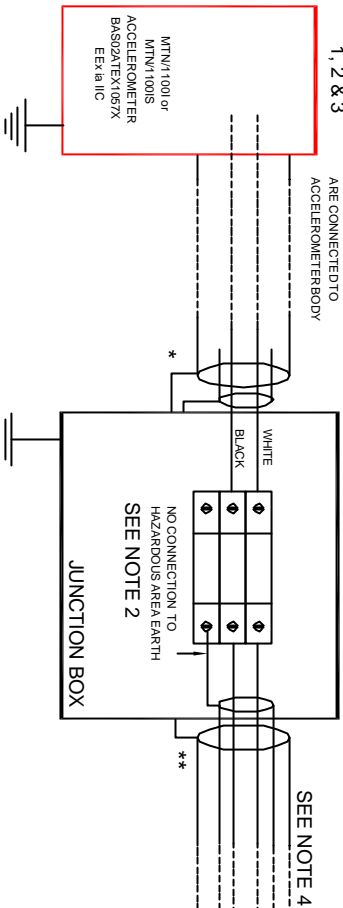


HAZARDOUS AREA

SEE NOTE
1, 2 & 3

OUTER SHIELD & SCREEN
ARE CONNECTED TO
ACCELEROMETER BODY



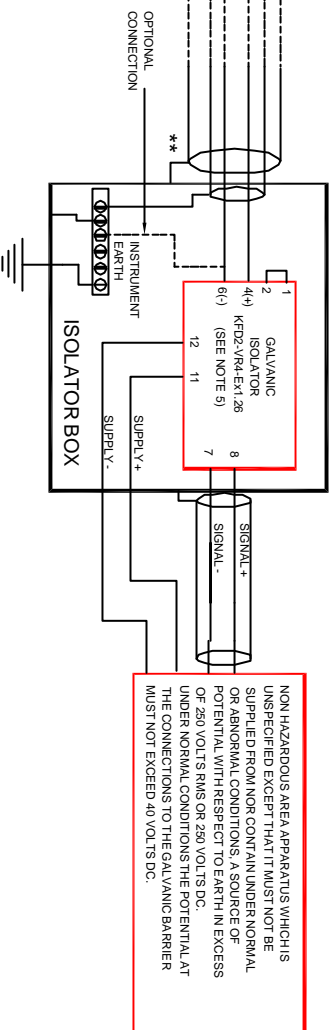
* OUTER SHIELD & INNER
SCREEN CONNECTED TO
CHASSIS VIA EX APPROVED
CABLE GLAND.

** OUTER SHIELD ONLY
CONNECTED TO CHASSIS VIA
EX APPROVED CABLE GLAND.

NOTES:

1. The minimum cross sectional area of the wiring used between the Circuit to transition PCB is 0.085mm².
2. The electrical circuits in the hazardous area must be capable of withstanding an AC test voltage of 500Vrms to earth or frame of the apparatus for 1 minute.
3. The capacitance and inductance, or inductance to resistance (L/R) ratio of the hazardous area cable must not exceed the values shown in Table 1.
4. The installation, including barrier earthing arrangements, must comply with the installation requirements of the country of use e.g.: in the UK, EN 60079-14.
5. Any single Galvanic Isolator certified by an EC approved body to IEEEx ia IIC having the following output parameters:
Uo = 28 V dc, Io = 93mA dc, Po = 0.65W
E.g. Pepperl + Fuchs KFD2-VR4 EX1.26 to BAS02ATEXZ7206
6. The installer is to perform a risk assessment in accordance with clause 10 of EN 60079-25 and install lightning protection arrestors as deemed necessary.

NON-HAZARDOUS AREA



NON HAZARDOUS AREA APPARATUS WHICH IS UNSPECIFIED EXCEPT THAT IT MUST NOT BE SUPPLIED FROM NOR CONTAIN UNDER NORMAL OR ABNORMAL CONDITIONS A SOURCE OF POTENTIAL WITH RESPECT TO EARTH IN EXCESS OF 250 VOLTS RMS OR 250 VOLTS DC. UNDER NORMAL CONDITIONS THE POTENTIAL AT THE CONNECTIONS TO THE GALVANIC BARRIER MUST NOT EXCEED 40 VOLTS DC.

SYSTEM LABEL
Monitran Limited
MTN/11001 ACCELEROMETER SYSTEM
Baseefa02Y0236
EEx ia IIC

TABLE 1: CABLE PARAMETERS FOR ADDITIONAL CABLE

ACCELEROMETER WITH INTERGRAL CABLE LENGHT ≤10m			
GROUP	CAPACITANCE μF	INDUCTANCE mH or L/R RATIO μH/Ω	
IIC	0.080	4.28	40
IIB	0.647	17.60	163
IIA	2.140	35.90	326
ACCELEROMETER WITH INTERGRAL CABLE LENGHT ≤50m			
GROUP	CAPACITANCE μF	INDUCTANCE mH or L/R RATIO μH/Ω	
IIC	0.073	4.26	40
IIB	0.640	17.60	163
IIA	2.140	35.90	326
ACCELEROMETER WITH INTERGRAL CABLE LENGHT ≤100m			
GROUP	CAPACITANCE μF	INDUCTANCE mH or L/R RATIO μH/Ω	
IIC	0.064	4.23	40
IIB	0.631	17.60	163
IIA	2.130	35.90	326

ISS	DESCRIPTION	BY	CHECKED BY	APPROVED BY	DATE
1	RELEASE	MJS	MAB	CMH	08/03/05

DRAWING TITLE:
SYSTEM CONNECTION FOR MTN/11001 & MTN/11001S
GROUP II ACCELEROMETERS WITH GALVANIC ISOLATION
TO THE PARAMETERS DETAILED ABOVE.

DRAWING NUMBER:
ATX027

SHEET 1 OF 2

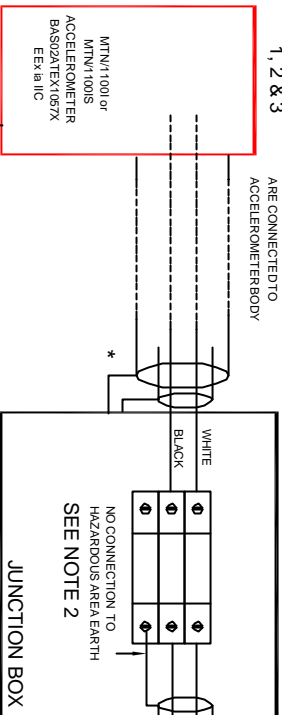
SCALE: NTS

Monitran Limited
33 Hazlemere Road,
Penn,
Bucks
HP10 8AD

HAZARDOUS AREA

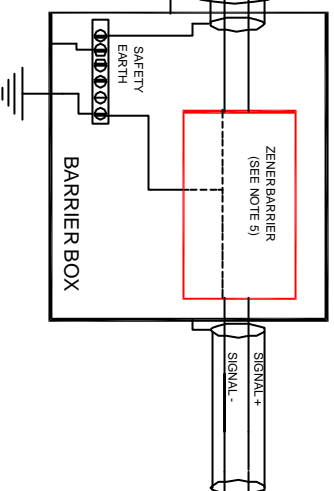
SEE NOTE 1, 2 & 3

OUTER SHIELD & SCREEN ARE CONNECTED TO ACCELEROMETER BODY



SEE NOTE 4

NON-HAZARDOUS AREA



NON-HAZARDOUS AREA APPARATUS WHICH IS UNSPECIFIED EXCEPT THAT IT MUST NOT BE SUPPLIED FROM NOR CONTAIN UNDER-NORMAL OR ABNORMAL CONDITIONS, A SOURCE OF POTENTIAL WITH RESPECT TO EARTH IN EXCESS OF 250 VOLTS RMS OR 250 VOLTS DC. UNDER NORMAL CONDITIONS THE POTENTIAL AT THE CONNECTIONS TO THE GALVANIC BARRIER MUST NOT EXCEED 40 VOLTS DC.

SYSTEM LABEL

Monitran Limited
MTN/11001 ACCELEROMETER SYSTEM
 Baseefa02Y0236
 EEx ia IIC

NOTES:

1. The minimum cross sectional area of the wiring used between the Circuit to transition PCB is 0.085mm².
2. The electrical circuits in the hazardous area must be capable of withstanding an AC test voltage of 500Vrms to earth or frame of the apparatus for 1 minute.
3. The capacitance and inductance, or inductance to resistance (L/R) ratio of the hazardous area cable must not exceed the values shown in Table 1.
4. The installation, including barrier earthing arrangements, must comply with the installation requirements of the country of use e.g.: in the UK, EN 60079-14.
5. Any single shunt zener safety barrier certified by an EC approved body to [EEx ia] IIC having the following output parameters:
 $U_o = 28 \text{ V dc}$, $I_o = 93\text{mA dc}$, $P_o = 0.65\text{W}$
 E.g. MTL728, BAS01ATEX7202 or Peppert + Fuchs Z728, BAS01ATEX7005
6. The installer is to perform a risk assessment in accordance with clause 10 of EN 60079-25 and install lightning protection arrestors as deemed necessary.

TABLE 1: CABLE PARAMETERS FOR ADDITIONAL CABLE

ACCELEROMETER WITH INTERGRAL CABLE LENGHT ≤10m			
GROUP	CAPACITANCE μF	INDUCTANCE mH or L/R RATIO	$\mu\text{H}/\Omega$
IIC	0.080	4.28	40
IIB	0.647	17.60	163
IIA	2.140	35.90	326
ACCELEROMETER WITH INTERGRAL CABLE LENGHT ≤50m			
GROUP	CAPACITANCE μF	INDUCTANCE mH or L/R RATIO	$\mu\text{H}/\Omega$
IIC	0.073	4.26	40
IIB	0.640	17.60	163
IIA	2.140	35.90	326
ACCELEROMETER WITH INTERGRAL CABLE LENGHT ≤100m			
GROUP	CAPACITANCE μF	INDUCTANCE mH or L/R RATIO	$\mu\text{H}/\Omega$
IIC	0.064	4.23	40
IIB	0.631	17.60	163
IIA	2.130	35.90	326

ISS	DESCRIPTION	BY	CHECKED BY	APPROVED BY	DATE
1	RELEASE	MJS	MAB	CMH	08/03/05

DRAWING TITLE:
 SYSTEM CONNECTION FOR MTN/11001 & MTN/11001S
 GROUP II ACCELEROMETERS WITH ZENER BARRIER
 PROTECTION TO THE PARAMETERS DETAILED ABOVE.

DRAWING NUMBER:

ATX027

SHEET 2 OF 2

SCALE: NTS

Monitran Limited
 33 Hazlemere Road,
 Penn,
 Bucks
 HP10 8AD