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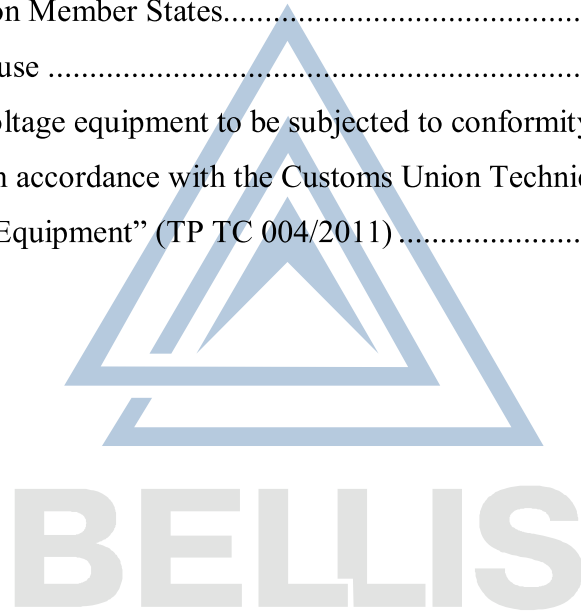
**Safety of Low-voltage Equipment**

**BELLIS**

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## Foreword

1. These Customs Union Technical Regulations is worked out in accordance with the Agreement on Uniform Principles and Rules of Technical Regulation in the Republic of Belarus, Republic of Kazakhstan and Russian Federation dated 18 November 2010.
2. These Customs Union Technical Regulations is worked out to establish, within the common customs territory of the Customs Union, uniform and mandatory requirements to be applied and observed with regard to low-voltage equipment and ensure free movement of low-voltage equipment which is put into circulation within the common customs territory of the Customs Union.
3. If, with regard to low-voltage equipment, other technical regulations setting forth requirements to low-voltage equipment are adopted by the Customs Union and/or the Eurasian Economic Community (hereinafter referred to as the “EurAsEC”), then low-voltage equipment shall comply with the requirements of these technical regulations of the Customs Union and/or EurAsEC where applicable.

## Article 1. Scope of Application

1. These Customs Union Technical Regulations apply to low-voltage equipment to be put into circulation within the common customs territory of the Customs Union.

The low-voltage equipment which is covered by these Customs Union Technical Regulations refers to electric equipment intended to be use at rated voltage from 50 up to 1000 V a.c. and from 75 up to 1500 V d.c.

2. These Customs Union Technical Regulations do not apply to:

Electric equipment intended to be used in explosive environments;  
Medical products;  
Electrical equipment for lifts and cargo hoists (excluding electric machines);  
Electric equipment for defense purposes;  
Pasture fence controlling devices;  
Electric equipment intended to be used by air, water, ground and underground transport;  
Electric equipment for reactor safety systems at nuclear power stations.

3. These Customs Union Technical Regulations set forth requirements to low-voltage equipment with the purpose to protect human life, health and property as well as to prevent any actions that may mislead consumers (users) as to the intended use and safety of low-voltage equipment.

## Article 2. Definitions

The following terms and their definitions are used in these Customs Union Technical Regulations:

Manufacturer – a legal entity, or a physical person in the capacity of individual entrepreneur, that manufacturers and/or trades in low-voltage equipment on its own behalf and is responsible for its conformity with the safety requirements of these Customs Union Technical Regulations;

Importer – a resident of a Customs Union member state who has a foreign trade contract with a non-resident of the Customs Union members states regarding the transfer of low-voltage equipment, trades in this low-voltage equipment and is responsible for its conformity with the safety requirements of these Customs Union Technical Regulations;

Rated voltage of low-voltage equipment – input and/or output voltage or voltage range of low-voltage equipment indicated by the manufacturer on this low-voltage equipment and in the operation manuals;

Circulation of low-voltage equipment on the market – the processes of passing low-voltage equipment from the manufacturer to the consumer (user) within the common customs territory of the Customs Union which the low-voltage equipment undergoes after its manufacture is completed;

Intended use – application of low-voltage equipment as indicated by the manufacturer on this low-voltage equipment and/or in its operation manuals;

Manufacturer's authorized person – a legal entity or physical person duly registered at a Customs Union member state that is contractually authorized by the manufacturer to act on the manufacturer's behalf as regards ensuring the conformity approval and marketing of the manufacturer's products within the common customs territory of the Customs Union and undertaking liability for non-compliance of the manufacturer's products with the requirements of these Customs Union Technical Regulations;

Electric equipment – equipment intended to generate, transform, transmit, distribute and use electric power including equipment intended both to be used directly or to be built in machines, mechanisms, apparatuses, devices and other products.

### Article 3. Rules of Circulation on the Market

1. Low-voltage equipment may be put into circulation on the market if it complies with these Customs Union Technical Regulations as well as other applicable technical regulations of the Customs Union and/or EurAsEC and passed conformity approval procedures according to Article 7 hereof and other applicable technical regulations of the Customs Union and/or EurAsEC.
2. Low-voltage equipment whose conformity with the requirements of these Customs Union Technical Regulations is not approved may not bear the uniform product circulation mark covering the market of the Customs Union member states and may not be put into circulation on the market.
3. Low-voltage equipment which fails to bear the uniform product circulation mark covering the market of the Customs Union member states may not be put into circulation on the market.

### Article 4. Safety Requirements

Low-voltage equipment shall be designed and produced in the way that, if it is used as intended and the requirements to its installation, operation (use), storage, haulage (transportation) and technical maintenance are observed, it ensures:

the required level of protection from direct or indirect exposure to electric current;  
the absence of any inadmissible risk of higher temperatures, arc discharges or emissions that can lead to the occurrence of hazards;  
the required level of protection from any injuries by rotating and static parts of this low-voltage equipment;  
the required level of protection from hazards of non-electric origin that may occur when using this low-voltage equipment, including those caused by physical, chemical or biological factors;  
the required level of insulation protection;  
the required level of mechanical and switching durability;  
the required level of durability to exogenous factors, including those of non-mechanical origin, under the respective climatic conditions of the ambient;  
the absence of any inadmissible risk in case of overload, emergency or failure caused by endogenous and exogenous factors;  
the absence of any inadmissible risk during the connection and/or installation.

Low-voltage equipment shall be designed and produced in the way that it does not become a source of fire at both normal and emergency operation conditions;

The consumer (user) shall be provided with information in the sufficient amount required for the safe use of low-voltage equipment as intended.

#### **Article 5. Requirements to Marking and Operation Manuals**

1. The name and/or designation of low-voltage equipment (type, make and model), its basic parameters and features that affect safety, manufacturer's name and/or trade/brand name, name of the country where the low-equipment was manufactured shall be marked on the low-equipment and specified in the operation manuals attached thereto.

At the same time, the manufacturer's name and/or trade/brand name, name and designation of the low-voltage equipment (type, make and model) shall be marked on the package as well.

2. If it is impossible to mark the data indicated in clause 1 hereof on low-voltage equipment itself, then it is allowed that it is specified only in the operation manuals attached to this low-voltage equipment. At the same time, the manufacturer's name and/or trade/brand name, name and designation of the low-voltage equipment (type, make and model (if any)) shall be marked on the package.

3. The marking on low-voltage equipment shall be distinct and easily readable and shall be affixed on the low-voltage equipment in a place accessible for visual examination without tool-assisted disassembly.

4. Operation manuals attached to low-voltage equipment shall contain:

the information indicated in clause 1 hereof;  
information on the intended use of the low-voltage equipment;  
the features and parameters;  
rules and conditions of safe operation (use);  
rules and conditions of installation, storage, haulage (transportation), sale and disposal (and, where appropriate, a specification of requirements to these);  
information on the measures to be taken in case a malfunction of this equipment is detected;

the name and place of the manufacturer (manufacturer's authorized person) and importer and their contact information;

the production month and year of the low-voltage equipment and/or information on the place where the production year is marked or on the way it can be identified.

5. Operation manuals shall be made in Russian and in (an) official language(s) of the Customs Union member state if so required by the laws of the Customs Union member state(s).

Operation manuals shall be made in the form of hardcopies. An electronic set of operation manuals may be enclosed therewith. Operation manuals to be attached to non-household low-voltage equipment may be made in the electronic form only.

## Article 6. Ensuring Conformity with Safety Requirements

1. The conformity of low-voltage equipment with these Customs Union Technical Regulations is ensured either through the direct observance of their safety requirements or through the observance of the requirements specified by the standards included in the List of Standards which, if applied on a voluntary basis, ensure that the requirements of these Customs Union Technical Regulations are observed.

2. Methods of examinations (tests) and measurements applicable to low-voltage equipment are set forth in the standards included in the List of Standards containing rules and methods of examinations (tests) and measurements, including sampling rules, that are necessary for the application and observance of the requirements of these Customs Union Technical Regulations and for the conduct of product conformity assessment/approval procedures.

## Article 7. Conformity Approval

1. Prior to coming out into circulation on the market, low-voltage equipment must undergo conformity approval procedures to confirm its conformity with safety requirements of these Customs Union Technical Regulations.

The conformity of low-voltage equipment is to be approved according to appropriate schemes as specified in the Guidelines for the Application of Model Conformity Assessment/Approval Schemes in the Customs Union Technical Regulations adopted by the Customs Union Commission (hereinafter referred to as "the Commission").

2. Low-voltage equipment included in the List specified in the Annex to these Customs Union Technical Regulations is subject to conformity approval in the form of certification (Schemes 1c, 3c and 4c).

Low-voltage equipment that is not included in the above-mentioned List is subject to conformity approval in the form of declaration of conformity (Schemes 1d, 2d, 3d, 4d and 6d). The selection between conformity declaration schemes for low-voltage equipment that is not included in the above-mentioned List is made by the manufacturer (manufacturer's authorized person) and/or importer.

As may be decided by the manufacturer (manufacturer's authorized person) and/or importer, the conformity approval of low-voltage equipment that is not included in the above-mentioned List may be carried out in the form of certification in accordance with clause 5 hereof.



In case the standards specified in Article 6 (clause 1) of these Customs Union Technical Regulations fail to be applied or exist, the conformity approval of low-voltage equipment is carried out in the form of certification (Schemes 1c, 3c and 4c) in accordance with clause 10 hereof.

3. The certification of mass-produced low-voltage equipment is carried out under Scheme 1c. Low-voltage equipment for certification is to be provided by the manufacturer (manufacturer's authorized person).

The certification of a low-voltage equipment batch is carried out under Scheme 3c. Individual low-voltage equipment is certified under Scheme 4c. A low-voltage equipment batch (or individual low-voltage equipment) manufactured within the common territory of the Customs Union is to be provided by the manufacturer. A low-voltage equipment batch (or individual low-voltage equipment) exported to the common territory of the Customs Union is to be provided by the importer or the manufacturer (manufacturer's authorized person).

4. The certification of low-voltage equipment shall be carried out by an accredited certification (conformity assessment/approval) body included in the Customs Union Common Register of Certification Bodies and Testing Laboratories (Centres).

Certification tests shall be carried out by an accredited testing laboratory (centre) included in the Customs Union Common Register of Certification Bodies and Testing Laboratories (Centres).

5. When low-voltage equipment is subjected to certification (Schemes 1c, 3c and 4c):

5.1. The manufacturer (manufacturer's authorized person) and/or importer shall provide the certification (conformity assessment/approval) body with a set of documents for the low-voltage equipment proving the conformity of the low-voltage equipment with safety requirements of these Customs Union Technical Regulations. Such set of documents shall include:

the Technical Specifications (is any);

the operation manuals;

a list of the standards to whose requirements this low-voltage equipment shall comply with out of the List of Standards specified in Article 6 (clause 1) of these Customs Union Technical Regulations;

the contract (supply contract) or shipment documents (for a low-voltage equipment batch or individual low-voltage equipment) (Schemes 3c and 4c);

5.2. The manufacturer shall take all necessary measures to make sure that the production process is stable and secures the conformity of the manufactured low-voltage equipment with the requirements of these Customs Union Technical Regulations;

5.3. The certification (conformity assessment/approval) body:

5.3.1. carries out sampling;

5.3.2. makes identification of the low-voltage equipment by establishing identity of its features with the criteria specified in Article 1 of these Customs Union Technical Regulations, provisions of Article 5 of these Customs Un