Pre-Engineered Compressed Air Foam Systems for Electrical Transformer Protection

THE NEXT GENERATION OF FOAM FIRE SUPPRESSION

Product Overview

Protection of electrical transformers often requires large volumes of water, expensive water tanks and high capacity pumps, which all combine to make a medium or high velocity deluge protection system an expensive option.

Now with the Factory Mutual approved Compressed Air Foam (CAF) from ACAF, the protection of indoor or outdoor transformer bays is much more economical.

ACAF Systems model SC series is an automatic pre-engineered, self-contained, stored energy-type fire suppression system that uses CAF as the fire suppression agent. Unique to the industry, it requires no water supply but rather creates a unique CAF: a non-toxic, biodegradable foam, from a pre-mixed foam water solution. Nitrogen is used under pressure to create the CAF as well as to power the system. Control of the system is maintained by a specially designed Automatic CAF Generator that upon activation creates CAF. The result is an expanded foam material that consists of small uniform bubbles.

The SC series is available in a range of assemblies: SC 01001, through SC 1,8004. Larger, customized units are available for system design of 100 gallons to 1,800 gallons. Each features a pre-assembled automatic CAF generator/control valve. ACAF Systems model SC series is designed for use in automatic fixed spray, deluge, monitor, and hose reel CAF systems. ACAF Systems model SC is pre-assembled, so the cost of installation is reduced.
FEATURES & BENEFITS

- A completely automatic control valve that creates CAF and controls the flow without any field adjustment.
- Self-contained design requires no water supply or energy source to power the CAF generation.
- By combining multiple CAF generator assemblies, large areas may be protected.
- Compressed nitrogen is the power that drives the system and creates the CAF. Nitrogen is provided by DOT certified compressed gas cylinders. The number and size of the cylinders is calculated by ACAF Systems based upon the system size.
- A foam/water solution is stored in a steel pressure tank that is sized by ACAF Systems to meet system duration demand.
- AR-AFFF concentrate at a mix ratio of 3% is the foam water solution approved for use in an ACAF system. The foam is a special mix of AR-AFFF foam concentrate and water that is environmentally responsible.
- Actuation of the system may be manual, electrical or pneumatic, or a combination of electric and pneumatic. Each control valve assembly is built with an emergency release valve for manual release.
- Supervision of all aspects of the control valve is by the Potter PFC-4410RC control panel. The main system solution control valve is provided with tamper switches as is the nitrogen supply control valve.
- Pre-engineered systems means less design and installation time.

APPLICATIONS

- Indoor Transformers
- Outdoor Transformers
- Pump Rooms
- Machinery Spaces
- Gas Turbine Enclosures