

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

TEST REPORT ON AUDIO / VISUAL ALARM

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1.0 SCOPE

1.1 Service Request No. : TE/0061/08-12
1.2 Test Report No. : ERTL(E)/TES/T238/0064/11-12
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	: AUDIO / VISUAL ALARM
Make	: TROLEX
Model	: TX6831
Sl.No.	: PROTOTYPE
Qty.	: 1

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

Ui=16.5V

1.4.2 Characterisation and condition of the item

Characterisation	: Not applicable /
Condition	: Satisfactory /

1.5 Date of item receipt of item : 04/09/2012

1.6 Date of start of testing : 18/12/2012

1.6.1 Date of completion of testing : 28/02/2013

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/IEC 60079-0:2004 & IS/IEC 60079-11:2006, GAS GROUP I

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



Certificate No. : T1397


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ELECTRONICS REGIONAL TEST LABORATORY (EAST) SALT LAKE CITY, BLOCK: DN, SECTOR: V, KOLKATA- 700091	TEST REPORT NO. ERTL(E)/ TES/ T238/ 0064/ 11-12	
REPORT ON: AUDIO VISUAL ALARM, TX 6831	PAGE 7	OF 8

2.0 TEST RESULT

Sl. No.	Test or Environment	Clause No.	Quantity		Specification limit	Test Result	Notes
			Tested	Failed			
8.0	Marking	12.0 of IS/IEC 60079-11/2006	1	-			
8.1	General	12.1 of IS/IEC 60079-11/2006	1	0	<p>a) Intrinsically safe apparatus and associated apparatus shall carry at least the minimum marking as specified in IEC 60079-0</p> <p>b) For associated apparatus the symbol Ex ia or Ex ib (' ia' or ' ib', if Ex is already marked) shall be enclosed in square brackets.</p> <p>c) All relevant parameters should be marked ; for example Um, Ui,li,Uo,Io,Li, Ci, Lo,Co wherever practicable.</p>	<p>Marking includes Ex ia I -20°C≤ Tamb≤ +60°C</p> <p>Entity parameters :</p> <p>Power input: Ui=16.5v, Ci=1.2nF, Li=0</p> <p>Signal input: Ui=16.5v, Ci=0, Li=0,</p> <p>Monitor Trip Voltage: Uo= Ui=16.5V, Io=5mA, Po=20mW,Ci=0, Li=0</p>	
8.2	Marking of connection facilities	12.2 of IS/IEC 60079-11/2006	1	0	Connection Facilities, terminal boxes, plugs and sockets of intrinsically safe apparatus and associated apparatus shall be clearly named and shall be clearly identifiable where a colour code is used for this purpose, it shall be light blue.	Complied	




B. Deb, Sc-F
Head (EAC)

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3.0 Equipment used

EQPT_NO	NAME	MAKE	MODEL	CAL. VALID UPTO
0369	SPARK TEST APPARATUS	DMT LAB	-	03/10/2013
1070	POWER SUPPLY	TEKTRONIX INC	PS-2520G	18/04/2013
1165	AC/DC HIPOT TESTER	QUADTECH	SENTRY-30	21/11/2013
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
1454	HIGH POWER RESISTANCE SUBST	IET LABS, INC(GR)	HPRS-C-5-1	08/11/2013
1488	TRUE RMS MULTIMETER	FLUKE	179	01/01/2014

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

4.0 Remarks (if any)

The equipment Audio / Visual Alarm, Type : TX 6831, Make : Trolex has been assessed and tested as per IS/IEC 60079-0:2004 and IS/IEC 60079-11:2006 for its intrinsically safe design & found complied for Gas Group I. Safe condition of use : The Audio / Visual Alarm, Type : TX 6831 on being mounted over its sensor unit, should be compatible to IP 54. Care should be taken in order to avoid entry of dust inside the enclosure.

RELEASED BY
(signature & date)

Sonali Jana
20.3.13
SONALI JANA
Scientist-C
Electronics Regional Test Laboratory (East)
STQC Directorate, Dept. of Info. Technology
Ministry of Comm. & Info. Technology
Kolkata-700 131

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Annexure-I

Report No: ERTL(E)/TES/T238/0064/11-12

Following are the list of certified drawings/ documents for Audio Visual Alarm, Type : TX6831, Make: Trolex, which are attached with the report.

Sl. No	Title	Document / Drawing No.	Date	Issue	No of sheet(s)
01	Certification Labelling India	P5459.47	21.02.13	A	1
02	General Arrangement	P5459.02	04.02.03	B	1
03	Certified Circuit Diagram	P5459.01	09.04.01	B	1 of 2
04	Certified Circuit Diagram	P5459.01	09.04.01	B	2 of 2
05	Power Input PCB Manufacturing Specification	P5459.03	04.04.00	A	1 of 5
06	Power Input PCB Top Overlay	P5459.03	04.04.00	A	2 of 5
07	Power Input PCB Top Layer	P5459.03	04.04.00	A	3 of 5
08	Power Input PCB Bottom Layer	P5459.03	04.04.00	A	4 of 5
09	Power Input PCB Bottom Overlay	P5459.03	04.04.00	A	5 of 5
10	Control PCB Manufacturing Specification	P5459.05	04.04.00	A	1 of 5
11	Control PCB Top Overlay	P5459.05	04.04.00	A	2 of 5
12	Control PCB Top Layer	P5459.05	04.04.00	A	3 of 5
13	Control PCB Bottom Layer	P5459.05	04.04.00	A	4 of 5
14	Control PCB Bottom Overlay	P5459.05	04.04.00	A	5 of 5



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