



REPUBLIC OF SERBIA

Ministry of Finance and Economy

# HANDBOOK FOR IMPLEMENTATION OF RULEBOOK ON THE ELECTRICAL EQUIPMENT INTENDED FOR USE WIHTIN CERTAIN VOLTAGE LIMITS

BMZ



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for Economic Cooperation  
and Development

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**Handbook for implementation of Rulebook on the Electrical equipment intended for use with certain voltage limits**

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# **INSTRUCTIONS FOR IMPLEMENTATION OF RULEBOOK ON THE ELECTRICAL EQUIPMENT INTENDED FOR USE WITHIN CERTAIN VOLTAGE LIMITS**

## **1. INTRODUCTION**

This equipment has been prepared in order to help all economic operators (manufacturers, importers, machine distributors), and all those involved in design, production and/or trade of electrical equipment intended for use within certain voltage limits. Also, consumers of this Handbook could be other stakeholders who directly or indirectly apply Rulebook on the electrical equipment intended for use within certain voltage limits ("Official Gazette of RS", No. 13/10 – hereinafter referred to as: Rulebook), as conformity assessment designated bodies (hereinafter referred to as: Designated bodies), standardisers, consumer associations and similar.

Intention of the authors of this Handbook is to provide short and concise overview in regards to the:

- application of the Rulebook,
- essential requirements,
- list of Serbian standards accompanying the Rulebook,
- technical documentation and risk assessment,
- the means (module) of conformity assessment,
- the principle of conformity marking with Serbian conformity mark,
- documentation accompanying the product,
- the safeguard clause and
- market surveillance.

Directive 2006/95/EC of the European Parliament and the Council of 12 December 2006 relating to electrical equipment intended for use within certain voltage limits (LVD), which is in line with the commitments of the Republic of Serbia under the Stabilisation and Association Agreement (SAA), and National Programme for Integration of the Republic of Serbia to the European Union (NPI) in regards to the transposition of directives of the European Union (EU) into national legislation, and harmonization of national legislation with the *Acquis Communautaire*. Obligations from SAA particularly relate to the part referring to the free movement of goods and, in this sense, the necessity of harmonization of technical legislation of the Republic of Serbia with EU technical legislation with the aim to remove technical barriers to trade as one of the key elements for ensuring the free movement of goods and creating a single market.

If the Rulebook is defined from the different perspective, that is, if we say that its primary goal is to harmonize the rules governing the marketing of the electrical equipment while at the same time guarantees the highest possible level of safety, then it is justified to conclude that the Rulebook actually represents an instruction intended for engineers, which must be applied at the beginning of designing electrical equipment with the main objective to provide its placing on the market and/or use, and in our conditions it can be said that the very approach of the production is changing.

Rulebook prescribes strengthened **exclusive responsibility of the manufacturer** that the electrical equipment placed on the market and/or put into use shall be in conformity with the essential requirements for health and safety protection, which is achieved by prescribed internal control of the production. This does not exclude the participation of the designated bodies, as so called third party, in conformity assessment, depending on the needs and choices of the manufacturer, and sometimes they act as additional "control" of the manufacturer.

*„manufacturer shall mean a legal person, entrepreneur or natural person that makes a product, or person claiming to be manufacturer by placing on the product its business name, name or title, trademark or other distinctive mark or in any other manner“;*

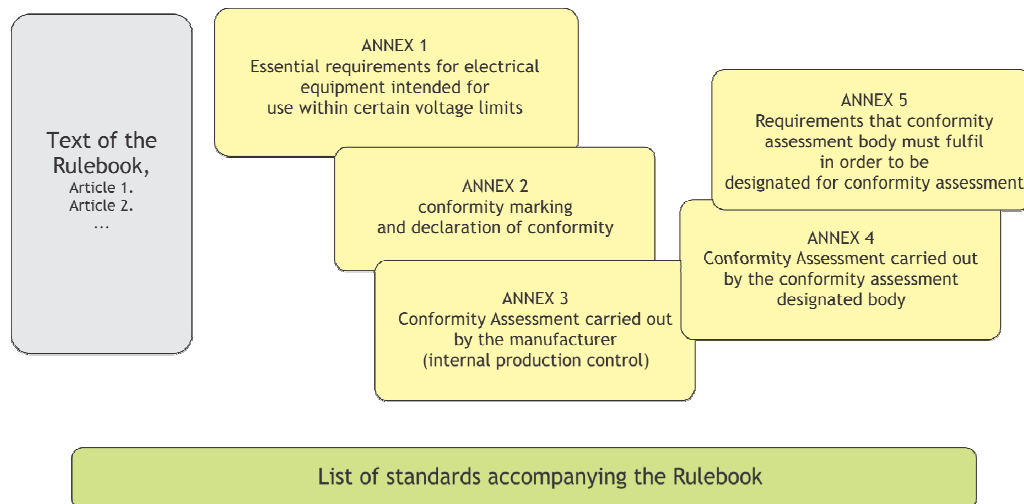
*Law on technical requirements for products and conformity assessment*

*("Official Gazette of RS", No. 36/09)*

This rulebook is accompanied by a list of Serbian standards in the field of electrical equipment, which is compiled and published by the minister responsible for the adoption of this Rulebook in the "Official Gazette of the Republic of Serbia". These are Serbian standards that transpose harmonized (European) standards in the field of electrical equipment, adopted by the Institute for Standardization of Serbia, and with whose application the presumption of conformity with essential requirements of this Rulebook is achieved.

**The intended purpose of the product is of great importance, because it further determines the application of directives or rulebook.**

Rulebook does not imply how the manufacturer should design a product that will be in conformity with the essential health and safety protection requirements and place it on the market, but "only" what requirements must be met, and the manner this will be achieved is left to the manufacturer. Among other things, this reflects flexibility of so-called New Approach of the EU.



*Picture 1. The Rulebook structure*

## 2. SCOPE OF THE RULEBOOK

This Rulebook prescribes the essential safety requirements and other requirements and conditions that must be fulfilled prior to placing on the market and/or putting into service electrical equipment intended for use within certain voltage limits; presumption of conformity; conformity assessment procedures; conformity mark and conformity marking; content of Declaration of Conformity; safeguard clause and requirements that conformity assessment body must meet in order to be designated for conformity assessment.

### 2.1. Products covered by the rulebook

By entering into force and with the beginning of full application (20<sup>th</sup> March 2010) the Rulebook has generated the greatest number of questions regarding the scope, that is, to which products does the rulebook apply to?

Rulebook applies to any equipment designed for use with a voltage rating of between **50 V** and **1000 V** for alternating current and between **75 V** and **1500 V** for direct current. Voltage ratings refer to the voltage of the electrical input or output, not to voltages that may appear inside the equipment.

The European commission has taken the position that the term „*designed for use with a voltage range*” shall be understood as equipment having either a rated input voltage or a rated output voltage inside this voltage range. Internally there may be higher voltages.

#### What is electrical equipment?

The term 'electrical equipment' is not defined in the Rulebook. Therefore it is to be interpreted according to the internationally recognised meaning of this term.

The definition of electric equipment in the “International Electrotechnical Vocabulary of IEC (International Electrotechnical Commission) is:

*„item used for such purposes as generation, conversion, transmission, distribution or utilisation of electrical energy, such as machines, transformers, switchgear and control gear, measuring instruments, protective devices, wiring material, current-using equipment.”*

Generally speaking, the Rulebook does not directly apply to electrical equipment (specific ICT equipment) that is „battery” operated. However, when we talk about product, i.e. electrical device delivered on the market as a pre-packed good with accompanying battery-charger – with power supply unit (AC/DC power supply, adapter and other commercial brand names) then all relevant requirements of the Rulebook apply to such product. Good illustration of such a case are laptops (sold together with battery charger), rechargeable flashlights sold together with battery charger.

### 2.2. Products not covered by the Rulebook

This Rulebook does not apply to following appliances and phenomenon:

- electrical equipment for use in a potentially explosive atmosphere;
- electrical equipment for radiology and medical purposes;
- Electrical parts for lifts for freight and passenger elevators;
- electricity meters (*covered by the regulations in the field of metrology*);
- product covered by other EU new approach directives;

- plugs and socket outlets for domestic use <sup>1</sup>;
- electric fence controllers (regulators of electric fence);
- radio-electrical disturbances;
- specialised electrical equipment, for use on ships, aircraft or railways which complies with the safety provisions drawn up by international bodies in which the Member States participate.

**Basic and other components and electrical equipment intended for incorporation into other equipment.**




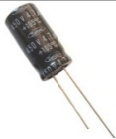




**Are components covered by the Rulebook?**

The scope of the Rulebook covers both electrical equipment intended for incorporation into other equipment and equipment intended to be used directly without being incorporated.

However, some types of electrical devices, designed and manufactured for being used as **basic components** to be incorporated into other electrical equipment, are such that their safety to a very large extent depends on:

- how they are integrated into the final product,
- overall characteristics of the final product.

Basic components include, „active” components such as integrated circuits, transistors, diodes, rectifiers, triacs, GTO’s, IGBT’s, opto-semi-conductors; „passive” components such as capacitors, inductance, resistors, filters; electromechanical components such as connectors, devices for mechanical protection which are part of equipment, relays with terminals for printed circuit boards, micro switches.

	<b>integrated circuits</b>		<b>resistors</b>
	<b>transistors</b>		<b>capacitors</b>
	<b>diodes</b>		<b>micro switches</b>
	<b>triacs</b>		<b>inductance</b>

*Picture 2. Some of basic components*

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<sup>1</sup> Domestic plugs and sockets may also be used in commercial or industrial premises for uses which do not require specialised industrial features.



Components (basic components), where the risk assessment cannot be performed, and where safety can be assessed after „incorporation” and for which a risk are not covered by the Rulebook, and as such must not be marked by conformity mark.








However, electrical components that are intended to be incorporated into other equipment and for which a **risk assessment can be undertaken** such as - transformers and electrical motors, are **covered by the Rulebook** and must be marked by conformity mark.











Even though basic components are not covered by the Rulebook, it does not mean that application of the Rulebook excludes products such as:

- lamps, starters, fuses, switches for household use, elements of electrical installations, etc.,

which, even if they are often used in conjunction with other electrical equipment and have to be properly installed in order to function properly, are themselves considered to be electrical equipment in the terms of the Rulebook.

*(This list was confirmed during the LVD Working Group on 17. April 2007.)*

Products	Scope	Examples of products	Comments
Plugs 230 V for domestic use	No		*
Socket outlets 230 V for domestic use	No		*
Luminaire plugs and socket outlets for domestic use	No		*
Appliance couplers –plugs , outlets	Yes		
Appliance couplers for industrial purposes	Yes		E.g. Standard SRPS EN 60309
Appliance couplers e.g. vehicle heater i.e. manufacturer fabricated standard	Yes		* It should not be interconnectable with other plugs or socket outlets
Cables	Yes		

Components	Scope	Examples of products	Comments
Cord extension sets Plug + cable + socket outlet with or without passive components	Yes		*
Cord sets and interconnection cord sets Plug + cable	Yes		*
Installations enclosures and conduits	Yes		
Insulating tape	No		
Plug with multiple way socket outlets	No		*
Multiple travel adaptors	Yes		**
Plug with one or more socket outlets with incorporated electronic dimmer or twilight dimmer?	Yes		*
Product with integrated plug and/or outlets. 230V for domestic use (e.g. charger for mobile phones, night lights)	Yes		*
Switches for households and similar fixed electrical installations	Yes		
Tools for working with live parts	No		E.g. Standard SRPS EN 60900
Voltage detector	Yes		E.g. Standard SRPS EN 61243

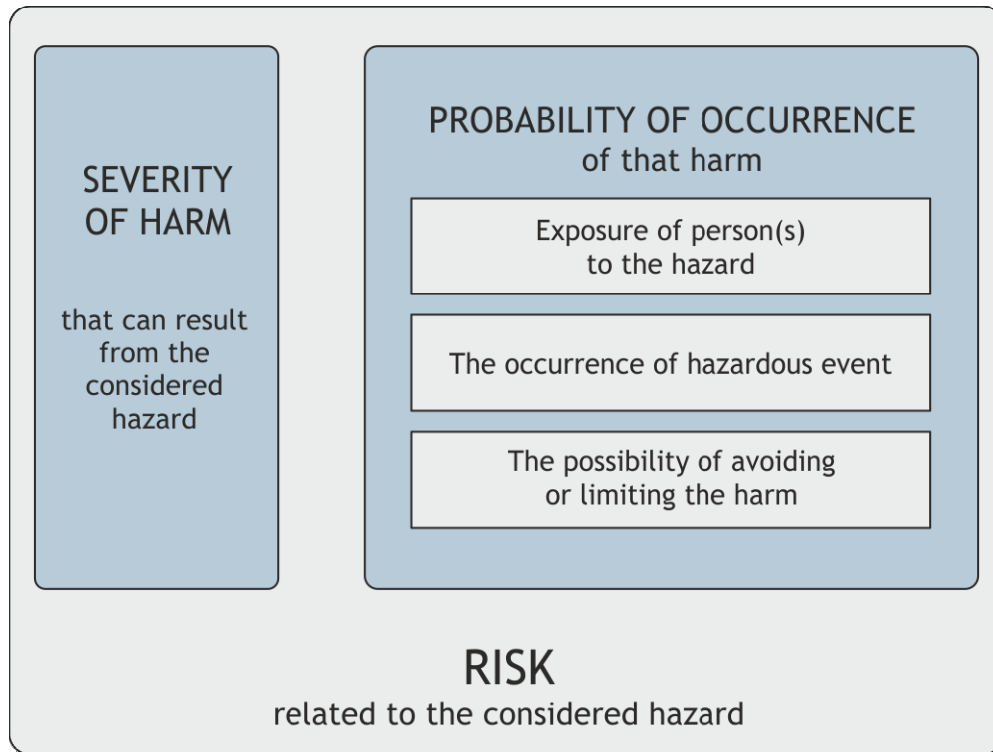
\* Plugs and sockets for domestic use are not covered by the Rulebook, but Law on General Product Safety („Official Gazette of RS”, No 41/09).

\*\* Interpretation of European Commission from January 2012

### 3. ESSENTIAL REQUIREMENTS AND RISK ASSESSMENT

Essential health and safety requirements are prescribed in Annex 1. It can be said that this methodology directly introduces basic procedures which become an integral part of the design process and manufacturing of products.

**Risk assessment** is the only possible method to identify the hazards and to assess the risk connected with electrical equipment, and in the sense of further identification of relevant essential health and safety requirements prescribed in the Rulebook.



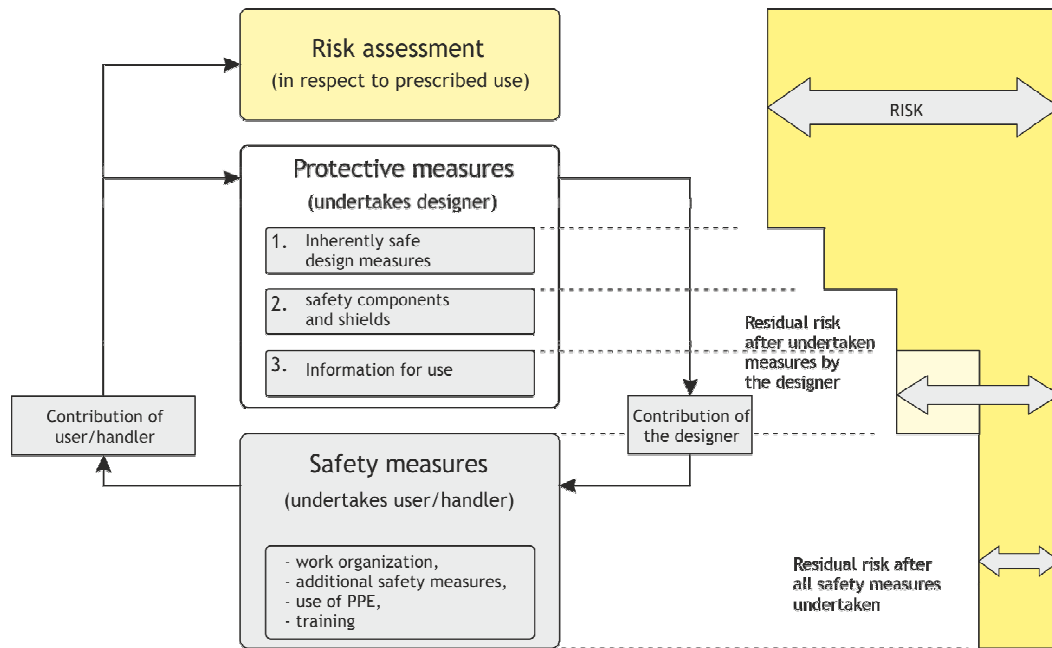
Picture 3. Elements of risk (SRPS EN 14121-1)

Electrical equipment should be designed and manufactured taking into account risk assessment results.

Risk reduction measures dealing with the identified hazards should to be given an order of priority, in accordance with the principles of safety integration. The risk assessment and its outcome in accordance with the Rulebook, must be documented in the technical documentation, and is nevertheless recommended to be archived in any form.

Serbian standard SRPS EN ISO 14121-1 (A type standard) *Safety of machinery - Risk assessment - Part 1: Principles*, serbian standard SRPS EN ISO 12100:2012 *Safety of machinery – General design principles – Risk assessment and risk reduction*, explains the general principles for risk assessment of machinery.

The above-mentioned standards, come from the list of Serbian standards in the field of machinery, but they are sufficiently general so to be applied to many other fields and products.



Picture 4. Methodology of risk reduction (SRPS ISO 12100-1)

### 3.1. Which safety aspects are covered by the Rulebook?

Rulebook covers **all risks** arising from the use of electrical equipment. Not only electrical, but also:

- mechanical,
- chemical (such as, in particular, emission of aggressive substances).
- health aspects of noise and vibrations,
- ergonomic aspects (as far as ergonomic requirements are necessary to protect against hazards in the terms of the Rulebook)
- electromagnetic compatibility aspects (relating to safety, including functional safety),
- effect of
- electromagnetic fields, emitted by electrical apparatus,
- radiation aspects

Products emitting ionising radiation are not covered by the Rulebook, but other technical regulations relating to the protection of the health of workers and the general public against the dangers arising from ionizing radiation.

### 3.2. General conditions that must be fulfilled

- ✓ Electrical equipment (or if this is not possible, on an accompanying document) **must be marked with essential characteristics**, the recognition and observance of which will ensure that electrical equipment will be **used safely and for intended use**.
- ✓ Electrical equipment (or if this is not possible, packaging) must be clearly marked with the brand name and name of manufacturer or trade mark.
- ✓ Electrical equipment, together with its component parts, should be made in such a manner to ensure its safety and proper assembly and connection.
- ✓ Electrical equipment should be so designed and manufactured as to ensure that protection against hazards **which may be caused by external influences on the electrical equipment and hazards that electrical equipment can create**, providing that the equipment is used for its intended purpose and is properly maintained.

### **3.3. Protection against hazards arising from the electrical equipment**

Technical measure must be applied, which ensure:

- ✓ Protection from direct or indirect contact with parts of electrical equipment under voltage;
- ✓ Temperatures, arcs or radiation which could cause danger, are not produced;
- ✓ Protection against non-electrical dangers caused by the electrical equipment which are revealed by experience;
- ✓ Insulation must be suitable for foreseeable conditions.

### **3.4. Protection against hazards which may be caused by external influences on the electrical equipment**

Technical measure must be applied, which ensure:

- ✓ that the electrical equipment meets the expected mechanical requirements in such a way that persons, domestic animals and property are not endangered;
- ✓ that the electrical equipment shall be resistant to non-mechanical influences in expected environmental conditions, in such a way that persons, domestic animals and property are not endangered;
- ✓ that the electrical equipment shall not endanger persons, domestic animals and property in foreseeable conditions of overload.

## **4. LIST OF SERBIAN STANDARDS ACCOMPANYING THE RULEBOOK AND PRESUMPTION OF CONFORMITY**

Harmonized standards in the field of electric equipment are transposed and adopted as Serbian standards by the Institute for Standardization of Serbia. List of adopted Serbian standards, in the field of electrical equipment, transposing harmonized standards is compiled, updated and published in accordance with the Law on technical requirements for products and conformity assessment and the regulation adopted on the basis of that law.

### **Presumption of conformity**

#### ***Conformity mark and Declaration of conformity as presumption of conformity***

This kind of presumption of conformity of electrical equipment with the requirements of the Rulebook is in fact derived indirectly. Conformity mark, placed on the electrical equipment, and the Declaration of conformity are the external appearances that indicate the existence of the presumption of conformity of electrical equipment with the requirements of the Rulebook

#### ***Application of standards from the List of Serbian standards in the field of electrical equipment as a presumption of conformity***

It is considered that the electrical equipment meets the essential health and safety requirements referred to in Annex 1, if it is designed in accordance with Serbian standards in the field of electrical equipment which transposed appropriate harmonized standards; in other words it could be said that the electrical equipment is in compliance with the essential requirements **until it is proven otherwise**. More, such machine is placed on the market and/or put into use freely without any restrictions.

The manufacturer can design and manufacture the electrical equipment, without applying any of the standards from the list of standards or with applying only parts of a standard, and it is possible that for specific electrical equipment there are no Serbian standards in terms of Article 8 of this Rulebook. In that

case, the manufacturer, through technical documentation, must prove that such technical solution fully complies with all essential safety requirements prescribed by the Rulebook.

Therefore, it can be concluded that the use of Serbian standards from the list of standards is the simplest and fastest tool in the procedure of "confirming" that the product is in compliance with essential requirements.

## 5. TECHNICAL DOCUMENTATION

In regards to the Rulebook (and all other regulations transposing New Approach and Global Approach Directives) technical documentation **is documentation providing evidence of conformity of the product** with requirements of all relevant technical regulations relating to the given product.

Drawing up of technical documentation, actually starts with the first, initial step in the process of manufacture of electrical equipment, and that is risk assessment.

Drawing up technical documentation includes knowledge, procedures and skills that engineers acquire on undergraduate and master studies. This activity does not require any special licence.

Essential characteristics:

- ✓ Technical documentation must confirm that electrical equipment complies with requirements from the Rulebook;
- ✓ Technical documentation includes design, manufacture and operation of the equipment to the extent it is necessary for conformity assessment;
- ✓ Technical documentation must be written in Serbian language, or in any of the official languages of the EU, with relevant translation into Serbian;

Technical documentation is defined in Annex 3 of the Rulebook.

The manufacturer is entirely responsible and obliged to take all actions and measures to ensure that the manufactured electrical equipment is in conformity with all essential safety requirements prescribed in the Rulebook. Conformity must be ensured before the equipment is placed on the market. For this purpose, the manufacturer has the exclusive right and obligation to prepare and draw up technical documentation. Manufacturer can never transfer these obligations to another person (his agent, importer, distributor, etc.).

Technical documentation must include details of the design, manufacture and operation of the electrical equipment **to the extent it is necessary for conformity assessment**, and particularly:

- a general description of the electrical equipment;
- design and manufacture drawings plus diagrams of components, subassemblies, circuits, etc.,;
- descriptions and explanations needed to understand drawings and diagrams and the operation of the electrical equipment;
- a list of the standards used, in full or in part, and a description of the solutions employed to meet the safety aspects of this Rulebook when standards have not been applied,;
- the results of design calculations and of checks carried out, etc.,
- test reports established by the manufacturer or his accredited laboratory or „third party”. „Third party” can be designated body for conformity assessment or some other conformity assessment body engaged by the manufacturer.

The technical documentation must be available to relevant authority at least ten years after the date of the last manufactured specimen.

The technical documentation **does not have to:**

- to be kept on the territory of the Republic of Serbia,
- in one locality,
- to be permanently available in material form.

*Person specified in Declaration of Conformity, **must ensure that technical documentation is available, that is, to make it at disposal to competent authorities at their request.***

If manufacturer or his representatives is not registered in the Republic of Serbia, all obligations are taken over by importer of electrical equipment in subject.

## 6. CONFORMITY ASSESSMENT

Rulebook in Article 9, defines procedures of conformity assessment of electrical equipment, which must be carried out **before placing equipment on the market or putting into use**. They can be performed by manufacturer or designated body for conformity assessment.

### 6.1. Conformity assessment carried out by manufacturer

The procedure applied, is the procedure of **conformity assessment of electrical equipment by internal production control** referred to in Annex 3 of the Rulebook. This procedure does not involve the participation of the designated body.

**Internal production control is the basic and the only mandatory conformity assessment procedure, prescribed by the Rulebook. This control, implemented by the manufacturer, consists of three essential elements:**

- Technical documentation,
- Declaration of Conformity;
- Marking of conformity and conformity mark.



Picture 5. Internal production control

### 6.2. Conformity assessment carried out by Designated body

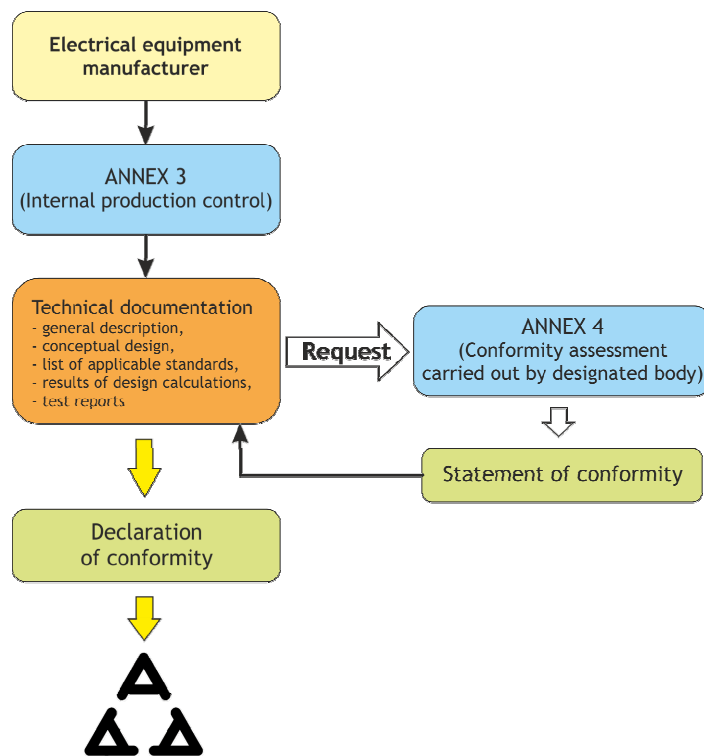
Rulebook in Chapter „Conformity assessment procedures” prescribes that conformity assessment body may conduct or participate in the conformity assessment of electrical equipment, only if it meets

the requirements for designation laid down in Annex 5 of the Rulebook, and if it is designated by the competent minister in accordance with the Law on technical requirements for products and conformity assessment and Regulation on the manner of designation and authorization of conformity assessment bodies ("Official Gazette of RS", No. 98/09).

**Declaration confirming conformity of electrical equipment with requirements from the Rulebook, as a type of document of conformity**

Activities of conformity assessment that, in accordance with the Rulebook, are performed by the designated body refer to review of technical documentation and assessment, based on the conducted examination whether the technical documentation confirms fulfilment of the requirements from the Rulebook. If compliance is confirmed, the designated body makes **Declaration of conformity** confirming compliance of electrical equipment in subject with the requirements of the Rulebook.

Conformity assessment performed in an abovementioned manner, that is, in which the designated body takes part is not mandatory in terms of the Rulebook, but voluntary and depends on the will and needs of the manufacturers. Namely, by choice and upon request of electrical equipment manufacturer or his agent, prior to placing the equipment on the market and/or putting into use, the designated body carries out conformity assessment of electrical equipment with the requirements from this Rulebook. Aspects of essential requirements that need to be assessed are stated in the request. Declaration of Conformity issued by, or drawn up by notified body is limited to those aspects of the essential requirements that designated body has assessed. This declaration, the manufacturer or his agent encloses with technical documentation of electrical equipment in subject and it does not represent a document that accompanies the product on the market.



Picture 6. Participation of Designated body in conformity assessment



## **Confirmation of conformity, as a type of document of conformity**

Confirmation of Conformity (an extract from the register of issued certificates) shall be applied in the legal system of the Republic of Serbia until entry into force of ratified International Agreement on Conformity Assessment and Acceptance of Industrial Products with the European Union - ACAA (Agreement on Conformity Assessment and Acceptance of Industrial Products) in part relating to the machinery covered by the Rulebook, and not later than the accession of Serbia to the European Union.

### **Who issues Confirmation of conformity?**

Confirmation of conformity can be issued at request of different economic operators. Request can be submitted by foreign or domestic manufacturer, representative, branch office or representative of foreign manufacturer or importer.

Designated body on the basis of that request, submitted before placing electrical equipment on the market, and enclosed documentation, which is:

- *declaration of conformity,*
- *appropriate technical documentation* (usually but not necessarily, the test report, test summary report),

reviews the technical documentation and if the conformity of the electrical equipment is confirmed, issues the **Confirmation of conformity**.

**Confirmation of conformity is a document accompanying the product during import and later during placing on the market** of the Republic of Serbia, which serves as a proof of conformity and which supplier of the product is obliged to present to the customs official and/or to the relevant authority at request. The Designated body keeps a record of issued confirmations and upon request of manufacturer or his representative and/or importer issues the **Excerpt from records**. The Designated body publishes the records on issued confirmations on its official webpage.

The obligation to obtain confirmation of conformity is valid for both importers and domestic manufacturers of electrical equipment. As an exception, this obligation does not refer to the manufacturers of electrical equipment made in the Republic of Serbia and for which conformity assessment has been carried out by the Designated body in accordance with Annex 3 of the Rulebook, that is, appropriate testing (as accredited body) and provided test report which is the integral part of technical documentation of the manufactured electrical equipment in question.

On the basis of the confirmation of conformity or excerpt from the record issued by the designated body, the manufacturer or his authorised representative affixes the **Serbian conformity mark** on the electrical equipment.

Confirmation of conformity contains, in particular:

- information on business name, and/or name of the manufacturer,
- title of the Rulebook and number of the Official Gazette of the Republic of Serbia,
- type and kind of electrical equipment having conformity confirmed.

Confirmation of conformity can consist of other information, such as information on the applicant requesting issuance of this confirmation, etc.

If a particular electrical equipment is subject of other technical regulations, that prescribe mandatory compliance of that apparatus, prior to its placing on the market, and with the requirements from these regulations, it is necessary that confirmation of conformity includes conformity assessment of apparatus with all technical regulations relating to that apparatus, and if it is not a case, it is recommended that

confirmation of conformity, besides requested conformity assessment with requirements from the Rulebook, contains a note other technical regulations the conformity assessment of apparatus in subject will be carried out.

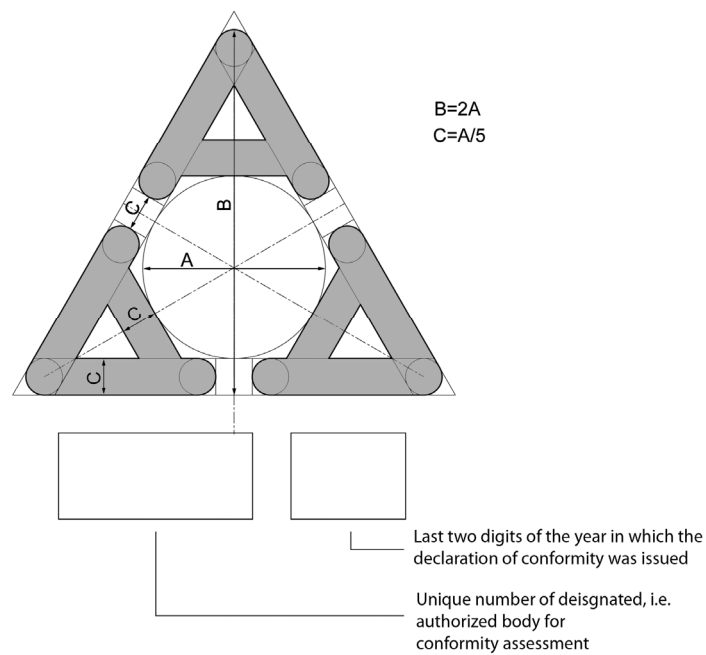
Issued confirmation of conformity is valid for the same type and/or type of product from the same manufacturer for three years from the date of issuance; and issued excerpt from the records has the same period of validity as issued confirmation of conformity in question.

## 7. MARKING OF CONFORMITY AND ACCOMPANYING DOCUMENTATION

### 7.1. Marking

Marking and conformity mark of electrical equipment are prescribed in Article 12 and Annex 2 of the Rulebook.

The equipment that is in compliance with requirements from the Rulebook is marked by conformity mark.



Picture 7. Serbian mark of conformity

The manufacturer, or his authorised representative, or importer (if the manufacturer or his representative is not registered in the Republic of Serbia) shall affix the conformity mark, so as to be visible, legible and indelible, in accordance with the regulation governing the manner of affixing and use of conformity marks.

**Serbian mark is the only label certifying that the product being placed on the market and/or put into use in the Republic of Serbia, is in compliance with the requirements of Serbian technical regulation**, if such regulation provides its affixing.

Together with Serbian mark, a unique number of designated body is affixed, if that body performed and/or participated in conformity assessment, as well as last two digits of the year of issuance of declaration of conformity of drawing up declaration of conformity.

Affixing of conformity mark is performed:

- by pressing, stamping,
- on the place easily accessible for inspection,
- by indentation on the plate,

*for importers who are not expected to open products*

- by affixing on the product container (or label, slings)
- by affixing on the documentation.

The equipment may be affixed with other signs, symbols, inscriptions or other markings, provided that this does not reduce the visibility, legibility and/or interpretation of a conformity mark.

## **7.2. Declaration of conformity**

The manner in which the conformity mark has been affixed is the first indication for market surveillance authorities that the product complies with the relevant essential requirements of the appropriate applicable regulations and suggests that it is followed by the declaration of conformity.

The declaration of conformity is a document issued or drawn up by the manufacturer or his representative. This document represents a kind of legal statement by which the manufacturer or his representative confirms:

- ✓ that all relevant requirements of the regulation(s) have been fulfilled;
- ✓ that he holds technical documentation,
- ✓ if necessary, holds other documents of conformity, by which undoubtedly confirms the fulfilment of the requirements of technical regulations,
- ✓ that he is held responsible for conformity of the product with the prescribed requirements, and safety of the products.

The declaration of conformity shall include, in particular:

- business name, or title or the name and address of the manufacturer's seat and, where appropriate, business name or title or the name and address of the seat of his representative;
- description of the electrical equipment with data that allow more detailed identification of the electrical equipment;
- an explicit statement that the electrical equipment is in compliance with the Rulebook, and the number of the Official Gazette in which the rulebook was published;

- list of Serbian standards from the list of standards referred to in Article 8 of the Rulebook that are were applied in manufacture of the electrical equipment;
- references to technical documentation, and the applied technical specifications or other standards, if standards from the list of standards referred to in Article 8 of the Rulebook were not applied;
- information on the declaration of conformity issued by a designated body, if it carried out or participated in the conformity assessment of the electrical equipment in accordance with Article 10 of the Rulebook, as well as information on the designated body that drafted and/or issued the declaration and his unique number from the register of designated conformity assessment bodies;
- last two digits of the year in which the conformity mark was affixed;
- place and date of issuance of the Declaration of Conformity;
- identification and signature of authorized person responsible for issuing the declaration of conformity in name of the manufacturer or his representative.

Supplier, along with the electrical equipment he delivers on the Serbian market, provides a copy of the Declaration of Conformity and its translation into Serbian language if that apparatus was not manufactured in the Republic of Serbia, as well as instruction for use in Serbian language.

Declaration must be provided separately, as a single document and when necessary it can be written on instructions but always with the prescribed content.

### **7.3. Confirmation of conformity**

Confirmation of Conformity is a special type of document of conformity that was introduced in the Serbian technical legislation by "the new technical regulations." The confirmation of conformity is a document certifying the compliance of the product in subject with the requirements of the relevant regulations. It can be issued at the request of various economic operators. The request may be submitted by foreign or domestic manufacturer, agent, representative or branch office or representative of a foreign manufacturer or importer. More on Confirmation of Conformity has been said in Section 6.2. of this booklet.

### **7.4. Instructions**

The supplier who is placing the electrical equipment on the market of the Republic of Serbia, together with the equipment, encloses instructions in the Serbian language. There is a general agreement that all instructions regarding health and safety requirements must be submitted in writing, because it should not be assumed that the user has means to read the given instructions in electronic form or available on the Internet site.

## 8. SAFEGUARD CLAUSE

Conformity mark and the Declaration of Conformity for electrical equipment are external indicators that confirm the existence of a **presumption of conformity** of equipment with the requirements from the Rulebook.

Therefore, **the delivery or use of electrical equipment, that is placed on the market of the Republic of Serbia**, which meets the requirements of this Rulebook, on which the conformity mark has been affixed, which is accompanied by a declaration of conformity and used in accordance with the intended purpose or under conditions that can be reasonably predicted, **it cannot be limited nor its free movement can be affected by other requirements and conditions which are not prescribed by the Rulebook.**

Nevertheless, this presumption of conformity can be disproved, so that the free movement of such equipment may still be restricted or prohibited **only if there is a reasonable doubt** that the equipment is unsafe or non-compliance with the essential safety requirements from Annex 1 of the Rulebook, but that restriction, withdrawal, revocation, or some other kind of prohibition on trade can be executed by a competent market surveillance authorities **only according to the procedure and in the manner prescribed by the law** governing technical requirements for products and conformity assessment, or by other appropriate law (Article 15 of the Rulebook - safeguard clause).

## 9. MARKET SURVEILLANCE

Market surveillance over the implementation of the Rulebook should ensure that the Rulebook is applied in practice and that the electrical equipment placed on the market and/or put into use in the Republic of Serbia is safe.

Market surveillance is carried out *during or after placing those products on the Serbian market*, and/or into their intended use. Market surveillance is different from the conformity assessment because their aim is to ensure conformity of products *before* they are placed on the market and/or put into use.

Market surveillance can be done at any stage after the completion of the electrical equipment design, as soon as the product is made available for distribution or use in the Republic of Serbia. Equipment can be inspected at the premises of manufacturers, importers, distributors or companies that rent, as well as in transit.

### **What does relevant market surveillance authority checks?**

- Conformity mark and declaration of conformity
- Instructions
- Where applicable, documents on conformity to which Declaration of Conformity refers to
- Technical documentation - if the relevant market surveillance authority has reasonable doubt in conformity with the essential health and safety requirements, it may require the submission of technical documentation. Such a request may be submitted at any stage of market surveillance procedure.

*Actions and measures undertaken by the relevant market surveillance authority in the case of non-compliance of all the products with the requirements from every technical regulation, including non-compliance of electrical equipment with the requirements from the Rulebook, are prescribed by the Law on Technical Requirements for Products and Conformity Assessment, and in the absence of some surveillance measures in that Law, other surveillance measures from the Law on General Product Safety are applied.*

## 10. CONCLUSION

Contrary to the Old Approach, the philosophy of the New Approach implies that the European directives define only essential requirements for product safety, and that the detailed technical content, i.e. elaboration of the essential requirements is contained in the so-called harmonized European standards. When requirements of the harmonized standards are met, it is considered that the manufacturer fulfils the essential requirements contained in the new approach directives (presumption of conformity). Having in mind that fulfilment of requirements from standards is not the only way to ensure conformity with essential requirements; manufacturer can meet essential requirements in another manner. This way the voluntary application of standards is preserved.

Another element of the new approach represents a way to verify compliance with the essential requirements. Conformity assessment is based on the so-called Global Approach, i.e. modules for conformity assessment. Unlike the old approach, compliance with the requirements of the directive is confirmed by the manufacturer – with a declaration of conformity or document of conformity which were issued by designated conformity assessment body, and the government is completely left out from the process of conformity assessment with the prescribed requirements.

Since the Rulebook transposed one of the New Approach directives - LVD 2006/95/EC, the spirit of the New and Global approach is also transferred into technical legislation of the Republic of Serbia. In addition to these basic principles, the Rulebook temporarily introduced, as an additional mechanism for consumer protection, verification of conformity of products performed by the designated bodies.

In accordance with Directive 2006/95/EC, as the so-called New approach directive in the field of technical legislation of the EU, as well as the law governing the technical requirements for products and conformity assessment, essentially new solutions are anticipated in the field of electronic equipment, types of operators that carry out or participate in the conformity assessment, types of documents of conformity, as well as the voluntary application of Serbian standards that transpose harmonized (European) standards in this field. This concept differs from concept from earlier rulebooks and ordinances in the field of electronic equipment, which often contained out of date, inconsistent and too detailed technical and technological solutions and rules, which have, in recent years, started to show unnecessary restrictions and burdens for the manufacturers.

# **RULEBOOK ON ELECTRICAL EQUIPMENT DESIGNED FOR USE WITHIN CERTAIN VOLTAGE LIMITS**

*("Official Gazette of RS ", No. 13/2010)*

## **I INTRODUCTION**

### **Scope**

#### Article 1

This Rulebook stipulates the essential safety requirements and other requirements and conditions that shall be met prior to placing electrical equipment on the market and/or putting into service which is intended for use within certain voltage limits; presumption of conformity; conformity assessment procedures; conformity mark and conformity marking; content of Declaration of Conformity; safeguard clause and criteria that shall be met by conformity assessment body to be notified for conformity assessment.

### **Definitions**

#### Article 2

For the purposes of this Rulebook, following meaning shall apply:

- 1) "Electrical equipment" shall mean any equipment designed for use with a voltage rating of between 50 and 1000V for alternating current and between 75 and 1500V for direct current, other than the equipment and phenomena listed under Article 4 of this Rulebook;
- 2) "Good engineering practice" shall mean confirmed (verified) solution from the practice with regard to design, manufacturing or assembly of certain electrical equipment whose application ensures that the equipment meets safety requirements if it used for its intended purpose;
- 3) "Placing on the market" shall mean making available for the first time on the market in the Republic of Serbia electrical equipment for the purpose of distribution or use, in return for payment or free of charge;
- 4) „manufacturer" shall mean any natural or legal person or entrepreneur who designs electrical equipment with a view to its being placed on the market, under his own business name or trademark or other recognisable label or for his own use. In the absence of a manufacturer as defined above, any natural or legal person or entrepreneur who places on the market or puts into service electrical equipment shall be considered a manufacturer;
- 5) „authorised representative" shall mean any legal entity or entrepreneur registered in the Republic of Serbia or natural person who is resident in the Republic of Serbia who has been authorised by the manufacturer to perform on his behalf all or part of the obligations under this Rulebook;
- 6) "putting into service" shall mean the first use of electrical equipment for its intended purpose in the Republic of Serbia;
- 7) "harmonised standard" shall mean standard adopted by European Standards Bodies: European Committee for Standardisation (CEN), European Committee for Electrotechnical Standardisation (CENELEC) or European Telecommunications Standards Institute (ETSI) on the basis of an order issued by the European Commission, which has been published in the Official Journal of the European Commission.

Terms used in this Rulebook which are not defined under Paragraph 1 of this Article, shall have meanings stipulated by acts regulating technical requirements for products, general safety of products and standardisation.

### **Application**

#### Article 3

This Rulebook shall apply to all electrical equipment specified in Article 2 (1), Point 1 of this Rulebook.

This Rulebook shall also apply to components of electrical equipment, where such components are considered electrical equipment independently, and if such are placed on the market or delivered to manufacturers with a view of incorporation into other electrical equipment.

### **Electrical equipment and phenomena to which this Rulebook does not apply**

#### Article 4

This Rulebook shall not apply to following electrical equipment and phenomena:

- 1) Electrical equipment for use in an explosive atmosphere;
- 2) Electrical equipment for radiology and medical purposes;
- 3) Electrical parts for goods and passenger elevators;
- 4) Electricity meters;
- 5) Plugs and socket outlets for domestic use;
- 6) Electric fence controllers;
- 7) Radio-electrical interference;
- 8) Specialised electrical equipment, for use on ships, aircraft or railways, which complies with the safety provisions drawn up by the relevant international organisations.

## **II PLACING ON THE MARKET AND/OR PUTTING INTO SERVICE**

### **Safety requirements**

#### Article 5

Electrical equipment may be placed on the market and/or putting into service only if, having been constructed in accordance with good engineering practice in safety matters in force in the Republic of Serbia, it does not endanger the safety of persons, domestic animals or property when properly installed, maintained and used in application for which it was made.

The principal elements of the safety objectives referred to in Paragraph 1 of this Article are listed in Annex 1 - Principal elements of the electrical equipment safety intended for use within certain voltage limits, printed with this Rulebook as its integral part.

### **Free movement**

#### Article 6

Electrical equipment complying with requirements and conditions of this Rulebook shall be placed on the market and/or put into service free without any limitations.



## **Requirements for connection of electrical equipment to the grid or for the supply of electricity**

### **Article 7**

In relation to electrical equipment, stricter safety requirements than those laid down in Article 5 of this Rulebook shall not be imposed by electricity supply bodies for connection to the grid, or for the supply of electricity to users of electrical equipment.

## **III PRESUMPTION OF CONFORMITY**

### **Serbian standards transposing harmonised standards**

#### **Article 8**

Electrical equipment shall be presumed to comply with the requirements set out in Article 5 of this Rulebook 1, if it is produced in accordance with Serbian standards relating to electrical equipment which transposed relevant harmonised standards, the list of which (hereinafter referred to as: List of standards) is made and published in accordance with the law governing technical requirements for products and conformity assessment and the regulation adopted on the basis of that law.

## **IV CONFORMITY ASSESMENT PROCEDURES**

### **Conformity assessment procedures conducted by manufacturer**

#### **Article 9**

Assessment of conformity of electrical equipment with the essential requirements under Annex 1 shall be carried out by the manufacturer by applying internal production control as per Annex 3 – Conformity assessment conducted by the manufacturer (internal production control), printed with this Rulebook as its integral part.

### **Conformity assessment procedures conducted by the Notified Body for conformity assessment**

#### **Article 10**

Conformity assessment body may carry out the assessment of conformity of electrical equipment if it fulfils criteria for conformity assessment specified in Annex 5 – Criteria to be taken into account for the notification of bodies for assessment of conformity, printed with this Rulebook as its integral part, and if such body is notified (hereinafter referred to as: Notified Body) in accordance with the law governing technical requirements for products and conformity assessment and the regulation adopted on the basis of such law.

At the request of the manufacturer or his authorised representative, and by his choice, prior to placing it on the market and/put into service, the Notified Body shall carry out, or participate in, the assessment of conformity of electrical equipment with requirements under this Rulebook, in the manner stipulated under Annex 4 - Conformity assessment conducted by the Notified Body, printed with this Rulebook as its integral part.

The Decision on notification of conformity assessment body as per Paragraph 1 of this Article shall state whether the Notified Body fulfills the requirements for carrying out assessment of conformity as per Paragraph 1 (3) of Annex 4 for all electrical equipment covered by this Rulebook and/or all essential requirements as per Annex 1 and whether the notification is limited to certain aspects of the essential requirements and/or certain types of electrical equipment.

The Notified Body may also carry out or participate in procedure for assessing the conformity of electrical equipment with requirements under this Rulebook after the equipment is placed on the market and/or

put into service, in case where there is a doubt that electrical equipment can endanger the safety of people, domestic animals or property.

If the conformity of electrical equipment as per Paragraphs 2 and 3 has been established, the Notified Body shall issue a Statement certifying the conformity of equipment.

## **Confirmation of Conformity**

### Article 11

The manufacturer or his authorised representative or importer if the manufacturer or his authorised representative is not established in the Republic of Serbia, prior to placing electrical equipment on the market shall communicate to the Notified Body, original of Declaration of Conformity of that equipment or certified copy with accompanying technical documentation in accordance with Annex 3 – Technical Documentation and Declaration of Conformity, printed with this Rulebook as its integral part, with a view of certifying the conformity of the electrical equipment with the requirements under this Rulebook.

If the Notified Body, on the basis of submitted documentation referred to in Paragraph 1 of this Article, establishes conformity of the electrical equipment, it shall issue the conformation of conformity of such equipment with the essential requirements stipulated in Annex 1.

Conformation of conformity of equipment shall contain, in particular: business name or name of the manufacturer; title of this Rulebook and number of the Official Gazette where this Rulebook was published; type of equipment and designation of the type of equipment which is the subject of conformity assessment.

Confirmation of conformity referred to in Paragraph 2 of this Article shall be valid for the same type or type of electrical equipment of the same manufacturer for the period of three years from the date of issue of this confirmation.

The Notified Body shall keep a record on issued confirmations as per Paragraph 2 of this Article, and shall issue an excerpt from the record upon request by the manufacturer or his authorised representative or importer; the excerpt shall contain, in particular, information on business name of the manufacturer and type of electrical equipment for which Confirmation was issued and validity period of the Confirmation.

The Notified Body shall publish the records on issued confirmations of conformity on its official webpage.

Documentation as per Paragraph 1 of this Article does not need to be communicated to the Notified Body for new delivery of electrical equipment of the same manufacturer and the same type for which confirmation of conformity was issued; and records certificate referred to in Paragraph 5 of this Article shall be regarded as evidence of validity of issued confirmation.

The manufacturer or his authorised representative shall affix the Serbian conformity mark on the basis of the confirmation of conformity or excerpts from the record issued by the Notified Body.

The Applicant under Paragraph 1 of this Article shall bear costs related to the inspection of documentation and issuance of the Confirmation.

Amount of costs referred to in Paragraph 9 of this Article shall be determined by the pricelist of the Notified Body and it shall be proportional to the scope and complexity of documentation to be inspected and time required for conducting such review.

Costs related to issuing of records certificate referred to in Paragraph 5 this Article may be charged up to the amount of costs necessary for issuing the certificate, which is determined by the pricelist of the Notified Body.

Submission of documentation and providing of Confirmation of conformity under Paragraphs 2 and 3 of this Article, shall not apply to the manufacturer of electrical equipment manufactured in the Republic of Serbia and where the Notified Body carried out the assessment of conformity of equipment in accordance with Annex 4.

## **V CONFORMITY MARK**

### **Conformity marking**

#### Article 12

Conformity mark shall be affixed on electrical equipment which is in conformity with the requirements under this Rulebook prior placing it on the market and/or putting into service in the manner specified in Annex 2 – Conformity mark, printed with this Rulebook as its integral part.

The manufacturer, or his authorised representative, or importer if the manufacturer of his representative is not established in the Republic of Serbia, shall affix the conformity mark so as to be visible, easily legible and indelible, in accordance with the regulation governing the manner of affixing and use of conformity marks.

Other marks, symbols and designations may be affixed on electrical equipment provided that they do not affect visibility, legibility and/or meaning of the conformity mark.

Marks, symbols and designations whose affixing on electrical equipment is forbidden by the act governing technical requirements and conformity assessment shall be prohibited to be placed.

If electrical equipment is subject to other regulations governing other matters, which also provide for the affixing of the conformity marking, affixed of conformity mark indicates that the equipment in question is also presumed to conform to the provisions of those other regulations.

### **Unduly marking**

#### Article 13

Unduly marking shall be considered as placing of marks, symbols and other designations whose placing is forbidden by the law governing technical requirements for products and conformity assessment, as well as:

- 1) affixing conformity mark on electrical equipment to which this Rulebook does not apply;
- 2) lack of conformity mark on electrical equipment which is in conformity with requirements under this Rulebook.

Affixing and use of conformity mark, and other marks, symbols and designations referred to in Article 12 of this Rulebook and Paragraph 1 of this Article, shall be provided in accordance with the law governing technical requirements for products and conformity assessment.

Documentation accompanying electrical equipment being placed on the market and/or put into service

#### Article 14

Supplier who places electrical equipment on the market in the Republic of Serbia shall enclose instructions for use in Serbian language.

In addition to instructions as per Paragraph 1 of this Article, the supplier shall provide original of Declaration of Conformity of electrical equipment or its certified copy with a translation into Serbian language if the electrical equipment has not been manufactured in the Republic of Serbia, as well as Confirmation of conformity, where issued, to accompany the electrical equipment being placed on the market in the Republic of Serbia.

If the electrical equipment has not been manufactured in the Republic of Serbia, the supplier who places such equipment on the market of the Republic of Serbia may make available original Declaration of Conformity, or a translation thereof into Serbian language, on its official webpage, where the webpage address shall be stated in the instructions for use.

## **VI SAFEGUARD CLAUSE**

### **Supply or use of equipment**

#### Article 15

Supply or use of electrical equipment being placed on the market in the Republic of Serbia, which is in conformity with the requirements under this Rulebook, with conformity mark affixed on, accompanied by the Declaration of Conformity of electrical equipment and which is used for its intended purpose or in conditions which may be reasonably foreseen, may be limited or prohibited in accordance with the act governing technical requirements for products and conformity assessment.

### **Conformity with EU regulations**

#### Article 16

This Rulebook is in compliance with all principles and requirements of the European Parliament and Council Directive No. 2006/95/EC, regarding electrical equipment intended for use within certain voltage limits of 12 December 2006.

## **VII TRANSITIONAL AND FINAL PROVISIONS**

#### Article 17

From the day when the ratified international agreement on conformity assessment and acceptance of industrial products with the EU comes into force (ACAA agreement), in this rulebook, for electrical equipment to which this Rulebook applies, the term: "conformity mark" in Article 1, in the title above Article 12, in Articles 12, 13 and 15, and Annex 2, Chapter B and Annex 3, Point 1 of this Rulebook shall mean: "CE mark", and the term: "Declaration of Conformity" in Articles 1, 14 and 15, as well as in the title of Annex 2, Annex 2, Chapter B and in Annex 3 of this Rulebook shall mean: "EC Declaration of conformity".

If the agreement under Paragraph 1 of this Article shall not be concluded, meanings of terms "conformity mark" and "Declaration of Conformity" as per Paragraph 1 of this Article shall apply as from the day of accession of the Republic of Serbia to the European Union.

#### Article 18

From the day when this Rulebook enters into force till the ratified international agreement on conformity assessment and acceptance of industrial products with the EU enters into force, conformity marking of electrical equipment, to which this Rulebook applies, shall be performed by affixing the Serbian conformity mark in accordance with this Rulebook and relevant regulations.

If the agreement under Paragraph 1 of this Article shall not be concluded, conformity marking by affixing the Serbian conformity mark shall be performed as from the day of accession of the Republic of Serbia to the European Union.

From the day when the ratified international agreement on conformity assessment and acceptance of industrial products with the EU comes into force (ACAA agreement), conformity marking of electrical equipment to which this Rulebook applies shall be performed by affixing CE mark in accordance with this Rulebook and relevant regulations.

If the agreement under Paragraph 3 of this Article shall not be concluded, conformity marking by affixing the CE mark shall be performed as from the day of accession of the Republic of Serbia to the European Union.

#### Article 19

Conformity assessment bodies which are accredited or authorised to carry out assessment of conformity as per regulations under Article 21 (1) of this Rulebook shall issue confirmations of conformity referred to in

Article 11 of this Rulebook until they get a notification in accordance with this Rulebook and relevant regulation.

#### Article 20

Provisions of Article 11 of this Rulebook shall be repealed as from the day when the ratified international agreement on conformity assessment and acceptance of industrial products with the EU for electrical equipment to which this Rulebook applies, enters into force.

If the agreement under Paragraph 1 of this Article shall not be concluded, provisions of Article 11 of this Rulebook shall cease to have effect as from the day of accession of the Republic of Serbia to the European Union.

#### Article 21

Following regulations shall cease to have effect on the day when this Rulebook enters into effect:

- 1) Rulebook on technical and other requirements for electric storage water heaters ("Official Gazette of FRY", No. 5/99);
- 2) Rulebook on technical and other requirements for electric light sources ("Official Gazette of Serbia and Montenegro", No. 44/05);
- 3) Order on mandatory attestation of electrical household appliances and similar use ("Official Gazette of SFRY", No.8/87);
- 4) Order on mandatory attestation of threaded lampholder ("Official Gazette of SFRY", No. 43/88);
- 5) Order on mandatory attestation of electrical household appliances ("Official Gazette of SFRY", No.43/88);
- 6) Order on mandatory attestation of separation and safety transformers ("Official Gazette of SFRY", No. 43/88);
- 7) Order on mandatory attestation of insulated electrical conductors and cables ("Official Gazette of SFRY", No.43/88);
- 8) Order on mandatory attestation of switches for devices ("Official Gazette of SFRY", No. 43/88).

Certificate of Conformity issued on the basis of the regulation under Paragraph 1 of this Article shall be repealed as from 1 January 2012.

#### Article 22

The manufacturer or his authorised representative, or importer, may, not later than 1 January 2012, place on the market and/or put into service electrical equipment designed and manufactured and for which conformity was assessed in accordance with requirements under the regulation referred to in Article 21 (1) of this Rulebook.

The conformity document that is issued on the basis of conducted assessment of conformity under Paragraph 1 of this Article or other documents accompanying equipment shall include information of regulations with which equipment is in conformity (title of regulation and number of the Official Gazette where that regulation was published).

#### Article 23

This Rulebook shall enter into force on the eighth day following its publication in the Official Gazette of the Republic of Serbia.

## **PRINCIPAL ELEMENTS OF THE SAFETY OBJECTIVES FOR ELECTRICAL EQUIPMENT DESIGNED FOR USE WITHIN CERTAIN VOLTAGE LIMITS**

### **1. General condition**

The essential characteristics, the recognition and observance of which will ensure that electrical equipment will be used safely and for intended use, shall be marked on the equipment, or, if this is not possible, on an accompanying document.

The brand name and name of manufacturer or trade mark should be clearly printed on the electrical equipment or, where that is not possible, on the packaging.

Electrical equipment, together with its component parts, should be made in such a manner to ensure its safety and properly assembly and connection.

Electrical equipment should be so designed and manufactured as to ensure that protection against hazards set out in Points 2 and 3 of this Annex, providing that the equipment is used for its intended purpose and is properly maintained.

### **2. Protection against hazards arising from the electrical equipment**

Technical measures shall be applied in accordance with Point 1 of this Annex, in order to ensure:

- 1) that persons and domestic animals are adequately protected against the danger of physical injury or other harm which might be caused by direct or indirect contact;
- 2) that temperatures, arcs or radiation which would cause a danger, are not produced;
- 3) that persons, domestic animals and property are adequately protected against non-electrical dangers caused by the electrical equipment which are revealed by experience;
- 4) that the insulation must be suitable for foreseeable conditions.

### **3. Protection against hazards which may be caused by external influences on the electrical equipment**

Technical measures must be applied in accordance with Point 1 of this Annex, in order to ensure:

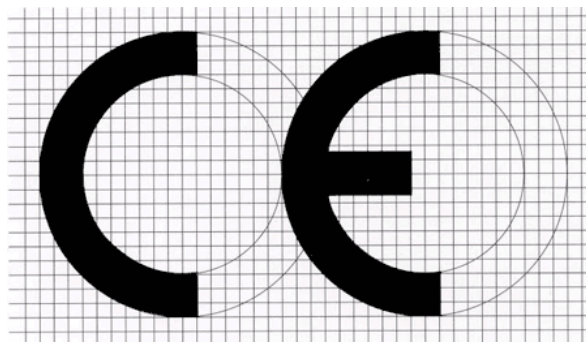
- 1) that the electrical equipment meets the expected mechanical requirements in such a way that persons, domestic animals and property are not endangered;
- 2) that the electrical equipment shall be resistant to non-mechanical influences in expected environmental conditions, in such a way that persons, domestic animals and property are not endangered;
- 3) that the electrical equipment shall not endanger persons, domestic animals and property in foreseeable conditions of overload.

## CONFORMITY MARKING AND DECLARATION OF CONFORMITY

### A CONFORMITY MARKING

#### 1. CE MARK

CE conformity marking shall consist of the initials "CE" taking the following form:



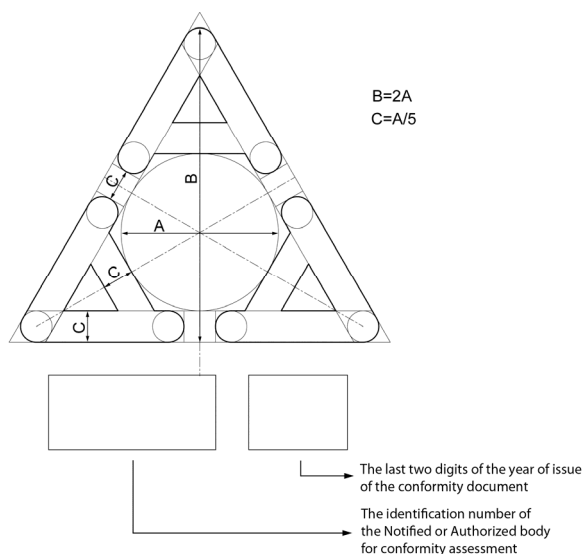
The CE mark shall have a vertical dimension of at least 5mm.

If the CE mark is reduced and enlarged the proportions given in the above graduated drawing must be respected.

The CE mark must be affixed to the electrical equipment or to its data plate, where this is not possible or not warranted on account of the nature of the equipment, it shall be affixed to the packaging, if any, and to the accompanying documents.

#### 2. SERBIAN CONFORMITY MARK

The Serbian mark consists of three capital letters "A" interconnected in the shape of equilateral triangle (3A), the appearance and content as per the figure below:



The height of the mark must be determined by the B height of the mark which may have only values of standard numbers rounded up, to the order of magnitude R10 expresses in millimetres (mm), as per Serbian standard SRPS A.A0.001 – Standard numbers, numerical values and definitions.

The height B of the mark must be, as a rule, at least five millimetres.

The identification number of the Notified or Authorized conformity assessment body from the Registry of notified or authorized conformity assessment bodies, and the last two digits of the year of issue of the conformity document, if this body conducted, or participated in, conformity assessment, must be placed next to the Serbian mark

## **B DECLARATION OF CONFORMITY**

The Declaration of Conformity must contain in particular:

- 1) Business name, or name and address of the manufacturer, and, where appropriate, business name, or name and address of his authorised representative;
- 2) Description of the electrical equipment including information for accurate identification of the electrical equipment
- 3) Reference to this Rulebook;
- 4) References to the applied Serbian standards listed in Article 8 of this Rulebook;
- 5) Reference to the technical specifications containing conformity requirements, where appropriate;
- 6) Information on statement on conformity issued by the Notified Body, if it conducted or participated in assessing the conformity of electrical equipment as per Article 10 of this Rulebook as well as information on that Notified Body;
- 7) The last two digits of the year in which the conformity marking was affixed;
- 8) Place and date of issuing the Declaration of Conformity;
- 9) Identification of the signatory, responsible for issuing the Declaration of Conformity on behalf of the manufacturer or his authorised representative.



**CONFORMITY ASSESMENT PROCEDURE CONDUCTED BY MANUFACTURER  
(INTERNAL PRODUCTION CONTROL)**

1. Internal Production Control is the procedure whereby the manufacturer who fulfils obligations laid down in Point 2 of this Rulebook, guarantees and declares that the electrical equipment conforms to the requirements under this Rulebook that apply to it. Manufacturer or his authorised representative must affix the conformity marking to each product and draw up a declaration of conformity.

2. The manufacturer draws up the technical documentation for electrical equipment, in accordance with requirements described in Point 3 of this Annex.

3. Technical documentation must enable the conformity of the electrical equipment to the requirements of this Rulebook to be assessed.

Documentation referred to in Paragraph 1 of this Point, to the extent relevant for such assessment, must include the information on design, manufacture and operation of the electrical equipment, in particular:

- 1) General description of the electrical equipment,
- 2) Conceptual design and manufacturing drawings and schemes of components, sub-assemblies, circuits, etc.;
- 3) Descriptions and explanations required for the understanding of said drawings and schemes referred to in the second subparagraph, as well as operation of the electrical equipment,
- 4) a List of the standards applied fully or partially, and descriptions of the solutions to meet conformity to the requirements of this Rulebook, where standards have not been applied,
- 5) Results of design calculations made, examinations carried out, etc.,
- 6) Test reports.

4. The manufacturer or his authorised representative must keep a copy of the Declaration of Conformity including a translation into Serbian language, if the electrical equipment was not manufactured in the Republic of Serbia, as well as the technical documentation, which must be at the disposal of the competent authorities for inspection purposes for least 10 years after the date on which such product was last manufactured.

If the manufacturer or his authorised representative is not established in the Republic of Serbia, the importer of electrical equipment must undertake obligations referred to in Paragraph 1 of this Point.

5. The manufacturer must take all measures necessary in order that the manufacturing process provides the compliance of the manufactured products with the technical documentation referred to in Point 2 of this Annex, and with the requirements of this Rulebook.

## **CONFORMITY ASSESSMENT CONDUCTED BY THE NOTIFIED BODY**

The conformity assessment as per this Annex shall be conducted by means of conformity assessment procedure set out in Annex 3 and following additional procedures:

1. The manufacturer or his authorised representative must communicate the technical documentation to the Notified Body and the application for assessment thereof, specifying which aspects of the essential requirements should be assessed.

2. The Notified Body must inspect the technical documentation and assess whether the technical documentation demonstrates that the requirements of this Rulebook have been met. If the compliance of the electrical equipment has been confirmed, the Notified Body shall issue a statement to the manufacturer or his authorised representative confirming the compliance of the electrical equipment.

3. The statement as per Point 2 of this Annex is limited to aspects of the essential requirements which are assessed by the Notified Body.

The manufacturer or his authorised representative must enclose the statement referred to in Paragraph 1 of this Point to the technical documentation referred to in Annex 3.

## **CRITERIA TO BE TAKEN INTO ACCOUNT FOR THE NOTIFICATION OF BODIES FOR ASSESSMENT OF CONFORMITY**

1. The conformity assessment body, its director, the members of managing board of directors or members of managing board of that body, as well as employees and other involved persons (hereinafter referred to as: staff) responsible for carrying out the assessment of conformity as per this Rulebook must not be the designer, manufacturer, supplier or installer of equipment that they inspect, nor the authorised representative of any of these parties. They must not become involved, either directly or as authorised representatives, in the design, production, marketing or maintenance of the equipment. This does not preclude the possibility of exchanges of technical information between the manufacturer and the Body.

2. The Body referred to in Point 1 of this Annex and its staff must carry out the assessment of conformity with the highest degree of professional integrity and technical competence and must be free from all pressures and inducements, particularly financial, which might influence their judgement or the results of the inspection, especially from persons or groups of persons with an interest in the result of conformity assessment.

3. For each type of electrical equipment for which it is notified, and each conformity assessment procedure, the Body, prior to and after the notification, must possess personnel with technical knowledge and sufficient and appropriate experience to perform a conformity assessment.

The staff responsible for conducting the assessment of conformity must have:

- 1) appropriate experience, and authorisation to perform conformity assessment activities,
- 2) qualification and independency in drawing up reports on conducted assessment and perform checks stipulated under this Rulebook.

4. Conformity assessment body must have adequate facilities depending on the requirements laid down in Serbian standards in the List of standards under Article 8 of this Rulebook and type of electrical equipment which is a subject of conformity assessment, or essential requirements and aspects of such requirements that shall be assessed.

5. The impartiality of staff conducting the assessment must be guaranteed. Their remuneration must not depend on the number of tests carried out or on the results of such tests.

6. The conformity assessment body must possess adequate general act governing basic procedures with regard to conducting conformity assessment activities including decision-making procedure on complaints on the performance of the body and made decisions.

7. The conformity assessment body must have damage liability insurance.

8. The staff of the body must be bound to observe professional secrecy with regard to all information obtained in carrying out procedures for assessing the conformity in accordance with general act on professional secrecy, this Rulebook and other regulations.