Ampgard AR
Arc-resistant medium-voltage motor control

Protecting your highest priority

Powering Business Worldwide

Certified to the 2017 revision of IEEE C37.20.7, Ampgard AR is Eaton's next generation of arc-resistant motor control. This robust motor control design is tested and verified as Type 2B arc-resistant construction and able to withstand the effects of an internal arc fault of 50 kA for 0.5 seconds. Built around Eaton's proven medium-voltage control designs, the new Ampgard AR ensures you receive industry-leading reliability, maintainability and safety.

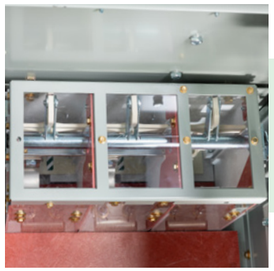
Designed to meet your toughest control applications

Safety is your number one priority. Controlling your processes with the utmost reliability is also key. Eaton delivers this unmatched combination with Ampgard AR arc-resistant medium-voltage motor control. Certified as arc-resistant to IEEE Std C37.20.7-2017 Annex I for medium-voltage ac controllers as defined by UL347, the Ampgard AR offers a legacy of medium-voltage starter performance enhanced by the latest standard for arc flash safety.

*Shown without plenum

The top-mounted plenum and exhaust ducts direct the arc fault byproducts out of the gear and away from personnel.*

The Ampgard AR is certified to meet the requirements of Type 2B construction, allowing the arc-resistant features to be maintained while accessing the front, sides or rear of the structure and even when the low-voltage control door is open.



The starter isolation switch has been redesigned with separate barriered compartments for each of the three main power phases. This method of separating the phases prevents arc faults from occurring in the switch area, reducing the overall likelihood of an arc event.

Ampgard AR arc-resistant has been tested and verified to withstand the effects of an internal arc fault of 50 kA for 0.5 seconds. Specially designed door latching mechanism and reinforced doors provide maximum holding force while maintaining ease of operation.

The fuse ferrules are positioned behind a power fuse service barrier to ensure that maximum pressure from an arcing fault is isolated in the rear compartment. This exclusive mounting configuration provides extra protection for those operating or maintaining the starter.

Be prepared for the worst-case scenario

In 2017, IEEE released a new standard for arc-resistant motor control that replaces the 2007 revision. In addition to other previously required test locations, the 2017 revision of C37.20.7 requires arc initiation at the starter's line-side fuse ferrules. This new arc fault location is considered the worst-case scenario for fault initiation.

The Eaton difference

- Further optimize performance and protection with the addition of **our medium-voltage variable frequency drives (VFD) and switchgear**. Available in close-coupled assemblies, including arc-resistant Type 2B, Eaton's integrated control gear offers savings on floor space and installation cost.
- **Synchronous transfer VFD applications**, Eaton's optional double-bus design enables the control of multiple motors or starters with a single drive, offering powerful benefits of reliability, and reduced floorspace, equipment and installation costs.
- **Fully arc-resistant lineups** of medium-voltage switchgear, motor control and drives further benefit from a common plenum. When only one plenum and set of exhaust ducts are required for an integrated lineup, coordination is streamlined and installation costs are reduced.

Engineering services and support

The Ampgard family of medium-voltage controls is supported by Eaton's Electrical Engineering Services & Systems, one of the largest and most experienced industrial service organizations in North America. With more than 1,500 highly trained professionals in 60 engineering service locations throughout the U.S. and Canada, Eaton's Electrical Engineering Services & Systems has complete local, national and international capabilities to provide a full range of electrical, civil and mechanical equipment services. Also, Eaton provides an additional year of warranty, beyond our standard warranty, when site acceptance testing and power system studies are performed by Eaton.

For more information, contact your local Eaton sales representative at **Eaton.com/AmpgardAR**

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