

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
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ELENCO PROVE ACCREDITATE - CATEGORIA: 0

Automatic disconnection device between a generator and the public low-voltage grid

Denominazione della prova / Campi di prova

- Functional safety (par.6.1);
- Voltage monitoring (par.6.2);
- Frequency monitoring (par.6.3);
- Direct current monitoring (par.6.4);
- Detection of island operation (par.6.5); - Residual current monitoring (par.6.6) (Tutto)

Metodo di prova

DIN V VDE V 0126-1-1:2006
+ A1:2012

Degrees of protection provided by enclosures

Denominazione della prova / Campi di prova

12 Tests for protection against access to hazardous parts indicated by the first; 13 Tests for protection against solid foreign objects indicated by the first characteristic numeral; 14 Tests for protection against water indicated by the second characteristic numeral; 15 Tests for protection against access to hazardous parts indicated by the additional letter; characteristic numeral

Metodo di prova

IEC 60529:2013; EN 60529:1991 + A1:2000 + A2:2013

Electric and electronic equipment

Denominazione della prova / Campi di prova

Electrical fast transient / burst immunity test

Metodo di prova

IEC 61000-4-4:2012, EN 61000-4-4:2012

Electrostatic discharge immunity test

IEC 61000-4-2:2008, EN 61000-4-2:2009

Immunity to conducted disturbances, induced by radio-frequency fields

IEC 61000-4-6:2008, EN 61000-4-6:2009

Radiated, radio-frequency, electromagnetic field immunity test

IEC 61000-4-3:2006 + A1:2007 + A2:2010, EN 61000-4-3:2006 + A1:2008 + IS1:2009 + A2:2010

Surge immunity test

IEC 61000-4-5:2005, EN 61000-4-5:2006

Testing and measurement techniques – Harmonics and interharmonics including mains signalling at a.c. power port, low frequency immunity tests

IEC 61000-4-13:2002 + A1:2009; EN 61000-4-13:2002 + A1:2009

Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests

IEC 61000-4-11:2004; EN 61000-4-11:2004

Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current more than 16 A per phase

IEC 61000-4-34:2005 + A1:2009; EN 61000-4-34:2007 + A1:2009

Ensayos de detección de funcionamiento en isla de múltiples inversores fotovoltaicos conectados a red en paralelo / Performance tests for islanding detection of multiple grid-connected photovoltaic inverters in parallel

Denominazione della prova / Campi di prova

- Procedure of evaluation (par.4)

Metodo di prova

UNE 206006 IN:2011

Erection of electrical installations with rated voltages up to AC 1000 V and DC 1500 V - Part 4-712: Photovoltaic power-systems - Erection and safety requirements systems

Denominazione della prova / Campi di prova

- Functional safety (Annex A.3.1);
- Voltage monitoring (Annex A.3.2);
- Frequency monitoring (Annex A.3.3);
- Direct current monitoring (Annex A.3.4);
- Detection of island operation (Annex A.3.5);
- Residual current monitoring (Annex A.3.6)

Metodo di prova

OVE/ONORM E 8001-4-712:2009

Fire hazard testing

Denominazione della prova / Campi di prova

Metodo di prova

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Glowinghot-wire based test methods – Glow-wire apparatus and common test procedure	IEC 60695-2-10:2013
Glowinghot-wire based test methods – Glow-wire flammability index (GWFI) test method for materials	IEC 60695-2-12:2010
Glowinghot-wire based test methods – Glow-wire ignition temperature (GWIT) test method for materials	IEC 60695-2-13:2010
Glowinghot-wire based test methods –Glow-wire flammability test method for end products	IEC 60695-2-11:2000
Test flames – 50 W horizontal and vertical flame test methods	IEC 60695-11-10:2013

Grid Connection Code for RPPs in South Africa

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
<ul style="list-style-type: none"> - Tolerance of Frequency and Voltage Deviations (par.5); - Frequency Response (par.6); - Reactive Power Capabilities (par.7); - Reactive Power and Voltage Control Functions (par.8); - Power Quality (par.9); - Protection and Fault levels (par.10); - Active Power Constraint Functions (par.11) 	Grid Connection Code for Renewable Power Plants (RPPs) connected to the Electricity Transmission System (TS) or the Distribution System (DS) in South Africa:2012 (Version 2.6)

Grid connection of energy systems via inverters - Part 2: Inverter requirements

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
<ul style="list-style-type: none"> - Power flow direction (par.4.3); - Power factor (par.4.4); - Harmonic currents (par.4.5); - Voltage fluctuations and flicker (par.4.6); - Impulse protection (par.4.7); - Transient voltage limits (par.4.8); - Direct current injection (par.4.9) (AS/NZS 3100 and AS/NZS 60950.1 excluded) 	AS 4777.2:2005

Grid connection of energy systems via inverters - Part 3: Grid protection requirements

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
<ul style="list-style-type: none"> - Voltage flicker (par.4.4); - Impulse protection (par.4.5); - Disconnection device (par.5.2); - Voltage and frequency limits (passive anti-islanding protection) (par.5.3); - Active anti-islanding protection (par.5.5); - Reconnection procedure (par.5.6); - Security of protection settings (par.5.7); - Grid protection device tests (appendix B) (AS/NZS 3100 and AS/NZS 60950.1 excluded) 	AS 4777.3:2005

Grid integration of generator plants - Low-Voltage- Test requirements for generator units to be connected to and operated in parallel with low-Voltage distribution networks

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
<ul style="list-style-type: none"> - Rapid Voltage changes (par.5.1.2) - Flicker (par.5.1.3) -Harmonics and inter-harmonics (par 5.1.4) - Proof of the symmetrical behavior of rotary current converter units (par.5.2) -Proof of the behavior of the generation unit on the grid (par. 5.3) - Proof of NS protection (par. 5.4) - Connection conditions and synchronization (par. 5.5) (Tutto) 	DIN V VDE V 0124-100:2012

Grid interconnection of embedded generation - Part 2: Small-scale embedded generation - Section 1: Utility interface

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
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- Flicker (par.4.1.3);
- Harmonics and waveform distortion (par.4.1.6);
- Power factor (par.4.1.7);
- Synchronization (par.4.1.8);
- Overvoltage and undervoltage (par.4.2.2.3.2);
- Overfrequency and underfrequency (par.4.2.2.3.3);
- Prevention of islanding (par.4.2.2.4);
- DC current injection (par.4.2.2.5)

NRS 097-2-1:2010

Household and similar electrical appliances - Safety - Part 2-100: Particular requirements for hand-held mains-operated garden blowers, vacuums and blower vacuums

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-100:2002 (ed.1)

Metodi di misura dei campi elettromagnetici degli apparecchi elettrodomestici e similari in relazione all'esposizione umana

Denominazione della prova / Campi di prova

Metodo di prova

5.5.2 - Time domain evaluation of magnetic fields, 5.5.3 - Line spectrum evaluation, 5.5.4 - Simplified test methods

IEC 62233:2005 (ed.1); EN 62233:2008

Photovoltaic (PV) systems - Characteristics of the utility interface

Denominazione della prova / Campi di prova

Metodo di prova

- Voltage, current and frequency (par.4.1);
- Normal voltage operating range (par.4.2);
- Flicker (par.4.3);
- DC injection (par.4.4);
- Normal frequency operating range (par.4.5);
- Harmonics and waveform distortion (par.4.6);
- Power factor (par.4.7);
- Loss of utility voltage (par.5.1);
- Over/under voltage and frequency (par.5.2);
- Islanding protection (par.5.3);
- Response to utility recovery (par.5.4) (Tutto tranne 5.5, 5.6, 5.7)

IEC 61727:2004;
EN 61727:1995

Photovoltaic systems - Power conditioners - Procedure for measuring efficiency

Denominazione della prova / Campi di prova

Metodo di prova

- Efficiency measurement (par.4,5,6);
- Loss measurements (par.7) (Tutto)

IEC 61683:1999;
EN 61683:2000

Power generation systems connected to the low-voltage distribution network - Technical minimum requirements for the connection to and parallel operation with low-voltage distribution networks.

Denominazione della prova / Campi di prova

Metodo di prova

Vedere dettagli della norma DIN V VDE V 0124-100:2012 (Tutto)

VDE-AR-N 4105:2011

Prescriptions techniques spécifiques pour les installations de production décentralisées fonctionnant en parallèle sur le réseau de distribution / Specific technical requirements for decentralized production facilities operating in parallel on the distribution network

Denominazione della prova / Campi di prova

Metodo di prova

- Connection issue (par.2);
- Disconnection and protection devices (par.3)

C10/11:2012

Procedimento de ensaio de anti-ilhamento para inversores de sistemas fotovoltaicos conectados à rede elétrica / Test procedure of islanding prevention measures for utility-interconnected photovoltaic inverters

Denominazione della prova / Campi di prova

Metodo di prova

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-Test for single or multi-phase inverter (par.6)

ABNT NBR IEC 62116:2012

Recommendations for the connection of generating plant to the distribution systems of licensed distribution network operators

Denominazione della prova / Campi di prova

Metodo di prova

- Disconnection times (par.13.8.3.1);
- Over / Under Voltage (par.13.8.3.2);
- Over / Under Frequency (par.13.8.3.3);
- Loss of Mains (LoM) Protection (par.13.8.3.4);
- Reconnection (par.13.8.3.5);
- Frequency Drift and Step Change Stability test (par.13.8.3.6)
- Harmonics (par.13.8.4.1);
- Power Factor (par.13.8.4.2);
- Voltage Flicker (par.13.8.4.3);
- DC Injection (par.13.8.4.4);
- Short circuit Current Contribution (par.13.8.4.6);
- Self Monitoring - Solid State Disconnection (par.13.8.4.7)

ENA G59/3:2013

Recommendations for the Connection of Type Tested Small-scale Embedded Generators (Up to 16A per Phase) in Parallel with Low-Voltage Distribution Systems

Denominazione della prova / Campi di prova

Metodo di prova

- Disconnection times (par.A1.3.1);
- Over / Under Voltage (par.A1.3.2);
- Over / Under Frequency (par.A1.3.3);
- Loss of Mains (LoM) Protection (par.A1.3.4);
- Re-connection (par.A1.3.5);
- Frequency Drift and Step Change Stability test (par.A1.3.6);
- Harmonics (par.A1.4.1);
- Power Factor (par.A1.4.2);
- Voltage Flicker (par.A1.4.3);
- DC Injection (par.A1.4.4);
- Short circuit Current Contribution (par.A1.4.6);
- Self Monitoring - Solid State Disconnection (par.A1.4.7) (Type Verification Functional Testing of the Interface Protection (Appendix A1.3))

ENA G83/2:2012

Regola tecnica di riferimento per la connessione di Utenti attivi e passivi alle reti BT delle imprese distributrici di energia elettrica

Denominazione della prova / Campi di prova

Metodo di prova

- Inverter: - Emissione armonica di corrente [par. B.1, punti a) e b)]; - Fluttuazioni di tensione e flicker [par. B.1, punto c)]; - Connessione, riconnessione ed erogazione graduale della potenza [par. B.1, punto d)]; - Erogazione della potenza reattiva (par. B.1, punto e); - Limitazione della potenza attiva (par.B.1, punto f); - Verifica della componente continua della corrente di uscita (par.B.1, punto g); - Verifica della insensibilità agli abbassamenti di tensione (par. B.1, punto h); - Verifica dell'assenza di danneggiamenti in caso di richiuse automatiche da parte del Distributore (par.B.1, punto i) (Allegato B Prove sugli inverter per impianti indirettamente connessi)

CEI 0-21:2012-06 + EC1:2012-06 + V1:2012-12

- Misura delle correnti armoniche (par.N.3.1);
- Misura di fluttuazioni di tensione dovute a manovre di sezionamento/separazione (par.N.3.2);
- Misura di fluttuazioni di tensione (flicker) in condizioni di funzionamento continuo (par.N.3.3);
- Verifica del campo di funzionamento in tensione e frequenza (par.N.4);
- Verifica delle condizioni di sincronizzazione e presa di carico (par.N.5);
- Verifica dei requisiti costruttivi circa lo scambio di potenza reattiva (par.N.6);
- Verifica dei requisiti costruttivi circa la regolazione di potenza attiva (par.N.7);
- Verifica della insensibilità agli abbassamenti di tensione (LVRT capability) (par.N.8);
- Verifica della insensibilità alle richiuse automatiche in discordanza di fase (par.N.9) (Allegato N Prove sui generatori statici)

CEI 0-16:2012-12 + EC:2013-05

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Requirements for the connection of micro-generators in parallel with public low-voltage distribution networks

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
- Over / Under Voltage (par.C.2.1); - Over / Under Frequency (par.C.2.2); - Loss of Mains (LoM) protection (par.C.2.3); - Re-connection (par.C.2.4); - Verification of disconnection in the event of failure of solid-state switching device (par.C.2.5); - Verification of leakage current of solid-state switching devices on off state (par.C.2.6); - Power factor (par.C.3.1); - Short-circuit current contribution (par.C.3.2); - Harmonic current emission (par.C.3.3); - Voltage fluctuations and flicker (C.3.4); - (Compliance type testing general arrangements (Annex C))	EN 50438:2007

Requisitos de conexiòn a la red elèctrica – Parte 1: Inversores para conexiòn a la red de distribuciòn / Requirements for connecting to the power system. Part 1: Grid-connected inverters

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
- Injection of direct current to main supply (par. 5.1); - Behavior under isolation failure (par. 5.2); - Detection of fault currents in the PV generator (par. 5.3); - Disconnection due voltage and frequency (par 5.4); - Automatic reconnection (par. 5.5); - Detection of island operation (par. 5.6); - Generation surges (par. 5.7); - Network quality (par. 5.8); - Reconnection out of sync (par. 5.9)	UNE 206007-1 IN:2013

Resoluciòn de 4 de octubre de 2006, de la Secretaria General de Energia, por la que se aprueba el procedimiento de operaciòn 12.3 Requisitos de respuesta frente a huecos de tensiòn de las instalaciones eòlicas

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
- Respuesta frente a cortocircuitos (par.4)	P.O. 12.3:2006

Sicurezza degli apparati di conversione di potenza utilizzati in impianti fotovoltaici di Potenza. Parte 1: Prescrizioni generali

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
4 General testing requirements, 5 -Marking and documentation, 6 - Environmental requirements and conditions, 7 -Protection against electric shock and energy hazards, 8 - Protection against mechanical hazards, 9 Protection against fire hazards, 10 - Protection against sonic pressure hazards, 11 - Protection against liquid hazards, 12 - Chemical hazards, 13 Phisical requirements, 14 - Components (eccetto 8.4, 8.5)	EN 62109-1: 2010 (ed.1.0) IEC 62109-1: 2010

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 1: Norme generali

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Creepage distances clearances and distances through insulation, 30 - Resistance to heat fire and tracking, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (Tutto tranne 22.16, 22.32, Annex L, Annex Q)	IEC 60335-1:1991 (ed.3) +A1:1994 +A2:1999; EN 60335-1:1994 +A1:1996 +A2:2000 +A11:1995 +A12:1996 +A13:1998 +A14:1998 +A15:2000 +A16:2001

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7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (Tutto tranne 22.16, 22.32, Annex F)

IEC 60335-1:2004 (ed.4) +A1:2004 +A2:2006; EN 60335-1:2002 +A1:2004 +A2:2006 +A11:2004 +A12:2006 +A13:2008 +A14:2010 +A15:2011

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (Tutto tranne 22.16, 22.32, Annex F)

IEC 60335-1:2010 (ed.5); EN 60335-1:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi da cucina

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-14:2006 (ed.5) +A1:2008 +A2:2012; EN 60335-2-14:2006 +A1:2008 +A11:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi per massaggio

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-32:2002 (ed.4) +A1:2008; EN 60335-2-32:2003 + A1:2008

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi per l'igiene orale

Denominazione della prova / Campi di prova

Metodo di prova

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7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-52:2002 (ed.3) +A1:2008; EN 60335-2-52:2003 +A1:2008 +A11:2010 +A11/EC:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi di grigliatura per uso esterno

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-78:2002 (ed.2) +A1:2008; EN 60335-2-78:2003 + A1:2008

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi per il riscaldamento di liquidi

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-15:2002 (ed.5) +A1:2005 +A2:2008; EN 60335-2-15:2002 +A1:2005 +A2:2008 +A11:2012

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-15:2012 (ed.6)

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi elettrici di riscaldamento per locali

Denominazione della prova / Campi di prova

Metodo di prova

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7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-30:2002 (ed.4) +A1:2004 +A2:2007; EN 60335-2-30:2003 + A1:2004 +A2:2007

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-30:2009 (ed.5); EN 60335-2-30:2009 +A11:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi elettrici annessi ad acquari e bacini da giardino

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-55:2002 (ed.3) +A1:2008; EN 60335-2-55:2003 + A1:2008

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi per vaporizzare sostanze insettifughe o deodoranti

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-101:2002 (ed.1) +A1:2008; EN 60335-2-101:2002 +A1:2008

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi di refrigerazione, apparecchi per gelati e produttori di ghiaccio

Denominazione della prova / Campi di prova

Metodo di prova

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7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (Tutto tranne 21.101)

IEC 60335-2-24:2002 (ed.6) +A1:2005 +A2:2007; EN 60335-2-24:2003 +A1:2005 +A2:2007 +A11:2004 +A12:2009

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (Tutto tranne 21.101)

IEC 60335-2-24:2010 (ed.7) +A1:2012; EN 60335-2-24:2010

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi di pulizia di superfici con l'uso di agenti pulenti liquidi o vapore per uso domestico

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (Tutto tranne 21.101, 21.102, 21.103,21.104, 21.105)

IEC 60335-2-54:2002 (ed.3) +A1:2004 +A2:2007; EN 60335-2-54:2003 +A1:2004 +A2:2007 +A11:2006

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (eccetto 21.101, 21.102, 21.103,21.104, 21.105)

IEC 60335-2-54:2008 (ed.4); EN 60335-2-54:2008 +A11:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi aventi bruciatori a gas, gasolio e combustibile solido provvisti di connessioni elettriche

Denominazione della prova / Campi di prova

Metodo di prova

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7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-102:2004 (ed.1) +A1:2009 +A2:2012;
EN 60335-2-102:2006 +A1:2010

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi per la pulizia a secco o umida, incluse le spazzole a motore, per uso industriale e commerciale

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (Tutto tranne 21.102, 21.103,21.104, 21.105, 21.106)

IEC 60335-2-69:2002 (ed.3) +A1:2005 +A2:2008; EN 60335-2-69:2009

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (eccetto 21.102, 21.103,21.104, 21.105, 21.106)

IEC 60335-2-69:2012 (ed.4); EN 60335-2-69:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi per il trattamento dei pavimenti e per la pulitura dei pavimenti bagnati, per uso industriale e collettivo

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-67:2002 (ed.3) +A1:2005; EN 60335-2-67:2009

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7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-67:2012 (ed.4); EN 60335-2-67:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi per la refrigerazione commerciale comprendenti un'unità di condensazione del fluido frigorifero o un compressore, incorporato o remoto

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-89:2002 (ed.1) +A1:2005 +A2:2007; EN 60335-2-89:2002 +A1:2005 +A2:2007 +A11:2004

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-89:2010 (ed.2) +A1:2012; EN 60335-2-89:2010

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per armadi caldi elettrici per uso collettivo

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-49:2002 (ed.4) +A1:2008; EN 60335-2-49:2003 +A1:2008 +A11:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per aspirapolvere ed apparecchi per pulizia ad aspirazione d'acqua

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Metodo di prova

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7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (Tutto tranne 21.101, 21.102, 21.103,21.104, 21.105)

IEC 60335-2-2:2002 (ed.5) +A1: 2004 +A2:2006; EN 60335-2-2:2003 +A1:2004 +A2:2006 +A11:2010 +A11/EC:2012

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (Tutto tranne 21.101, 21.102, 21.103,21.104, 21.105)

IEC 60335-2-2:2009 (ed.6) +A1:2012; EN 60335-2-2:2010 +A11:2012 +A1:2013

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per attuatori di cancelli, porte e finestre motorizzati

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (Tutto tranne 32.101)

IEC 60335-2-103:2002 (ed.1); EN 60335-2-103:2003 +A11:2009

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (eccetto 32.101)

IEC 60335-2-103:2006 (ed.2) +A1:2011

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per cappe da cucina

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Metodo di prova

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7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-31:2002 (ed.4) +A1:2006 +A2:2009; EN 60335-2-31:2003 +A1:2006 +A2:2009

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-31:2012 (ed.5)

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per cappe da cucina per uso commerciale

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-99:2003 (ed.1); EN 60335-2-99:2003

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per cucine, fornelli, forni ed apparecchi similari per uso domestico

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-6:2002 (ed.5) +A1:2005 +A2:2008; EN 60335-2-6:2003 +A1:2005 +A2:2008 +A11:2010 +A12:2012 +A11/EC:2012 +A13:2013

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per cucine, forni, fornelli e piani di cottura elettrici per uso collettivo

Denominazione della prova / Campi di prova

Metodo di prova

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7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-36:2002 (ed.5) +A1:2004 +A2:2008; EN 60335-2-36:2002 +A1:2004 +A2:2008 +A11:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per distributori commerciali e apparecchi automatici per la vendita

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (Tutto tranne Annex A)

IEC 60335-2-75:2002 (ed.2) +A1:2005 +A2:2009; EN 60335-2-75:2004 +A1:2005 +A2:2008 +A11:2006 +A12:2010

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (eccetto Annex AA)

IEC 60335-2-75:2012 (ed.3)

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per ferri da stiro

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-3:2002 (ed.5) +A1:2005 +A2:2008; EN 60335-2-3:2002 +A1:2005 +A2:2008 +A11:2010 +A11/EC:2012

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-3:2012 (ed.6)

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Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per forni elettrici a ventilazione forzata, forni per cottura a vapore e forni combinati convezione-vapore per uso collettivo

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-42:2002 (ed.5) +A1:2009; EN 60335-2-42:2003 +A1:2008 +A11:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per friggitrice elettriche per uso collettivo

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-37:2002 (ed.5) +A1:2008 +A2:2011; EN 60335-2-37:2002 +A1:2008 +A11:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per gli apparecchi per la purificazione dell'aria

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-65:2002 (ed.2) +A1:2008; EN 60335-2-65:2003 +A1:2008 +A11:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per gli apparecchi per la cura della pelle e dei capelli

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-23:2003 (ed.5) +A1:2008 +A2:2012; EN 60335-2-23:2003 +A1:2008 +A11:2010 +A11/EC:2012

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Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per gli apparecchi per l'asciugatura dei tessuti e per gli asciugasalviette

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-43:2002 (ed.3) +A1:2005 +A2:2008; EN 60335-2-43:2003 +A1:2006 +A2:2008

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per grill e tostapane elettrici per uso collettivo

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-48:2002 (ed.4) +A1:2008; EN 60335-2-48:2003 +A1:2008 +A11:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per griglie, tostapane e apparecchi per cottura mobili similari

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-9(ed.5)+am1+am2; EN 60335-2-9:2003 + A1:2004 + A2:2006 + A12:2007 + A13:2010 + A13/EC:2011 + A13/EC:2012

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-9:2008 (ed.6) +A1:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per i motori di movimentazione di porte di garage a movimento verticale per uso residenziale

Denominazione della prova / Campi di prova

Metodo di prova

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7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-95:2002 (ed.2); EN 60335-2-95:2004

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-95:2011 (ed.3)

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per idropulitrici ed apparecchi per la pulizia a vapore

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-79:2002 (ed.2) +A1:2005 +A2:2007; EN 60335-2-79:2009

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-79:2012 (ed.3); EN 60335-2-79:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per lavastoviglie elettriche per uso collettivo

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Metodo di prova

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7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (Tutto tranne Annex BB)

IEC 60335-2-58:2002 (ed.3) +A1:2008; EN 60335-2-58:2005 +A1:2008 +A11:2010

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per le cabine con doccia multifunzione

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-105:2004 (ed.1) +A1:2008 +A2:2013; EN 60335-2-105:2005 +A1:2008 +A11:2010

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per le pompe di calore elettriche, per i condizionatori d'aria e per i deumidificatori

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (Tutto tranne 22.108)

IEC 60335-2-40:2002 (ed.4) +A1:2005 +A2:2005; EN 60335-2-40:2003 +A1:2006 +A2:2009 +A11:2004 +A12:2005 +A13:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per macchine per cucire elettriche

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-28:2002 (ed.4) +A1:2008; EN 60335-2-28: 2003 + A1:2008

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per macchine da cucina elettriche per uso collettivo

Denominazione della prova / Campi di prova

Metodo di prova

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7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-64:1991 (ed.2) +A1:1997; EN 60335-2-64:2000 +A1:2002

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-64:2002 (ed.3) +A1:2008

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per macchine automatiche per il trattamento dei pavimenti per uso industriale e collettivo

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-72:2002 (ed.2); EN 60335-2-72:2009

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-72:2012 (ed.3); EN 60335-2-72:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per macchine per la pulizia a polverizzazione e ad aspirazione d'acqua per uso industriale e collettivo

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7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-68:2002 (ed.3) +A1:2005 +A2:2007; EN 60335-2-68:2009

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-68:2012 (ed.4); EN 60335-2-68:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per motori di movimentazione per tapparelle, tende per esterno, tende e apparecchiature avvolgibili similari

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-97:2002 (ed.2) +A1:2005 +A2:2009; EN 60335-2-97:2006 +A2:2010 +A11:2008

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per padelle per friggere, friggitrici e apparecchi similari

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-13:2002 (ed.5) +A1:2004 +A2:2008; EN 60335-2-13:2003 +A1:2004 +A2:2008

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7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-13:2009 (ed.6); EN 60335-2-13:2010 +A11:2012

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per piastre a grigliare elettriche per uso collettivo

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-38:2002 (ed.5) +A1:2008; EN 60335-2-38:2003 + A1:2008

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per pompe

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-41:2002 (ed.3) +A1:2004 +A2:2010; EN 60335-2-41:2003 +A1:2004 +A2:2010

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-41:2012 (ed.4)

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per rasoi, tosatrici e apparecchi elettrici analoghi

Denominazione della prova / Campi di prova

Metodo di prova

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7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-8:2002 (ed.5) +A1:2005 +A2:2008; EN 60335-2-8:2003 +A1:2005 +A2:2008

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-8:2012 (ed.6)

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per riscaldatori fissi ad immersione

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-73:2002 (ed.2) +A1:2006 +A2:2009; EN 60335-2-73:2003 +A1:2006 +A2:2009

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per riscaldatori mobili ad immersione

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-74:2002 (ed.2) +A1:2006 +A2:2009; EN 60335-2-74:2003 +A1:2006 +A2:2009

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per risciacquatrici elettriche per uso collettivo

Denominazione della prova / Campi di prova

Metodo di prova

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7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-62:2002 (ed.3) +A1:2008; EN 60335-2-62:2003 + A1:2008

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per scaldavivande elettrici ed apparecchi similari

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-12:2002 (ed.5) +A1:2008; EN 60335-2-12:2003 + A1:2008

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per umidificatori da utilizzarsi in sistemi di riscaldamento, ventilazione o di condizionamento dell'aria

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards (Tutto tranne 22.7, 22.106)

IEC 60335-2-88:2002 (ed.2); EN 60335-2-88:2002

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per utensili elettrici mobili riscaldanti e apparecchi similari

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-45:2002 (ed.3) +A1:2008 +A2:2012; EN 60335-2-45:2002 +A1:2008 +A2:2012

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Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per vasche per idromassaggio e per piscine di tipo "spa"

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-60:2002 (ed.3) +A1:2005 +A2:2008; EN 60335-2-60:2003 +A1:2005 +A2:2008 +A11:2010 +A12:2010

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per ventilatori

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-80:2002 (ed.2) +A1:2004 +A2:2008; EN 60335-2-80:2003 +A1:2004 +A2:2009

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Prescrizioni particolari per umidificatori

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 9 Starting of motor-operated appliances, 10 Power input and current, 11 - Heating, 13 - Leakage current and electric strength at operating temperature, 14 - Transient overvoltage, 15 - Moisture resistance, 16 Leakage current and electric strength, 17 - Overload protection of transformers and associated circuits, 18 - Endurance, 19 - Abnormal operation, 20 - Stability and mechanical hazards, 21 - Mechanical strength, 22 - Construction, 23 - Internal wiring, 24 - Components, 25 - Supply connection and external flexible cords, 26 - Terminal s for external conductors, 27 - Provision for earthing, 28 - Screws and connections, 29 - Clearances, creepage distances and solid insulation, 30 - Resistance to heat and fire, 31 - Resistance to rusting, 32 - Radiation, toxicity and similar hazards

IEC 60335-2-98:2002 (ed.2) +A1:2005 +A2:2008; EN 60335-2-98:2003 +A1:2005 +A2:2008

Sicurezza dei convertitori di potenza utilizzati negli impianti Fotovoltaici. Parte 2: Prescrizioni particolari per gli inverter

Denominazione della prova / Campi di prova

Metodo di prova

4 General testing requirements, 5 -Marking and documentation, 6 - Environmental requirements and conditions, 7 -Protection against electric shock and energy hazards, 8 - Protection against mechanical hazards, 9 Protection against fire hazards, 10 - Protection against sonic pressure hazards, 11 - Protection against liquid hazards, 12 - Chemical hazards, 13 Physical requirements, 14 - Components - (eccetto 8.4, 8.5)

EN 62109-2: 2011 IEC 62109-2: 2011 (ed.1.0)

Sistemas fotovoltaicos (FV) – Características da interface de conexão com a rede elétrica de distribuição / Photovoltaic (PV) systems – Characteristics of the utility interface

Denominazione della prova / Campi di prova

Metodo di prova

- Compatibility with the electrical grid (par.4);
 - Personal safety and PV system protection (par. 5);
 - External control (par. 6);
 - Requirements for supportability to voltages caused by electrical faults (fault ride through - FRT) (par. 7)

ABNT NBR 16149:2013

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
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Sistemas fotovoltaicos (FV) – Características da interface de conexão com a rede elétrica de distribuição – Procedimento de ensaio de conformidade / Photovoltaic (PV) systems – Characteristics of the utility interface – Conformity test procedure

Denominazione della prova / Campi di prova

Metodo di prova

- Flicker (par. 6.1);
- c.c. component injection (par. 6.2);
- Harmonics and wave-form distortion (par. 6.3);
- Power factor (par. 6.4);
- Reactive power injection / demand (par. 6.5);
- Voltage variation (par. 6.6);
- Frequency variation (par. 6.7);
- Active power control in overfrequency (par. 6.8);
- Reconnection (par. 6.9);
- Automatic out-of-phase reconnection (par. 6.10);
- Active power limitation (par. 6.11);
- Reactive power command (par. 6.12);
- Disconnection and reconnection of the photovoltaic system in the electrical grid (par. 6.13);
- Supportability requirements to undervoltages due to faults in the electrical grid (fault ride through - FRT)

ABNT NBR 16150:2013

Solid insulating materials

Denominazione della prova / Campi di prova

Metodo di prova

Method for the determination of the proof and the comparative tracking indices of solid insulating materials

IEC 60112:2009

Technical Guideline - Generating plants connected to the Medium-Voltage Network

Denominazione della prova / Campi di prova

Metodo di prova

- Verification of feed-in power (par. 6.2);
- Verification of network interactions (par. 6.3);
- Verification of the generating plant's behaviour connected to the network (par. 6.4);
- Verification of connection conditions (par. 6.5);
- Verification of the properties of disconnection equipment (par. 6.6)

BDEW:2008

Technical guidelines for power generating units and systems - Part 3: Determination of electrical characteristics of power generating units and systems connected to MV, HV and EHV grids

Denominazione della prova / Campi di prova

Metodo di prova

- Active power provision (par. 5.2);
- Reactive power provision (par. 5.3);
- Voltage quality (par. 5.4);
- Disconnecting the PGU from the grid (par. 5.5);
- Verification of cut-in conditions (par. 5.6);
- Performance during voltage dips (par. 5.7)

FGW Part 3 Revision 22:2011

Technische und organisatorische Regeln für Betreiber und Benutzer von Netzen. Teil D: Besondere technische Regeln. Hauptabschnitt D4: Parallelbetrieb von Erzeugungsanlagen mit Verteilernetzen / Technical and organizational rules for users and operators of networks. Part D: Special technical rules. Section D4: Parallel operation of generating plants with distribution networks

Denominazione della prova / Campi di prova

Metodo di prova

- Voltage and reactive power (par.7);
- Behavior of the generating plant at the medium voltage grid (par.8);
- Protective device for uncoupling point (par.9);
- Generators with neutral point of connection to the low voltage grid (par.10);
- Switching control equipment and switching conditions (par.11);
- Grid perturbations (par.12)

TOR D4 V2.0:2008

Test procedure of islanding prevention measures for utility-interconnected photovoltaic inverters

Denominazione della prova / Campi di prova

Metodo di prova

- Test for single or multi-phase inverter (par.6)

IEC 62116:2008;
EN 62116:2011

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ELENCO PROVE ACCREDITATE - CATEGORIA: 3

Automatic disconnection device between a generator and the public low-voltage grid

Denominazione della prova / Campi di prova

Metodo di prova

- Functional safety (par.6.1);
- Voltage monitoring (par.6.2);
- Frequency monitoring (par.6.3);
- Direct current monitoring (par.6.4);
- Detection of island operation (par.6.5); - Residual current monitoring (par.6.6)

DIN V VDE V 0126-1-1:2006
+ A1:2012

Grid integration of generator plants - Low-Voltage- Test requirements for generator units to be connected to and operated in parallel with low-voltage distribution networks

Denominazione della prova / Campi di prova

Metodo di prova

- Rapid Voltage changes (par.5.1.2) - Flicker (par.5.1.3)
- Harmonics and inter-harmonics (par 5.1.4)
- Proof of the symmetrical behavior of rotary current converter units (par.5.2)
- Proof of the behavior of the generation unit on the grid (par. 5.3)
- Proof of NS protection (par. 5.4)
- Connection conditions and synchronization (par. 5.5)

DIN V VDE V 0124-100:2012

Photovoltaic systems - Power conditioners - Procedure for measuring efficiency

Denominazione della prova / Campi di prova

Metodo di prova

- Efficiency measurement (par.4,5,6);
- Loss measurements (par.7)

IEC 61683:1999;
EN 61683:2000

Power generation systems connected to the low-voltage distribution network - Technical minimum requirements for the connection to and parallel operation with low-voltage distribution networks.

Denominazione della prova / Campi di prova

Metodo di prova

- Verification of the electrical properties (par.9);
- Islanding detection (Annex D)

VDE-AR-N 4105:2011

Regola tecnica di riferimento per la connessione di Utenti attivi e passivi alle reti BT delle imprese distributrici di energia elettrica

Denominazione della prova / Campi di prova

Metodo di prova

- Misura delle correnti armoniche (par.N.3.1);
- Misura di fluttuazioni di tensione dovute a manovre di sezionamento/separazione (par.N.3.2);
- Misura di fluttuazioni di tensione (flicker) in condizioni di funzionamento continuo (par.N.3.3);
- Verifica del campo di funzionamento in tensione e frequenza (par.N.4);
- Verifica delle condizioni di sincronizzazione e presa di carico (par.N.5);
- Verifica dei requisiti costruttivi circa lo scambio di potenza reattiva (par.N.6);
- Verifica dei requisiti costruttivi circa la regolazione di potenza attiva (par.N.7);
- Verifica della insensibilità agli abbassamenti di tensione (LVRT capability) (par.N.8);
- Verifica della insensibilità alle richiuse automatiche in discordanza di fase (par.N.9) (Allegato N Prove sui generatori statici)

CEI 0-16:2012-12 + EC:2013-05

Sicurezza degli apparati di conversione di potenza utilizzati in impianti fotovoltaici di Potenza. Parte 1: Prescrizioni generali

Denominazione della prova / Campi di prova

Metodo di prova

- 4 General testing requirements, 5 -Marking and documentation, 6 - Environmental requirements and conditions, 7 -Protection against electric shock and energy hazards, 8 - Protection against mechanical hazards, 9 Protection against fire hazards, 10 - Protection against sonic pressure hazards, 11 - Protection against liquid hazards, 12 - Chemical hazards, 13 Physical requirements, 14 - Components (eccetto 8.4, 8.5)

EN 62109-1: 2010 IEC 62109-1: 2010
(ed.1.0)

Sicurezza dei convertitori di potenza utilizzati negli impianti Fotovoltaici. Parte 2: Prescrizioni particolari per gli inverter

Denominazione della prova / Campi di prova

Metodo di prova

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4 General testing requirements, 5 -Marking and documentation, 6 - Environmental requirements and conditions, 7 -Protection against electric shock and energy hazards, 8 - Protection against mechanical hazards, 9 Protection against fire hazards, 10 - Protection against sonic pressure hazards, 11 - Protection against liquid hazards, 12 - Chemical hazards, 13 Physical requirements, 14 - Components - Tutto tranne 8.4, 8.5

FGW Part 3 Revision 22:2011

Technical Guideline - Generating plants connected to the Medium-Voltage Network

Denominazione della prova / Campi di prova

Metodo di prova

- Verification of feed-in power (par. 6.2);
- Verification of network interactions (par. 6.3);
- Verification of the generating plant's behaviour connected to the network (par. 6.4);
- Verification of connection conditions (par. 6.5);
- Verification of the properties of disconnection equipment (par. 6.6)

BDEW:2008

Technical guidelines for power generating units and systems - Part 3: Determination of electrical characteristics of power generating units and systems connected to MV, HV and EHV grids

Denominazione della prova / Campi di prova

Metodo di prova

- Active power provision (par. 5.2);
- Reactive power provision (par. 5.3);
- Voltage quality (par. 5.4);
- Disconnecting the PGU from the grid (par. 5.5);
- Verification of cut-in conditions (par. 5.6);
- Performance during voltage dips (par. 5.7)

FGW Part 3 Revision 22:2011

Test procedure of islanding prevention measures for utility-interconnected photovoltaic inverters

Denominazione della prova / Campi di prova

Metodo di prova

- Test for single or multi-phase inverter (par.6)

IEC 62116:2008;
EN 62116:2011

Legenda

- ABNT NBR: Associação Brasileira De Normas Técnicas
- UNE: AENOR - Asociación Española de Normalización y Certificación
- BDEW: Bundesverband der Energie- und Wasserwirtschaft (German Association of Energy and Water Industries)
- FGW: Fördergesellschaft Windenergie (Society for the Promotion of wind energy and other renewable energy)
- TOR: E-Control (Government regulator for electricity and natural gas markets in Austria)
- C: Synergrid (Federation of the Electricity and gas networks in Belgium)
- IEC: International Electrotechnical Commission
- CEI: Comitato Elettrotecnico Italiano
- VDE: Verband der Elektrotechnik
- EN: European Committee for Standardization
- G: Operations Directorate of Energy Networks Association UK
- AS: Australian Standards
- P.O.: Procedimiento de operación (Ministry of Industry, Tourism and Trade of Spain)
- ÖVE: Österreichischer Verband für Elektrotechnik (Austrian Standards Institute)
- NRS: Specifications for the Electricity Supply Industry in collaboration with the South African Bureau of Standards (SABS)
- ENA: Energy Network Association

ACCREDIA
Il Direttore del Dipartimento
(Dr. Paolo Bianco)