

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 1 di 29 PA1790AR11.pdf

ELENCO PROVE ACCREDITATE - CATEGORIA: 0

Alimentatori a bassa tensione con uscita in corrente continua / Low-Voltage power supplies, d.c. Output

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Misure di emissione e prove di immunità / Emission measurements and immunity tests	IEC 61204-3:2011 IEC 61204-3:2016 EN 61204-3:2000

Apparati radio e apparati ausiliari / Radio and ancillary equipment

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Compatibilità elettromagnetica e questioni relative allo spettro delle radiofrequenze (ERM); compatibilità elettromagnetica (EMC) per apparecchiature e servizi radio; Parte 3: Condizioni specifiche per dispositivi a breve portata (SRD) operanti su frequenze tra 9 kHz e 246 GHz / Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz (f min = 9 kHz f max = 18 GHz)	ETSI EN 301 489-3 V1.6.1
Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 34: Specific conditions for External Power Supply (EPS) for mobile phones	ETSI EN 301 489-34 V1.4.1
Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment; Part 17: Specific conditions for Broadband Data Transmission Systems (f min = 9 kHz f max = 18 GHz)	ETSI EN 301 489-17 V2.2.1
Misura di emissione di spurie dei ricevitori / Receiver spurious emission	ETSI EN 300 328 V2.1.1
Misura di emissione di spurie dei ricevitori / Receiver spurious emission (Intervallo operativo di frequenza: f min = 9 kHz f max = 18 GHz/ Operating frequency range: f min = 9 kHz f max = 18 GHz)	ETSI EN 300 440-2 V1.4.1
Misura di emissione di spurie dei ricevitori / Receiver spurious emission (Intervallo operativo di frequenza: f min = 9 kHz f max = 18 GHz/ Operating frequency range: f min = 9 kHz f max = 18 GHz)	ETSI EN 300 440 V2.1.1
Misura di emissione di spurie dei trasmettitori/Transmitter spurious emission	ETSI EN 300 328 V2.1.1
Misura di emissione di spurie dei trasmettitori/Transmitter spurious emission (Intervallo operativo di frequenza: f min = 9 kHz f max = 18 GHz/ Operating frequency range: f min = 9 kHz f max = 18 GHz)	ETSI EN 300 440-2 V1.4.1
Misura di emissione di spurie dei trasmettitori/Transmitter spurious emission (Intervallo operativo di frequenza: f min = 9 kHz f max = 18 GHz/ Operating frequency range: f min = 9 kHz f max = 18 GHz)	ETSI EN 300 440 V2.1.1

Apparati radio e apparati ausiliari/Radio and ancillary equipment

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Compatibilità elettromagnetica e questioni relative allo spettro delle radiofrequenze (ERM); compatibilità elettromagnetica (EMC) per apparecchiature e servizi radio; Parte 1: Requisiti tecnici comuni / Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirement (f min = 9 kHz f max = 18 GHz)	ETSI EN 301 489-1 V1.9.2:2011 escl. 9.6, Annex B

Apparecchi di illuminazione / Lighting Equipment

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Misure di emissione / Emission measurements	CISPR 15:2013 +A1:2015 EN 55015:2013+A1:2015
Prove di immunità / Immunity tests	IEC 61547:2009 EN 61547:2009

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 2 di 29 PA1790AR11.pdf

Apparecchi e sistemi per la navigazione marittima e radiocomunicazione / Maritime navigation and radiocommunication equipment and system

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Misure di emissione e prove di immunità / Emission measurements and immunity tests	IEC 60945:2002+COR1:2012 EN 60945:2002 (clauses 9 and 10)

Apparecchi elettrici di misura, controllo e per utilizzo in Laboratorio / Electrical equipment for measurement, control and laboratory use

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Misure di emissione e prove di immunità / Emission measurements and immunity tests	IEC 61326-1:2012 EN 61326-1:2013

Apparecchi Elettromedicali / Medical Electrical Equipment

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Misure di emissione e prove di immunità / Emission measurements and immunity tests	IEC 60601-1-2:2007 IEC 60601-1-2:2014 EN 60601-1-2:2007+AC:2010

Apparecchi industriali, scientifici e medicali/Industrial, scientific and medical equipment

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Emission measurements	ICES-001 (Issue 4, June 2006)
Misure di emissione / Emission measurements	CISPR 11:2015 + A1:2016 CISPR 11:2009+A1:2010 EN 55011:2016 EN 55011 :2009+A1:2010

Apparecchi per la tecnologia dell'informazione / Information technology equipment

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Misure di emissione / Emission measurements	CISPR 22:2008 EN 55022:2010+AC: 2011

Apparecchi per la tecnologia dell'informazione / Information technology equipment

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Prove di immunità / Immunity tests	CISPR 24:2010 +A1:2015 EN 55024:2010+A1:2015

Apparecchiatura per la saldatura ad arco / Arc welding equipment

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Misure di emissione e prove di immunità / Emission measurements and immunity tests	IEC 60974-10:2014 + A1:2015 EN 60974-10:2014 + A1:2015

Apparecchiature assiemate di protezione e di manovra per bassa tensione (quadri BT) / Low-voltage switchgear and controlgear assemblies

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Misure di emissione e prove di immunità / Emission measurements and immunity tests	IEC 61439-1:2011 EN 61439-1:2011

Apparecchiature elettriche ed elettroniche / Electric and electronic equipment

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Electrical fast transient / burst immunity test	IEC 61000-4-4:2012 EN 61000-4-4:2012
Electrostatic discharge immunity test	IEC 61000-4-2:2008 EN 61000-4-2:2009
- Harmonic current measurement	IEC 61000-3-12:2011 EN 61000-3-12:2011
- Harmonic current measurement	IEC 61000-3-2:2014 EN 61000-3-2:2014
Immunity to conducted disturbances, induced by radio-frequency fields	IEC 61000-4-6:2013 EN 61000-4-6:2014

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 3 di 29 PA1790AR11.pdf

Immunity to conducted, differential mode disturbances and signalling in the frequency range 2 kHz to 150 kHz at a.c. power ports	IEC 61000-4-19:2014 EN 61000-4-19:2014
Prova di immunità a fluttuazioni di tensione / Voltage fluctuations immunity test	IEC 61000-4-14:1999+A1:2001+A2:2009 EN 61000-4-14:1999+A1:2004+A2:2009
Prova di immunità a onde oscillatorie / Ring wave immunity test	IEC 61000-4-12:2006 IEC 61000-4-12:2017 EN 61000-4-12:2006
Prova di immunità ai buchi di tensione, alle brevi interruzioni e alle variazioni di tensione sulle porte di alimentazione a tensione continua / Voltage dips, short interruptions and voltage variations on d.c. Input power ports, immunity tests	IEC 61000-4-29:2000 EN 61000-4-29:2000
Prova di immunità ai campi magnetici a frequenza di rete / Power frequency magnetic field immunity test	IEC 61000-4-8:2009 EN 61000-4-8:2010
Prova di immunità ai disturbi condotti di modo comune (0Hz to 150kHz) / Immunity to conducted common mode disturbances (0Hz to 150kHz)	IEC 61000-4-16:1998+A1:2001+A2:2009 IEC 61000-4-16:2015 EN 61000-4-16:1998+A1:2004+A2:2011 EN 61000-4-16:2016 (only Table 1 - continuous disturbance)
Prova di immunità alle variazioni della frequenza di alimentazione / variation of power frequency, immunity test	IEC 61000-4-28:1999+A1:2001+A2:2009 EN 61000-4-28:2000+A1:2004+A2:2009
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 61000-4-5:2014+A1:2017 EN 61000-4-5:2014
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+A2:2015 EN 61000-4-13:2002+A1:2009+A2:2016
Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests	IEC 61000-4-11:2004+A1:2017 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
- Voltage changes, voltage fluctuations and flicker measurement	IEC 61000-3-3:2013+A1:2017 EN 61000-3-3:2013
- Voltage changes, voltage fluctuations and flicker measurement	IEC 61000-3-11:2017 EN 61000-3-11:2000
Apparecchiature elettriche ed elettroniche e materiali metallici / Electric and electronic equipment and metal materials	
<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Test Db: Damp heat, cyclic (12 h + 12 h cycle)	IEC 60068-2-30:2005 EN 60068-2-30:2005
Test Ka: Salt Mist	IEC 60068-2-11:1981 EN 60068-2-11:2001
Test Kb: Salt mist, cyclic (sodium chloride solution)	IEC 60068-2-52:2017 EN 60068-2-52:1997
Test Na, Nb: change of temperature	IEC 60068-2-14:2009 EN 60068-2-14:2009
Test Nc not covered (Range di temperatura: -40°C a 150°C / Temperature Range: -40°C to 150°C)	
For test Nb max 1K/min)	

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 4 di 29 PA1790AR11.pdf

Test Z/AD: Composite temperature/humidity cyclic test (Range di temperatura: -10°C a 65°C / Temperature Range: -10°C a 65°C) IEC 60068-2-38:2009
EN 60068-2-38:2009

Gradiente / Gradient 1.2K/min)

Apparecchiature elettriche ed elettroniche per gli ambienti industriali / Electric and electronic equipment for industrial environments

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Misure di emissione / Emission measurements	IEC 61000-6-4:2006+A1:2010 IEC 61000-6-4:2018 EN 61000-6-4:2007+A1:2011
Prove di immunità / Immunity tests	IEC 61000-6-2:2005 IEC 61000-6-2:2016 EN 61000-6-2:2005

Apparecchiature elettriche ed elettroniche per gli ambienti residenziali, commerciali e dell'industria leggera / Electric and electronic equipment for residential, commercial and light-industrial environments

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Misure di emissione / Emission measurements	IEC 61000-6-3:2006+A1:2010 EN 61000-6-3:2007+A1:2011+ AC:2012
Prove di immunità / Immunity tests	IEC 61000-6-1:2005 IEC 61000-6-1:2016 EN 61000-6-1:2007

Apparecchiature elettriche, elettroniche e meccaniche, componenti e materiali / Electric, electronic and mechanical equipment, components and materials

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Test A: Cold (Limite di temperatura -40°C / Temperature limit -40°C)	IEC 60068-2-1:2007 EN 60068-2-1:2007
Test B: Dry heat (Limite di temperatura 150°C / Temperature limit 150°C)	IEC 60068-2-2:2007 EN 60068-2-2:2007
Test Cab: Damp heat, steady state	IEC 60068-2-78:2012 EN 60068-2-78:2013
Test Eh: Hammer tests	IEC 60068-2-75:2014 EN 60068-2-75:2014

Apparecchiature multimediali / Multimedia Equipment

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Misure di emissione / Emission measurements	CISPR 32:2015 EN 55032:2012+AC:2013 Esclusi ricevitori broadcast e apparecchi audio/video / Excluded broadcast receiver and audio/video equipment

Azionamenti elettrici a velocità variabile / Adjustable speed electrical power drive systems

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Misure di emissione e prove di immunità / Emission measurements and immunity tests	IEC 61800-3:2004 + A1:2011 IEC 61800-3:2017 EN 61800-3:2004 + A1:2012

Convertitori connessi alla rete e protezione di interfaccia / Grid connected converters and interface protections

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Annex B - Test on inverters for indirectly connected power systems	CEI 0-21:2016-07
Appendix B (Power factor test), Appendix C (Harmonic current limit test), Appendix D (Transient voltage limit test), Appendix E (DC injection test), Appendix F (Active anti-islanding test), Appendix G (Voltage and frequency limits (Passive anti-islanding protection) test), Appendix H (Limits for sustained operation), Appendix I (Demand and power quality response mode testing including disconnection on external signal), Appendix J (Multiple inverter testing)	AS/NZS 4777.2:2015

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 5 di 29 PA1790AR11.pdf

<ul style="list-style-type: none"> - 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
<ul style="list-style-type: none"> - Functional safety (par.6.1); - Switch-on condition (par.6.2); - Voltage monitoring (par.6.3); - Frequency monitoring (par.6.4); - Direct current monitoring (par.6.5); - Detection of island operation (par.6.6); 	DIN VDE V 0126-1-1 (VDE V 0126-1-1):2013-08
<ul style="list-style-type: none"> - 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
Islanding prevention measures	IEC 62116:2014 EN 62116:2014
<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 (VDE V 0124-100):2012
<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 (Version 2.8 - 2014)
- Unintentional islanding test (par.5.7.1) (<120kVA)	IEEE 1547.1:2005+IS1:2010
- Unintentional islanding test (par.5.7.1) (<120kVA)	IEEE 1547:2003
<ul style="list-style-type: none"> - 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
Convertitori connessi alla rete e protezione di interfaccia/Grid connected converters and interface protections	
<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
<ul style="list-style-type: none"> - 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
	Revisione: 11 Data: 10/08/2018
	Scheda 6 di 29 PA1790AR11.pdf

- 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 Protection, Inverter connected machines (par.13.8.3.4A);
- 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);
- Over current Protection (par.13.8.3.4.5)
- Short circuit Current Contribution inverter connected Generating Units (par.13.8.4.6A);
- Self Monitoring - Solid State Disconnection (par.13.8.4.7)

ENA G59/3-2:2015

- 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

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

IEC 61683:1999
EN 61683:2000

- 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

Islanding prevention measures

ABNT NBR IEC 62116:2012

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 7 di 29 PA1790AR11.pdf

CEI 0-16:2014-09+V1:2014-12+V2:2016-07

- Misura di 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 (VFRT capability) (par.N.8);
- Verifica della insensibilità alle richiuse automatiche in discordanza di fase (par.N.9)
- Misura di correnti armoniche (par.Nbis.3.1);
- Misura di fluttuazioni di tensione dovute a manovre di sezionamento/separazione (par.Nbis.3.2);
- Misura di fluttuazioni di tensione (flicker) in condizioni di funzionamento continuo (par.Nbis.3.3);
- Verifica del campo di funzionamento in tensione e frequenza (par.Nbis.4);
- Verifica delle condizioni di sincronizzazione e presa di carico (par.Nbis.5);
- Verifica dei requisiti costruttivi circa lo scambio di potenza reattiva (par.Nbis.6);
- Verifica dei requisiti costruttivi circa la regolazione di potenza attiva (par.Nbis.7);
- Verifica della insensibilità agli abbassamenti di tensione (VFRT capability) (par.Nbis.8);
- Verifica della insensibilità alle richiuse automatiche in discordanza di fase (par.Nbis.9) (<120kVA)

EN 50438:2013

- Over / Under Voltage (par.D.2.3);
- Over / Under Frequency (par.D.2.4);
- Loss of Mains (LoM) detection (par.D.2.5);
- Operating range (par.D.3.1);
- Active power feed-in at under-frequency (par.D.3.2);
- Power response to over-frequency (par.D.3.3);
- Reactive power capability (par.D.3.4);
- Connection and starting to generate electrical power (par.D.3.6);
- Short-circuit current contribution (par.D.3.7);
- Harmonic current emission (par.D.3.8);
- Voltage fluctuations and flicker (D.3.9);
- DC injection (par.D.3.10)

UNE 206006 IN:2011

- Procedure of evaluation (par.4)

VDE-AR-N 4105:2011

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

Dispositivi a radiofrequenza, apparati digitali/RF devices, digital apparatus

Denominazione della prova / Campi di prova

Metodo di prova

Misure di emissione / Emission measurements

ICES-003 (Issue 6, January 2016)

Elettrodomestici, utensili elettrici e apparecchi similari / Household appliances, Electric tools and similiar apparatus

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
EN 62233:2008

Misure di emissione / Emission measurements

CISPR 14-1:2005+A1:2008+A2:2011
CISPR 14-1:2016+COR1:2016
EN 55014-1:2006+A1:2009+A2:2011
EN 55014-1:2017

Prove di immunità / Immunity tests

CISPR 14-2:2015
EN 55014-2:2015

Fire hazard testing

Denominazione della prova / Campi di prova

Metodo di prova

Glowing/hot-wire based test methods – Glow-wire flammability index (GWFI) test method for materials

IEC 60695-2-12:2010+A1:2014

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 8 di 29 PA1790AR11.pdf

Glowing/hot-wire based test methods – Glow-wire ignition temperature (GWIT) test method for materials	IEC 60695-2-13:2010+A1:2014
Glowing/hot-wire based test methods –Glow-wire flammability test method for end products	IEC 60695-2-11:2014
Glowinghot-wire based test methods – Glow-wire apparatus and common test procedure	IEC 60695-2-10:2013
Test flames – 50 W horizontal and vertical flame test methods	IEC 60695-11-10:2013
Test flames – Needle-flame test method - Apparatus, confirmatory test arrangement and guidance	IEC 60695-11-5:2016

Gradi di protezione forniti dalle coperture / Degrees of protection provided by enclosures

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
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	IEC 60529:1989+A1:1992+A2:2013 EN 60529:1991+ A1:2000+A2:2013+AC:2016-12

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

<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, 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

Industrial, Scientific, and Medical Equipment (FCC Part 18)

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Electromagnetic compatibility - Radiated and conducted emissions (up to 18 GHz)	FCC MP-5 (February 1986) FCC Part 18

Interruttori automatici / Circuit-breakers

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Emission measurements and immunity tests (Annexes F.4, F.5 and J)	IEC 60947-2:2016+COR1:2016 IEC 60947-2:2006+A1:2009+A2:2013 EN 60947-2:2017 EN 60947-2:2006 + A1:2009 + A2:2013 (allegati F e J / Annexes F and J)

Interruttori differenziali (RCD) per usi domestici e similari / Residual current-operated protective device (RCDs) for household and similar use

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Prove di immunità / Immunity tests	IEC 61543:1995+A1:2004+A2:2005 EN 61543:1995+AC:1997+A11:2003+A11:2003/AC:2004+A12:2005+A2:2006

Involucri per apparecchiature elettriche / Enclosures for electrical equipment

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Degrees of protection provided by enclosures for electrical equipment against external mecha-nical impacts (IK code)	IEC 62262:2002 EN 62262:2002

Macchine utensili / Machine tools

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 9 di 29 PA1790AR11.pdf

Misure di emissione / Emission measurements

EN 50370-1:2005

Prove di immunità / Immunity tests

EN 50370-2:2003

Requisiti di sicurezza per i sistemi e le apparecchiature di conversione elettronica di potenza / Safety requirements for power electronic converter systems and equipment

Denominazione della prova / Campi di prova

Metodo di prova

Clearance and creepage distances test 5.2.2.1

IEC 62477-1:2012

Non-accessibility test 5.2.2.2

EN 62477-1:2017

Ingress protection test (IP rating) 5.2.2.3

Enclosure integrity test 5.2.2.4

Deflection test 5.2.2.4.2

Steady force test, 30N 5.2.2.4.2.2

Steady force test, 250N 5.2.2.4.2.3

Impact test 5.2.2.4.3

Drop test 5.2.2.4.4

Stress relief test 5.2.2.4.5

Stability test 5.2.2.5

Wall or ceiling mounted equipment test 5.2.2.6

Handles and manual control securement test 5.2.2.7

Impulse voltage test 5.2.3.2

a.c. or d.c. voltage test 5.2.3.4

Partial discharge test 5.2.3.5

Protective impedance test 5.2.3.6

Touch current measurement test 5.2.3.7

Capacitor discharge test 5.2.3.8

Limited power source test 5.2.3.9

Temperature rise test 5.2.3.10

Protective equipotential bonding test 5.2.3.11

Output Short circuit test 5.2.4.4

Output overload test 5.2.4.5

Breakdown of components test 5.2.4.6

PWB short circuit test 5.2.4.7

Loss of phase test 5.2.4.8

Cooling failure tests 5.2.4.9

Inoperative blower test 5.2.4.9.2

Clogged filter test 5.2.4.9.3

Loss of coolant test 5.2.4.9.4

Glow-wire test 5.2.5.3

Flammability test 5.2.5.5

Dry heat test 5.2.6.3.1

Damp heat test 5.2.6.3.2

Vibration test 5.2.6.4

Salt mist test 5.2.6.5

Dust and sand test 5.2.6.6

Hydrostatic pressure test 5.2.7

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 -

IEC 62109-1:2010

Environmental requirements and conditions, 7 -Protection against electric

EN 62109-1:2010

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)

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

Denominazione della prova / Campi di prova

Metodo di prova

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 10 di 29 PA1790AR11.pdf

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 60335-1:2001+A1:2004 +A2:2006
 IEC 60335-1:2010+A1:2013+A2:2016
 EN
 60335-1:2002+A1:2004+A2:2006+A11:2004+A12:2006+A13:2008+A14:2010+A15:2011
 EN 60335-1:2012 +A11:2014+AC:2014+A13:2017

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+A1:2008+A2:2012
 IEC 60335-2-14:2016
 EN 60335-2-14:2006 +A1:2008
 +A11:2012+corrigendum Feb.2007 +A11/AC:2013
 + A12:2016 + A11:2012/AC:2016

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+A1:2008+A2:2013
 EN 60335-2-32:2003+A1:2008+A2:2015

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

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+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

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 11 di 29 PA1790AR11.pdf

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+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+A1:2005 +A2:2008
IEC 60335-2-15:2012+A1:2016
EN 60335-2-15:2002 +A1:2005 +A2:2008
+A11:2012+corrigendum Jul.2005 + corrigendum
Dec.2006 + A11:2012/AC:2013
EN 60335-2-15:2016

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

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+A1:2004 +A2:2007
IEC 60335-2-30:2009+A1:2016
EN 60335-2-30:2003 + A1:2004 +A2:2007
EN 60335-2-30:2009+A11:2012+corrigendum
Mar.2010+AC:2014

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+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

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 12 di 29 PA1790AR11.pdf

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+A1:2008 +A2:2014
EN 60335-2-101:2002 +A1:2008 +A2:2014

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

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+A1:2005+A2:2007
IEC 60335-2-24:2010+A1:2012+A2:2017
EN 60335-2-24:2003
+A1:2005+A2:2007+A11:2004+A12:2009+corrigendum Aug.2010
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+A1:2004 +A2:2007
IEC 60335-2-54:2008+A1:2015
EN 60335-2-54:2003 +A1:2004 +A2:2007
+A11:2006
EN 60335-2-54:2008
+A11:2012+A11:2012/AC:2015 + A1:2015

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

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+A1:2008+A2:2012
IEC 60335-2-102:2017
EN 60335-2-102:2006+A1:2010
EN 60335-2-102:2016

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

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 13 di 29 PA1790AR11.pdf

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+A1:2004+A2:2007
 IEC 60335-2-69:2012
 IEC 60335-2-69:2016
 EN 60335-2-69:2009
 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+A1:2005
 IEC 60335-2-67:2012+A1:2016
 EN 60335-2-67:2009
 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+A1:2005+A2:2007
 IEC 60335-2-89:2010+A1:2012+A2:2015
 EN 60335-2-89:2002+A1:2005+A2:2007+A11:2004+corrigendum Aug.2010
 EN 60335-2-89:2010+AC:2014+A1:2016+A2:2017

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+A1:2008
 EN 60335-2-49:2003+A1:2008+A11:2012+corrigendum Sep.2007

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 14 di 29 PA1790AR11.pdf

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

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
7 – Marking 8 – Protection against access to live parts 10 – Power input 11 – Heating 13 – Leakage current and el. strength at op. temp 14 – Transient overvoltages 15 – Moisture resistance 16 – Leakage current and el. Strength 17- Overload protection of transformers and associated circuits 19 – Abnormal Operations 20 – Stability and mechanical hazards 21 – Mechanical strength 22 – Construction 23 – Internal wiring 24 – Components 25 – Supply connection and ext. flexible cords 26 – Terminals for external conductors 27 – Provision for earthing 28 – Screws and connections 29 – Cl./Cr. distances and solid insulation 30 – Resistance to heat and fire 31 Resistance to rusting 32 Radiation, toxicity and similar hazards Annex AA Annex BB	IEC 60335-2-11:2008+A1:2012+A2:2015 EN 60335-2-11:2010+A11:2012+A1:2015

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

<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, 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+A1: 2004 +A2:2006 IEC 60335-2-2:2009+A1:2012+A2:2016 EN 60335-2-2:2003 +A1:2004 +A2:2006 +A11:2010 +A11/EC: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

<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, 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 IEC 60335-2-103:2006+A1:2010 IEC 60335-2-103:2015 EN 60335-2-103:2003 +A11:2009 EN 60335-2-103:2015

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

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
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UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 15 di 29 PA1790AR11.pdf

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+A1:2006+A2:2008
 IEC 60335-2-31:2012+A1:2016
 EN
 60335-2-31:2003+A1:2006+A2:2009+corrigendum
 Dec.2005
 EN 60335-2-31:2014

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+A1:2017
 EN 60335-2-99:2003

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

Denominazione della prova / Campi di prova

Metodo di prova

7 Marking and instructions, 8 Protection against access to live parts, 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, 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, ANNEX AA

IEC 60335-2-29:2016

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+A1:2005+A2:2008
 IEC 60335-2-6:2014
 EN
 60335-2-6:2003+A1:2005+A2:2008+A11:2010+A12
 :2012+A11/AC:2012+A13:2013
 EN 60335-2-6:2015

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

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 16 di 29 PA1790AR11.pdf

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+A1:2004+A2:2008
 IEC 60335-2-36:2017
 EN
 60335-2-36:2002+A1:2004+A2:2008+A11:2012+cor
 rigendum Aug.2007

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+A1:2004+A2:2008
 IEC 60335-2-75:2012+A1:2015
 EN
 60335-2-75:2004+A1:2005+A2:2008+A11:2006+A1
 2:2010

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+A1:2005 +A2:2008
 IEC 60335-2-3:2012+A1:2015
 EN 60335-2-3:2002 +A1:2005 +A2:2008 +A11:2010
 +A11/AC:2012
 EN 60335-2-3:2016

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+A1:2008+A2:2017
 EN
 60335-2-42:2003+A1:2008+A11:2012+corrigendum
 Sep.2007

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

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 17 di 29 PA1790AR11.pdf

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+A1:2008+A2:2017
IEC 60335-2-37:2017
EN
60335-2-37:2002+A1:2008+A11:2012+corrigendum
Aug.2007+A12:2016

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+A1:2008+A2:2015
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+A1:2008+A2:2012
IEC 60335-2-23:2016
EN
60335-2-23:2003+A1:2008+A11:2010+A11/AC:2012+A2:2015

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+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 gli apparecchi per il trattamento dei pavimenti e per gli strofina-pavimenti per pavimenti bagnati

Denominazione della prova / Campi di prova

Metodo di prova

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 18 di 29 PA1790AR11.pdf

7 Marking and instructions, 8 Protection against access to live parts, 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, 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 - Terminals 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 60335-2-10:2002+A1:2008
EN 60335-2-10:2003+A1:2008

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 - Terminals 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+A1:2008+A2:2017
EN
60335-2-48:2003+A1:2008+A11:2012+corrigendum
Sep.2007

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 - Terminals 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 60335-2-9:2002+A1:2004+A2:2006
IEC 60335-2-9:2008+A1:2012+A2:2016
EN
60335-2-9:2003+A1:2004+A2:2006+A12:2007+A13
:2010+A13/AC:2011+A13/AC: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

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 - Terminals 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+A1:2004+A2:2008
IEC 60335-2-95:2011+A1:2015
EN 60335-2-95:2004
EN 60335-2-95:2015+A1:2015

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

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 19 di 29 PA1790AR11.pdf

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+A1:2004+A2:2007
 IEC 60335-2-79:2012
 IEC 60335-2-79:2016
 EN 60335-2-79:2009
 EN 60335-2-79:2012

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

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
7 - Marking	IEC 60335-2-5:2012+A1:2018
8 - Protection against access to live parts	EN 60335-2-5:2015
10 - Power input	
11 - Heating	
13 - Leakage current and el. strength at op. temp	
14 - Transient overvoltages	
15 - Moisture resistance	
16 - Leakage current and el. Strength	
17- Overload protection of transformers and associated circuits	
19 - Abnormal Operations	
20 - Stability and mechanical hazards	
21 - Mechanical strength	
22 - Construction	
22.103 - Construction	
23 - Internal wiring	
24 - Components	
25 - Supply connection and ext. flexible cords	
26 - Terminals for external conductors	
27 - Provision for earthing	
28 - Screws and connections	
29 - Cl./Cr. distances and solid insulation	
30 - Resistance to heat and fire	
31 Resistance to rusting	
32 Radiation, toxicity and similar hazards	
Annex AA	

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

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
7 - Marking	IEC 60335-2-7:2008+A1:2001+A2:2016
8 - Protection against access to live parts	EN 60335-2-7:2010+A11:2013
10 - Power input	
11 - Heating	
13 - Leakage current and el. strength at op. temp	
14 - Transient overvoltages	
15 - Moisture resistance	
16 - Leakage current and el. Strength	
17- Overload protection of transformers and associated circuits	
19 - Abnormal Operations	
20 - Stability and mechanical hazards	
21 - Mechanical strength	
22 - Construction	
23 - Internal wiring	
24 - Components	
25 - Supply connection and ext. flexible cords	
26 - Terminals for external conductors	
27 - Provision for earthing	
28 - Screws and connections	
29 - Cl./Cr. distances and solid insulation	
30 - Resistance to heat and fire	
31 Resistance to rusting	
32 Radiation, toxicity and similar hazards	
Annex AA	

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 20 di 29 PA1790AR11.pdf

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per lavastoviglie 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 (Tutto tranne Annex BB)

IEC 60335-2-58:2002+A1:2008+A2:2015
EN
60335-2-58:2005+A1:2008+A11:2010+corrigendum
Aug.2007+A2:2015+A12:2016

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+A1:2008+A2:2013
IEC 60335-2-105:2016
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+A1:2005+A2:2005
IEC 60335-2-40:2013+A1:2016
EN
60335-2-40:2003+A1:2006+A2:2009+A11:2004+A1
2:2005+A13:2012+corrigendum
Apr.2006+corrigendum
Aug.2010+A13:2012/AC:2013

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+A1:2008
EN 60335-2-28: 2003+A1:2008

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 21 di 29 PA1790AR11.pdf

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

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+A1:1997
IEC 60335-2-64:2002+A1:2007
EN 60335-2-64:2000+A1:2002+corrigendum Jun.2002

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+A1:2005
IEC 60335-2-72:2012
IEC 60335-2-72:2016
EN 60335-2-72:2009
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

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 60335-2-68:2002+A1:2005 +A2:2007
IEC 60335-2-68:2012+A1:2016
EN 60335-2-68:2009
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+A1:2004+A2:2008
IEC 60335-2-97:2016
EN
60335-2-97:2006+A2:2010+A11:2008+A12:2015

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 22 di 29 PA1790AR11.pdf

Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per padelle per friggere, friggitrice 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+A1:2004+A2:2008
IEC 60335-2-13:2009+A1:2016
EN 60335-2-13:2003+A1:2004+A2:2008
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+A1:2008+A2:2017
EN 60335-2-38:2003+A1:2008+corrigendum
Aug.2007

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+A1:2004+A2:2009
IEC 60335-2-41:2012
EN 60335-2-41:2003+A1:2004+A2:2010

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

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+A1:2005+A2:2008
IEC 60335-2-8:2012+A1:2015
EN 60335-2-8:2003+A1:2005+A2:2008
EN 60335-2-8:2015+A1:2016

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

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 23 di 29 PA1790AR11.pdf

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+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+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

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+A1:2008
EN 60335-2-62:2003+A1:2008+corrigendum Aug.2007

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

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 24 di 29 PA1790AR11.pdf

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
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+A1:2008+A2:2011
EN 60335-2-45:2002+A1:2008+A2:2012

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+A1:2004+A2:2008
EN
60335-2-60:2003+A1:2005+A2:2008+A11:2010+A1
2:2010

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+A1:2004+A2:2008
IEC 60335-2-80:2015
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

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 25 di 29 PA1790AR11.pdf

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+A1:2004+A2:2008
EN 60335-2-98:2003+A1:2005+A2:2008

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

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 60335-2-59:2002+A1:2006+ A2:2009
EN 60335-2-59:2003 +A1:2006 +A2:2009

Sicurezza degli apparecchi elettrici d'uso domestico e similare Parte2: Norme particolari per forni a microonde, compresi forni a microonde combinati

Denominazione della prova / Campi di prova

Metodo di prova

Classificazione / Classification (par. 6);
 Marcatura e istruzioni / Marking and instructions (par. 7);
 Protezione contro l'accesso a parti in tensione / Protection against access to live parts (par. 8);
 Potenza e corrente / Power input and current (par. 10);
 Riscaldamento / Heating (par. 11);
 Corrente di dispersione e rigidità dielettrica alla temperatura di funzionamento / Leakage current and electric strength at operating temperature (par. 13);
 Sovratensioni transitorie / Transient overvoltage (par. 14);
 Resistenza all'umidità / Moisture resistance (par. 15);
 Corrente di dispersione e rigidità dielettrica / Leakage current and electric strength (par. 16);
 Protezione contro il sovraccarico dei trasformatori e dei circuiti associati / Overload protection of transformers and associated circuits (par. 17);
 Durata / Endurance (par. 18);
 Funzionamento anormale / Abnormal operation (par. 19);
 Stabilità e pericoli meccanici / Stability and mechanical hazards (par. 20);
 Resistenza meccanica / Mechanical strength (par. 21);
 Costruzione / Construction (par. 22);
 Cavi interni / Internal wiring (par. 23);
 Componenti / Components (par. 24);
 Collegamento alla rete e cavi flessibili esterni / Supply connection and external flexible cords (par. 25);
 Morsetti per cavi esterni / Terminals for external conductors (par. 26);
 Disposizioni per la messa a terra / Provision for earthing (par. 27);
 Viti e connessioni / Screws and connections (par. 28);
 Distanze di isolamento superficiali, in aria e distanze attraverso l'isolamento solido / Clearances, creepage distances and solid insulation (par. 29);
 Resistenza al calore e al fuoco / Resistance to heat and fire (par. 30);
 Protezione contro la ruggine / Resistance to rusting (par. 31);
 Radiazione, tossicità e pericoli analoghi / Radiation, toxicity and similar hazards (par. 32)

IEC 60335-2-25:2010+A1:2014+A2:2015
EN 60335-2-25:2012+A1:2015+A2:2016

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

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 26 di 29 PA1790AR11.pdf

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)

IEC 62109-2:2011
EN 62109-2:2011

Sistemi di allarme / Alarm systems

Denominazione della prova / Campi di prova

Metodo di prova

Electromagnetic compatibility - Immunity requirements

EN 50130-4:2011 + A1:2014

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

Unintentional Radiators (FCC Part 15, Subpart B)

Denominazione della prova / Campi di prova

Metodo di prova

Electromagnetic compatibility - Radiated and conducted emissions (up to 18 GHz)

ANSI C63.4-2014
FCC Part 15, Subpart B

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 27 di 29 PA1790AR11.pdf

ELENCO PROVE ACCREDITATE - CATEGORIA: III

Convertitori connessi alla rete e protezione di interfaccia / Grid connected converters and interface protections

<i>Denominazione della prova / Campi di prova</i>	<i>Metodo di prova</i>
Appendix B (Power factor test), Appendix C (Harmonic current limit test), Appendix D (Transient voltage limit test), Appendix E (DC injection test), Appendix F (Active anti-islanding test), Appendix G (Voltage and frequency limits (Passive anti-islanding protection) test), Appendix H (Limits for sustained operation) , Appendix I (Demand and power quality response mode testing including disconnection on external signal, Appendix J (Multiple inverter testing)	AS/NZS 4777.2:2015
<ul style="list-style-type: none"> - 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 style="list-style-type: none"> - 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
<ul style="list-style-type: none"> - Efficiency measurement (par.4.5,6); - Loss measurements (par.7) 	IEC 61683:1999; EN 61683:2000
<ul style="list-style-type: none"> - 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
<ul style="list-style-type: none"> - 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
<ul style="list-style-type: none"> - Functional safety (par.6.1); - Switch-on condition (par.6.2) - Voltage monitoring (par.6.3); - Frequency monitoring (par.6.4); - Direct current monitoring (par.6.5); - Detection of island operation (par.6.6) 	DIN VDE V 0126-1-1 (VDE V 0126-1-1):2013-08

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 28 di 29 PA1790AR11.pdf

<ul style="list-style-type: none"> - 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
Islanding prevention measures	ABNT NBR IEC 62116:2012
Islanding prevention measures	IEC 62116:2014 EN 62116:2014
<ul style="list-style-type: none"> - Misura di 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 (VFRT capability) (par.N.8); - Verifica della insensibilità alle richiuse automatiche in discordanza di fase (par.N.9) - Misura di correnti armoniche (par.Nbis.3.1); - Misura di fluttuazioni di tensione dovute a manovre di sezionamento/separazione (par.Nbis.3.2); - Misura di fluttuazioni di tensione (flicker) in condizioni di funzionamento continuo (par.Nbis.3.3); - Verifica del campo di funzionamento in tensione e frequenza (par.Nbis.4); - Verifica delle condizioni di sincronizzazione e presa di carico (par.Nbis.5); - Verifica dei requisiti costruttivi circa lo scambio di potenza reattiva (par.Nbis.6); - Verifica dei requisiti costruttivi circa la regolazione di potenza attiva (par.Nbis.7); - Verifica della insensibilità agli abbassamenti di tensione (VFRT capability) (par.Nbis.8); - Verifica della insensibilità alle richiuse automatiche in discordanza di fase (par.Nbis.9) 	CEI 0-16:2014-09+V1:2014-12+V2:2016-07
<ul style="list-style-type: none"> - Procedure of evaluation (par.4) 	UNE 206006 IN:2011
<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) 	DIN V VDE V 0124-100 (VDE V 0124-100):2012
<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 (Version 2.8 - 2014)
<ul style="list-style-type: none"> - Unintentional islanding test (par.5.7.1) 	IEEE 1547.1:2005+IS1:2010
<ul style="list-style-type: none"> - Unintentional islanding test (par.5.7.1) (<120kVA) 	IEEE 1547:2003
<ul style="list-style-type: none"> - Verification of the electrical properties (par.9); - Islanding detection (Annex D) 	VDE-AR-N 4105:2011

UL International Italia Srl Via delle Industrie, 6 20061 Carugate MI	Numero di accreditamento: 1363 Sede A
	Revisione: 11 Data: 10/08/2018
	Scheda 29 di 29 PA1790AR11.pdf

- 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

Elettrodomestici, utensili elettrici e apparecchi simili / Household appliances, Electric tools and similar apparatus

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
EN 62233:2008

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)

IEC 62109-1:2010
EN 62109-1:2010

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 - Tutto tranne 8.4, 8.5

IEC 62109-2:2011
EN 62109-2:2011

Legenda

- ETSI = European Telecommunications Standards Institute
- CISPR = Comité international spécial des perturbations radioélectriques
- ABNT NBR = Associação Brasileira De Normas Técnicas
- ANSI = American National Standards Institute
- AS = Australian Standards
- BDEW = Bundesverband der Energie- und Wasserwirtschaft (German Association of Energy and Water Industries)
- DIN = Deutsches Institut für Normung
- ENA = Energy Network Association
- FCC = Federal Communications Commission
- FGW = Fördergesellschaft Windenergie (Society for the Promotion of wind energy and other renewable energy)
- IEEE = Institute of Electrical and Electronics Engineers
- NRS = Specifications for the Electricity Supply Industry in collaboration with the South African Bureau of Standards (SABS)
- ÖVE = Österreichischer Verband für Elektrotechnik (Austrian Standards Institute)
- UNE = AENOR - Asociación Española de Normalización y Certificación
- VDE = Verband der Elektrotechnik Elektronik Informationstechnik

ACCREDIA
Il Direttore del Dipartimento
(Dott.ssa Silvia Tramontin)

La decorrenza del presente elenco delle prove accreditate, coincide con la data di revisione del documento, posta in alto a destra. Non rileva il fatto che la firma digitale sia stata apposta successivamente
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