



Mining And Surface Certification CC

CC 2008/202081/23



Certificate Number: MASC M/11-421X
Issued: 31 October 2013
Expired: 31 October 2014
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IA – CERTIFICATE (Revision 2 – Revised for Annual Review)

IN TERMS OF REGULATION 21.17.2 OF THE MINERALS ACT (INCORPORATION THE MINE HEALTH AND SAFETY ACT) AND REGULATION 9 (1) OF THE ELECTRICAL MACHINERY REGULATIONS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT

Ex – Type Examination

Certificate number:

MASC M/11-421X

Equipment:

TX5814 & TX6114 Pressure Transmitter

Serial No:

(See “Conditions of Certification”)

Applicant:

Troxel Limited

Address:

Hazel Grove
Stockport
Cheshire SK7 5DY
United Kingdom

Manufacturer:

Troxel Limited

Address:

Hazel Grove
Stockport
Cheshire SK7 5DY
United Kingdom

DESCRIPTION OF EQUIPMENT OR PROTECTIVE SYSTEM

TX5814 & TX6114 Pressure Transmitters are designed to produce an output signal proportional to the pressure in a fluid. The output signal is configured as a 2 wire 4-20mA output. The options are detailed on the label drawing listed below.

The apparatus comprises a pressure sensor assembly, an amplifier board, and an RFI board, all housed in a stainless steel enclosure.

External connections are made by means of an integral cable with a maximum length of 150m, or by a plug and socket arrangement.

Input parameters

Ui = 16.5V

Ci = 0.05µF

Li = 0.35mH

Li/Ri = 5µH/ohm

* The apparatus is identical to that covered by Certificate MECS 01 ATEX 4126X except for the marking label.

/ . Marking...

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TX5814 & TX6114 Pressure Transmitter
(INTRINSIC SAFETY)
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MARKING:

The marking of the unit are as follows:

Trolex Limited
TX5814 & TX6114 Pressure Transmitter
 I M1 Ex ia I (-20°C ≤ Ta ≤ 60°C)

Additional MASC Marking

Trolex Limited
TX5814 & TX6114 Pressure Transmitter
Ex Rating: Ex ia I (-20°C ≤ Ta ≤ 60°C)
IA No: MASC M/11-421X

COMPLIANCE:

The unit as described above and in MASC Letter **11-421** is hereby certified “Explosion Protected” Ex ia I (-20°C ≤ Ta ≤ 60°C), and is suitable for use in hazardous locations as stated below and as tested, assessed and inspected in accordance with the relevant requirements of SANS Standards:

SANS / IEC 60079: “Electrical apparatus for explosive gas atmospheres”,

- **SANS/(IEC) 60079-0 : 2005 “General Requirements”;**
- **SANS/(IEC) 60079-11: 2007 “Intrinsic Safety ‘i’”;**
- **ARP 0108 (Edition 1.1) “Regulatory requirements for explosion protected apparatus”.**
- **SANS10108: 2005, “The classification of hazardous locations and the selection of apparatus for use in such locations”**

Location	Zone 0, 1 & 2	Mining
Hazard Frequency		Continuous as could occur under normal operations
Environment	Group I	Methane / Coal dust
Limiting Temperature		450°C (Methane gas) / 150°C(Coal dust)
Ambient Temperature	-20°C to +60°C	

The use of apparatus in hazardous locations is subject to the following provisions as applicable, which shall be adhered to:

- i) SANS 10086 requirements;
- ii) Any conditions mentioned in the above report;
- iii) Codes of Practice enforced in terms of Regulations 21.17.2 of Minerals Act, by Chief Inspector of Mines;
- iv) Any restrictions and conditions enforced by Chief Inspectors of Mines, Principal Inspector (Group I equipment) of Chief Inspector of Factories (Group II equipment);
- v) Any relevant requirements of the MHS Act or the OHS Act.

/ . Special...

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SPECIAL CONDITIONS OF USE (“X”) (According to the Baseefa Certificate):

1. The screen of the integral cable may be connected internally to the frame of the apparatus, this must be taken into account when installing the apparatus.
2. Pin 4 of the optional plug/socket arrangement is connected internally to the frame of the apparatus, this must be taken into account when installing the apparatus.
3. The equipment is not capable of withstanding the 500V insulation test required by clause 6.3.12 of EN 60079-11: 2007. This must be taken into account when installing the apparatus.

CONDITIONS OF CERTIFICATION:

1. This Certificate remains valid based on an annual review covered by an official MASC letter.
2. The apparatus must be additionally marked with the MASC marking details above.
3. This approval only covers the equipment as certified above and does not include any scheduled additions or variations/amendments/new issues to the certificate(s), made after the above date.
4. The equipment does not need to be re-tested when used on the conditions and with such restrictions as prescribed by Baseefa and in this approval.
5. The Baseefa certification must remain valid.
6. The extent of the requirements in the ARP 0108 (or regulations) and SANS 10108 on the certification of the equipment must remain unchanged.
7. The Ex quality assurance notification for the equipment must remain valid.

Approved on behalf of MASC



F du Toit
TECHNICAL SPECIALIST

Mining And Surface Certification

This document is issued based on Mining And Surface Certification's Standard Contract terms and conditions available on request.

While every endeavour is made to ensure that a test / assessment is representative and accurately performed, and that a report is accurate in the quoted results and conclusions drawn from the test / assessment, MASC or its members/employees shall in no way be liable for any error made in carrying out the test / assessment or for any erroneous statement, whether in fact or in opinion, contained in a report issued pursuant to a test / assessment.

MASC takes no responsibility for any non-conformances, exclusions or any results / assessments not in compliance with the standards. By marking the equipment in accordance with the documentation / standard, the manufacturer attests on his own responsibility that the equipment has been constructed in accordance with the applicable requirements of the relevant standards and that the routine verifications and routine tests have been successfully completed and the product complies with the documentation and standard(s).

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