



Providing high SCCR to protect power generation equipment



High SCCR, up to 200kA, provides superior protection for critical electrical systems.

Product description:

Eaton's Bussmann series Quik-Spec™ Coordination Panelboard (QSCP) is a compact fusible distribution panel. With up to 200kA Short-Circuit Current Rating (SCCR), the QSCP easily withstands high fault currents, while the use of current-limiting CUBEFuse™ minimizes arc flash hazard.

Highly configurable, the QSCP is available in NEMA 1 and 3R enclosures and can be used as a branch circuit panel or UL service entrance panel. It uses the Bussmann series Compact Circuit Protector Base (CCPB) and time-delay or fast-acting Class CF CUBEFuses for its branch circuit disconnect. The use of the Class CF CUBEFuses makes complying with selective coordination requirements easy.

Features and benefits:

- UL Listed and cULus to CSA Standard 22.2 No. 29.
- Same footprint as traditional circuit breaker panelboards 20 inches wide, and 40% smaller than standard fusible panelboards.
- Up to 400A mains, 200kA SCCR and 100A branches with 18, 30 and 42 branch positions.
- All NEMA 1 configurations available for shipment in ten business days with QuikShip service.

Challenge:

An EPC designing a large rooftop installation with the use of string inverters faced the challenge of providing a reliable panelboard solution at extreme temperatures while keeping the cost of the AC Balance of System (BOS) on budget. There was a high available fault current from the utility on the AC side of the system, creating a unique challenge when specifying equipment.

Solution:

Eaton's Bussmann series QSCP solution allowed the customer to design in a UL 67 panelboard to combine AC circuits from the string inverters. Using the QSCP allowed the designer to:

- Provide a high SCCR panelboard. In addition to protecting against the high available fault current, this allowed non-fused disconnects to be used on the lineside of the string inverters to reduce the BOS cost compared to fused disconnects.
- Withstand extreme temperatures at a competitive price.
- Allow for a lower ambient derating factor, which decreased the fuse sizing and lowered conductor size requirements, further lowering the BOS cost by using Eaton's Bussmann series Class CF, Fast-Acting CUBEFuse.