

1 **EU - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres  
Directive 2014/34/EU**

3 EU - Type Examination Certificate **BAS01ATEX2200X – Issue 10**  
Number:

3.1 In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

4 Product: **Oxygen Measuring Transmitter Type Insta Trans**

5 Manufacturer: **Teledyne Analytical Instruments, a business unit of Teledyne Instruments Inc.**

6 Address: **16830 Chestnut Street, PO Box 1580, City of Industry, California 91748, USA**

7 This re-issued certificate extends EC - Type Examination Certificate No. BAS01ATEX2200X to apply to product designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to

8 The original certificate was issued by The Electrical Equipment Certification Service, Notified Body Number 0600, which retains responsibility for its original documentation. SGS Baseefa, Notified Body Number 1180, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, is responsible only for the additional work relating to this re-issued certificate and any other supplementary certificate it has issued.

The examination and test results are recorded in confidential Report No. **17(C)0574**

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN60079-0: 2012 + A11: 2013 EN 60079-11: 2012**

except in respect of those requirements listed at item 18 of the Schedule.

10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

11 This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of the product shall include the following :

**Ⓔ II 2(1)G Ex ia IIC T4 Gb (0°C ≤ Ta ≤ +50°C)**

SGS Baseefa Customer Reference No. **1081**

Project File No. **17/0574**

This document is issued by the Company subject to its General Conditions for Certification Services accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and the Supplementary Terms and Conditions accessible at <http://www.sgs.com/SGSBaseefa/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. It does not necessarily indicate that the equipment may be used in particular industries or circumstances. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, schedule included, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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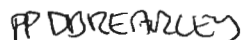
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R S SINCLAIR  
TECHNICAL MANAGER

On behalf of SGS Baseefa Limited



13 **Schedule**

14 **Certificate Number BAS01ATEX2200X – Issue 10**

15 **Description of Product**

The Oxygen Measuring Transmitter Type Insta Trans and Type Insta Trans-CV is a two wire transmitter designed to measure oxygen content.

Its enclosure comprises of an aluminium 'main part' and a plastic or stainless steel 'cell holder part' which are either fastened together directly or via an intervening stainless steel 'right angle flange part'. The main enclosure contains three printed circuit boards, two of which form an assembly by being directly connected together, the third, which is connected to the assembly above via a ribbon cable, being part of a separate membrane switch/LCD display module which is located in, and viewed via, an aperture at the top of the main enclosure.

The cell holder contains a replaceable fuel cell. Access for cell replacement is provided by removal of an insert at the base of the cell holder, this insert, which forms part of the cell holder enclosure, being fastened in place by a mating screwed collar.

External connections are made via an enclosure mounted connector.

Parameters at pins 2 and 4 of connector:

$U_i = 28V$        $I_i = 93mA$        $P_i = 0.65W$        $C_i = 11pF$        $L_i = 50\mu H$

The above parameters must be derived from a linear supply (resistive output)

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17 **Specific Conditions of Use**

1. The apparatus enclosure must be earthed via its earthing strap to prevent electrostatic hazards.
2. The apparatus must not be used to measure oxygen enriched gases i.e. gases with greater than 21% oxygen content.
3. Pins 1 and 3 of the connector are connected to the apparatus enclosure; this must be taken into account in any apparatus installation.

18 **Essential Health and Safety Requirements**

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product.

Clause	Subject	Compliance
1.4.1	External effects	The Purchaser should make the manufacturer aware of such issues.
1.4.2	Aggressive substances, etc.	The Purchaser should make the manufacturer aware of such issues.

19 **Drawings and Documents**

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
D-73889	1-3	5	8/1/17	Schematic Diagram ATEX PCB Set Model 3001 Insta Trans.
D73996	1-2	6	08/01/17	PCB Assembly 4-20mA Oxygen Transmitter (ATEX)
D73996A	1	6	8/1/17	PCB Assembly ATEX MDL 3001 Insta Trans
D73996B	1	6	8/1/17	PCB Assembly ATEX MDL 3001 Insta Trans
D-73996C	1	6	8/1/17	PCB Assembly ATEX MDL 3001 Insta Trans

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
B-73993	-	2	5/31/13	ATEX TAG Model 3001 Insta Trans
C-73994	1 to 3	3	12/8/11	Model 3001 (ATEX) Insta Trans Unit Assembly Intrinsically Safe Version
B-73997	1	1	06/17/05	Finishing Detail Insta Trace Cell Holder Model 3001 (ATEX)
C-73998	1	2	10/12/10	Model 3001 (ATEX) Insta Trans Unit Cell Body Assembly
A-74000	1	1	06/17/05	Fabrication Detail Serial Number Tag Model 3001 Inst Trans
B-74008	1	1	06/17/05	Display Modification Insta Trans Unit Model 3001
C-74032A	1-8	Rev0	11/26/01	P.C.B. 'A' Artwork
C-74032A	1-8	Rev0	11/26/01	P.C.B. 'B' Artwork
C-74032A	1-8	Rev0	11/26/01	P.C.B. 'C' Artwork
C-74032A	1	2	01/08/08	PCB Fabrication 3001 Insta Trans ATEX PCB (A)
C-74032B	1	2	01/08/08	PCB Fabrication 3001 Insta Trans ATEX PCB (B)
C-74032C	1	2	01/08/08	PCB Fabrication 3001 Insta Trans ATEX PCB (C)
B-74118	1	2	06/17/05	Label Fabrication Detail Pomalux-CF Cell Body Model 3001(ATEX)
B-74130	-	Rev 0	12/20/01	P.C.B Subassembly
B-74307	1	1	06/17/05	Cell Holder Stencil Model 3001 (ATEX)
B-78606	1	0	1/26/06	Subassembly Insta Trans Electronics Model 3001 (ATEX)
C-83454	1	5	04-5-11	Final Assembly Insta Trans-CV Remote Control Unit
B-84120	1	0	03/25/10	Modification Detail Cell Holder Model 3001 Insta-Trans
C-84366	1	1	1/11/11	Model Insta Trans-CV Transmitter Unit ATEX Cell Body Assembly
C-84367	1	3	04/04/11	Final Assy Insta Trans-CV 150lb FF Mount Analysis Unit
D-84369	1	3	4/5/11	3001 Insta Trans-CV Remote Sensor Outline
B-84452	1	1	10/8/10	PCB Modification A-5 Sensor Option PCB Ass'y D73996C
B-84454	1	4	1/18/11	Subassembly Insta Trans Electronics Model Insta Trans-CV
B-84882	1	1	1/3/12	PCB Modification A-5 Sensor Option PCB Ass'y D73996-A
B-85198	1	0	1-24-11	Connector/Cable Assembly Model Insta Trans-CV

**20 Certificate History**

Certificate No.	Date	Comments
BAS01ATEX2200X	18 February 2002	The release of the prime certificate. The associated test and assessment against the requirements of EN 50014:1997+Amds 1 & 2, EN 50020:1994, EN50284:1999 is documented in Test Report No. 00(C)0696
BAS01ATEX2200X/1	23 May 2006	To permit minor drawing and mechanical changes that do not affect the original assessment. Project Number: 06/0302.
BAS01ATEX2200X/2	09 July 2007	To permit minor electrical changes that do not affect the original assessment. Project Number: 07/0492.
BAS01ATEX2200X/3	12 February 2008	To confirm the current design meets the requirements of EN 60079-0:2006, EN 60079-11:2007 & EN 60079-26:2007 including the revision of the equipment marking in accordance with these standards. Project Number 07/0853



Certificate No.	Date	Comments
BAS01ATEX2200X/4	23 June 2008	To permit minor electrical changes that do not affect the original assessment. Project Number: 08/00334.
BAS01ATEX2200X/5	25 May 2010	To permit minor mechanical and electrical changes that do not affect the original assessment. Project Number: 08/00334.
BAS01ATEX2200X/6	04 May 2011	To permit the introduction of a variant named the Insta Trans-CV. Report 10(C)0677.
BAS01ATEX2200X/7	09 January 2012	To permit previously assessed sensor and electronic subassemblies to be used in a different combination and to permit a minor electrical change.
BAS01ATEX2200X/8	11 October 2012	To permit a component change and a change of the name of the certificate holder from 'Teledyne Instruments, Analytical Instruments' to 'Teledyne Analytical Instruments a business unit of Teledyne Instruments Inc.' Project Number : 12/0800.
BAS01ATEX2200X/9	10 June 2013	To confirm the current design meets the requirements of EN 60079-0:2012, EN 60079-11:2012. Project 13/0466.
BAS01ATEX2200X Issue 10	28 September 2017	This issue of the certificate incorporates previously issued primary & supplementary certificates into one certificate, permits a minor electrical change and confirms that the equipment meets the requirements of EN 60079-0:2012+A11:2013. Report Number 17(C)0574

For drawings applicable to each issue, see original of that issue.