IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx TRC 12.0016X	Issue No: 1	Certificate history:
			Issue No. 1 (2014-11-18)
Status:	**Current**	Page 1 of 4	Issue No. 0 (2012-12-17)
Date of Issue:	**2014-11-18**		

Applicant: **Synatel Instrumentation Ltd**
Walsall Road,
Norton Canes,
Cannock,
Staffordshire,
WS11 9TB
United Kingdom

Equipment: **Capacitance Level Control, Digimatic DML4AI**

Optional accessory:

Type of Protection: **Enclosure, Intrinsic Safety**

Marking:

Ex ta [ia] IIIC T100°C Da T_{amb} -20°C to +50°C

Approved for issue on behalf of the IECEx Certification Body: Stephen Winsor

Position: Certification Team Leader

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

TRaC Global Ltd.
Unit 1 Pendle Place
Skelmersdale
West Lancashire
WN8 9PN
United Kingdom

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Manufacturer: **Synatel Instrumentation Ltd**
Walsall Road,
Norton Canes,
Cannock,
Staffordshire,
WS11 9TB
United Kingdom

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

GB/TRC/ExTR12.0015/01 GB/TRC/ExTR12.0015/00

Quality Assessment Report:

GB/BAS/QAR06.0065/05

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Digimatic Level Control, model type DML4AI, is a fixed point level controller that calibrates and monitors the capacitance of a sensor probe for detecting the level of material inside a tank or vessel. The equipment is intended for use in combustible non-conductive dust environments using the concepts' of intrinsic safety 'ia' and protection by enclosures 'ta'.

The sensor probe extension is supplied as a flush probe version as well as a standard probe in various lengths to suit customer requirements and is considered not to be a source of ignition.

The construction consists of a 2-part (base, lid) nylon injection moulded enclosure, rated to IP65 achieved by a neoprene rubber gasket fitted under the lid. The lid is secured to the base by means of four M5 Slotted hexagonal headed steel screws which have nitrile 'O' ring retainers fitted.

The enclosure is covered with a nickel loaded coat of paint as an antistatic measure.

Inside the enclosure there is a PCB with the electronic circuit and field wiring terminals. From the base of the enclosure there is an integral externally mounted sensor and from the side of the enclosure there are up to two cable entries by means of an IP6x approved gland.

There is a relay used as an indicator, the contacts are rated at 250Vac and 2.5A, connections are made through the same conduit entry as the mains wiring.

The supply voltage Um is either 24Vdc or 110/230 Vac.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. Cable glands used must be at least IP6x approved.
2. The enclosure shall be inspected for damage to the nickel coating regularly as part of the maintenance schedule.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Update of standards from IEC61241-0,-1,-11 to IEC60079-0,-11,-31 including IIIC and include a model variant with NPT thread.

Model variants	
DML 4 AI	Level probe
DML 4 AIV	Variable length power shield
DML 4 AIFP	Flush probe
DML 4 AIUS	Fitted with NPT mounting and conduit threads
DML 4 AIVUS	Fitted with NPT mounting and conduit threads

Annex:

Annex to IECEx CoC TRC 12.0016X is 01.pdf