

Power-Zone™ Arc Resistant with ArcBlok™ Technology Switchgear Test Certification Summary Class 6037

Retain for future use.

Ratings

- 100,000 amperes symmetrical, maximum available short circuit current
- 635 volts, maximum
- Arc duration 500 milliseconds, maximum
- Type 2B accessibility¹
(Protection on front, rear, and sides of the equipment and no propagation into instrument compartments.)



Testing was witnessed and validated by UL

- All internal arc testing was witnessed by UL
- Power-Zone™ 4 Arc Resistant Switchgear with ArcBlok™ Technology

Testing was performed per requirements outlined in ANSI/IEEE C37.20.7

The following criteria was used to assess the equipment for the arc rating. The equipment was required to meet all of the criteria to qualify as Power-Zone 4 Arc Resistant Switchgear with ArcBlok Technology.

Every unit tested was compliant with ALL of these criteria.

Criterion 1: That properly latched or secured doors, covers, and so on, do not open. Bowing or other distortion is permitted provided no part comes as far as the position of the indicator mounting racks or walls (whichever is closest) on any assessed surface.

Criterion 2: No fragmentation of the enclosure occurs within the time specified for the test.

Criterion 3: Assessment of burn-through:

It is assumed that any opening in the switchgear caused by direct contact with an arc will also ignite an indicator mounted outside of the switchgear at that same point. Since it is not possible to cover the entire area under assessment with indicators, any opening in the area under assessment that results from direct contact with an arc is considered cause for failure. Openings above the indicator mounting rack height 78 inches (2 m) that do not cause ignition of the horizontally mounted indicators are ignored.

Accessibility Type 1: That arcing does not cause holes in the freely accessible front of the enclosure.

Accessibility Type 2: That arcing does not cause holes in the freely accessible front, sides, and rear of the enclosure.

Criterion 4: That no indicators ignite as a result of escaping gases. Indicators ignited as a result of the burning of paint or labels, glowing particles, and so on, are excluded from this assessment. High-speed movies or video may be used to evaluate the cause of indicator ignition. Holes in horizontally mounted indicators caused by particles that do not ignite the indicator are ignored.

Criterion 5: That all the grounding connections remain effective.

¹ Sections directly connected to a transformer are Type 1B accessibility. All other sections, even in the same line-up, are Type 2B accessibility.

Product tested:

The Power-Zone 4 Arc Resistant Switchgear with ArcBlok Technology was tested per the ANSI C37.20.7 guidelines with the following enclosure features:

- Exhaust type
 - Roof flaps
 - Plenum
- IR windows, pilot devices and metering displays
- Installed position
 - With an aisle around the enclosure (front, rear & sides)

An internal arc was initiated in the following compartments in the Power-Zone 4 Arc Resistant Switchgear with ArcBlok Technology. Multiple tests were performed in each compartment type to cover the variations of product offered.

- Bus compartment
 - Vertical riser bus
 - Cross-bus
 - Insulated and Un-insulated versions
 - Transformer connection
 - Busway connection
 - Cable-in connection
- Cable compartments
 - Incoming and outgoing customer lug pads
 - Largest and smallest section footprints
- Main and Feeder units
 - Arc initiator placed on line side of disconnect with circuit breaker trip disabled
 - Masterpact™ NW circuit breakers

The undersigned, representing Schneider Electric, certifies the information contained in this document to be accurate.



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