing damage to the mechanism and interlocks
- A self-stopping system interrupts the operations if excessive resistance is encountered

Operation
The portable driver is easily applied to the switchgear door
- User-friendly ergonomic console
- Equipment position indicated remotely
- Mechanical interlocks are maintained for manual operations
- Easy storage in the switchroom

Investment
- Cost-effective way to attain a new level of operator safety
- Optimized investment since a single portable device is used for the whole line up

Description
TruckMaster comprises three elements:
- Driver docking
- Portable driver
- Remote console

Driver docking is applied to the breaker compartment door so as to hook the portable driver to the door itself. One portable driver and relevant remote console are required in the switchroom to perform the remote racking operations. The umbilical cord for the remote console can be provided in different lengths.

TruckMaster FR version features
- Suitable for linear ratchet racking mechanisms
- Dedicated solution for roll-in retrofit apparatus
- Can be customized to comply with different switchgear design and apparatus versions
- Best implementation during retrofit commissioning
- Driver docking permanently mounted in every motorized panel
- The portable driver can be easily hooked to the switchgear door in already installed driver docking
- Equipment position is indicated remotely via an optional signal port

For more information please contact:

More product information:
www.abb.com/mediumvoltage
Your contact center:
www.abb.com/contactcenters
More service information:
www.abb.com/service
TruckMaster webpage:

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