Arc-resistant Ampgard AR—enhanced safety and reliability

The Eaton Ampgard™ product line has long been recognized as the industry leader in medium-voltage motor control. Eaton offers Ampgard AR for applications that require arc-resistant medium-voltage control.

Ampgard AR has been extensively tested and verified to meet the requirements of IEEE® C37.20.7-2007 for Type 2B accessibility (defined as "arc-resistant designs or features at the freely accessible exterior [front, back and sides] of the equipment" with the low-voltage control door open).

Ampgard AR includes many of the features you have come to expect from Eaton's standard Ampgard line of medium-voltage motor control:

- Type SL vacuum contactors
- Completely front accessible
- Top-mounted main bus
- Two-high 400 A and one-high 800 A
- FVNR, FVR, RVR, RVAT and RVSS starter types

Ampgard AR is available in a 49 kA, 0.5 second rating and is supplied with a plenum and exhaust ducts to carry an internal arc fault away from the operator and into a remote isolated area. Exhaust ducts may exit the plenum from the left, right, front or rear. Exhaust duct lengths are variable and will be selected based on the distance from the plenum to the exhaust area.

Ampgard AR's unique isolation switch design disconnects the starter from the medium-voltage source in the rear arc chamber, not in the front starter compartment. An arc fault that results from the operation of the switch will produce maximum pressures toward the rear of the structure. Other manufacturers' designs disconnect the medium-voltage source in the front starter compartment, resulting in maximum pressures toward the front of the structure.

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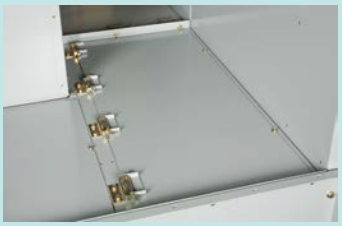
Starter with door open



Plenum and roof flaps

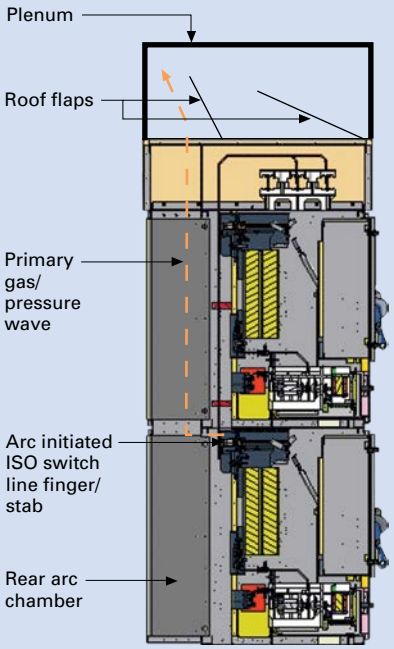
Incoming cable section

Ampgard AR special features

- Individual rear arc chambers for each structure to minimize transfer to arc contaminants from structure to structure
- Reinforced front doors with special latches
- Roof flaps above each rear arc chamber to minimize blow-back from faulted structure to other structures
- Standard insulated main bus
- Low-voltage control compartment verified to meet arc-resistant requirements inside the compartment (Type B)
- Testing certified by UL® to IEEE C37.20.7-2007
- Top-mounted plenum and exhaust duct to carry the arc products away from the equipment
- Power and control cables may exit either the top or the bottom of the enclosure. For top exit, special protective chimneys are installed in the plenum to prevent damage to the cables during an arcing event

Eaton's family of arc-resistant products

Eaton offers a complete range of arc-resistant products for both low-voltage and medium-voltage applications. Ampgard AR can be supplied close coupled to Eaton arc-resistant medium-voltage switchgear, arc-resistant medium-voltage switches or arc-resistant medium-voltage drives. Specific laboratory testing has been completed to verify the arc-resistant properties of Ampgard AR when close coupled to these other Eaton products.



Ampgard AR pressure relief

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