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भारत सरकार Government of India राष्ट्रीय परीक्षण शाला (द.क्षे.) NATIONAL TEST HOUSE (SR) तरमणी, चेन्नई - 600 113. Taramani, Chennai - 600 113. Phone : 22432374, 22431157 Fax : 22433158 email : nthsr@tn.nic.in

Number of Copies issued Single पर्याशाण प्रमाण पत्र सं Test Certificate No

परीक्षण प्रमाण पत्र TEST CERTIFICATE

जारी होने की तिथि कोड नं Date of Issue 29/10/2020

उन्म Page पष्ठों की संख्या No of Pages

INTERIM/FINAL REPORT

NTH(SR)/EL(C)/2020/0049B-M

जिसे जारी करना है

Issued To. पता Address

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पंजिका सं एवं दिनांक Register No & Date

परीक्षण सामग्री का लिवरण Description of Test tem

परीक्षण सामग्री का पहचान Identification of Test Item

नमना का विशिष्टि (यदि हों) Product Specification (F any)

नमना प्राप्ति की तिथि Date of Receipt of the Test tem

कार्य सम्पादन की तिथि Date(s) of Performance of Tests

व्यावद्धत प्रणाली का पहचान Method(s) used for Test

नमना प्रकिश जहाँ प्रासंगिक हो Sampling Procedure where relevant

Tested By gibimo V.Sivaguru

SO Electrical

Code No Manual

2

COBA Europe Ltd,

Marlborough Drive, Fleckney, Leicester, LE8 8UR, **United Kingdom**

By Mail

Date: 13/10/2020

0049B-M/NTH(SR)/EL(C)/21/10/2020

Electrical Insulating matting made of Elastomer, Class - 0

Marking : As in the attached sheet "Annexure".

IEC 61111 Edition 2.0 2009-04

21/10/2020

From: 21/10/2020

To: 29/10/2020

Tests as per IEC 61111 Edition 2.0 2009-04

Not Applicable

Checked By Sriilayrajj Soundararajan Scientist- C (Electrical)

Approved By 22

Sriilayrajj Soundararajan Scientist- C (Electrical)

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Number of Copies issue	d Single T	परीक्षण प्रमाण पत्र EST CERTIFICATE	INTE	RIM/FINAL REPORT
परीक्षण प्रमाण पुत्र सं Test Certificate No NTH(SR)/EL(C)/2020/0049B-M	जारी होने की ति Date of Issue 29/10/2020	াথি কীত্ত ন Code No Manual	पृष्ठ Page 1	पृष्ठों की संख्वा No of Pages 2
SI. No.	Test Name	Test Result		Limit
1	Test	As in the attached sheet " and the Annexure contair		As in the attached sheet "Annexure"
टिप्पणी Note ः	were as follow humidity, percen	pient conditions of the l /s:Room temperature, nt: 70 to 75%. nce test was carried out	deg C: 28+/-	2, Relative
कैफियत : Remarks	Comments offered	against each test.		

Tested By

q.h. V.Sivaguru **SO Electrical**

Checked By Brown iilayraii Soundar

Sriilayrajj Soundararajan Scientist- C (Electrical)

Approved By Dm

Sriilayrajj Soundararajan Scientist- C (Electrical)



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Α	NNEXURE			
Date of Issue	Code No.	Page	No. of Page	
29.10.2020	Manual	01	05	
	Date of Issue		Date of Issue Code No. Page	Date of Issue Code No. Page No. of Page

1. Description of the sample :

- a. Nomenclature
 : Electrical Insulating matting made of Elastomer, Class 0

 b. Size
 : 1m x 5m

 c. Quantity
 : 1 roll

 d. Colour Code
 : Not Avilable
- e. Marking

: Not Avilable : Not Available

As requested, the sample was subjected to the Tests as per IEC 61111 Edition 2.0 2009-04 and the results noted below:

2. Visual Inspection (CI. 5.2)

- a. Classification : Class 0
- b. Dimensions
- c. Workmanship and finish
- d. Sample Color
- : 3.1mm X 1m X 5m : Satisfactory
- : Dark Grey

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Am
Sriilayaraj Soundarrajan
Scientist-C(Electrical)



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6.0	1918 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	E Carlo Carlo		1888	118111	
Test Certificate No. Date of Issue Code No.		Page	No. of Page			
£ 2						
NTH(S	R)/EL(C)/2020/0049B-M	29.10.2020	Manual	02	05	
3. Tes	ts					
SI.No	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Tests	5555	Observed Values	Specified limits	2
1.	Mechanical Puncture re (as per cl. 5.5.2 of the sp					6
	Number of specimens: 2 Size of specimen: 50mm					
and and a second se Second second s	Test carried out on both specimens.	the sides of the ma	atting for two			
an a	5mm diameter needle pr include angle of 12° and					
	Puncture resistance in N i. Side 1			116		8
6.0	ii. Side 2		بالمرجع والمحرجة والمح	118	ومحدث والمستعد والمحار المحار الم	-
S.	iii. Average		6 4000	117	Min. 70	de la
2.	Voltage Proof test (as per cl. 5.6.2.2.2 of the	e specification)				6
5.5	Number of specimen: 1		61613	12644	8 S	o Y
	A 1270mm x 1270mm	sheet of 5mm	thick Plexiglass	الماري الموجود المحار	1. Sec. 1. 1.	15
	material with picture fram	me of 762 mm x	762 mm opening	1.000	a start for the second	¢,
100	the center placed on a	grounded metal	plate, Mask filled	10200	8 . C. A. C. K. K. S.	
S. C. S.	with a conductive material same as thickness to bring the				S. S. S. S. S. S.	e.
ground electrode at the same level to maintain direct contact			1. 6 6 6 1 1	والمساحد المراجع المحراط	1	
with the mat to be tested. (fig:1 of IEC 61111 Edition 2.0			80000	والمحد تعمير تصحي تعلي تلتحد تقل		
6.1	2009-04)		المرحمة عوالمحوط		1 5 x 8 8 5	\$
	An ac voltage of 5kV (rm constant for 3 minutes.	s) at 50 Hz applied	l and kept	Withstood the test satisfactorily	Shall withstand te voltage without bre down or flashover	est ak
						6

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	3 6 6 6 6 6 8 3	A	NNEXURE		
Test Ce	ertificate No.	Date of Issue	Code No.	Page	No. of Page
S. A.					
NTH(S	R)/EL(C)/2020/0049B-M	29.10.2020	Manual	03	05
SI.No		Tests	<u>e statue a</u>	Observed Values	Specified limits
3.	Voltage Withstand Test (as per cl. 5.6.2.3 of the s		1 a a a a a	3 . S. C. C. C.	الموحمة فتركم كوحموهم
1.5	1 1 1 1 1 1 1 1	specification	12555	2468.24	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
6.1	Number of specimen: 3		- C	683368	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
12	Specimen size : 150 x 15	60	1115	وهجا محوطه بالأخراط	212131
19.8	Electrode : 25mm (T	op) x 75mm (Botto	m)	وحمرته ترجم تحدثني تحرجم	822222
	10kV ac voltage at 50	Hz applied with	a rate of rise of	Withstood the test	Shall withstand test
	1000V/sec.			satisfactorily	voltage without break
12.8	8 8 8 8 8 8 8 A A		1486	11143	down or flashover
4.	Ageing test (as per cl. 5	.7 of specification)	6.8 4 8	266186	668886
C. S.	Number of specimen: 2		a la cara a	1.1111	184846
1	Sample conditioned at 70)°C for 168 hours.	2 3 3 8 B	18616	
1 Stor	Mechanical Puncture re	esistance (as per o	sl. 5.5.2)	202820	1 1 2 4 1 1 2
	Test carried out on both	the sides of the ma	atting for two	63338	a la la sa sa sa
	specimens. Puncture resistance in	N	1115	8 3 3 4 4 6 V	2000000
	i. Side 1	المحوطون والمحدي	6.8.1.1.1	96	94(Min)
	ii. Side 2		2000	98	(Minimum 80% of puncture resistance before ageing)
5.	Flame retardance test (as per cl.5.8.1 of th	ne specification)		
نو مور مو	Number of specimen: 1		6.6.6.8.6	62120	24899861
1	Specimen size: 150 x 15	0mm	ويتحصي فالمرتقي	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	المرجح فراحي تحرك تتواح
1000	1 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		and the second	1. 6 6 1 1	8 9 4 6 X 4 6
and a	Application of flame	10s and after	withdrawal, the	Satisfactory	Propagation of flame
a de fi	propagation of flame wa	s observed for 55	s and it shall not	No appreciable	shall not reached 50 mm
	reach any point of 50mm	diameter.		flame observed	diameter of circle

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8.8		A	NNEXURE		<u> </u>
Test Ce	ertificate No.	Date of Issue	Code No.	Page	No. of Page
and and					
NTH(SI	R)/EL(C)/2020/0049B-M	29.10.2020	Manual	04	05
SI.No		Tests	1.1.1.1.1	Observed Values	Specified limits
6.	Acid resistance (as per	cl. 5.9 of the speci	fication)		6.8.8.6.6.8.9
de p	Number of specimen: 4		1884		1688263
a st	Size of specimen: 150 x	50mm	1999		1 1 1 2 8 8 5 6
	Sample immersed in Sul 8h. Following acid condi and dried for 2h at 70°C.	tion, the sample r			
	Mechanical Puncture re Test carried out on both specimens.				
	Puncture resistance in N i. Side 1 ii. Side 2 Voltage Withstand Test			90 92	Min. 88 (Minimum 75% of puncture before acid resistance)
6.1					Shall withstand test
	10kV ac voltage at 50 Hz 1000V/sec.	applied with a rate	of rise of	Withstood the test satisfactorily	voltage without breakdown or flashover
7.	*Oil resistance (as per of Number of specimen: 4 Size of specimen: 150 x	1 18 18 18 18 18 18 18 18 18 18 18 18 18	fication)		
	Sample conditioned in a 50% RH for 3h. The immersing in oil at a tem oil condition, the sample	n the sample is perature of 70°C fo	conditioned by or 24h. Following		
	Mechanical Puncture resistance (as per cl. 5.5.2) Test carried out on both the sides of the matting for two specimens.				Mire 00
	Puncture resistance in i. Side 1 i. Side 2	N		92 91	Min. 88 (Minimum 75% of puncture without oil conditioning)
A RA	Voltage Withstand Test with a rate of rise of 100	2 AF 1 A A A	at 50 Hz applied	Withstood the test satisfactorily	Shall withstand test voltage without breakdown or flashover
Tested	Bv				& Approved By
2.0	imest				Company of the

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		A	NNEXURE	1 + 8 + 11	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Test Certificate No. Date of Issue Code No.		Page	No. of Page		
NTH(S	R)/EL(C)/2020/0049B-M	29.10.2020	Manual	05	05
SI.No		Tests		Observed Values	Specified limits
8.	Low Temperature foldir (as per cl. 5.8.2 of the sp Number of specimen: 3 Size of specimen: 200 x Sample conditioned at (test piece folded at the polyethylene plates and	ecification) 500mm -)25±3°C for 4 hou midpoint and plac	ed between two		
30s.			a a sa	2526866	
	Visual inspection			Satisfactory	Shall not show crack or tear break observed
	Voltage Withstand Test (An ac voltage at 50 Hz a 1000V/sec. until it reache	applied with a rate	of rise of voltage	No crack or tear break observed Withstood the test satisfactorily	Shall with stand without breakdown or flashover

Note:

i. The average ambient conditions of the laboratory during the above tests were as follows

Room Temperature	: 27 ± 2°C
Relative Humidity	: 70 to 75%.

ii. *The Oil Resistance test was carried out by transformer oil as requested by the firm.

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