



भारत सरकार Government of India
राष्ट्रीय परीक्षण शाला (द.क्षे.)
NATIONAL TEST HOUSE (SR)

347308

तरमणी, चेन्नई - 600 113. Taramani, Chennai - 600 113.
Phone : 22432374, 22431157 Fax : 22433158 email : nthsr@tn.nic.in

TEST CERTIFICATE

INTERIM/FINAL REPORT

परीक्षण प्रमाण पत्र नं Test Certificate No NTH(SR)/EL(C)/2014/00222B	जारी होने की तिथि Date of Issue 16/06/2014	कोड नं Code No 1400832588170	पृष्ठ Page 1	पृष्ठों की संख्या No of Pages 2
जिसे जारी करना है Issued To	COBA EUROPE LTD.			
पता Address	MARLBOROUGH DRIVE, FLECKNEY, LEICESTERSHIRE LE8 8UR, UNITED KINGDOM			
ग्राहक का सन्दर्भ सं एवं दिनांक Customer's Ref. No.	CE/029/202/2014	Date: 16/05/2014		
पंजिका सं एवं दिनांक Register No & Date	00222/NTH(SR)/EL(C)/30/05/2014			
परीक्षण सामग्री का विवरण Description of Test Item	Electrical Insulating matting made of Elastomer Manufacturer's Name:			
परीक्षण सामग्री का पहचान Identification of Test Item	Electrical Insulating matting made of Elastomer, Class: '2' Size: 2m x 1m, Thickness: 4mm			
नमूना का विशिष्टि (यदि हो) Product Specification (if any)	IEC 61111 Edition 2.0 2009-04			
नमूना प्राप्ति की तिथि Date of Receipt of the Test Item	23/05/2014			
कार्य सम्पादन की तिथि Date(s) of Performance of Tests	From: 30/05/2014	To: 16/06/2014		
व्यावहृत प्रणाली का पहचान Method(s) used for Test	IEC 61111 Edition 2.0 2009-04			
नमूना प्रक्रिया जहाँ प्रासंगिक हो Sampling Procedure where relevant	Not Applicable			

Tested By

V. Sivaguru

SO Electrical

Checked By

A. Muthuraman

SO Electrical

Approved By

S.B. Nanda Kumar

Scientist-SC(Electrical)



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Sl. No.	Test Name	Test Result	Limit
1	Type Test	Results reported in annexure	As per specification
टिप्पणी Note	:	Reported in annexure.	
कैफियत Remarks	:	Results reported in annexure.	

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1. Description of the sample :

- a. Nomenclature : Electrical Insulating matting made of Elastomer, Class '2'
b. Size : 2m x 1 m, Thickness: 4 mm,
c. Quantity : 2 Number.

As requested the sample has been subjected to IEC 61111 Edition 2.0 2009-04 with the results noted below.

2. Visual Inspection (Cl. 5.2)

- a. Classification : Class '2'
b. Composition : Elastomer, with slip resistance both sides
c. Dimensions : Length: 2m, Breadth: 1 m, Thickness: 4 mm,
d. Workmanship and finish : Generally Satisfactory, no harmful physical irregularities found on both surfaces

3. Tests	Observed	Specified
a. Mechanical Puncture resistance (as per cl. 5.5.2 of the specification) Test carried out on both sides of the sample on two samples. Puncture resistance in N	Satisfactory	70 (Min)
i. Side 1	75	
ii. Side 2	75	

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b. Voltage Proof test (as per cl. 5.6.2.2.2 of the specification) Mask with picture frame made up of insulating material with a opening of 762x762mm in the middle and kept on a earthed metal plate. The opening was filled by a conductive material. The sample kept on this arrangement and top electrode of size 762mm X 762mm place above this. (such arrangement shown in Picture 1) An ac voltage of 20kV (rms) at 50 Hz applied and kept constant for 3 minutes.	Observed	Specified
	Withstood the test satisfactorily	Shall withstand without breakdown or flashover
c. Voltage Withstand Test (as per cl. 5.6.2.3 of the specification) Electrode: 25mm (Top) x 75mm (Bottom) An ac voltage at 50 Hz applied with a rate of rise of voltage 1000V/sec. until it reaches 30kV.	Withstood the test satisfactorily	Shall withstand without breakdown or flashover
d. Ageing test (as per cl. 5.7 of specification) Sample conditioned at 70°C±2°C for 168 hours. Mechanical Puncture resistance (as per cl. 5.5.2 of the specification) Test carried out on both sides of the sample on two samples. Puncture resistance in N i. Side 1 ii. Side 2	Satisfactory 68 69	(Minimum 80% of puncture resistance before ageing) 60 (Min) 60 (Min)
e. Flame retardance test (as per cl.5.8.1 of the specification) Application of flame 10s and after withdrawal, the propagation of flame was observed for 55s and it shall not reach any point of 50mm diameter.	Satisfactory 45mm	Propagation of flame shall not reached 50 mm diameter of circle

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f. Low Temperature folding test (as per cl. 5.8.2 of the specification) Sample conditioned at (-)25±3°C for 4 hours. After this the test piece folded at the midpoint and placed between two polyethylene plates and subjected to a force of 100N for 30s. i. Visual inspection ii. Voltage Withstand Test (An ac voltage at 50 Hz applied with a rate of rise of voltage 1000V/sec. until it reaches 30kV).	Observed	Specified
	Satisfactory as no crack or tear break observed Withstood the test satisfactorily	Shall not show crack or tear break observed Shall withstand without breakdown or flashover
g. Acid resistance (as per cl. 5.9 of the specification) Sample shall be immersed in Sulfuric acid solution at 23°C±2°C for 8h. after this rinsed with water and dried for 2h at 70°C. Mechanical Puncture resistance (as per cl. 5.5.2 of the specification) Test carried out on both sides of the sample on two samples. Puncture resistance in N i. Side 1 ii. Side 2 iii. Voltage Withstand Test (An ac voltage at 50 Hz applied with a rate of rise of voltage 1000V/sec. until it reaches 30kV).	Satisfactory 63 64 Withstood the test satisfactorily	(Minimum 75% of puncture resistance before ageing) 56.25 (Min) 56.25 (Min) Shall withstand without breakdown or flashover

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h. Oil resistance (as per cl. 5.10 of the specification) Sample shall be immersed in Oil 23°C±2°C at 50% RH for 3h. after this rinsed with water and dried for 24h at 70°C. Mechanical Puncture resistance (as per cl. 5.5.2 of the specification) Test carried out on both sides of the sample on two samples. Puncture resistance in N i. Side 1 ii. Side 2 iii. Voltage Withstand Test (An ac voltage at 50 Hz applied with a rate of rise of voltage 1000V/sec. until it reaches 30kV).	Observed	Specified
	Satisfactory 59 58 Withstood the test satisfactorily	(Minimum 75% of puncture resistance before ageing) 56.25 (Min) 56.25 (Min) Shall withstand without breakdown or flashover

Note: The average ambient condition during the above test was as follows:-

Temperature : 25±2°C
Relative Humidity : 60 to 70 %

###END OF TEST CERTIFICATE###

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