

Affects: Improper Fire Alarm Installations Fail to Meet NFPA Requirements

Issue

In recent Bosch Security Systems seminars on fire alarm systems, it became clear that some dealers have not installed *required* modules for D8112 fire alarm applications. In a number of cases, the fire alarm initiating device circuits were connected **directly** to the D8112 zone terminals without interface modules.

Under such circumstances, a ground fault, which may occur in the initiating circuit, can result in a false alarm. This is in conflict with National Fire Protection Association (NFPA) standards, and is unacceptable.

Keeping in mind that the common terminal for each zone loop is at ground potential, a ground fault on the other side of the loop has the same effect as a wire-to-wire short and causes an alarm to be initiated.

NFPA requires that the control panel be capable of distinguishing between alarm and trouble conditions, and that the panel initiate distinctly different signals to identify each.

Resolution

Three options are available in modules to provide the necessary ground isolation, in addition to other desirable features:

- **D125 Dual Powered Loop Interface Module**

In addition to serving as an interface for glass-break detectors in burglary protection, the D125 module provides two Class B initiating circuits. It is suitable for all types of fire alarm initiating devices. This includes two-wire smoke detectors which are UL Listed for compatibility with the D8112 (see 73-05510-000 for listed detectors, or contact the detector manufacturer). For complete installation instructions, see the *D125 Powered Loop Interface Module Operation and Installation Guide* (P/N: 74-03123-000).

- **D129 Dual Class A Initiating Circuit Module**

The D129 module is suitable for all types of fire alarm initiating devices **except** two-wire smoke detectors. It also provides an optional electronic retard feature for wetpipe sprinkler waterflow alarm. For complete installation instructions, see the *D129 Dual Class A Initiation Circuit Module Operation and Installation Guide* (P/N: 74-03158-000).

- **Zonex System using D8125 POPEX Modules and D8126U and/or D8126T POPIT Modules**

D8126U and D8126T POPIT modules can be used for connection of all types of fire alarm initiating devices *except* two-wire smoke detectors. For specifications, see the *Omegalarm D8112 ZONEX System Specifications Sheet* (P/N: 75-04246-000). For complete installation instructions, see the *D8125 Operation and Installation Guide* (P/N: 74-04247-000).

Note: *The D8128 OctoPOPIT module is suitable for sprinkler supervisory service, but cannot be used for fire alarm initiating devices. For specifications, see the Omegalarm D8112 ZONEX System Specifications Sheet (P/N: 75-04246-000). For complete installation instructions see the D8128 OctoPOPIT Operation and Installation Guide (P/N: 74-04416-000).*

We strongly recommend that any installations lacking these essential modules be upgraded without delay to avoid possible false alarms and needless response of the fire department.

If you have any questions about proper fire alarm installations, call Bosch Security Systems Customer Service (800) 538-5807.



