Arc-resistant AMPGARD AR medium voltage motor control

Eaton's AMPGARD® product line has long been recognized as the industry leader in medium voltage motor control. Eaton now 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 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 400A and one-high 800A
- FVNR, FVR, RVR, RVAT and RVSS starter types

AMPGARD AR is available in two ratings: 30 kA and 50 kA. 30 kA design is 41 inches deep; 50 kA design is 51 inches deep. Both ratings are supplied with a plenum to exhaust an internal fault away from the operator and into a "safe area." Exhaust ducts may exit the plenum from the left, right, front or rear.

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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 manufacturer's designs disconnect the medium voltage source in the front starter compartment, resulting in maximum pressures toward the front of the structure.

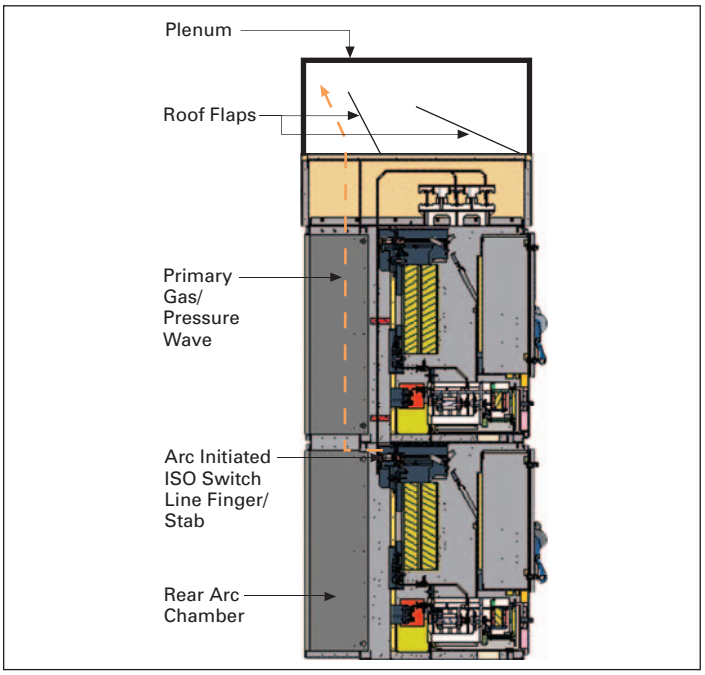
AMPGARD AR special features

- 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
- 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

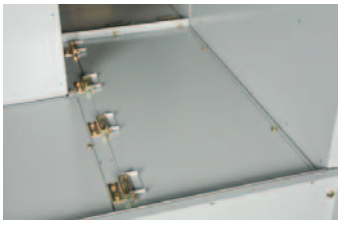
Choose the rating that's right for you:

- For systems with 30 kA or less of available fault current, AMPGARD AR rated for 30 kA can be provided with smaller footprint and lower cost than higher rated arc-resistant equipment

  Example: 10 MVA transformer with 5% impedance and 4160V primary has less than 28 kA available fault current
- AMPGARD AR is available with a 50 kA rating for those systems with higher available fault currents



AMPGARD AR Pressure Relief



Plenum and Roof Flaps

Starter with Door Open

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