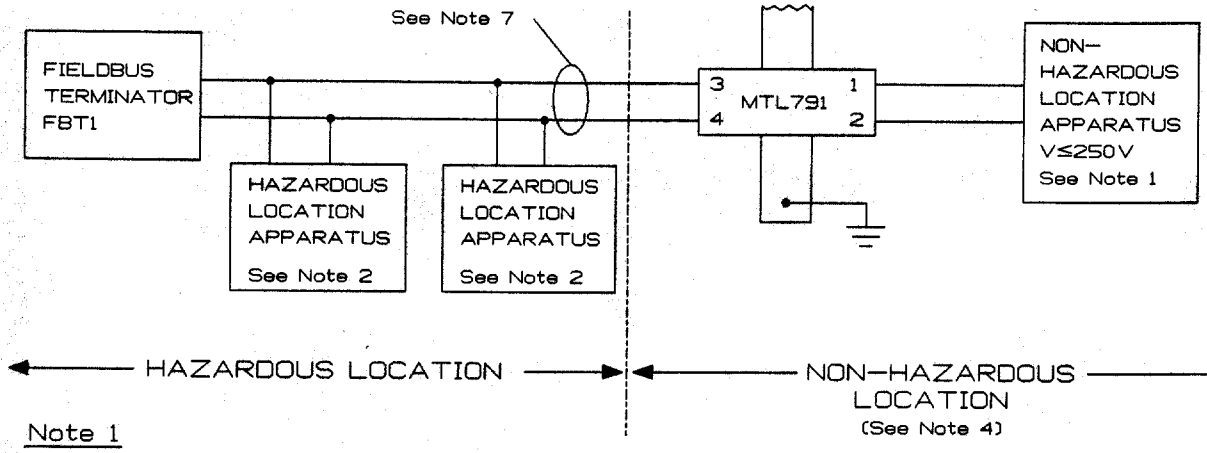
Dimensions in mm | Do Not Scale | Third Angle Projection



Note 1

The Non-Hazardous (Safe) Location equipment must not generate or use voltages in excess of 250V rms or d.c.

Note 2

The Hazardous Location equipment: any number of FMRC Approved devices which meet the power and Entity Parameter requirements below may be connected to the Fieldbus:-

a) All device's electronic circuitry which interface directly to the Fieldbus must be powered from Fieldbus power. Other power sources in the devices (if any), must be galvanically isolated from the Fieldbus power.
b) Vmax of all devices must be equal to or greater than 22V;
c) Imax of all devices must be equal to or greater than 233mA;
d) Pmax of all devices must be equal to or greater than 1.18W;
e) The sum of all device's unprotected input capacitance Ci, plus the cable capacitance must be equal to or less than Ca for the applicable Gas Group in note 7.
f) The sum of all device's unprotected input inductance Li, plus the cable inductance must be equal to or less than La for applicable Gas Group in note 7.

Note 3

For guidance on the installation see ANSI/ISA RP12.6 and the USA National Electrical Code.

Note 4

The MTL791 Shunt Diode safety barrier is Associated Apparatus, and when mounted in an appropriate enclosure may be installed in the following areas:

i) Non-Hazardous (Safe) Location
ii) Class I, Division 2, Groups A,B,C, and D Hazardous Locations
iii) Class II, Division 2, Groups F and G Hazardous Locations
iv) Class III, Division 2 Hazardous Locations

Note 5

The barrier must be installed in enclosures meeting the requirements of ANSI/ISA-S82 and the USA National Electrical Code.

Note 6

Use FMRC-Approved, or NRTL-Listed, dust-ignition proof enclosures appropriate for environmental protection in Class II, Division 2, Groups F and G, and Class III Hazardous Locations.

Note 7

The Entity Parameters for the MTL791 & FBT1 are .

Vt=22V

It=233mA

Po=1.18W

Groups	Ca (μF)	La (mH)	L/R μH/Ω
A,B	0.24	0.31	31
C,E	0.74	2.97	121
D,F,G	1.99	5.50	242

System Certificate No:

Scale . N/A

Certifying Authority: Factory Mutual

Sheet 1 of 1

Title
Installation Drawing for the MTL791 and FBT1 Fieldbus Terminator

Drg. No. SCI-609

Iss 1 | Date 3.96 | Drn DRG | Chd

Modification

IBMCAD

A4