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Life Is On





## Innovative Arc Flash Protection

The Square D by Schneider Electric Model 6 Low Voltage Motor Control Center with the ArcBlok™ arc isolation unit is a gamechanger in equipment protection and safety-related work practices. This extremely innovative product is always on to help contain and extinguish arc flash energy on incoming conductors.



Despite the advancements in standards such as NFPA 70E (Standard for Electrical Safety in the Workplace) and your efforts to establish safety-related work practices, these methods have limited effectiveness. The challenge remains: how can more effective risk mitigation be implemented by Engineering Controls?

With ArcBlok, the line side conductors are fully enclosed inside a cable vault which has been tested to IEEE/ANSI C37.20.7 (Guide for Testing Switchgear Rated Up to 52kV for Internal Arcing Faults) test requirements for arc containment. Not just a barrier; ArcBlok helps to prevent arc flash causes from originating, and contains the arc energy if they would occur.

This robust unit can now be specified for new installations or retrofit as a new main section as part of a modernization project to add protection to your existing Model 6 Motor Control Center (MCC) installation.



Traditional MCC Arc Flash Event: 100kA@480V



ArcBlok MCC Arc Flash Event: 100kA @ 480V



Cable vault is designed to isolate arcs on the line side conductors

# ArcBlok Technology Protection System for MCCs

### Helping to protect equipment and people through innovative technology

Schneider Electric designed this ArcBlok technology from the ground up. Assessing the hazards, we tested unique designs to create a passive protection system that can contain a line side arc flash event at the equipment's maximum rated level.

Our patented design includes a newly designed main Motor Control Center section, which reinforces the structure and adds thermal sensors allowing temperature monitoring on your mobile device while standing outside the arc flash boundary. Take temperature readings faster and without the discomfort of PPE normally required for infrared thermography.

Using Zigbee communication protocols, you can monitor main breaker operating temperatures on your wireless device. Schneider Electric's goal is to move away from reliance on PPE and administrative controls to more effective engineering controls and technology solutions.



Temperature sensors can be read remotely without exposure to the line side conductors



PPE is required when thermal imaging equipment



Newly redesigned MCC interiors include a robust enclosure to contain and extinguish Arc Flash events for the line side conductors



Rear view of the MCC Main unit, reveals new patented design tested to withstand and control the high explosive pressures of a line side arc flash event.



Reading the NFC (Near Field Communication Tag) on the equipment provides access to the mobile app while wearing minimal PPE



After reading NFC tag you can use the mobile app to monitor line side temperatures outside the arc flash zone

# Convenient wireless connectivity and user friendly app for simple thermal monitoring





#### Step 1

Locate the NFC Tag on the MCC near the Main Circuit Breaker

#### Step 2

Read the NFC Lable with your android smart phone





#### Step 3

Activate the app

#### Step 4

Wait for data transfer, obtain readings and email results

#### **Technical Details**

- ArcBlok MCC: 100 kA at 208, 240 and 480Vac, 50kA at 600Vac
- Line side testing was UL® witnessed in accordance with ANSI/IEEE C37.20.7-2017
- Model 6 MCCs are Listed to UL845 Standard and Certified to Canadian Standard C22.2 No. 254 and Mexican Standard NOM-003-SCFI-2014 (NMX-J-515-ANCE)
- PowerPact<sup>™</sup> P Molded Case Circuit Breakers with ArcBlok Technology are Listed to the UL489 Standard and Certified to Canadian Standard C22.2 No. 5.



Learn more about the future of arc flash risk reduction in Motor Control Centers, visit schneider-electric.us/arcblok

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