

Instructions specific to hazardous area installations (reference European ATEX Directive 94/9/EC, Annex II, 1.0.6.)

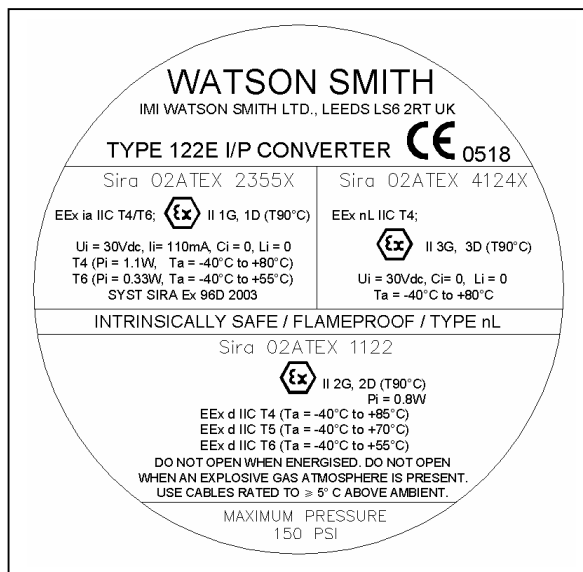
The following instructions apply to the Intrinsically Safe Type 122 I/P Converter covered by certificate numbers:

- 1 Certification Marking Label:
For I.S. only: Sira 02ATEX2123X



Label size and shape may vary to suit housings

- Certification Marking Label:
For Triple certified Flameproof instrument: Sira02ATEX2355X,
Sira02ATEX4124X and Sira02ATEX1122



- 2 It is recommended that the installer refers to Watson Smith drawing number 96-133; system drawing, also attached on page 2.
- 3 The equipment should not be used outside the stated ambient temperature range.
- 4 Where the equipment is marked as being triple certified, then it is recommended that, after installation, it is indicated on or near the equipment whether the installation is to EEx ia, EEx d or EEx nL. This facilitates subsequent inspection of the equipment.
- 5 The certificate number has an 'X' suffix, which indicates that the certificate contains special conditions for safe use. Those installing or inspecting the equipment should have access to this section of the certificate.
- 6 The equipment has not been assessed as a safety-related device (as referred to by Directive 94/9/EC Annex II, clause 1.5)
- 7 Installation and maintenance of this equipment shall be carried out by suitably-trained personnel in accordance with the applicable codes of practice
- 8 Repair of this equipment shall be carried out by the manufacturer or in accordance with the applicable code of practice
- 9 If the equipment is likely to come into contact with aggressive substances, then it is the responsibility of the user to take suitable precautions that prevent it from being adversely affected, thus ensuring that the type of protection is not compromised.
 - ◆ Aggressive substances: e.g. acidic liquids or gases that may attack metals, or solvents that may affect polymeric materials
 - ◆ Suitable precautions: e.g. regular checks as part of routine inspections or establishing from the material's data sheet that it is resistant to specific chemicals.

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EXPORT ACHIEVEMENT

AB

Registered in England
1691122

DO NOT SCALE DRAWING, IF IN DOUBT ASK.

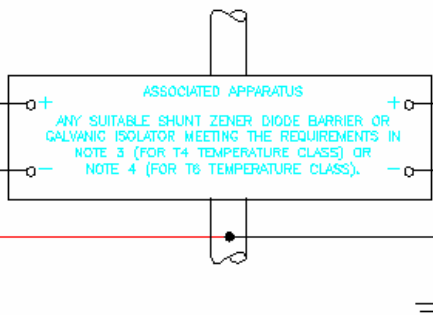
HAZARDOUS AREA

SYSTEM DRAWING SYS Sira Ex 96D2003

NON-HAZARDOUS AREA

TYPE 122
CURRENT TO PRESSURE
CONVERTER
SCS Ex 96D 2004X
Ex IIC to IIC T6 Ta 55°C
T4 Ta 80°C
or Sira 02ATEX 2123X
or Sira 02ATEX 2355X
U_i = 30V dc, I_i = 110mA dc
C_i = 0, L_i = 0
P_i = 0.33W (T6) / 1.1W (T4)

SEE NOTE 2
OPTIONAL SCREEN



NON-HAZARDOUS AREA
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 250V DC

NOTES

1. THE ELECTRICAL CIRCUIT IN THE HAZARDOUS AREA MUST BE CAPABLE OF WITHSTANDING AN A.C. TEST VOLTAGE OF 500 VOLTS R.M.S. TO EARTH OR FRAME OF THE APPARATUS FOR 1 MINUTE.
2. THE CAPACITANCE AND INDUCTANCE OR INDUCTANCE/RESISTANCE (L/R) RATIO OF THE HAZARDOUS AREA CABLES MUST NOT EXCEED THE VALUES SPECIFIED IN TABLE 1.

TABLE 1.

GROUP	MAXIMUM CABLE		MAXIMUM CABLE L/R RATIO
	CAPACITANCE FROM EN 50020: 2002 TABLE A2	INDUCTANCE	
IIC	83 nF	2.9 mH	46 μH/Ω
IIB	650 nF	11.7 mH	185 μH/Ω
IIA	2150 nF	23.5 mH	370 μH/Ω

HAZARDOUS AREA

3. ONE CHANNEL OF A POSITIVE POLARITY, 28V BARRIER OR ISOLATOR, CERTIFIED [EEx ia] IIC OR [EEx ib] IIC, WITH OUTPUT PARAMETERS AS FOLLOWS:
U_o NOT GREATER THAN 28V, I_o NOT GREATER THAN 110mA,
A SOURCE RESISTANCE OF 255 OHMS MINIMUM
C_o AT LEAST 83nF, L_o AT LEAST 2.9mH, L_o/R_o AT LEAST 46μH/OHM
EXAMPLE: MTL 728
4. ONE CHANNEL OF A POSITIVE POLARITY, 28V BARRIER OR ISOLATOR, CERTIFIED [EEx ia] IIC OR [EEx ib] IIC, WITH OUTPUT PARAMETERS AS FOLLOWS:
U_o NOT GREATER THAN 28V, I_o NOT GREATER THAN 110mA,
A SOURCE RESISTANCE OF 800 OHMS MINIMUM
C_o AT LEAST 83nF, L_o AT LEAST 2.9mH, L_o/R_o AT LEAST 46μH/OHM

5. THE INSTALLATION INCLUDING THE BARRIER EARTHING ARRANGEMENTS (IF APPLICABLE), SHALL COMPLY WITH THE INSTALLATION REQUIREMENTS IN THE COUNTRY OF USE, E.G. IEC/EN 60079-14.
INSTALLATION SHALL ALSO BE IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES.

CERTIFIED PRODUCT
No modifications are permitted without the approval of the
SIRA

Drawing 96-133