

Government of India
Ministry of Communications and Information Technology
Department of Information Technology, Standardisation Testing & Quality Certification Directorate
ELECTRONICS REGIONAL TEST LABORATORY (EAST)

COPY REPORT

TEST REPORT ON FLAMMABLE GAS SENSOR

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1.0 SCOPE

1.1 Service Request No. : TE/0061/08-12
1.2 Test Report No. : ERTL(E)/TES/T238/0063/11-12
Date : 12/03/2013

1.3 Requested by : **TROLEX LTD.**
(Name & Address of the organisation)
NEWBY ROAD INDL.ESTATE
HAZEL GROVE,STOCKPORT,
CHESHIRE, SK75DY,
UNITED KINGDOM

1.4 Description , Identification of the item to be tested

Item	:	FLAMMABLE GAS SENSOR
Make	:	TROLEX
Model	:	STX3261
Sl.No.	:	PROTOTYPE
Qty.	:	1

1.4.1 Applicable Spec.of the item(s) tested:

Ui=14.4 V, SIGNAL OUTPUT=4 TO 20 mA & 0.4 TO 2Vdc

1.4.2 Characterisation and condition of the item

Characterisation	:	Not applicable /
Condition	:	Satisfactory /

1.5 Date of item receipt of item : 12/09/2012

1.6 Date of start of testing : 01/01/2013

1.6.1 Date of completion of testing : 15/02/2013

1.7 Location where testing performed : In house

1.8 Ambient condition during measurement : 25 +/- 1.5°C
70% RH. Max.

1.9 Spec. used for testing : IS/IEC60079-0:2004 & IS/IEC60079-11:2006, GAS GROUP I

1.9.1 Details of non-standard method followed (if any) : NIL



Certificate No. : T1397

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3.0 Equipment used

EQPT_NO	NAME	MAKE	MODEL	CAL. VALID UPTO
0318	SPRAY APARATUS	PTL	P17.39/P02-18	11/01/2014
0369	SPARK TEST APPARATUS	DMT LAB	-	03/10/2013
1120	DUST CHAMBER	KASCO INDUSTRIES	PUNE	07/01/2014
1150	DIG ELECTRO COMPA WITH LVDT	ACCURATE	AI-050-2	15/11/2013
1245	DIGIMATIC VERNIER	MITUTOYO	CD 6"CSX	19/12/2013
1349	GAS MIXING PUMP(PRECIS'N BE	DIGAMIX	8KM931	22/11/2013
1375	THERMOMETER(DIG)	FLUKE	51 II	06/07/2013
1452	DIGITAL MULTIMETER(6.5 DIGI	AGILENT	34401A	25/06/2013
1572	HIPOT TESTER	CHROMA	19073	01/08/2013

Note: All tests were conducted within the validity period of respective equipment shown above.

4.0 Remarks (if any)

- a) The equipment "Flammable Gas Sensor", Type:STX3261, Make:Trolex has been assessed & tested as per IS/IEC 60079-0: 2004 and IS/IEC 60079-11: 2006 for its intrinsically safe design & found compliance for Gas Group I.
- b) The assessment does not cover any accessories to the STX3261 Flammable Gas Sensor or its incorporation into an intrinsically safe system.



RELEASED BY
(signature & date)

Sona
20.3.13

SONALI JANA
Scientist - I
Electronics Regional Test Laboratory
STQC Directorate, Deptt
Ministry of Comm. & Info. Tech.
Government of India
Kolkata - 700 094

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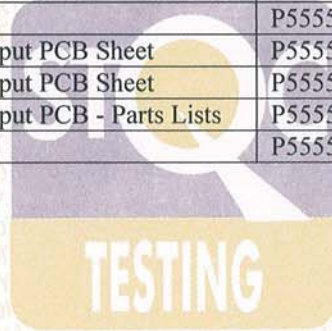
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Annexure-I

Report No: ERTL(E)/TES/T238/0063/11-12

Following are the list of certified drawings/ documents for Flammable Gas Sensor, Type : STX3261, Make: Trolex, which are attached with the report.

Sl. No	Title	Document / Drawing No.	Date	Issue	No of sheet(s)
01	Certification Labelling	P5555-17-I	12.02.13	A	1
02	Block Diagram	P5555.15	10.04.07	A	1
03	Certified Circuit Diagram Control & Display PCB	P5555.05	08.03.07	A	1 of 2
04	Certified Circuit Diagram Parts Lists	P5555.05	08.03.07	A	2 of 2
05	PCB, Control & Display	P5555.04	17.01.07	A	1
06	Certified Circuit Diagram Output PCB Sheet	P5555.01	30.04.07	A	1 of 3
07	Certified Circuit Diagram Output PCB Sheet	P5555.01	30.04.07	A	2 of 3
08	Certified Circuit Diagram Output PCB - Parts Lists	P5555.01	08.03.07	A	3 of 3
09	PCB, Output	P5555.03	30.04.07	A	1



B. Deb
Head (EAC)



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Annexure – II

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Entity parameters for Flammable Gas Sensor, Make: Trolex, Type: STX3261 as referred in the report

T1-T2 (Power Input)

$U_i = 14.4V$; $I_i = 3.14A$; $C_i = 0$; $L_i = 0$

T3-T4 (0.4 - 2V Signal Output, Type STX 3261.01)

$U_o = 7.14V$; $I_o = 12mA$; $P_o = 22mW$; $C_i = 0$; $L_i = 0$; $C_o = 1000\mu F$; $L_o = 1H$; $U_i = 14.4V$

Refer clause no. 10.1.5.2 of IS/IEC 60079-11:2006 for connection of combined inductance and capacitance.

Or.

T3-T4 (4 - 20mA Signal Output, Type STX 3261.01.84)

$U_o = 14.4V$; $I_o = 276mA$; $P_o = 1W$; $C_i = 0$; $L_i = 0$; $C_o = 17.9\mu F$; $L_o = 6.13mH$; $U_i = 14.4V$

Refer clause no. 10.1.5.2 of IS/IEC 60079-11:2006 for connection of combined inductance and capacitance.



B. Deb
Head (EAC)

