VoltaSchutz®
Saving Lives, Mat by Mat!

User Guide

VoltaSchutz Mat

Electrical insulating mat for protection against high voltage electrical shocks

DESCRIPTIONS:

VoltaSchutz Mat based on(NR/SBR) Matting to IEC2009-61111 from Class 0 up to class 4 is a high-quality electrical safety matting fully tested from 1,000 V up to 36,000 V. working voltage with the regulation standard stamped on reverse of roll at 1000mm intervals: It has an anti-slip surface ribbed pattern on one side and a cloth impression finish on the reverse.

- Fully tested to specification
- Health & Safety regulation material including flame retardance
- Fully traceable supply
- Regulatory branding on reverse
- Low maintenance
- Available 1.0 m wide rolls, thickness 2mm, 3mm, 4mm, 5mm or 6mm

Due to the very high quality of the raw materials the need for additional thickness is not necessary. The IEC:61111 specification states ‘maximum’ thickness with minimum thickness being determined by suppliers’ ability to pass the correct tests defined in table D.1 of specification. The above materials do so with the integral ‘lay-flat’ quality of the rubber compounds unimpaired in any way. In addition to the above our thinner grades present less of a trip hazard when laid offering additional safety to operators.

MARKINGS:

The example marking on the underside of the mat will consist of a tag denoting details:

The brand shall be placed at 1000mm intervals along length of rolls.

The brand shall be color coded as per IEC: 61111:2009 guidelines

Class ‘0’ - RED, Class ‘1’ - WHITE, Class ‘2’ - YELLOW, Class ‘3’ - GREEN, Class ‘4’ - ORANGE

IN SERVICE RECOMMENDATIONS FOR MATTING TO IEC 61111:2009

SIZE: 1.0m x 10m.

These mats are to be part of a safe system of work and not to be the only protection against electrical risk.

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CAREFULLY READ THESE INSTRUCTIONS BEFORE USING THIS PRODUCT

THESE MATS ARE INTENDED TO BE USED EXCLUSIVELY FOR ELECTRICAL PURPOSES.

The following is for guidance only for the maintenance, inspection, retest and use of mats after purchase.

STORAGE:

Matting should be stored in their container or package. Care should be taken to ensure that the matting is not compressed, folded, or stored in proximity to steam pipes, radiators or other sources of artificial heat or exposed to direct sunlight, artificial light or other sources or ozone. It is desirable that the ambient temperature be between 10°C and 21°C.

TRANSPORTATION:

It is recommended that the matting be packaged in an individual container of sufficient strength to properly protect the matting from damage.

EXAMINATION BEFORE USE

Each time before use, the matting should be visually inspected. If the matting is thought to be unsafe, it shall not be used and should be returned for testing or destroyed.

PRECAUTIONS IN USE:

Matting should not be exposed unnecessarily to heat or light or allowed to come in contact with oil, grease, turpentine, white spirit or strong acid.

When rubber mat becomes soiled, it should be washed with soap and water at a temperature not exceeding that recommended by the matting manufacturer, and thoroughly dried. If insulating compounds, such as tar and paint, continue to stick to the mat, the affected parts should be wiped immediately with a suitable solvent, avoiding excessive solvent use, and then immediately washed and treated as described above.

Matting which becomes wet in use of by washing shall be dried thoroughly, but not in a manner that will cause the temperature of the matting to exceed 55°C.

PERIODIC INSPECTION AND ELECTRICAL RE-TESTING:

No matting of classes 3 ,2 ,1 and 4, even those held in storage, should be used unless they have been electrically tested in accordance with EN 61111:2009 within a maximum period of twelve months.

For class 0. a visual inspection may be considered adequate. However, a routine dielectric test in accordance with EN 61111:2009 may be performed at the owner's request and is recommended by the manufacturer.

POTENTIAL ALLERGENS:

Plasticizer, Odor

GUIDELINES FOR THE SELECTION OF THE CLASS OF MATTING IN RELATION TO NOMINAL VOLTAGE OF A SYSTEM:

The choice of insulating matting in accordance with this standard and for use in live working is determined by the following:

The highest voltage of the system;

The required insulation level for live working (RILL);

The supplemental protective insulating equipment utilized by the worker;

The work practices required by the employer and utilized by the employee.

The maximum use voltage recommended for each class of matting is designated in Table D.1. of EN 60903:2003

Table D.1 – Designation of maximum use voltage:

Class	AC V. r ms	DC V
0	1,000	1,500
1	7,500	11,250
2	17,000	25,500
3	26,500	39,750
4	36,000	54,000

The maximum use voltage is the a.c. voltage (r.m.s.) rating of the protective equipment that designates the maximum nominal voltage of the energized system that may be safely worked. The nominal voltage is equal to the phase-to-phase voltage on multiphase circuits.

If there is no multiphase exposure in a system area, and the voltage exposure is limited to the phase (polarity on dc. systems) to ground potential, the phase (polarity on dc. systems) to ground potential, shall be considered to be the nominal voltage.

If electrical equipment and devices are insulated, or isolated, or both, such that the multiphase exposure on an earthed, neutral star circuit (grounded wye circuit) is removed and if supplemental insulation (e.g., insulated aerial device of structure-mounted insulating work platform) is used to insulate the worker from ground, then the nominal design voltage may be considered as the phase-to-ground voltage on that circuit.

The user may then decide to use a different class of mat than that recommended in Table D.1.

USER INFORMATION:

No electrical insulating matting, even those held in storage should be used unless they have been inspected and/or electrically tested within the previous 12 months.

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