

Safety Concern Notice

March 31, 2026

HVAC pull-out type electrical disconnect devices

There have been several documented cases of failures with pull-out type disconnects that are commonly used with HVAC equipment. The concerns involve the tendency for these devices to overheat and melt when the electrical load lasts for an extended period of time.

These devices are intended for use with air-conditioning equipment with lighter loads and intermittent operation. They are often misused with resistive heating loads, such as electric furnaces and electric vehicle charging disconnecting means.

There are several manufacturers that produce this type of disconnect. These include Midwest, Mars, Halex Alpine, Cambridge, and others. Most are almost identical in design. One particular model that has proven to be problematic is the Eaton DPU222R. This model is a 60-amp rated non-fusible switch. Eaton's instructions state that this model is not intended for use with resistive heating, photovoltaic systems, and electric vehicle charging. They also state that they are not intended for continuous loads. Per NEC requirements, HVAC equipment is considered to be a continuous load. This poses a conflict with the designed use and instructions of these devices.

A multi-family development in Columbia, Tennessee has experienced multiple damaged disconnects that have been installed for use with attic air-handler/furnaces. As many as 14 have melted and had to be replaced. One apartment unit caught fire and was destroyed in December 2025. The models installed in this development were the Eaton DPU222R. Even though the electrical load was approximately 42 amps and the disconnect is rated at 60 amps, they still failed because of the continuous load and misuse.

Other models by other manufacturers have a history of melting/damage as well, including fusible models with both resistive heat and condensing units/heat pumps.

This notice is to inform home inspectors, electricians, HVAC technicians, and code compliance inspectors of this issue. Careful inspection of these devices is imperative for proper use and to reveal any signs of heat distortion. The failure point is primarily at the pull-out handle. Inspectors should look carefully for any deformation near the top of the plastic dead-front cover and pull-out handle. The Tennessee state fire marshal's office has recently sent notice to electrical code inspectors to fail any installations of these disconnects when used with resistive heating loads.



Disconnect in fire damage condo



Melted pull-out handle

Any questions or requests for additional information can be directed to:

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