

Federal Public Service

**MINISTRY OF DEVELOPMENT, INDUSTRY AND FOREIGN TRADE
NATIONAL INSTITUTE OF METROLOGY, STANDARDIZATION AND
INDUSTRIAL QUALITY - INMETRO**

Administrative act 371, 29 December 2009.

THE PRESIDENT OF THE NATIONAL INSTITUTE OF METROLOGY, STANDARDIZATION AND INDUSTRIAL QUALITY – “INMETRO - *INSTITUTO NACIONAL DE METROLOGIA, NORMALIZAÇÃO E QUALIDADE INDUSTRIAL*”, in exercise of its powers, conferred in § 3 of Article 4 of Law No. 5966 of 11 December 1973, in Item I of Article 3 of Law No. 9933 of 20 December 1999, and in item V of article 18 of the Regimental Structure of Authority, approved by Decree No. 6275 of 28 November 2007;

Considering the item f of sub-item 4.2 of the Terms of Reference of the Brazilian Conformity Assessment, approved by Conmetro Resolution No 04, of 02 December 2002, it confers to Inmetro the power to establish guidelines and criteria for conformity assessment activities;

Considering the accidents occurring during use of household and similar electrical appliances;

Considering the negative results of the analysis of several electrical appliances, observed in Product Analysis Program conducted by Inmetro;

Considering the need for household and similar electrical appliances, sold in the country, meet the minimum safety requirements;

Considering the decision of the National Metrology, Standardization and Industrial Quality Council - Conmetro in its 52th meeting held on April 16, 2008, to extend the compulsoriness, related to minimum safety requirements for all electrical appliances, decides to determine the following rules:

Article 1 - Approve Conformity Assessment Requirements for Household and Similar Electrical Appliances, available on www.inmetro.gov.br or at the address below:
National Institute of Metrology, Standardization and Industrial Quality - Inmetro
Division of Conformity Assessment Programs- Dipac Santa Alexandrina street, No. 416 - 8th floor - 20261-232 Rio de Janeiro / RJ

Article 2 - Certify that the Public Consultation, which originated the approved Requirements, was divulgated by Administrative act 228, 07 August 2009, published on the Federal Office Journal - DOU, on 10 August 2009, section 01, page 73.

Article 3 – Institute, according to the Brazilian System of Conformity Assessment – SBAC, the mandatory certification for household and similar electrical appliances, which should be performed by the Product Certification Organization – OCP, accredited by Inmetro, according to the agreements approved beforehand.

Sole Paragraph: These requirements do not cover household and similar electrical appliances, since they were already covered by other programs of Conformity Assessment developed by Inmetro.

Article 4 - Determine that, from 1 July 2011, the manufacturing and importation of appliances mentioned above, at the national level, should be in accordance with the requirements approved herein.

Sole Paragraph – From July 1, 2012, the appliances mentioned above should be traded in national market, by manufacturers and importers only in accordance with the requirements approved herein.

Article 5 – Determine that, from January 1, 2013, the commercialization of the appliances mentioned above in national market should be in accordance with the requirements approved herein.

Sole Paragraph – The determination referred in the caput of this article should not be applied to manufacturers and importers, who must observe the deadlines established in the previous article.

Article 6 – Determine that violations of this Administrative act or the Requirements approved here, shall subject the violator to the penalties provided for by Law number 9933 of 20 December 1999.

Sole Paragraph: The inspection, in charge of Inmetro and public bodies related to it by agreement of delegation shall observe the deadlines established in the articles 4 and 5 of the Administrative act.

Article 7 – This Administrative act will go into effect on the date of its publication in the Federal Office Journal.

JOÃO ALZIRO HERZ DA JORNADA

ATTACHMENT OF INMETRO ADMINISTRATIVE ACT NUMBER 371/2009.
REQUIREMENTS FOR SAFETY CONFORMITY ASSESSMENT OF HOUSEHOLD
AND SIMILAR ELECTRICAL APPLIANCES.

1 OBJECTIVE

Establish criteria for the Safety Conformity Assessment Program of Household and Similar Electrical Appliances, focusing on security requirements, through the mechanism of certification, meeting the requirements of rule ABNT NBR NM 60335-1 or IEC 60335-1 - General Requirements, and rules for specific requirements of ABNT NBR NM 60335-2-X or IEC 60335-2-X applied to the product, in order to prevent Consumption-related accidents and protect consumers from electrical, mechanical, thermal, fire and radiation risks when in normal use.

This RAC refers to the safety of household and similar electrical appliances with nominal voltage not exceeding 250 V for single phase appliances, and 480 V for other appliances.

The products applied to this RAC are those included within the scope of ABNT NBR NM, NM series or IEC 60335-2-x listed in Section 2.1, being excluded, however, specific object products from the Conformity Assessment Program already developed by Inmetro, listed in item 1.1.

Appliances not intended for normal household use, but which nevertheless can be a source of danger to the public, such as appliances destined for the use by laypersons in shops, workshops, light industry or on farms, are within this RAC.

NOTE 1: Examples of such devices are industrial cooking equipment, cleaning appliances for industrial and commercial use, gardening equipment, and beauty salon appliances.

1.1. This RAC does not apply to:

- Appliances destined exclusively for industrial purposes;
- Equipment destined for use in locations where special conditions prevail, such as explosive atmosphere (dust, vapor or gas);
- Equipment for audio and video, and similar electronic equipment (covered by IEC 60065);
- Equipment destined for medical care (covered by IEC 60601);
- Motor operated portable electrical tools covered by IEC 60745);
- Personal computers and similar equipment (covered by IEC 60950);
- Motor operated semi-stationary power tools (covered by IEC 61029);
- Devices that already covered by specific Conformity Assessment Programs conducted by Inmetro, as described below:
 - Drinking Fountains– Regulation on Conformity Assessment for Drinking Fountains, Inmetro Administrative act number 191, of 10 December 2003.
 - Domestic gas stoves - Regulation on Conformity Assessment for Domestic Gas

Stoves, Inmetro Administrative act number 18, of 15 January 2008.

- Electric Showers - Regulation on Conformity Assessment for Electric Showers - Inmetro Administrative act number. 211, of 19 June 2008;
- Household refrigerators (refrigerators and freezers) - Regulation on Conformity Assessment for Household Refrigerators, In metro Administrative act number 20, of 01 February 2006.
- Air conditioners (window and split) - Regulation on Conformity Assessment for Air conditioners (window and split), Inmetro Administrative act number 215, of July 2009.
- Washing machines - Regulation on Conformity Assessment for Washing Machines, Inmetro Administrative act number 185, of 15 September 2005.
- Ceiling Fans - Regulation on Conformity Assessment for Ceiling Fans, Inmetro Administrative act number 113, of 07 April 2008.
- Appliances already covered by other Inmetro Conformity Assessment Programs to be implemented;
- Table fans;
- Oven and electric ovens;
- Microwave ovens;
- Drying machines and centrifuges;
- Wine cellars;
- Commercial freezers and cold storages;
- Hybrid heaters, heat pumps, whirlpools (pump).

2 REGULATORY AND ADDITIONAL DOCUMENTS

2.1 REGULATORY DOCUMENTS

Each appliance covered by this RAC shall meet the IEC 60335-1 rule, of General Requirements, as well as meeting the pertinent rule of Specific Requirements.

When applying this RAC, the normative documents listed below are applicable, either in English version, issued by IEC, or in Portuguese version, issued by ABNT.

The annex C of this RAC has national deviations that must be applied to the normative documents below.

- ABNT NBR NM 60335-1 – Segurança de Aparelhos Eletrodomésticos e Similares, Parte-1: Requisitos Gerais;
- NM 60335-1 - Segurança de Aparelhos Eletrodomésticos e Similares, Parte-1: Requisitos Gerais;
- IEC 60335-1 - Household and similar electrical appliances - Safety - Part 1: General Requirements;
- IEC 60335-2-2 - Household and similar electrical appliances – Safety – Part 2-2: Particular requirements for vacuum cleaners and water-suction cleaning appliances;
- ABNT NBR NM IEC 60335-2-2 - Segurança de aparelhos eletrodomésticos e similares – Parte 2-2: Requisitos particulares para aspiradores de pó e aparelhos de limpeza por sucção de água;
- IEC 60335-2-3 - Household and similar electrical appliances – Safety – Part 2-3: Particular requirements for electric irons;
- ABNT NBR NM 60335-2-3 - Segurança de aparelhos eletrodomésticos e similares - Parte 2: Requisitos particulares para ferros elétricos de passar roupa;
- IEC 60335-2-4 - Household and similar electrical appliances - Safety - Part 2-4:

Particular requirements for spin extractors;

Note: This RAC does not apply to products under the scope of this rule that are covered by another Conformity Assessment Program conducted by Inmetro, such as those listed in item 1.1

- IEC 60335-2-5 - Household and similar electrical appliances - Safety - Part 2-5:

Particular requirements for dishwashers;

Note: This RAC does not apply to products under the scope of this rule that are covered by another Conformity Assessment Program conducted by Inmetro, such as those listed in item 1.1

- IEC 60335-2-6 - Household and similar electrical appliances - Safety - Part 2-6:

Particular requirements for stationary cooking ranges, hobs, ovens and similar appliances; Nota: Este RAC não é aplicável aos produtos do escopo desta norma que estejam cobertos por outro programa de avaliação da conformidade conduzido pelo Inmetro como, por exemplo, aqueles listados no item 1.1.

- IEC 60335-2-7 - Household and similar electrical appliances - Safety - Part 2-7:

Particular requirements for washing machines;

Note: This RAC does not apply to products under the scope of this rule that are covered by another Conformity Assessment Program conducted by Inmetro, such as those listed in item 1.1

- ABNT NBR NM 60335-2-8 - Segurança de aparelhos eletrodomésticos e similares – Parte 2: Requisitos particulares para barbeadores elétricos, cortadores de cabelo e aparelhos similares;

- IEC 60335-2-8 - Household and similar electrical appliances - Safety - Part 2-8: Particular requirements for shavers, hair clippers and similar appliances;

- ABNT NBR NM 60335-2-9 - Segurança de aparelhos eletrodomésticos e similares - Parte 2: Requisitos particulares para tostadores, grills e aparelhos similares;

- IEC 60335-2-9 - Household and similar electrical appliances - Safety - Part 2-9: Particular requirements for grills, toasters and similar portable cooking appliances;

- ABNT NBR NM IEC 60335-2-10 Segurança de aparelhos eletrodomésticos e similares – Parte 2: Requisitos particulares para máquinas de tratamento de piso e de lavagem por esfregamento a úmido;

- IEC 60335-2-10 - Household and similar electrical appliances - Safety - Part 2-10: Particular requirements for floor treatment machines and wet scrubbing machines;

- IEC 60335-2-11 - Household and similar electrical appliances - Safety - Part 2-11: Particular requirements for tumble dryers;

Note: This RAC does not apply to products under the scope of this rule that are covered by another Conformity Assessment Program conducted by Inmetro, such as those listed in item 1.1

- IEC 60335-2-12 - Household and similar electrical appliances - Safety - Part 2-12: Particular requirements for warming plates and similar appliances;

- ABNT NBR NM IEC 60335-2-13 Segurança de aparelhos eletrodomésticos e similares – Parte 2: Requisitos particulares para fritadeiras, frigideiras e aparelhos similares;

- IEC 60335-2-13 - Household and similar electrical appliances - Safety - Part 2-13: Particular requirements for deep fat fryers, frying pans and similar appliances;

- IEC 60335-2-14 - Household and similar electrical appliances - Safety - Part 2-14: Particular requirements for kitchen machines;
- IEC 60335-2-15 - Household and similar electrical appliances - Safety - Part 2-15: Particular requirements for appliances for heating liquids;
- IEC 60335-2-16 - Household and similar electrical appliances - Safety - Part 2-16: Particular requirements for food waste disposers;
- IEC 60335-2-17 - Household and similar electrical appliances - Safety - Part 2-17: Particular requirements for blankets, pads and similar flexible heating appliances;
- IEC 60335-2-21 - Household and similar electrical appliances - Safety - Part 2-21: Particular requirements for storage water heaters;
- ABNT NBR NM IEC 60335-2-23 Segurança de aparelhos eletrodomésticos e similares – Parte 2: Requisitos particulares para aparelhos para cuidado da pele ou cabelo;
- IEC 60335-2-23 - Household and similar electrical appliances - Safety - Part 2-23: Particular requirements for appliances for skin or hair care;
- IEC 60335-2-24 - Household and similar electrical appliances - Safety - Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice-makers; Nota: Este RAC não é aplicável aos produtos do escopo desta norma que estejam cobertos por outro programa de avaliação da conformidade conduzido pelo Inmetro como, por exemplo, aqueles listados no item 1.1.
- IEC 60335-2-25 - Household and similar electrical appliances - Safety - Part 2-25: Particular requirements for microwave ovens, including combination microwave ovens; Note: This RAC does not apply to products under the scope of this rule that are covered by another Conformity Assessment Program conducted by Inmetro, such as those listed in item 1.1

- ABNT NBR NM IEC 60335-2-25 - Segurança de aparelhos eletrodomésticos e similares – Parte 2: Requisitos particulares para fornos microondas
Note: This RAC does not apply to products under the scope of this rule that are covered by another Conformity Assessment Program conducted by Inmetro, such as those listed in item 1.1

- IEC 60335-2-26 - Household and similar electrical appliances - Safety - Part 2-26: Particular requirements for clocks;
- IEC 60335-2-27 - Household and similar electrical appliances - Safety - Part 2-27: Particular requirements for skin exposure to ultraviolet and infrared radiation;
- NBR IEC 60335-2-27 - Segurança de aparelhos eletrodomésticos e similares - Parte 2: Requisitos particulares para aparelhos de exposição da pele à radiação ultravioleta e infravermelho;
- IEC 60335-2-28 - Household and similar electrical appliances - Safety - Part 2-28: Particular requirements for sewing machines;
- IEC 60335-2-29 - Household and similar electrical appliances - Safety - Part 2-29: Particular requirements for battery chargers;
- IEC 60335-2-30 - Household and similar electrical appliances - Safety - Part 2-30: Particular requirements for room heaters;
- IEC 60335-2-31 - Household and similar electrical appliances - Safety - Part 2-31: Particular requirements for range hoods;
- IEC 60335-2-32 - Household and similar electrical appliances - Safety - Part 2-32: Particular requirements for massage appliances;
- IEC 60335-2-34 - Household and similar electrical appliances - Safety - Part 2-34:

Particular requirements for motor-compressors;

- NM 60335-2-34 - Segurança de aparelhos eletrodomésticos e similares - Parte 2:

Requisitos particulares para motocompressores;

- NBR NM 60335-2-34 - Segurança de aparelhos eletrodomésticos e similares - Parte 2:

Requisitos particulares para motocompressores;

- IEC 60335-2-35 - Household and similar electrical appliances - Safety - Part 2-35:

Particular requirements for instantaneous water heaters;

Note: This RAC does not apply to products under the scope of this rule that are covered by another Conformity Assessment Program conducted by Inmetro, such as those listed in item 1.1

- IEC 60335-2-36 - Household and similar electrical appliances - Safety - Part 2-36:

Particular requirements for commercial electric cooking ranges, ovens, hobs and hob elements;

- IEC 60335-2-37 - Household and similar electrical appliances - Safety - Part 2-37:

Particular requirements for commercial electric deep fat fryers;

- IEC 60335-2-38 - Household and similar electrical appliances - Safety - Part 2-38:

Particular requirements for commercial electric griddles and griddles grill;

- IEC 60335-2-39 - Household and similar electrical appliances - Safety - Part 2-39:

Particular requirements for commercial electric multi-purpose cooking pans;

- IEC 60335-2-40 - Household and similar electrical appliances - Safety - Part 2-40:

Particular requirements for electrical heat pumps, air conditioners and dehumidifiers;

Note: This RAC does not apply to products under the scope of this rule that are covered by another Conformity Assessment Program conducted by Inmetro, such as those listed in item 1.1

- IEC 60335-2-41 - Household and similar electrical appliances - Safety - Part 2-41:

Particular requirements for pumps;

- IEC 60335-2-42 - Household and similar electrical appliances - Safety - Part 2-42:

Particular requirements for commercial electric forced convection oven, steam cookers and steam-convection ovens;

- IEC 60335-2-43 - Household and similar electrical appliances - Safety - Part 2-43:

Particular requirements for clothes dryers and towel rails;

- ABNT NBR NM IEC 60335-2-43 - Segurança de aparelhos eletrodomésticos e similares – Parte 2: Requisitos particulares para secadoras de roupa com varal e fluxo de ar quente;

- IEC 60335-2-44 - Household and similar electrical appliances - Safety - Part 2-44:

Particular requirements for ironers;

- IEC 60335-2-45 - Household and similar electrical appliances - Safety - Part 2-45:

Particular requirements for portable heating tools and similar appliances;

- NM 60335-2-45 - Segurança de aparelhos eletrodomésticos e similares - Parte 2:

Requisitos particulares para ferramentas móveis de aquecimento e aparelhos similares;

- NBR NM 60335-2-45 - Segurança de aparelhos eletrodomésticos e similares - Parte 2:

Requisitos particulares para ferramentas móveis de aquecimento e aparelhos similares;

- IEC 60335-2-47 - Household and similar electrical appliances - Safety - Part 2-47:

Particular requirements for commercial electric boiling pans;

- IEC 60335-2-48 - Household and similar electrical appliances - Safety - Part 2-48:

Particular requirements for commercial electric grillers and toasters;

- IEC 60335-2-49 - Household and similar electrical appliances - Safety - Part 2-49:

Particular requirements for commercial electric hot cupboards;

- IEC 60335-2-50 - Household and similar electrical appliances - Safety - Part 2-50: Particular requirements for commercial electric bains-marie;
- IEC 60335-2-51 - Household and similar electrical appliances - Safety - Part 2-51: Particular requirements for stationary circulation pumps for heating and service water installations;
- IEC 60335-2-52 - Household and similar electrical appliances - Safety - Part 2-52: Particular requirements for oral hygiene appliances;
- IEC 60335-2-53 - Household and similar electrical appliances - Safety - Part 2-53: Particular requirements for sauna heating appliances;
- IEC 60335-2-54 - Household and similar electrical appliances - Safety - Part 2-54: Particular requirements for surface-cleaning appliances for household use employing liquids on steam;
- IEC 60335-2-55 - Household and similar electrical appliances - Safety - Part 2-55: Particular requirements for electrical appliances for use with aquariums and garden ponds;
- IEC 60335-2-56 - Household and similar electrical appliances - Safety - Part 2-56: Particular requirements for projectors and similar appliances;
- IEC 60335-2-58 - Household and similar electrical appliances - Safety - Part 2-58: Particular requirements for commercial electric dishwashing machines;
- IEC 60335-2-59 - Household and similar electrical appliances - Safety - Part 2-59: Particular requirements for insect killers;
- IEC 60335-2-60 - Household and similar electrical appliances - Safety - Part 2-60: Particular requirements for whirlpool baths and whirlpool spas;
- IEC 60335-2-61 - Household and similar electrical appliances - Safety - Part 2-61: Particular requirements for thermal storage room heaters;
- IEC 60335-2-62 - Household and similar electrical appliances - Safety - Part 2-62: Particular requirements for commercial electric rinsing sinks;
- IEC 60335-2-64 - Household and similar electrical appliances - Safety - Part 2-64: Particular requirements for commercial electric kitchen machines;
- IEC 60335-2-65 - Household and similar electrical appliances - Safety - Part 2-65: Particular requirements for air cleaning appliances;
- IEC 60335-2-66 - Household and similar electrical appliances - Safety - Part 2-66: Particular requirements for water-bed heaters;
- IEC 60335-2-67 - Household and similar electrical appliances - Safety - Part 2-67: Particular requirements for floor treatment and floor cleaning machines for industrial and commercial use;
- IEC 60335-2-68 - Household and similar electrical appliances - Safety - Part 2-68: Particular requirements for spray extraction appliances for industrial and commercial use;
- IEC 60335-2-69 - Household and similar electrical appliances - Safety - Part 2-69: Particular requirements for wet and dry vacuum cleaners, including power brush for industrial and commercial use;
- IEC 60335-2-70 - Household and similar electrical appliances - Safety - Part 2-70: Particular requirements for milking machines;
- IEC 60335-2-71 - Household and similar electrical appliances - Safety - Part 2-71: Particular requirements for electrical heating appliances for breeding and rearing animals;
- IEC 60335-2-72 - Household and similar electrical appliances - Safety - Part 2-72: Particular requirements for automatic machines for floor treatment for commercial and

industrial use;

- IEC 60335-2-73 - Household and similar electrical appliances - Safety - Part 2-73: Particular requirements for fixed immersion heaters;
- IEC 60335-2-74 - Household and similar electrical appliances - Safety - Part 2-74: Particular requirements for portable immersion heaters;
- IEC 60335-2-75 - Household and similar electrical appliances - Safety - Part 2-75: Particular requirements for commercial dispensing appliances and vending machines;
- NBR IEC 60335-2-76 Segurança de aparelhos eletrodomésticos e similares - Parte 2: Requisitos particulares para eletrificadores de cerca;
- IEC 60335-2-76 - Household and similar electrical appliances - Safety - Part 2-76: Particular requirements for electric fence energizers;
- IEC 60335-2-77 - Household and similar electrical appliances - Safety - Part 2-77: Particular requirements for pedestrian controlled mains-operated lawnmowers;
- IEC 60335-2-78 - Household and similar electrical appliances - Safety - Part 2-78: Particular requirements for outdoor barbecues;
- IEC 60335-2-79 - Household and similar electrical appliances - Safety - Part 2-79: Particular requirements for high pressure cleaners and steam cleaners;
- ABNT NBR 11829 Segurança de aparelhos eletrodomésticos e similares – Requisitos particulares para ventiladores;

Note: This RAC does not apply to products under the scope of this rule that are covered by another Conformity Assessment Program conducted by Inmetro, such as those listed in item 1.1

- IEC 60335-2-80 - Household and similar electrical appliances - Safety - Part 2-80: Particular requirements for fans;

Note: This RAC does not apply to products under the scope of this rule that are covered by another Conformity Assessment Program conducted by Inmetro, such as those listed in item 1.1

- IEC 60335-2-81 - Household and similar electrical appliances - Safety - Part 2-81: Particular requirements for foot warmers and heating mats;
- IEC 60335-2-82 - Household and similar electrical appliances - Safety - Part 2-82: Particular requirements for amusement machines and personal services machines;
- IEC 60335-2-83 - Household and similar electrical appliances - Safety - Part 2-83: Particular requirements for heated gullies for roof drainage;
- IEC 60335-2-84 - Household and similar electrical appliances - Safety - Part 2-84: Particular requirements for toilets;
- IEC 60335-2-85 - Household and similar electrical appliances - Safety - Part 2-85: Particular requirements for fabric steamers;
- IEC 60335-2-86 - Household and similar electrical appliances - Safety - Part 2-86: Particular requirements for electric fishing machines;
- IEC 60335-2-87 - Household and similar electrical appliances - Safety - Part 2-87: Particular requirements for electrical animal-stunning equipment;
- IEC 60335-2-88 - Household and similar electrical appliances - Safety - Part 2-88: Particular requirements for humidifiers intended for use with heating, ventilation or air-conditioning systems;
- IEC 60335-2-89 - Household and similar electrical appliances - Safety - Part 2-89: Particular requirements for commercial refrigerating appliances with an incorporated or remote refrigerant condensing unit or compressor;
- IEC 60335-2-90 - Household and similar electrical appliances - Safety - Part 2-90: Particular requirements for commercial microwave ovens;

- IEC 60335-2-91 - Household and similar electrical appliances - Safety - Part 2-91: Particular requirements for walk-behind and hand-held lawn trimmers and lawn edge trimmers;
- IEC 60335-2-92 - Household and similar electrical appliances - Safety - Part 2-92: Particular requirements for pedestrian-controlled mains-operated lawn scarifiers;
- IEC 60335-2-94 - Household and similar electrical appliances - Safety - Part 2-94: Particular requirements for scissor type grass shears;
- IEC 60335-2-95 - Household and similar electrical appliances - Safety - Part 2-95: Particular requirements for drives for vertically moving garage doors for residential use;
- IEC 60335-2-96 - Household and similar electrical appliances - Safety - Part 2-96: Particular requirements for flexible sheet heating elements for room heating;
- IEC 60335-2-97 - Household and similar electrical appliances - Safety - Part 2-97: Particular requirements for drives for rolling shutters, awnings, blinds and similar equipment;
- IEC 60335-2-98 - Household and similar electrical appliances - Safety - Part 2-98: Particular requirements for humidifiers;
- IEC 60335-2-99 - Household and similar electrical appliances - Safety - Part 2-99: Particular requirements for commercial electric hoods;
- IEC 60335-2-100 - Household and similar electrical appliances - Safety - Part 2-100: Particular requirements for hand-held mains-operated garden blowers, vacuums and blower vacuums;
- IEC 60335-2-101 - Household and similar electrical appliances - Safety - Part 2-101: Particular requirements for vaporizers;
- IEC 60335-2-102 - Household and similar electrical appliances - Safety - Part 2-102: Particular requirements for gas, oil and solid-fuel burning appliances having electrical connections;
- IEC 60335-2-103 - Household and similar electrical appliances - Safety - Part 2-103: Particular requirements for drives for gates, doors and windows;
- IEC 60335-2-104 - Household and similar electrical appliances - Safety - Part 2-104: Particular requirements for appliances to recover and/or recycle refrigerant from air conditioning and refrigeration equipment;
- IEC 60335-2-105 - Household and similar electrical appliances - Safety - Part 2-105: Particular requirements for multifunctional shower cabinets;
- IEC 60335-2-106 - Household and similar electrical appliances - Safety - Part 2-106: Particular requirements for heated carpets and for heating units for room heating installed under removable floor coverings.

General Note: The NBR version of IEC correspondent that is being developed by the ABNT/CB03 Study Commission, when published, will be included in future updates of this RAC.

2.1.1 At the discretion of the manufacturer / importer up to 12/31/2011, this RAC considers the possibility of using as the normative standard ABNT NBR NM 60335-1 / 2006 (and SB 60335-1/2006) – Household and Similar Electrical Appliances Security Part-1: General Requirements. After this time only the version 4 of IEC 60335-1:2006 or NBR (or NM) equivalent and its special requirements will be accepted.

It is considered that the use specific requirement rules shall be made only in compatible versions with the general part (60335-1) up to the moment when only the version 4 is accepted.

2.1.2. The issuance of the certificate of the product by OCP should indicate the version of the rule used when assessing.

2.2 ADDITIONAL DOCUMENTS

ABNT/ISO/IEC Guide 2: 1998	Standardization and Related Activities - General Vocabulary
ABNT/ISO/IEC Guide 65: 1998	General requirements for bodies operating certification systems for products
ABNT NBR 5426:1985	Sampling plan and procedures for inspection by attributes
ABNT NBR ISO 9001:2008	Quality Management Systems - Requirements
Inmetro Administrative Act 27/2000	Household low voltage electrical device
Inmetro Administrative Act 179/2009	Regulation for the use of Trademarks, Accreditation Symbols, Recognition of Compliance with the Principles of Good Laboratory Practice - BPL and Inmetro Identification Stamps

3 SIGLAS

	Portuguese	English
ABNT	Associação Brasileira de Normas Técnicas	Brazilian Association of Technical Rules
Cgcre	Coordenação Geral de Acreditação do Inmetro	General Coordination for Accreditation of Inmetro
CNPJ	Cadastro Nacional de Pessoa Jurídica	National Registry of Legal Entities
IEC	International Electrotechnical Commission	International Electro technical Commission
Inmetro	Instituto Nacional de Metrologia, Normalização e Qualidade Industrial	National Institute of Metrology, Standardization and Industrial Quality
ISO	International Organization for Standardization	International Organization for Standardization
MoU	Memorandum of Understanding (Memorando de Entendimento)	Memorandum of Understanding
NBR	Norma Brasileira	Brazilian Standard
NM	Norma Mercosul	Mercosul Standard
CER	Organismo de Avaliação da Conformidade	Conformity Assessment Office
OCP	Organismo de Certificação de Produtos	Product Certification Office
RAC		Conformity Assessment Requirements
ILAC		International Laboratory Accreditation Cooperation

4 DEFINITIONS

On this RAC, will be used definitions of the rule NBR NM ABNT 60335-1/2006 and IEC 60335-1/2006, and rules 11,829 ABNT NBR, NBR IEC 60335-2 / X, NM IEC 60335 - 2 / IEC 60335-2 X / X (see item 2.1), and the definitions from 4.1 to 4.5

4.1 Product Packaging

Package containing the product for marketing to the final consumer.

4.2 Manufacturer

Legal entity that develops manufacturing production, creation, construction or transformation of the regulated product.

4.3 Family

Assembly of products manufactured in the same factory, destined to the same function, and which necessarily satisfy the following conditions:

- Have the same basic design (parts or assemblies essential for safety in common) in terms of: applied technology, mechanical characteristics of plastic shell, and plastic and metallic materials used for fixing, finishing and insulation;
- Differ in the electrical characteristics of nominal input (127 V or 220 V) and the use of secondary or ancillary functions.

4.4 Lot

Set of appliances from the same family, defined and identified by the solicitor.

4.5 Solicitor

Manufacturer company or importer of the regulated product, which requires the Authorization for Use of Conformity Identification Seal, which can be the manufacturer itself.

5 MECHANISM OF CONFORMITY ASSESSMENT REQUIREMENTS

The mechanism of Conformity Assessment requirements used in this RAC is compulsory. RAC allows the choice of 02 (two) different systems for obtaining and maintaining authorization for the use of the Conformity Identification Seal : the certification testing and evaluation of the management system for quality of manufacturing (item 6.1) and certification by lot (item 6.2).

All stages of certification systems provided in this RAC must be conducted by the OCP, including the selection of laboratory tests, as provided in Chapter 12.

6 STAGES OF THE CONFORMITY ASSESSMENT PROCESS

6.1 Certification Testing and Evaluation of the Management System for Quality of Manufacturing

6.1.1 Initial Evaluation

6.1.1.1 Request to initiate proceedings

The solicitor contacts a body accredited conformity assessment to the standards laid down in this CAR are applicable to their product list as available at site of Quality Control, and answers to the following:

- a) The request must be on the model or family of appliances and the like.
- b) The applicant must establish that the certification system selected, as Chapter 5 of this RAC.
- c) The applicant must indicate the version of the standard you want to use the certification process.

The solicitor must contact the Product Certification Rule accredited for the rules applied to its product, determined on this RAC according to the list available at Inmetro's webpage, and answer the following procedure:

- a-) The solicitation must be related to the model or family of household and similar electrical appliances.
- b) The solicitor must define which certification system will be chosen, according to the chapter 5 of this RAC.
- c) the solicitor must indicate with version of the rule will be used in the certification process.

6.1.1.2 Analysis of the solicitation and documentation

The OCP analyzes the solicitation and informs the solicitor about the necessary documentation, including at least:

- Composition of the family and the similarity between the models;
- Lists of components and their suppliers, informing about those already certified;
- Electric schemes;
- Assembly drawings or photographic records of the product and subassemblies;
- Instruction manual
- Identification labels
- Design , final Art, or picture of the individual packaging
- Technical documentation of printed circuit boards (when applicable);

6.1.1.3 Initial Audit

6.1.1.3.1 After reviewing documentation, the OCP programs and plans the Initial Audit Management for Quality of Manufacturing System.

6.1.1.3.2 Initial Audit Management for Quality of Manufacturing System. must be done by OCP based on the scope of the certification process, and according to the requirements of ABNT NBR ISO 9001:2008 defined below in 6.1.1.3.4.

6.1.1.3.3 It is part of those assessments the monitoring of the manufacturing of product models incorporating the scope of certification, and confirmation that the

routine tests defined in Section 6.1.7 are being executed.

6.1.1.3.4 The requirements given in ISO 9001:2008 to be verified in the audit are set out below:

Requirement	Item
Records control	4.2.4
Production control	7.5.1 e 7.5.2
Verification of purchased product	7.4.3
Product identification and traceability	7.5.3
Product preservation	7.5.5
Control of Measuring and monitoring devices	7.6
Complaints dealing	8.2.1
Product monitoring and measurement	8.2.4
Control of nonconforming product	8.3
Corrective action	8.5.2

6.1.1.3.5 If the manufacturer has a Management Quality System certified by an OCS (Office of Systems Certification) accredited by Inmetro, according to the standard ISO 9001:2008 ABNT, the OCP should review the relevant documentation to the Management Quality System, noting that the requirements described above are evaluated in the process of manufacturing to be certified. Otherwise, the OCP should verify compliance with requirements described in paragraph 6.1.1.3.4.

6.1.1.3.6 If the initial audit identifies that any requirement set out in 6.1.1.3.4 is not being applied (non-compliance), the OCP should ask the manufacturer to take appropriate action to remedy it. Therefore, the OCP should establish a deadline for this adaptation.

6.1.1.3.7 At the discretion of OCP, a new audit may be required to verify the implementation of the actions taken to remedy the non-complied requirements identified.

6.1.1.4 Initial Tests

6.1.1.4.1 The OCP must collect representative samples of manufacturer's assembly line, as defined in the Plan of Tests to start the initial tests for each of the product families characterized. The sample must be identified, sealed and sent to a testing laboratory. This sample must meet the requirements for the implementation of the tests prescribed in the general and particular rules, mentioned in section 2.1, applied

for the product. If additional samples are required, the OCP should make a new collection. When collecting samples, the OCP shall prepare a report of sampling, detailing the location and conditions under which the sample was obtained.

Note: In case of prototypes, the manufacturer can collect and forward the sample to the laboratory / OCP, if agreed by them, and under the responsibility of the OCP. The approval of the prototype in initial tests does not release the OCP to validate the products after the initial operation of the assembly line.

6.1.1.4.2 Samples should be tested and verified in accordance with the Test Plan determined by the OCP, in a test laboratory chosen according to the requirements established on Chapter 12 of this RAC.

6.1.1.4.3 If the results of the tests present non-compliance with the requirements of the rules, the OCP should request further testing, after correction of the causes that led to failure of the product. If there is failure in one part of a product that interferes with the construction of the product as a whole, OCP should request that the modified product is subjected to all tests established in specific and general rules, mentioned on 2.1, applied to the product. Otherwise, should only be performed tests whose results are affected by the changes, being under the responsibility of the OCP to make such decision.

6.1.1.4.4 Is the responsibility of the OCP, based on analysis of different types of construction, accessories and / or variations / models allowed within the family, to set the Test Plan, according to the rules applied to the product, as well as the number of samples to be collected.

6.1.1.4.5 The Test Plan must consider complete test plan, according to the general and specific rules, in the sample of the equipment that represents the most complete and the most unfavorable configuration of the family.

6.1.1.4.6 Variations / models within the family, where there is significance for safety, must be verified on representative samples of these variations / models, in the relevant tests to these varying characteristics.

6.1.1.4.7 Variations should be considered when it comes to: input and output nominal data, layouts, insulation system, power supplies, use of engines, system/components under pressure, heating components/systems, mass, volume and others.

6.1.1.4.8 Additional tests for orientation, to be applied when there is difference in the componet related to the base model, according to the following sequence:

Component	Chapters of rules considered in chapter 2 of this RAC to be verified, if applicable.
Compressor/motor	8, 10, 11, 13, 15, 16, 19*, 21, 22, 23, 24*, 27, 28, 29, 30*
Thermostat	8, 11, 13, 15, 16, 21, 22, 23, 24*, 27, 28, 29, 30*

Pressostatic Valve	8, 10, 11, 13, 15, 16, 19*, 21, 22, 23, 24*, 27, 28, 29, 30*
Plastic Cabinets	20, 21, 22, 23, 30
Switch	8, 11, 13, 15, 16, 21, 22, 23, 24*, 27, 28, 29, 30*
Fan	8, 10, 11, 13, 15, 16, 19*, 21, 22, 23, 24*, 17, 18, 19, 30*
Cabinet	8, 11, 13, 15, 16, 20, 22, 25
Resistance	8, 10, 11, 13, 15, 16, 19, 21, 22, 23, 27, 28, 29, 30*
Reactor	8, 10, 11, 13, 15, 16, 19*, 21, 22, 23, 27*, 28, 29, 30*
Transformer	8, 10, 11, 13, 15, 16, 17, 19, 21, 22, 23, 27, 28, 29, 30*
Printed Circuit Board with components	10, 11, 13, 15, 16, 19, 29, e 30*
* = applicable if the component is not certified according to SBAC	

6.1.1.5 Issuance of the Certificate of Compliance

6.1.1.5.1 The issuance of the Certificate of Compliance and the Authorization for use of Conformity Identification Seal should only be granted to the solicitor, after the consolidation and approval of testing and audits, as well as the other requirements of items 6.1.1.3 e 6.1.1.4.

6.1.1.5.2 The OCP Accreditation Commission, through the analysis of information presented in the process, must give its opinion on the recommendation of certification. The OCP must issue the certificate and provide guidance to the manufacturer and the solicitor related to the use of Conformity Identification Seal, given the requirements of Chapter 8 of this RAC.

6.1.2 Maintenance Evaluation

6.1.2.1 Maintenance Audit

6.1.2.1.1 A periodic evaluation of the Management Quality System of manufacturing must be done annually, after being granted the Authorization for use of Conformity Identification Seal; there may be special auditing if justified.

6.1.2.1.2 The Maintenance Audit must include all the requirements described on 6

6.1.2.2 Maintenance Testing

6.1.2.2.1 It is the responsibility of the OCP, based on analysis of different types of construction, accessories and / or variations allowed within the family, to determine the tests for each rule applicable to the product, as well as the maintenance test plan to be carried out annually in their samples to be collected, using as reference the date of Authorization for use of Conformity Identification Seal.

6.1.2.2.2 The maintenance tests must be performed annually in different models of family, when it is formed by more than one model. In other words, the model for maintenance tests can not be the same every year.

6.1.2.2.3 The OCP is allowed to conduct tests before 12 (twelve) months, since they are justified for changes in the productive process or due to complaints about the product.

6.1.2.2.4 The tests must be performed in laboratories, according the agreements on chapter 12 of this RAC.

6.1.2.2.5 The annual maintenance tests must comply with all the items of the rules (general and specific) for at least one model that represents a family.

6.1.2.2.6 Additional tests for other models may be required in case of a variation on the supply voltage, being OCP in charge of its definition according to the Tests Plans established. They must include the following rules: 7 – 10 – 11 – 15 – 16 – 19 – 23 – 25.

6.1.2.2.7 The sample must be collected randomly from each family of the certified products in turns in production, distribution center and trade, whereas it is possible to apply all the necessary tests arranged for the year. This choice is made by the OCP, without the prior knowledge of the manufacturer, according to the Test Plans. This collection provides a sample for testing, rebuttal and witness, all belonging to the same manufacturing lot. The rebuttal and witness samples, according to the OCP, may remains with the manufacturer/importer as a trustee and must be forwarded for testing in case of failure of the sample used in the evidence test.

6.1.2.2.8 After confirmation of non-compliance in any of the maintenance tests, they must be repeated in two samples characterized as a rebuttal and witness, not being allowed the observation of any non-compliance. **Note:** If the OCP deems appropriate, and in accordance with the manufacturer, the non-compliance can be confirmed without the tests in rebuttal witness.

6.1.2.2.9 When confirming the non-compliance, the OCP shall immediately suspend the authorization for Authorization for use of Conformity Identification Seal of the specific families, requesting the manufacturer to provide repair, with the definition of corrective actions and deadlines for implementation.

Note: If the non-compliance found does not compromise the user security, under analysis and responsibility of the OCP, the manufacturer may not have the

Authorization for use of Conformity Identification Seal suspended, since evidence of the implementation of this action on assembly line for all the products family is provided through corrective actions.

6.1.2.3 Routine Tests

6.1.2.3.1 The routine tests for the product quality control are the responsibility of the manufacturer and must be carried out in 100% of production, in the whole product. The tests described on Annex B of this RAC are mandatory.

6.1.2.3.2 Records of these tests should be kept for OCP verification of OCP in the process of Initial Audit and Maintenance Audit.

6.1.2.4 Issuance of the Certificate of Compliance Maintenance

6.1.2.4.1 The issuance of the Certificate of Compliance Maintenance and the maintenance of the Authorization for use of Conformity Identification Seal may be granted only to the solicitor, after the consolidation and approval of testing and audits, as well as any other requirements in items 6.1.2.1, 6.1.2.2 and 6.1.2.3

6.1.2.4.2 The OCP Certification Commission, through the analysis of information presented during the stages of the process, must opine on the recommendation of certification maintenance. The OCP must issue the certificate and provide guidance to the manufacturer and the solicitor for the use of the Conformity Identification Seal, given the requirements of Chapter 8 of this RAC.

6.1.3 Treatment of deviation in the Conformity Assessment Process

6.1.3.1 If after any activity carried out by the OCP (sections 6.1.1 and 6.1.2) any non-compliant result is identified, the OCP will issue a report of non-compliance.

6.1.3.2 The manufacturer, under analysis and approval of the OCP, must repair the non-compliances adequately.

6.1.3.3 The impacts of the non-compliances in security and the need of removing the faulty products from the market must be considered.

6.2 Lot Certification System

For the system with Lot Certification, the Authorization for use of Conformity Identification Seal will be linked only to the lot of manufacture / importation evaluated, not being allowed processes for of the Authorization for use of Conformity Identification Seal.

6.2.1 Type Test for the Lot

6.2.1.1 It is the responsibility of the OCP, based on analysis of different types of construction, accessories and / or variations allowed within the family, to define the Type Test for the Lot to be used based on the rule applicable to the product, in the respective samples to be collected. The type tests are done in using the twice more samples defined as necessary for the approval tests. Test of rebuttal and witness will not be done.

6.2.1.2 The Type Test for the Lot must not present non-compliances. If it happens, new samples can not be taken from the lot.

6.2.1.3 The collection of samples for Type Tests must be done by the OCP.

6.2.1.4 If the results present non-compliance with the requirements of the general and specific rules applied to the product, mention in 2.1, the request must be dismissed. In case of failure of any models, the whole lot will be dismissed. If the OCP consider a non-compliance of all the necessary requirements for the Authorization for use of Conformity Identification Seal, it must inform the solicitor company about the faulty features.

6.2.1.5 The Type Test determined in the Lot Certification System must be done in test laboratories according to the rules on chapter 12 of this RAC.

6.2.2 Additional Lot Certification Tests

6.2.2.1 Besides the Type Tests for the Lot, lot inspection tests must also be done. The collection of samples for Lot Inspection must be done by the OCP.

6.2.2.2 It is the responsibility of the OCP, based on analysis of different types of construction, accessories and / or variations allowed within the family, to define the Lot Inspection Tests to be done based on the rule applicable to the product, in the respective samples to be collected, considering the tests described on items 7, 8, 10, 16, 20, 22, 25, 27 of general and specific rules mentioned on 2.1.

6.2.2.3 The number of samples to be tested must be determined according to the rule ABNT NBR 5426, with regular sampling plan, general inspection level and I and NQA 0,25.

6.2.2.4 The Lot Inspection Tests must not present non-compliances. In case of non-compliances, new samples from the lot will not be accepted. If it happens, the OCP must explain o the solicitor why the request was dismissed.

6.2.2.5 The Lot Inspection Tests determined in the Lot Certification System must be done in test laboratories according to the rules on chapter 12 of this RAC.

7. COMPLAINTS HANDLING

The supplier must have a system for handling complaints from customers, including the following requirements, depending on the specific object of the program:

7.1 A Policy for Complaints Handling, signed by its major representant, showing that the company:

- a) Value and give effective treatment to complaints from customers;
- b) Acknowledges and undertakes to comply with, and be subject to the penalties provided for in law (Law No. 8078/1990, Law No 9933/1999, etc.).
- c) Examines critically the results and take the appropriate measurements, according to the statistics of complaints received;
- d) Defines responsibilities for the handling of complaints;
- e) Undertakes to answer any complaint forwarded by Inmetro meeting the deadline established by it.

7.2 Development of a training program for the person or team responsible for handling complaints, as well as for any other person involved, covering at least the following topics:

- a) Regulations and rules applicable to the products, processes, services, people or management systems;
- b) Notions about the Laws 8078 of 11 September 1990, which provides for consumer protection and other measures, and 9933 of 20 December 1999, which provides for the powers of Conmetro and Inmetro, establishing the rate of metrological services, and other provisions;
- c) Understanding of interpersonal relationship;
- d) Policy for Handling Complaints;
- e) Procedure for Handling Complaints

7.3 When appropriate, separate facilities and easy access for customers who wish to make complaints, as well as signposts and posters encouraging complaints and informing on how and where to complain;

7.4 Procedure for Handling Complaints, which must include a simple form of complaint registration, as well as tracking, investigation, response, resolution and closure of complaint.

7.5 Appropriate register of every complaint presented and handled.

7.6 A chart that allows easy visualization of the situation (e.g.: under analysis, progress, current situation, closed complaint, etc.) of every complaint presented by customers during the previous 18 months;

7.7 Statistics that show the number of complaints made during the previous 18 months, and the average time for solving the problem.

7.8 Conduct monthly review of statistics on complaints and evidence of implementation of the corresponding corrective actions, as well as opportunities for improvement.

8. Conformity Identification Seal

The Conformity Identification Seal, defined in Annex A of this RAC, has the role of indicating the existence of an appropriate level of confidence that prove the products are in conformity with the rules established in this RAC, with the rules indicated in item 2.1, and must be applied according to Annex A of this RAC.

8.1 Product Marking and Packaging

8.1.1 The appliances must contain the Conformity Identification Seal in the product and on its packaging, complying with the regulations of Annex A, which must be legible and indelible.

8.1.2 Besides the Conformity Identification Seal, the product must present a legible, permanent and indelible form of identification, containing the code or product family, with explicit description of each model and the marking required by the specific and general rules, applicable to the product, mentioned on 2.1.

9. AUTHORIZATION FOR THE USE OF CONFORMITY IDENTIFICATION SEAL

The Authorization for the use of Conformity Identification Seal will be given under the approval of all the stages described on this RAC.

The Authorization for the use of Conformity Identification Seal, as well as its identification in the products, does not transfer, in any case, the responsibility of the company authorized by Inmetro and/or OCP.

9.1 Grant of Authorization

The Grant of Authorization must contain, necessarily, the following data:

- a) company name, trade name, complete address and CNPJ (federal tax number) of the solicitor or importer, in case of not being the solicitor, besides the same information of the manufacturer. Foreigners do not need to provide the CNPJ number;
- b) OCP complete information, including name, register number and signature;
- c) Authorization number for the use of Conformity Identification Seal, date of issuance and authorization validity;
- d) Identification of types and models of products covered with the respective project codes and correspondent technical rules, belonging to the same family;

f) If it is necessary to use more than one page or annexes, they must be clearly identified, referring in correspondence to numbering and coding certificate. If the certificate has any type of annex, there must contain the expression “Certificate valid only with annexes” in the document.

g) Lot identification, mandatory in case of lot certification.

9.2 Maintenance of Authorization for the use of Conformity Identification Seal

The validity of the certificate of conformity and the maintenance of Authorization for the use of Conformity Identification Seal are conditioned to the absence of non-compliance during the Maintenance Evaluation, as defined in Section 6.1.2.4 of this RAC.

9.3 Suspension or Cancellation of Authorization for the use of Conformity Identification Seal

9.3.1 The suspension or cancellation occurs when any of the requirements of item 6.1.2.4 are not met.

9.3.2. In case of cancellation of the certification process, the OCP must schedule a special audit to verify and register the following requirements:

- when the last lot was manufactured and in which quantity;
- material available in stock for new products;
- quantity of finished product in stock, and estimation from the licensed company of when this lot will be sold out.
- if the requirements determined in this RAC were met since the last monitoring audit.

9.3.3 Once the steps above are completed, the OCP shall notify its Certification Commission and Inmento about the cancellation.

9.4 Misuse of Authorization for the use of Conformity Identification Seal

9.4.1 The OCP must assure that the Conformity Identification Seal in the product, or the company’s documentation does not lead the receptors to misunderstanding.

9.4.2 It is considered improper use of the Certification - the use of the Certification and the Conformity Identification Seal – when:

- The certification has not yet been granted, or has been canceled;
- The certification has been suspended;
- In reference to products not covered by Certification.

9.5 Renouncement

9.5.1 The Company may renounce certification when the product is no longer in use, being obliged to:

- Send to OCP the document signed by its guardian or designate, informing its decision;

- Restore and no longer use of the Conformity Identification Seal;
- Dismiss the Conformity Identification Seal;
- Destroy of all advertising material that makes reference do the Certification or the identification of the Conformity Identification Seal;

9.5.2 In case of renouncement, the OCP must apply the determinations on items 9.3.2 e 9.3.3.

9.6 Reconsideration

If the company is willing to reconsider the renouncement, suspension or cancellation, it must forward to the OCP, in less than 06 (six) months from the renouncement or cancellation, a document signed by the legal representative or his designate, informing reasons that led to the current condition, and the actions taken by the Company to change this condition.

10. RESPONSIBILITIES AND DUTIES

10.1 Authorized company

10.1.1 Comply with all conditions of the general and specific rules, listed in Section 2.1 of this RAC in the legal and contractual arrangements regarding the authorization, regardless of their transcription.

10.1.2 Comply with the relevant decisions taken by the OCP certification, coming to Inmetro as last resort, in cases of complaints and appeals

10.1.3 Facilitating the OCP or its contractor, with evidence of this condition, the task of auditing and monitoring, as well as testing and other activities for certification described in this RAC.

10.1.4 Keep the technical and organizational conditions used for obtaining the Authorization for the use of the Conformity Identification Seal.

10.1.5 Give prior notification to OCP about any change in its structure that involves changing the product or production process, regarding the certified product.

10.1.6 The solicitor should be required in advance to warn the OCP when planning any change to the process or product change, so that the OCP can assess whether or not to conduct tests or verification audits

10.1.6 The solicitor must inform the OCP in advance when planning any change in the process or in the product, so that the OCP can assess whether or not to conduct new test or certifications audits.

10.1.7 Immediately notify the OCP in case of definite cessation of manufacturing, importation or trading of the certified model.

10.1.8 Keep the certified products with different encryption (code and model) from the encoding of non-certified products.

10.1.9 Submit previously to the OCP any advertising material containing the Conformity Identification Seal.

10.1.10 Cope directly with technical, civil and criminal responsibilities regarding the manufactured or imported products, as well as any other documents regarding certification, since there is no possibility of transferring this responsibility.

10.2 OCP

10.2.1 Implement the program of Conformity Assessment, described in this RAC, according to the requirements previously established, and contact Inmetro in case of any questions.

10.2.2 Use the database system provided by Inmetro to keep updated information about the certified products.

10.2.3 Immediately notify Inmetro in case of cessation, extension, reducing, and certification cancellation, through the database system provided by Inmetro.

10.2.4 Keep the authorized company updated with demands that may influence them established by Inmetro

11. PENALTIES

In case of failure to comply with the requirements established by this RAC, companies authorized to use the Conformity Identification Seal will be subject to the penalties herein. Failure to comply with the requirements included in this RAC will result in the application of penalties provided for in Article 8 of Law No. 9933 of 20 December 1999.

12. USE OF LABORATORY TEST

12.1 The tests described in the certification, as defined in Chapter 6 of this RAC, with the exception of routine tests, should be performed in third part laboratories, accredited by Inmetro for the scope of the tests referenced.

12.2 In a temporary and exceptional manner, with evaluation of the OCP, a non-accredited laboratory for the specific scope may be used, if one of the assumptions described below occurs:

Em caráter excepcional e precário, desde que condicionado a uma avaliação pelo OCP, poderá ser utilizado laboratório não acreditado para o escopo específico, quando configurada uma das hipóteses abaixo descritas:

- I. When there is no laboratory accredited by Inmetro for the scope of the program of Conformity Assessment, at the moment of promulgation related to the program;
- II. When there is only laboratory accredited by Inmetro, and the OCP conclude that the price of analysis at a non-accredited laboratory, plus the cost of evaluation of OCP, in

comparison with the accredited one, is, at least, 50% lower..

III. When the laboratories accredited by Inmetro do not meet the deadline (maximum of two months) for the start of tests determined on regulations.

Note: The evaluation done by the OCP in non-accredited laboratory, must be done according to the second Annex of NIT-DICOR-021, by an OCP professional who has previous training record on the rule ABNT NBR ISO/ IEC 17025.

12.3 When configured in one of the situations described above, the OCP must follow the following priority order in the selection of non-accredited laboratory for specific scope:

- a) Third party laboratory accredited for other scope tests;
- b) First party accredited laboratory;
- c) Third party non-accredited laboratory;
- d) First party non-accredited laboratory;

12.4 Considering the possibilities described in subparagraphs 12.2 and 12.3, the OCP must submit to Inmetro documentary evidence to justify the reasons that led it to choose the laboratory.

12.5 The OCP must keep records of evaluation done according to the annex of Inmetro rule NIT DICOR 021 for further information;

12.6 In case of hiring first party non-accredited laboratory, the OCP must monitor all the tests, each time the laboratory performs this task.

12.7 In case of hiring a third party laboratory accredited for the other scope tests, the OCP must assess the requirements of the annex to Inmetro rule NIT DICOR 021, except for items 1 to 3.

12.8 In case of tests performed by international laboratories, the equivalence of testing methods and sampling methodology established must be observed. Additionally, these laboratories must be accredited by Inmetro or by one of the following Accreditation Bodies, signatory to a mutual recognition agreement including Inmetro:

- a) Interamerican Accreditation Cooperation – IAAC
- b) European Cooperation for Accreditation – EA
- c) International Laboratory Accreditation Cooperation – ILAC

13 ACTIVITIES CARRIED OUT BY FOREIGN BODIES

13.1 The Conformity Evaluation activities can be performed by a foreign body provided the following conditions are employed:

- a) The OCP must have a MOU with the foreign body;
- b) The foreign body must be accredited by the same international rules adopted by Inmetro, for the same or equivalent scope.
- c) The activities carried out abroad must be equivalent to the ones regulated by Inmetro;

- d) The OCP must issue a certificate of compliance with Brazilian regulation and assume all responsibilities for the activities carried out abroad and the ones arising from this issue, as if it had carried out all the activities itself.
- e) The OCP must be the responsible for the judgment and concession of Conformity Certificates.
- f) Inmetro must approve the MOU.

13.2 The annual maintenance tests described on item 6.1.2.2 must be carried out in test laboratories according to what was defined in the chapter 12 of this RAC.

14. TERMINATION OF CERTIFICATION

14.1 The termination of the certification must be requested by the authorized company. The OCP must assure that the certified objects must be in conformity with the requirements of this RAC before this decision.

14.2 The OCP must program an extraordinary audit to verify and record the following requirements:

- a) when the last lots of the certified object were manufactured and their sizes;
- b) material available in stock for further productions;
- c) the amount of finished product in stock and the authorized company forecast for the consumption of this lot.
- d) if the requirements determined in this RAC were met since the last Maintenance Audit; and
- e) routine tests performed in the last lots produced.

14.3 Whenever the OCP deems necessary, it must also program the collection of samples and carry out test to evaluate the conformity of the products in stock in the factory/store.

14.4 If identified any non-compliances in the results of these tests, the OCP, before considering the process terminated, shall request the provider to start appropriate repair, defining positions and deadlines for implementation.

14.5 Once the stages below are concluded, the OCP notifies termination to Inmetro.

Annexes

ANNEX A – CONFORMITY IDENTIFICATION SEAL

A.1 The Conformity Identification Seal that must be attached to the package and to the product itself, is the one presented below.

A.2 The Conformity Identification Seal shall be provided to the solicitor by the OCP, in electronic format.

ANNEX B – Routine Tests

The routine tests are planned to be performed by the manufacturer on every device to detect changes in production that may affect safety. They are usually performed on the whole product after assembly, but the manufacturer can perform tests in an appropriate stages during production, provided that the subsequent manufacturing processes do not affect the results.

NOTE: The components should not be subjected to these tests if they were previously subjected to routine tests during its manufacturing..

The manufacturer may use a different routine test procedure, since the security level is equivalent to the one obtained by specified tests in this annex.

The tests described in this annex are considered the minimum necessary to cover the essential aspects of security. It is the responsibility of the manufacturer to decide if additional routine tests are needed. Some of these tests can be considered impractical or inappropriate through engineering considerations and, thus, do not need to be performed.

If a product fails in any of the tests, it should be re-tested after repair or adjustment.

B.1 Ground Continuity Test

*A current of at least 10 A, coming from a source with a unload voltage (idle) not exceeding 12 V (AC or DC), is circulated between each of the **accessible ground metal parts** and:*

- *The grounding terminal, in case of **class 0I appliances** and **class I appliances** set to be permanently connected to fixed wiring;*
- *for other **class I appliances***
 - *the ground pin or grounding plug contact;*
 - *the grounding prong of the input device.*

The voltage drop is measured and the resistance is calculated, and they shall not exceed

- *0.2 Ω for appliances with a **power cord**, or 0.1 Ω over the resistance of the **power cord**,*
- *0.1 Ω to other appliances.*

NOTE 1: The test is only performed for the necessary period to allow the measurement of the voltage drop

NOTE 2: Care must be taken to ensure that the contact resistance between the tip of the measuring device and the metal part under test do not influence the test results.

B.2 Withstand Voltage Test

The isolation of the device is subjected to an almost sinusoidal voltage with a frequency of approximately 60 Hz for 1 s. This value of voltage test and the application points are shown in Table B.1

Table B.1 – Voltage Test

<i>Application points</i>	<i>Voltage Test</i>		
	<i>V</i>		<i>Class III appliances</i>
	<i>Class 0 appliances, class 0I appliances, class I appliances and class II appliances</i>		
	<i>Nominal voltage</i>		
	<i><150 V</i>	<i>> 150 V</i>	
<i>Between live parts and accessible metal parts separated from live parts by</i> <ul style="list-style-type: none"> • <i>Only basic insulation</i> • <i>double or reinforced insulation^{a, b}</i> 	800 2000	1000 2500	400 -----
^a <i>This test is not applicable to class 0 appliances</i>			
^b <i>For class 0I appliances and class I appliances, this test does not need to be done in parts of construction class II if the test is considered inadequate.</i>			

NOTA 3: It may be necessary that the appliance be in operation during the test to ensure that the test voltage is applied in all the relevant insulation, for example, heating elements controlled with a relay control.

There must be no disruptive discharge. It is considered a flashover d when the current in the test circuit exceeds 5 mA. However, this limit can be increased to 30 mA for appliances with high leakage current.

NOTE 4: The circuit used for the test incorporates a current sensor device that acts when the current exceeds the limit.

NOTE 5: The high voltage transformer must be able to keep the specified voltage in the current limit

NOTE 6: Instead of being subjected to an AC voltage, the insulation can be subjected to a DC voltage of 1.5 higher than the value shown in table B.1. An AC voltage with a frequency of up to 5 Hz is considered as a DC voltage

B.3 Functional testing

The correct operation of a device is verified by inspection or by an appropriate test if the connection or improper adjustment of the components presents implications that affect security. NOTE: Examples, such as, checking the correct direction of motor rotation and proper operation of the interlock switches. This does not require testing of thermal controls or protective devices.

ANNEX C – Specific requirements (national deviations)

This Annex can be applied to all the rules listed as a deviation from the original rule text.

C.1 Applied to irons (ABNT NBR IEC 60335-2-3)

The irons must have compulsorily certified flexible cords in accordance with the Regulation on Conformity Assessment for Flexible Cords with extruded chlorosulfonated polyethylene (CSP) insulation for voltages up to 300V, approved by Inmetro Administrative Act No. 286/2007.