



Reduce network equipment damage with the High Thermal Event System

In the event of a vault fire, Eaton's High Thermal Event System (HTES)—the newest option available for the VaultGard™ gateway—minimizes damage by drawing inputs from various heat sensors in the vault and using the data to trip and isolate equipment involved in the thermal event.

Electrical system challenge

As demand for electrical equipment and infrastructure grows, the risk of catastrophic fires and electrical hazards become a greater concern. Unique fire hazards require unique solutions. Eaton's High Thermal Event System (HTES) helps protect utility vaults for industrial, commercial, and institutional facilities by monitoring for fires or electrical equipment failures that may occur. When systems fail, immediate action is required. The HTES is plug-and-play, designed for quick installation and immediate system monitoring. The HTES helps protect not only a company's employees and customers, but its assets as well.

Turnkey installation and validation testing are available.

Ease of use and control

- Autonomous control and monitoring
 - Easy access through the VaultGard™ gateway
 - Algorithm used to sense heat through high-speed RTU in conjunction with VaultGard gateway
- Easy plug-and-play setup
 - Eaton can set up, test, and configure the HTES for you—a turnkey solution or install yourself with ease
 - VaultGard gateway communications integration provides observability to the vaults
- Retrofittable to any vault
 - Up to six spot networks
- HMI touchscreen display
 - Quickly test the array of vault thermal sensors through Eaton's HMI—no need to manually apply heat to each sensor in the vault
 - Access configuration and testing algorithms

Protection of people and property

- Equipped with emergency shut-off switch for maintenance personnel safety
- Helps protect host structure from additional damage
 - Network protectors, transformers, busway and other vault contents
- Helps protect non-affected electrical equipment from being damaged
- Reduces likelihood of transformer failure, network protector thermal fire, collector bus thermal events, catastrophic vault fires and ground fault events



The HTES is available with VaultGard gateway integration.



Powering Business Worldwide

Eaton protects your investment with the High Thermal Event System option for the VaultGard gateway.

Transformer failure – Sudden pressure operation

Figure 1 shows a transformer failure. In this operation the HTES isolates the transformer(s) from the primary and secondary collector bus. By tripping isolation devices on the primary side of the transformer, the HTES trips and locks out the network protector on the secondary side of the transformer.

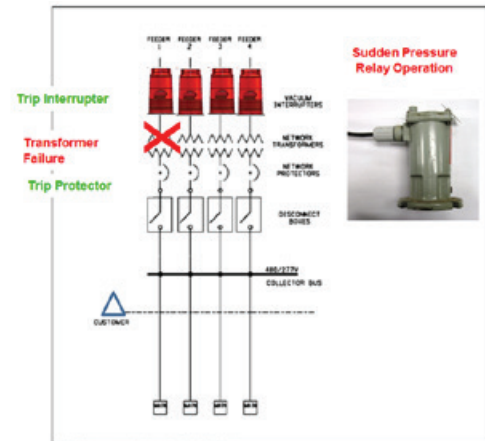


Figure 1. Transformer failure – sudden pressure operation

Network protector fire – Thermal-sensor operation

Figure 2 shows a network protector fire. In this operation the HTES isolates the transformer(s) from the primary and secondary collector bus. In addition, it also trips isolation devices on the primary side of the transformer, and trips and locks out the network protector on the secondary side of the transformer.

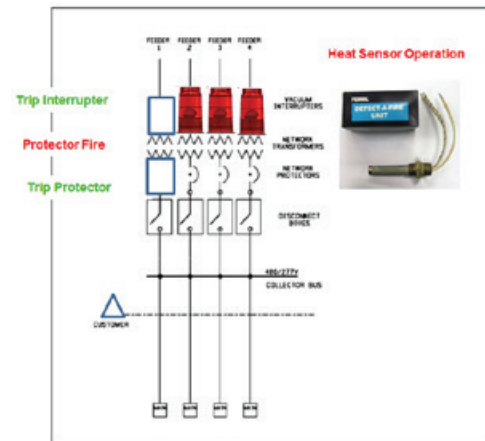


Figure 2. Network protector fire – thermal sensor operation

Collector bus failure – Continuous fire-detection operation

Figure 3 shows a collector bus fire. In this operation the HTES isolates the entire spot network system, trips all isolation devices on the primary side of all transformers, and also trips and locks out all network protectors. The ground fault operation relies on a current sensing device on the ground conductor.

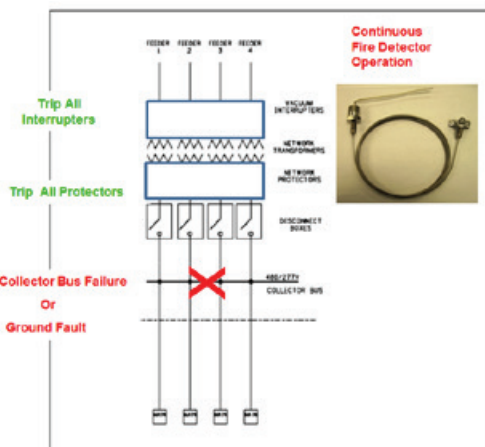


Figure 3. Collector bus failure – continuous fire detection operation

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