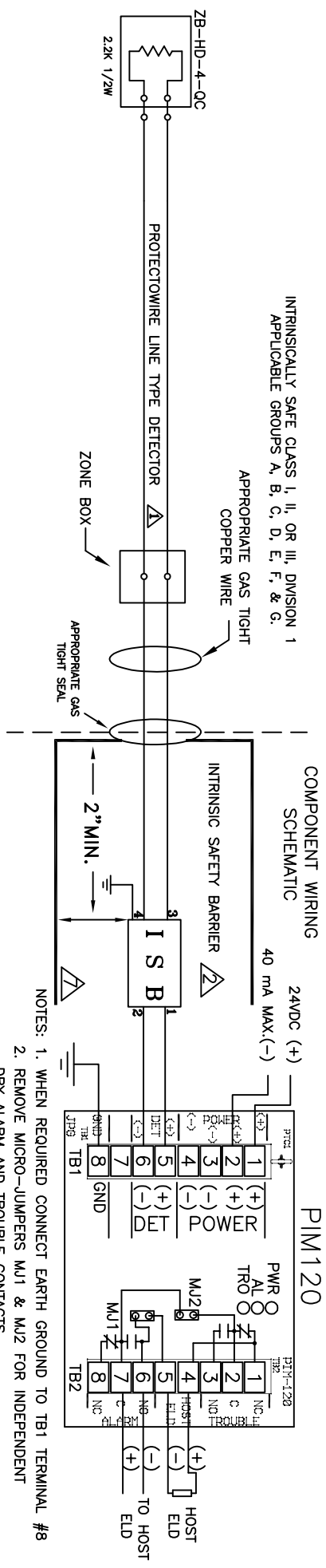


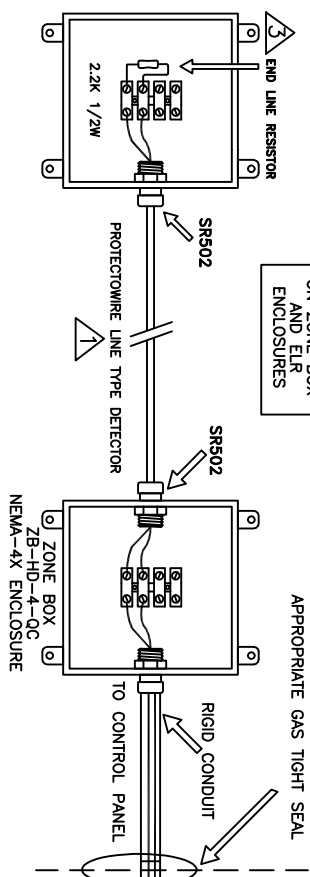
HAZARDOUS LOCATION NON-HAZARDOUS LOCATION

INTRINSICALLY SAFE CLASS I, II, OR III, DIVISION 1  
APPLICABLE GROUPS A, B, C, D, E, F, & G.



- NOTES: 1. WHEN REQUIRED CONNECT EARTH GROUND TO TB1 TERMINAL #8  
2. REMOVE MICRO-JUMPERS MJ1 & MJ2 FOR INDEPENDENT DRY ALARM AND TROUBLE CONTACTS.

LABEL L-1170  
ON ZONE BOX  
AND ELR  
ENCLOSURES



**PROTECTOWIRE Linear Heat Detector**  
Maximum Inductive & Capacitive Loading

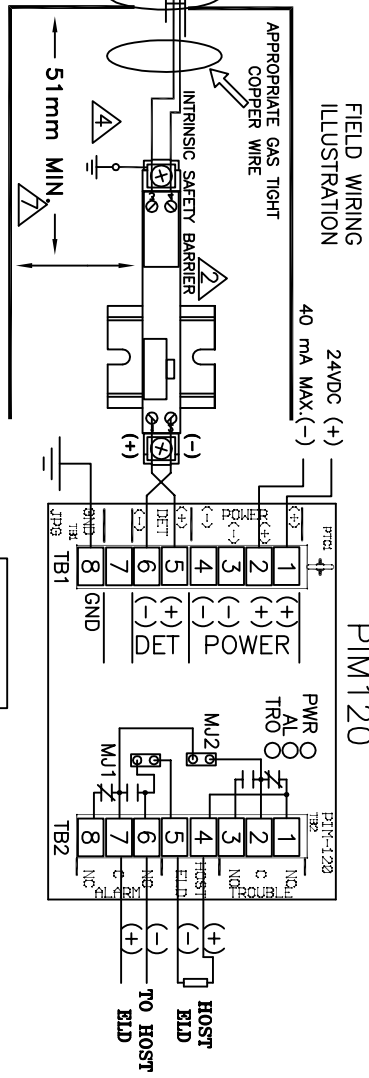
La = Maximum Loop Inductance Ca = Maximum Loop Capacitance  
Lfc = Feed Cable or Other Inductance Cfc = Feed Cable or Other Capacitance

Group	A	B	C	D	E	F	G
Ca	0.14 uF	0.14 uF	0.43 uF	1.14 uF	0.43 uF	1.14 uF	1.14 uF
La	3.60 mH	3.60 mH	13.9 mH	28.5 mH	13.9 mH	28.5 mH	28.5 mH

$La \geq ((2.5 \mu\text{H} / \text{ft.}) \times (\text{PROTECTOWIRE ft.})) + (Lfc)$   
 $Ca \geq ((30 \text{ pF} / \text{ft.}) \times (\text{PROTECTOWIRE ft.})) + (Cfc)$

**NOTES:**

- PROTECTOWIRE LINE HEAT DETECTOR, REGULAR, INTERMEDIATE, HIGH TEST AND EXTRA HIGH EPC, EPN & TYPE EPR. PART NO. PHSC. MAX LENGTH PER ZONE = 1829 METERS
- INTRINSIC SAFETY BARRIER (ISB) PART NO. 9001/01-280-100-101, R. STAHL INC.
- END OF LINE RESISTOR, PART NO. RB-222-5, 2.2K 1/2W 5%
- RESISTANCE FROM ISB GROUNDSTRAP TO EARTH GROUND MUST BE ONE OHM OR LESS. COPPER WIRE, #12 AWG MIN.
- EQUIPMENT SHALL NOT USE OR GENERATE GREATER THAN 250V.
- WIRE ACCORDINGLY FOLLOWING NATIONAL ELECTRICAL CODE & ANSII/SARP12.6
- MINIMUM 51mm SEPARATION BETWEEN HAZARDOUS & NON-HAZARDOUS AREA WIRING NO OTHER WIRING WITHIN BLACK LINES
- GROUND FAULT DETECTOR IN HOST PANEL MUST BE DISABLED



LABEL L-1169  
ON BARRIER  
ENCLOSURE

- NOTES: 1. WHEN REQUIRED CONNECT EARTH GROUND TO TB1 TERMINAL #8  
2. REMOVE MICRO-JUMPERS MJ1 & MJ2 FOR INDEPENDENT DRY ALARM AND TROUBLE CONTACTS.

**PROTECTOWIRE**  
*FireSystems*  
Manufacturer of Special Hazard Fire Detection Systems

**TYPICAL PIM120 INTERFACE MODULE WITH INTRINSIC SAFETY BARRIER (STAHL) ILLUSTRATION DIAGRAM**

DATE	REVISION	DWN:	CHKD:	APPD:
9-08	CORRECT NOTE 3	NTT		
9-11	CHANGE TEXT FONT	DATE: 8-01-06	SCALE: NTS	TOL:
5-15	ADD L-1169 & L-1170			

THE PROTECTOWIRE CO., INC.  
Hanover, Massachusetts

DWG NO.: **IL-1612C**