

AlarmLine

Intrinsic Safety Barriers for Conventional and Addressable AlarmLine™ Systems

FEATURES

- Permits AlarmLine installation in Classified Hazardous Areas, compatible with Addressable and Conventional control systems using AlarmLine
- 1-Channel Operation
- Shunt-Diode Type
- Limits Energy
- Slim Packaging
- UL Listed
- FM Approved

DESCRIPTION

AlarmLine™ applications in classified hazardous areas with potentially explosive vapors, dust or fibers require the use of Intrinsic Safety Barriers so as to limit the total energy entering the hazard via the sensor wiring conductors.

Kidde P/N 73-117068-131 shunt-diode Safety Barriers (as shown in Figure 1) are 1-channel devices that use intrinsically safe techniques to allow electrical signals to be conveyed between non-hazardous (safe) and hazardous areas. The Safety Barriers achieve this by limiting the transfer of energy in one direction to a level that cannot cause ignition of explosive atmospheres.

WIRING

Each barrier handles two conductors, so two barriers are required for each sensor cable. As shown in Figure 1, two Intrinsic Safety Barriers are used for each AlarmLine Sensor which is then connected to either the conventional hardwired LHD-4 Module (P/N 73-117068-047) or Addressable AlarmLine Module AAM (P/N 73-10001-003) depending on the type of system (conventional or addressable). The AAM is a SmartOne® module that connects to the SLC loop of the ARIES™ or ARIES NETLink™ Control Panel. Up to 255 AAM modules can be connected to a SLC loop.

The AlarmLine LHD-4 Module is a 4-wire module that connects to any FM approved fire alarm panel. One fire alarm panel can monitor several AlarmLine Interface Modules limited only by the maximum permissible cable length.

ORDERING INFORMATION

Part Number	Description
73-117068-131	Intrinsic Safety Barrier for AlarmLine (need 2 per sensor)
73-117068-132	Intrinsic Safety Barrier Weathertight Enclosure. Holds up to five Barriers.
73-117068-133	Intrinsic Safety Barrier Weathertight Enclosure. Holds up to 13 Barriers.

INSTALLATION

Intrinsic Safety Barriers with dimensions must be enclosed in a separate weather-tight enclosure. Kidde offers multi-barrier enclosures suitable for 5 and 13 barriers (see Ordering Information for part numbers).

To determine if the need for an intrinsically safe circuit exists on a specific application, consult the National Electric Code and the local Authority Having Jurisdiction (AHJ).

REFERENCE DOCUMENTS

- K-73-02: Addressable AlarmLine Module Data Sheet
- K-73-07: AlarmLine LHD-4 Data Sheet
- K-76-600: ARIES™ Data Sheet
- K-76-800: ARIES NETLink™ Data Sheet

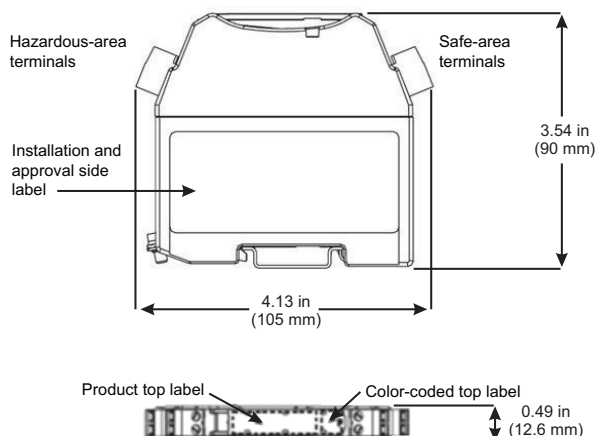


Figure 1. Intrinsic Safety Barrier Dimensions

SPECIFICATIONS

FM Approvals	Class I, Division I, Groups A, B, C, D Class II, Division 1, Groups E, F, G Class III, Division 1
Operating Temperature Range	-4° F (-20° C) to 140° F (60° C)
Humidity	5 to 95% R.H.
Terminals	Will accept up to #12 AWG
Working Voltage	6 V
Maximum Voltage	7.0 V
Fuse Rating	100 mA
End-to-End Resistance	107 ohms maximum 90 ohm minimum
Weight	Approximately 0.310 lb. (0.140 kg)
Enclosures	73-117068-132 holds 5 barriers 73-117068-133 holds 13 barriers

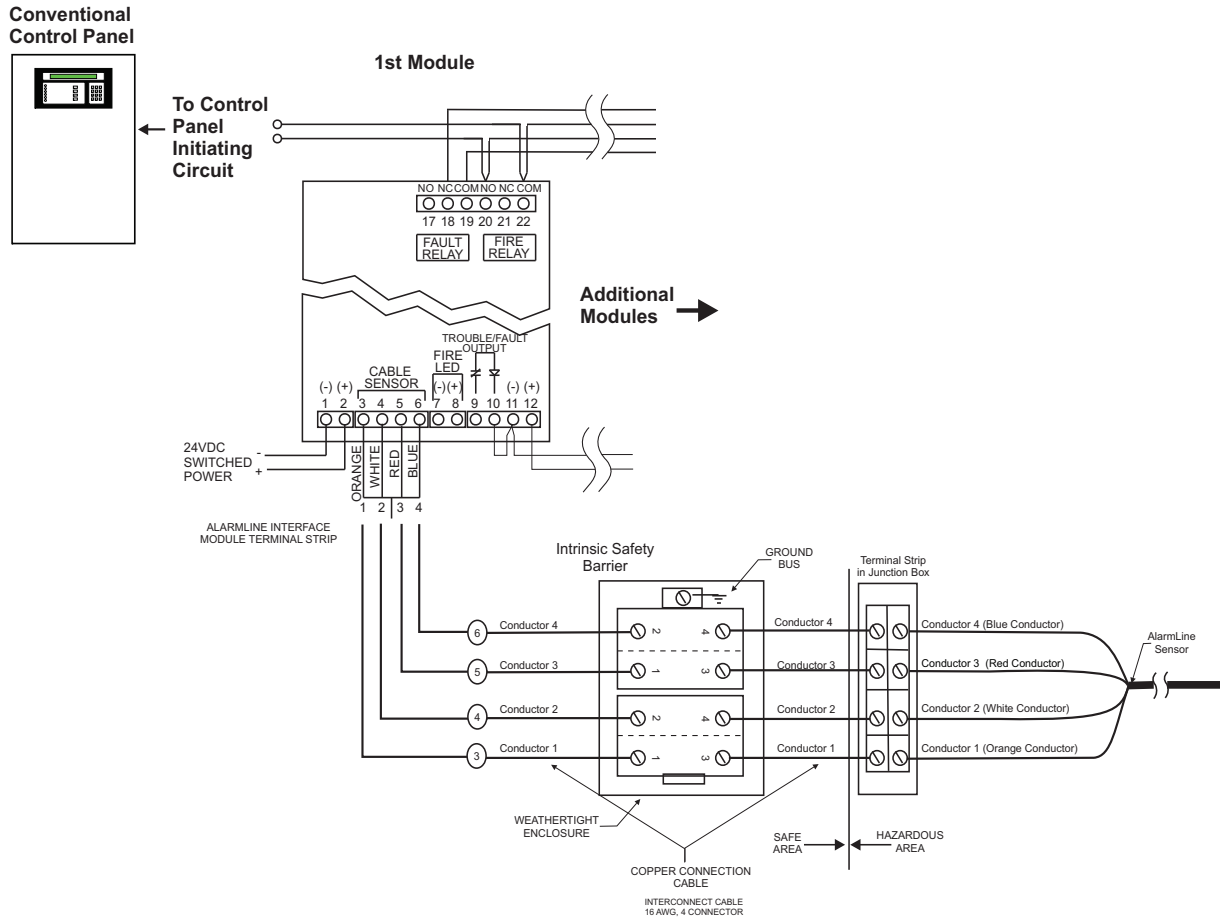


Figure 2. Typical Schematic Wiring Diagram (Conventional Hardwired)

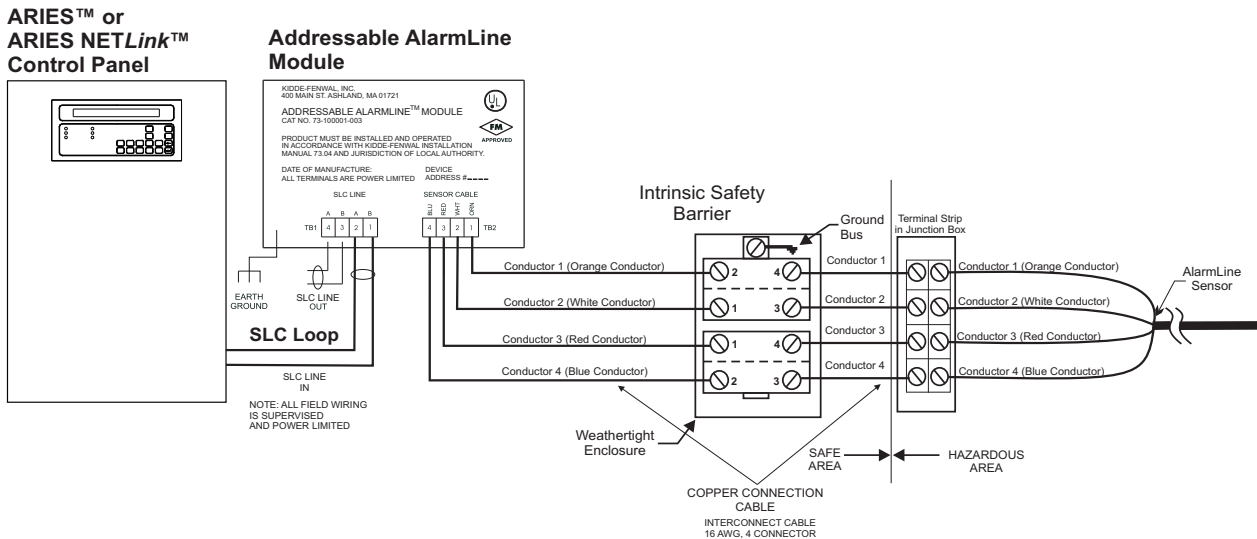


Figure 3. Typical Schematic Wiring Diagram (Addressable)

EXPORT INFORMATION (USA)

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