



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:

DEKRA Testing and Certification S.r.l.
Via Martiri della Liberazione 12, 23875- Osnago (LC), Italia

(Hereinafter called the Organization) and hereby declares that Organization is accredited in accordance with the recognized International Standard:

ISO/IEC 17025:2017

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

Electrical Testing
(As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

Tracy Szerszen
President

Perry Johnson Laboratory
Accreditation, Inc. (PJLA)
755 W. Big Beaver, Suite 1325
Troy, Michigan 48084

Initial Accreditation Date:

March 1, 2019

Issue Date:

June 1, 2021

Expiration Date:

July 31, 2023

Accreditation No.:

101871

Certificate No.:

L21-404

The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: www.pjllabs.com



Certificate of Accreditation: Supplement

DEKRA Testing and Certification S.r.l.
Via Martiri della Liberazione 12, 23875-Osnago (LC), Italia
Contact Name: Sig. Franco Vasta Phone: 0399280293

Accreditation is granted to the facility to perform the following testing:

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT	
Electrical ^F	Sicurezza degli apparecchi elettrici d'uso domestico e similare	Classificazione Classification	IEC 60335-1:2001 +A1:2004+A2:2006;	Visual Evaluation	
		Marcatura e istruzioni Marking and instructions	IEC 60335-1:2010 +A1:2013+A2:2016; EN 60335-1:2002		
	Household and similar electrical appliances	Protezione contro l'accesso a parti in tensione Protection against access to live parts	+A1:2004+A11:2004 +A2:2006+A12:2006 +A13:2008+A14:2010 +A15:2011; EN 60335-1:2012+ A11:2014;		Up to 20 N Up to 63 A
		Avviamento degli apparecchi a motore Starting of motor operated appliances	CEI EN 60335-1:2008 +A13:2009+A14:2012 +A15:2012; CEI EN 60335-1:2013+A11:2015		
	Potenza e corrente assorbita Power input and current				
	Riscaldamento Heating		Climatic chamber: 5 °C to 60 °C Data Recorder: -10 °C to 400 °C		
	Corrente di dispersione e rigidità dielettrica alla temperatura di funzionamento Leakage current and dielectric strength at operating temperature		Up to 1 mA/kW; Up to 5 000 Vac Up to 95 % RH Up to 1 mA/kW; Up to 5 000 Vac		
	Resistenza all'umidità Resistance to humidity				
	Corrente di dispersione e rigidità dielettrica Leakage current and Dielectric strength				
	Protezione contro il sovraccarico dei trasformatori e dei circuiti associati Overload protection of transformers and associated circuits		Up to 63 A		
Funzionamento anormale Abnormal Operation					



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Electrical ^F	Sicurezza degli apparecchi elettrici d'uso domestico e similare Household and similar electrical appliances	Stabilità e pericoli meccanici Stability and Mechanical Hazards	IEC 60335-1:2001 +A1:2004+A2:2006; IEC 60335-1:2010 +A1:2013+A2:2016;	Up to 63 A
		Resistenza meccanica Mechanical Resistance	EN 60335-1:2002 +A1:2004+A11:2004 +A2:2006+A12:2006 +A13:2008+A14:2010 +A15:2011;	Visual Evaluation
		Costruzione Construction	EN 60335-1:2012+ A11:2014; CEI EN 60335-1:2008 +A13:2009+A14:2012 +A15:2012;	Flexing test up to 10 N/ 20 000 flexing 360° Pull force up to 100 N; Torque 0,35 Nm
		Cavi interni Internal wiring	CEI EN 60335-1:2008 +A13:2009+A14:2012 +A15:2012; CEI EN 60335-1:2013+A11:2015	
		Componenti Components	Up to 12 V; 0.01 Ω to 0.5 Ω	
		Collegamento alla rete e cavi flessibili esterni Supply connection and external flexible cords Disposizioni per la messa a terra Grounding Provisions	Up to 2.5 Nm	
		Viti e connessioni Screws and Connections	0.01 mm to 1 m	
		Distanze superficiali, in aria e distanze attraverso un isolamento solido Surface distances, in the air and distances through a solid insulation	Up to 960 °C	
		Resistenza al calore e al fuoco Resistance to Heat and Fire	EMF: Up to 100 %	
		Protezione contro la ruggine Protection against rust	100 °C ± 5 °C; 10 min	
Radiazioni tossicità e pericoli analoghi Toxicity Radiation and Similar Hazards				



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Electrical ^F	Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per aspirapolvere ed apparecchi per la pulizia ad aspirazione acqua Safety of household and similar electrical appliances – Part 2: Particular requirements for vacuum cleaners and water suction cleaning devices	Classificazione Classification	IEC 60335-2-2:2009 +A1:2012+A2:2016; EN 60335-2-2:2010+A1:2013; CEI EN 61335-2-2:2011 +A11:2013+A1:2014	Visual Evaluation		
		Marcatura e istruzioni Marking and instructions				
		Protezione contro l'accesso a parti in tensione Protection against access to live parts				
		Avviamento degli apparecchi a motore Starting of motor operated appliances				
		Potenza e corrente assorbita Power input and current				
		Riscaldamento Heating				
		Corrente di dispersione e rigidità dielettrica alla temperatura di funzionamento Leakage current and dielectric strength at operating temperature			Climatic chamber: 5 °C to 60 °C Data Recorder: -10 °C to 400 °C	
		Resistenza all'umidità Resistance to humidity				
		Corrente di dispersione e rigidità dielettrica Leakage current and Dielectric strength				Up to 1 mA/kW; Up to 5 000 Vac Up to 95 % RH Up to 1 mA/kW; Up to 5 000 Vac
		Protezione contro il sovraccarico dei trasformatori e dei circuiti associati Overload protection of transformers and associated circuits				Up to 63 A
Funzionamento anormale Abnormal Operation						



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		Resistenza meccanica Mechanical Resistance		Visual Evaluation
		Costruzione Construction		Flexing test up to 10 N/ 20 000 flexing 360° Pull force up to 100 N; Torque 0,35 Nm
		Cavi interni Internal wiring		
		Componenti Components		Up to 2.5 Nm
		Collegamento alla rete e cavi flessibili esterni Supply connection and external flexible cords		0.01 mm to 1 m
		Disposizioni per la messa a terra Grounding Provisions		
		Viti e connessioni Screws and Connections		Up to 960 °C
		Distanze superficiali, in aria e distanze attraverso un isolamento solido Surface distances, in the air and distances through a solid insulation		100 °C ± 5 °C; 10 min
		Resistenza al calore e al fuoco Resistance to Heat and Fire		EMF: Up to 100 %
Protezione contro la ruggine Protection against rust				
Radiazioni tossicità e pericoli analoghi Toxicity Radiation and Similar Hazards				



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Electrical ^F	Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi da cucina Household and similar electrical appliances - Safety - Part 2: Particular requirements for kitchen machines	Classificazione Classification	IEC 60335-2-14:2016;	Visual Evaluation
		Marcatura e istruzioni Marking and instructions	IEC 60335-2-14:2006 +A1:2008+A2:2012;	
		Protezione contro l'accesso a parti in tensione Protection against access to live parts	EN 60335-2-14:2006 +A1:2008+A11:2012 +AC:2016;	Up to 20 N Up to 63 A
		Avviamento degli apparecchi a motore Starting of motor operated appliances	EN 60335-2-14:2016; CEI EN 60335-2-14:2007 +A1:2009+A14:2012	
		Potenza e corrente assorbita Power input and current	Climatic chamber: 5 °C to 60 °C Data Recorder: -10 °C to 400 °C	
		Riscaldamento Heating		
		Corrente di dispersione e rigidità dielettrica alla temperatura di funzionamento Leakage current and dielectric strength at operating temperature		Up to 1 mA/kW; Up to 5 000 Vac Up to 95 % RH Up to 1 mA/kW; Up to 5 000 Vac
		Resistenza all'umidità Resistance to humidity		
		Corrente di dispersione e rigidità dielettrica Leakage current and Dielectric strength	Up to 63 A	
		Protezione contro il sovraccarico dei trasformatori e dei circuiti associati Overload protection of transformers and associated circuits		
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Electrical ^F	Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi da cucina Household and similar electrical appliances - Safety - Part 2: Particular requirements for kitchen machines	Stabilità e pericoli meccanici Stability and Mechanical Hazards	IEC 60335-2-14:2016; IEC 60335-2-14:2006 +A1:2008+A2:2012; EN 60335-2-14:2006	Up to 20 °
		Resistenza meccanica Mechanical Resistance	+A1:2008+A11:2012+AC:2016; EN 60335-2-14:2016;	Up to 1 J
		Costruzione Construction	CEI EN 60335-2-14:2007 +A1:2009+A14:2012	Visual Evaluation
		Cavi interni Internal wiring		
		Componenti Components		
		Collegamento alla rete e cavi flessibili esterni Supply connection and external flexible cords		Flexing test up to 10 N/ 20 000 flexing 360° Pull force up to 100 N; Torque 0,35 Nm
		Disposizioni per la messa a terra Grounding Provisions		Up to 12 V; 0.01 Ω to 0.5 Ω
		Viti e connessioni Screws and Connections		Up to 2.5 Nm
		Distanze superficiali, in aria e distanze attraverso un isolamento solido Surface distances, in the air and distances through a solid insulation		0.01 mm to 1 m
		Resistenza al calore e al fuoco Resistance to Heat and Fire		Up to 960 °C
	Protezione contro la ruggine Protection against rust		100 °C ± 5 °C; 10 min	
	Radiazioni tossicità e pericoli analoghi Toxicity Radiation and Similar Hazards		EMF: Up to 100 %	



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Electrical ^F	Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi per il riscaldamento di liquidi Household and similar electrical appliances - Safety - Part 2: Particular requirements for appliances for heating liquids	Classification	IEC 60335-2-15:2002	Visual Evaluation	
		Marking and instructions	+A1:2005+A2:2008;		
		Construction Internal cables	IEC 60335-2-15:2012+A1:2016;	Force up to 20 N	
		Components	EN 60335-2-15:2002+A1:2005+ EC:2005+EC:2006+A2:2008+ A11:2012+AC:2013;		
		Terminals for external cables	EN 60335-2-15:2016;		
		Protection against access to live parts	CEI EN 60335-2-15:2003		
		Starting of Motor Appliances	+A1:2006+A2:2009+ A11:2012; 15:2012+A11:2013		Up to 63 A
		Power and current absorbed			
		Protection against overload of transformers and associated circuits			Visual Evaluation
		Classificazione Classification			
		Marcatura e istruzioni Marking and instructions			
		Protezione contro l'accesso a parti in tensione Protection against access to live parts			Up to 20 N Up to 63 A
		Avviamento degli apparecchi a motore Starting of motor operated appliances			
		Potenza e corrente assorbita Power input and current			
		Riscaldamento Heating		Climatic chamber: 5 °C to 60 °C Data Recorder: -10 °C to 400 °C	
Corrente di dispersione e rigidità dielettrica alla temperatura di funzionamento Leakage current and dielectric strength at operating temperature		Up to 1 mA/kW; Up to 5 000 Vac			



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		Corrente di dispersione e rigidità dielettrica Leakage current and Dielectric strength	EN 60335-2-15:2002+A1:2005+ EC:2005+EC:2006+A2:2008+ A11:2012+AC:2013; EN 60335-2-15:2016;	Up to 1 mA/kW; Up to 5 000 Vac
		Protezione contro il sovraccarico dei trasformatori e dei circuiti associati Overload protection of transformers and associated circuits	CEI EN 60335-2-15:2003 +A1:2006+A2:2009+ A11:2012; CEI EN 60335-2-15:2012+A11:2013	Up to 63 A
		Funzionamento anormale Abnormal Operation		Up to 63 A
		Stabilità e pericoli meccanici Stability and Mechanical Hazards		Up to 20°
		Resistenza meccanica Mechanical Resistance		Up to 1 J
		Costruzione Construction		Visual Evaluation
		Cavi interni Internal wiring		
		Componenti Components		
		Collegamento alla rete e cavi flessibili esterni Supply connection and external flexible cords		Flexing test up to 10 N / 20 000 flexing 360° Pull force up to 100 N; Torque 0,35 Nm
		Disposizioni per la messa a terra Grounding Provisions		Up to 12 V; 0.01 Ω to 0.5 Ω
Viti e connessioni Screws and Connections		Up to 2.5 Nm		



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Electrical ^F	Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per apparecchi per il riscaldamento di liquidi Household and similar electrical appliances - Safety - Part 2: Particular requirements for appliances for heating liquids	Distanze superficiali, in aria e distanze attraverso un isolamento solido Surface distances, in the air and distances through a solid insulation	IEC 60335-2-15:2002 +A1:2005+A2:2008; IEC 60335-2-15:2012+A1:2016; EN 60335-2-15:2002+A1:2005+EC:2005+EC:2006+A2:2008+A11:2012+AC:2013; EN 60335-2-15:2016; CEI EN 60335-2-15:2003	0.01 mm to 1 m
		Resistenza al calore e al fuoco Resistance to Heat and Fire	+A1:2006+A2:2009+ A11:2012; CEI EN 60335-2-15:2012+A11:2013	Up to 960 °C
		Protezione contro la ruggine Protection against rust		100 °C ± 5 °C; 10 min
		Radiazioni tossicità e pericoli analoghi Toxicity Radiation and Similar Hazards		EMF: Up to 100 %
		Distanze superficiali, in aria e distanze attraverso un isolamento solido Surface distances, in the air and distances through a solid insulation		0.01 mm to 1 m
		Resistenza al calore e al fuoco Resistance to Heat and Fire		Up to 960 °C
		Protezione contro la ruggine Protection against rust		100 °C ± 5 °C; 10 min
		Radiazioni tossicità e pericoli analoghi Toxicity Radiation and Similar Hazards		EMF: Up to 100 %



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Electrical ^F	Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per gli apparecchi per la cura della pelle e dei capelli Household and similar electrical appliances - Safety - Part 2: Particular requirements for appliances for skin or hair care	Classificazione Classification	IEC 60335-2-23:2003 +Ec:2004+A1:2008+A2:2012;	Visual Evaluation Up to 20 N Up to 63 A
		Marcatura e istruzioni Marking and instructions	IEC 60335-2-23:2016;	
		Protezione contro l'accesso a parti in tensione Protection against access to live parts	EN 60335-2-23:2003 +A1:2008+A2:2015;	
		Avviamento degli apparecchi a motore Starting of motor operated appliances	CEI EN 60335-2-23:2004 +A1:2009+A11:2011+Ec:2012+A2:2016	Climatic chamber: 5 °C to 60 °C Data Recorder: -10 °C to 400 °C
		Potenza e corrente assorbita Power input and current	Up to 1 mA/kW; Up to 5 000 Vac Up to 95 % RH Up to 1 mA/kW; Up to 5 000 Vac	
		Riscaldamento Heating		
		Corrente di dispersione e rigidità dielettrica alla temperatura di funzionamento Leakage current and dielectric strength at operating temperature		
		Resistenza all'umidità Resistance to humidity	Up to 63 A	
		Corrente di dispersione e rigidità dielettrica Leakage current and Dielectric strength		
		Protezione contro il sovraccarico dei trasformatori e dei circuiti associati Overload protection of transformers and associated circuits		
Funzionamento anormale Abnormal Operation				



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Electrical ^F	Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per gli apparecchi per la cura della pelle e dei capelli Household and similar electrical appliances - Safety - Part 2: Particular requirements for appliances for skin or hair care	Stabilità e pericoli meccanici-Stability and Mechanical Hazards	IEC 60335-2-23:2003 +Ec:2004+A1:2008+A2:2012;	Up to 20° Up to 1 J
		Resistenza meccanica Mechanical Resistance	IEC 60335-2-23:2016;	
		Costruzione Construction	EN 60335-2-23:2003 +A1:2008+A2:2015;	Visual Evaluation
		Cavi interni. Internal wiring	CEI EN 60335-2-23:2004 +A1:2009+A11:2011+Ec:2012+A2:2016	
		Componenti Components		
		Collegamento alla rete e cavi flessibili esterni Supply connection and external flexible cords		Flexing test up to 10 N / 20 000 flexing 360° Pull force up to 100 N; Torque 0,35 Nm
		Disposizioni per la messa a terra Grounding Provisions		Up to 12 V; 0.01 Ω to 0.5 Ω
		Viti e connessioni Screws and Connections		Up to 2.5 Nm
		Distanze superficiali, in aria e distanze attraverso un isolamento solido Surface distances, in the air and distances through a solid insulation		0.01 mm to 1 m
		Resistenza al calore e al fuoco Resistance to Heat and Fire		Up to 960 °C
Protezione contro la ruggine Protection against rust		100 °C ± 5 °C; 10 min		
Radiazioni tossicità e pericoli analoghi Toxicity Radiation and Similar Hazards		EMF: Up to 100 %		



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Electrical ^F	Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per Macchine da cucina elettriche per uso collettivo Safety of household and similar electrical appliances - Part 2: Particular requirements for electric kitchen machines for collective use	Classificazione Classification	IEC 60335-2-64:2002 +A1:2007;	Up to 20° Up to 1 J	
		Marcatura e istruzioni Marking and instructions	EN 60335-2-64:2000 +A1:2002;		
		Protezione contro l'accesso a parti in tensione Protection against access to live parts	CEI 60335-2-64:2000; CEI EN 60335-2-64+A1:2004		
			Avviamento degli apparecchi a motore Starting of motor operated appliances		
			Potenza e corrente assorbita Power input and current		
			Riscaldamento Heating		Climatic chamber: 5 °C to 60 °C Data Recorder: -10 °C to 400 °C
			Corrente di dispersione e rigidità dielettrica alla temperatura di funzionamento Leakage current and dielectric strength at operating temperature		Up to 1 mA/kW; Up to 5 000 Vac Up to 95 % RH Up to 1 mA/kW; Up to 5 000 Vac
			Resistenza all'umidità Resistance to humidity		
			Corrente di dispersione e rigidità dielettrica Leakage current and Dielectric strength		
	Protezione contro il sovraccarico dei trasformatori e dei circuiti associati Overload protection of transformers and associated circuits		Up to 63 A		
	Funzionamento anormale Abnormal Operation				



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		Resistenza meccanica Mechanical Resistance		Visual Evaluation	
		Costruzione Construction		Flexing test up to 10 N/ 20 000 flexing 360° Pull force up to 100 N; Torque 0,35 Nm	
		Cavi interni Internal wiring			
		Componenti Components			
		Collegamento alla rete e cavi flessibili esterni Supply connection and external flexible cords			
		Disposizioni per la messa a terra Grounding Provisions			
		Disposizioni per la messa a terra Grounding Provisions			
		Viti e connessioni Screws and Connections			Up to 12 V; 0.01 Ω to 0.5 Ω
		Distanze superficiali, in aria e distanze attraverso un isolamento solido Surface distances, in the air and distances through a solid insulation			Up to 2.5 Nm
Resistenza al calore e al fuoco Resistance to Heat and Fire	0.01 mm to 1 m				
Protezione contro la ruggine Protection against rust	Up to 960 °C				
Radiazioni tossicità e pericoli analoghi Toxicity Radiation and Similar Hazards	100 °C ± 5 °C; 10 min				
	EMF: Up to 100 %				



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Electrical ^F	<p>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 collettivo</p> <p>Household and similar electrical appliances - Safety - Part 2: Particular requirements for wet and dry vacuum cleaners, including power brush, for industrial and commercial use</p>	Classificazione Classification	IEC 60335-2-69:2002 +A1:2004+A2:2007;	Visual Evaluation		
		Marcatura e istruzioni Marking and instructions	IEC 60335-2-69:2012; IEC 60335-2-69:2016;			
		Protezione contro l'accesso a parti in tensione Protection against access to live parts	EN 60335-2-69:2009; EN 60335-2-69:2012; CEI EN 60335-2-69:2014			
				Avviamento degli apparecchi a motore Starting of motor operated appliances		Up to 20 N Up to 63 A
				Potenza e corrente assorbita Power input and current		
				Riscaldamento Heating		Climatic chamber: 5 °C to 60 °C Data Recorder: -10 °C to 400 °C
				Corrente di dispersione e rigidità dielettrica alla temperatura di funzionamento Leakage current and dielectric strength at operating temperature		Up to 1 mA/kW; Up to 5 000 Vac
				Resistenza all'umidità Resistance to humidity		Up to 95 % RH
				Corrente di dispersione e rigidità dielettrica Leakage current and Dielectric strength		Up to 1 mA/kW; Up to 5 000 Vac
		Protezione contro il sovraccarico dei trasformatori e dei circuiti associati Overload protection of transformers and associated circuits		Up to 63 A		



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Electrical ^F	<p>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 collettivo</p> <p>Household and similar electrical appliances - Safety - Part 2: Particular requirements for wet and dry vacuum cleaners, including power brush, for industrial and commercial use</p>	Funzionamento anormale Abnormal Operation	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; CEI EN 60335-2-69:2014	Up to 63 A
		Stabilità e pericoli meccanici Stability and Mechanical Hazards		Up to 20°
		Resistenza meccanica Mechanical Resistance		Up to 1 J
		Costruzione Construction		Visual Evaluation
		Cavi interni Internal wiring		Flexing test up to 10 N / 20 000 flexing 360° Pull force up to 100 N; Torque 0,35 Nm
		Componenti Components		
		Collegamento alla rete e cavi flessibili esterni Supply connection and external flexible cords		Up to 12 V; 0.01 Ω to 0.5 Ω
		Disposizioni per la messa a terra Grounding Provisions		Up to 2.5 Nm
		Viti e connessioni Screws and Connections		0.01 mm to 1 m
		Distanze superficiali, in aria e distanze attraverso un isolamento solido Surface distances, in the air and distances through a solid insulation		
		Resistenza al calore e al fuoco Resistance to Heat and Fire		Up to 960 °C
		Protezione contro la ruggine Protection against rust		100 °C ± 5 °C; 10 min



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Electrical ^F	<p>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 collettivo</p> <p>Household and similar electrical appliances - Safety - Part 2: Particular requirements for wet and dry vacuum cleaners, including power brush, for industrial and commercial use</p>	<p>Radiazioni tossicità e pericoli analoghi Toxicity Radiation and Similar Hazards</p>	<p>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; CEI EN 60335-2-69:2014</p>	<p>EMF: Up to 100 %</p>
	<p>Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per distributori commerciali ed apparecchi automatici per la vendita</p> <p>Household and similar electrical appliances - Safety - Part 2: Particular requirements for commercial dispensing appliances and vending machine</p>	<p>Classificazione Classification</p> <p>Marchatura e istruzioni Marking and instructions</p> <p>Protezione contro l'accesso a parti in tensione Protection against access to live parts</p> <p>Avviamento degli apparecchi a motore Starting of motor operated appliances</p> <p>Potenza e corrente assorbita Power input and current</p> <p>Riscaldamento Heating</p>	<p>IEC 60335-2-75:2002 +A1:2004+A2:2008; IEC 60335-2-75:2012+A1:2015; EN 60335-2-75:2004 +A1:2005+A11:2006+A2:2008+A12:2010; CEI EN 60335-2-75:2005 +A11:2007+ A2:2009+A12:2010</p>	<p>Visual Evaluation Up to 20 N Up to 63 A</p> <p>Climatic chamber: 5 °C to 60 °C Data Recorder: -10 °C to 400 °C</p>



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Electrical ^F	Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per distributori commerciali ed apparecchi automatici per la vendita	Corrente di dispersione e rigidità dielettrica alla temperatura di funzionamento Leakage current and dielectric strength at operating temperature	IEC 60335-2-75:2002 +A1:2004+A2:2008; IEC 60335-2-75:2012+A1:2015; EN 60335-2-75:2004 +A1:2005+A11:2006+A2:2008+A12:2010; CEI EN 60335-2-75:2005 +A11:2007+ A2:2009+A12:2010	Up to 1 mA/kW; Up to 5 000 Vac
		Resistenza all'umidità Resistance to humidity		Up to 95 % RH Up to 1 mA/kW; Up to 5 000 Vac
	Household and similar electrical appliances - Safety - Part 2: Particular requirements for commercial dispensing appliances and vending machine	Corrente di dispersione e rigidità dielettrica Leakage current and Dielectric strength		Up to 63 A
		Protezione contro il sovraccarico dei trasformatori e dei circuiti associati Overload protection of transformers and associated circuits		
		Funzionamento anormale Abnormal Operation		
		Stabilità e pericoli meccanici Stability and Mechanical Hazards		
		Resistenza meccanica Mechanical Resistance		
		Costruzione Construction		
		Cavi interni Internal wiring		
		Componenti Components		
Collegamento alla rete e cavi flessibili esterni Supply connection and external flexible cords	Flexing test up to 10 N/ 20 000 flexing 360° Pull force up to 100 N; Torque 0,35 Nm			



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Electrical ^F	Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2: Norme particolari per distributori commerciali ed apparecchi automatici per la vendita Household and similar electrical appliances - Safety - Part 2: Particular requirements for commercial dispensing appliances and vending machine	Disposizioni per la messa a terra Grounding Provisions	IEC 60335-2-75:2002 +A1:2004+A2:2008; IEC 60335-2-75:2012+A1:2015;	Up to 12 V; 0.01 Ω to 0.5 Ω
		Viti e connessioni Screws and Connections	EN 60335-2-75:2004 +A1:2005+A11:2006+	Up to 2.5 Nm
		Distanze superficiali, in aria e distanze attraverso un isolamento solido Surface distances, in the air and distances through a solid insulation	A2:2008+A12:2010; CEI EN 60335-2-75:2005 +A11:2007+ A2:2009+A12:2010	0.01 mm to 1 m
		Resistenza al calore e al fuoco Resistance to Heat and Fire		Up to 960 °C
		Protezione contro la ruggine Protection against rust		100 °C ± 5 °C; 10 min
		Radiazioni tossicità e pericoli analoghi Toxicity Radiation and Similar Hazards		EMF: Up to 100 %
		Apparecchi di illuminazione Parte 1: Prescrizioni generali e prove” Luminaires - Part 1: General requirements and tests	Componenti degli apparecchi Components of luminaires	IEC 60598-1:2014 + AMD1:2017; EN 60598-1:2015 + AC:2015 +
	Classificazione degli apparecchi Classification of luminaires		AC:2016 + A1:2018; CEI EN 60598-1: 2015 +EC:2015+EC:2016	Visual Evaluation
	Marchatura Marking			
	Costruzione (esclusione 4.9.2, 4.16.2, 4.16.3, 4.20) Construction			0.2 Nm to 20 Nm 0.2 J to 1 J 1 N to 1 200 N 30 N to 120 N 0.08 Nm to 0.35 Nm
	Cablaggio esterno ed interno External and internal wiring			
	Messa a terra Provision for earthing			0.01 Ω to 0.5 Ω



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Electrical ^F	Apparecchi di illuminazione Parte 1: Prescrizioni generali e prove" Luminaires - Part 1: General requirements and tests	Protezione contro la scossa elettrica Protection against electric shock Scarica dei condensatori Capacitors discharge	IEC 60598-1:2014 + AMD1:2017; EN 60598-1:2015 + AC:2015 + AC:2016 + A1:2018; CEI EN 60598-1: 2015 +EC:2015+EC:2016	Test gauges D.L. = 100 Nm Up to 250 Vac
		Protezione contro la penetrazione di polvere, corpi solidi e umidità Resistance to dust, solid object and moisture		1 Nm to 3 Nm 0.07 l/m to 100 l/m
		Resistenza di isolamento e rigidità dielettrica, corrente di contatto e corrente nel conduttore di protezione Insulation resistance and electric strenght, touch current and protective conductor current		0.5 M Ω to 50 M Ω 1 V to 5 000 V 0 mA to 10 mA
		Distanze di isolamento superficiali e in aria Creepage distances and clearances		0.1 mm to 150 mm
		Prove di durata e di riscaldamento Endurante test and thermal test		Climatic chamber: 5 °C to 60 °C Data Recorder: -10 °C to 400 °C
		Resistenza al calore, al fuoco e alle correnti superficiali Resistance to heat, fire and tracking		25 °C to 280 °C 550 °C to 960 °C
		Morsetti a vite Screw terminals		1 Nm to 100 Nm
		Morsetti e connessioni elettriche senza viti, Allegato A Screwless terminals and electrical connections, Annex A		



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Electrical ^F	Apparecchi di illuminazione Parte 2: Prescrizioni particolari Apparecchi fissi per uso generale Part 2: Particular requirements Section 1: Fixed general purpose luminaires	Classificazione Classification	IEC 60598-2-1:1979 + AMD1:1987; EN 60598-2-1:1989; CEI EN 60598-2-1: 1997	Visual Evaluation
		Marchatura Marking		Visual Evaluation
		Costruzione Construction		0.2 Nm to 20 Nm 0.2 J to 1 J 1 N to 1 200 N 30 N to 120 N 0.08 Nm to 0.35 Nm
		Distanze superficiali e distanze in aria Creepage distances and clearances		0.1 mm to 150 mm
		Messa a terra Provision for earthing		0.01 Ω to 0.5 Ω
		Morsetti Terminals		1 Nm to 100 Nm
		Cablaggio esterno ed interno External and internal wiring		0.2 Nm to 20 Nm 0.2 J to 1 J 1 N to 1 200 N 30 N to 120 N 0.08 Nm to 0.35 Nm
		Protezione contro la scossa elettrica Protection against electric shock		Test gauges D.L. = 100 Nm
		Prove di durata e di riscaldamento Endurance tests and thermal tests		Climatic chamber: 5 °C to 60 °C Data Recorder: -10 °C to 400 °C
		Protezione contro la penetrazione di corpi solidi e di acqua Resistance to dust and moisture		1 Nm to 3 Nm 0.07 l/m to 100 l/m
		Resistenza di isolamento e prova di tensione applicata Insulation resistance and electric strength		0.5 M Ω to 50 M Ω 1 V to 5 000 V 0 mA to 10 mA
		Resistenza al calore, al fuoco e alle correnti superficiali Resistance to heat, fire and tracking		25 °C to 280 °C 550 °C to 960 °C



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Electrical ^F	Parte 2: Prescrizioni particolari per apparecchi d'illuminazione da incasso	Classificazione Classification	IEC 60598-2-2:2011; EN 60598-2-2:2012; CEI EN 60598-2-2: 2012	Visual Evaluation	
		Marchatura Marking		Visual Evaluation	
		Messa a terra Provision for earthing		0.01 Ω to 0.5 Ω	
		Scarica dei condensatori Capacitors discharge		Up to 250 Vac	
		Resistenza di isolamento e prova di tensione applicata Insulation resistance and electric strength		0.5 M Ω to 50 M Ω 1 V to 5 000 V 0 mA to 10 mA	
	Parte 2: Prescrizioni per apparecchi d'illuminazione stradale	Part 2: Particular requirements Section 2: Recessed luminaires	Classificazione Classification	IEC 60598-2-3:2002 + AMD1:2011; EN 60598-2-3-2003 + EC:2005 + A1:2011; CEI EN 60598-2-3: 2003 + EC 2005 + A1:2012	Visual Evaluation
			Marchatura Marking		Visual Evaluation
			Costruzione Construction		0.2 Nm to 20 Nm 0.2 J to 1 J 1 N to 1 200 N 30 N to 120 N 0.08 Nm to 0.35 Nm
		Part 2: Particular requirements Section 3: Luminaires for road and street lightin	Distanze superficiali e distanze in aria Creepage distances and clearances		0.1 mm to 150 mm
			Messa a terra Provision for earthing		0.01 Ω to 0.5 Ω
			Morsetti Terminals		1 Nm to 100 Nm
			Cablaggio esterno ed interno External and internal wiring		0.2 Nm to 20 Nm 0.2 J to 1 J 1 N to 1 200 N 30 N to 120 N 0.08 Nm to 0.35 Nm
			Protezione contro la scossa elettrica Protection against electric shock		Test gauges D.L. = 100 Nm



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Electrical ^F	Parte 2: Prescrizioni per apparecchi d'illuminazione stradale Part 2: Particular requirements Section 3: Luminaires for road and street lighting	Prove di durata e di riscaldamento Endurance tests and thermal tests	IEC 60598-2-3:2002 + AMD1:2011; EN 60598-2-3-2003 + EC:2005 + A1:2011; CEI EN 60598-2-3: 2003 + EC 2005 + A1:2012	Climatic chamber: 5 °C to 60 °C Data Recorder: -10 °C to 400 °C
		Protezione contro la penetrazione di corpi solidi e di acqua Resistance to dust and moisture		1 Nm to 3 Nm 0.07 l/m to 100 l/m
		Resistenza di isolamento e prova di tensione applicata Insulation resistance and electric strength		0.5 M Ω to 50 M Ω 1 V to 5 000 V 0 mA to 10 mA
		Resistenza al calore, al fuoco e alle correnti superficiali Resistance to heat, fire and tracking		25 °C to 280 °C 550 °C to 960 °C
	Parte 2: Prescrizioni per proiettori Part 2: Particular requirements Section 5: Floodlights	Classificazione Classification	IEC 60598-2-5:2015; EN 60598-2-5:2015; CEI EN 60598-2-5: 2016	Visual Evaluation
		Marcatura Marking		Visual Evaluation
		Messa a terra Provision for earthing		0.01 Ω to 0.5 Ω
		Scarica dei condensatori Capacitors discharge		Up to 250 Vac
		Resistenza di isolamento e prova di tensione applicata Insulation resistance and electric strength		0.5 M Ω to 50 M Ω 1 V to 5 000 V 0 mA to 10 mA
	Unità di alimentazione di lampada Parte 1: Prescrizioni generali e di sicurezza Lamp controlgear - Part 1: General and safety requirements	Marcatura Durability and legibility of marking	IEC 613471:2015 +AMD1:2017 EN 61347-1:2015	Visual Evaluation
		Morsetti Screw / screwless terminals		1 Nm to 100 Nm
		Disposizioni per la messa a terra Provisions for protective earthing		10 A to 25 A 0.01 Ω to 0.5 Ω



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Electrical ^F	Unità di alimentazione di lampada Parte 1: Prescrizioni generali e di sicurezza Lamp controlgear - Part 1: General and safety requirements	Protezione dal contatto accidentale con le parti in tensione Protection against accidental contact with live parts	IEC 613471:2015 +AMD1:2017 EN 61347-1:2015	Up to 250 Vac 0.7 mA (peak) or 2 mA d.c.
		Resistenza all'umidità e all'isolamento Moisture resistance and insulation		20 °C to 30 °C 91-95% RH and 0.5 MΩ to 50 MΩ
		Rigidità dielettrica Electric strength		1 V to 5 000 V 0 mA to 100 mA
		Prova di Durata degli Avvolgimenti Thermal endurance of windings		up to 16 A 450 V, 300 °C
		Condizioni di guasto Fault conditions		Up to 16 A 450 V, 300 °C
		Distanze di isolamento superficiali e in aria Creepage distances and clearances		0.1 mm to 150 mm
		Viti, parti che portano corrente e connessioni Screws, current-carrying parts and connections		Up to 10 Nm
		Resistenza al calore, al fuoco e alle correnti superficiali Resistance to heat, fire and tracking		Up to 300 °C 550 °C to 960 °C 600 V, 1 A
		Resistenza alla corrosione Resistance to corrosion		60°C 95% RH to 98% RH



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Electrical ^F	Unità di alimentazione di lampada Parte 2-7: Prescrizioni particolari per unità di alimentazione elettroniche (autonome) alimentate da batterie per illuminazione di emergenza Lamp controlgear - Part 2-7: Particular requirements for battery supplied electronic controlgear for emergency lighting (self-contained)	Classificazione Classification	IEC 61347-2-7:2011 +AMD1:2017	Visual Evaluation
		Marchatura Marking	EN 61347-2-7:2012+A1:2019	Visual Evaluation
		Protezione dal contatto accidentale con parti in tensione Protection against accidental contact with lives parts		Up to 250 Vac 0,7 mA (peak) or 2 mA d.c.
		Morsetti- Terminals		1 Nm to 100 Nm
		Disposizioni per la messa a terra Provision for protective earthing		10 A to 25 A 0.01 Ω to 0.5 Ω
		Resistenza all'umidità e isolamento Moisture resistance and insulation		20 °C to 30 °C 91% RH to 95% RH and 0.5 M Ω to 50 M Ω
		Rigidità dielettrica Electric strength		1 V to 5 000 V 0 mA to 100 mA
		Prova di Durata degli Avvolgimenti Thermal endurance test for windings		Up to 16 A 450 V, 300 °C
		Condizioni di guasto Fault conditions		Up to 16 A 450 V, 300°C
		Condizioni di innesco Starting conditions		Up to 16 A 450 V
		Corrente di alimentazione Supply current		
		Sicurezza funzionale (EBLF) Functional safety (EBLF)		
		Commutazione Changeover operation		
		Dispositivo di ricarica Recharging device		5 °C to 50 °C Up to 16 A 450 V



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Electrical ^F	Unità di alimentazione di lampada Parte 2-7: Prescrizioni particolari per unità di alimentazione elettroniche (autonome) alimentate da batterie per illuminazione di emergenza Lamp controlgear - Part 2-7: Particular requirements for battery supplied electronic controlgear for emergency lighting (self-contained)	Protezione contro la scarica eccessiva Protection against excessive discharge	IEC 61347-2-7:2011 +AMD1:2017 EN 61347-2-7:2012+A1:2019	5 °C to 50 °C up to 16 A 450 V	
		Indicatore-Indicator		Visual Inspection	
		Comando remoto, modo di riposo, modo di inibizione Remote control, rest mode, inhibition mode		Visual Inspection	
		Prova con cicli di temperatura e prova di durata Temperature cycling test and endurance test		5 °C to 50 °C up to 16 A 450 V	
		Inversione di polarità Polarity reversal		Visual Inspection	
		Condizioni di guasto Fault conditions		Up to 16 A 450 V, 300°C	
		Costruzione Construction		up to 16 A 450 V	
		Distanze di isolamento superficiale e in aria Creepage distances and clearances		0.1 mm to 150 mm	
		Viti, parti che portano corrente e connessioni Screws, current-carrying parts and connections		Up to 10 Nm	
		Resistenza al calore, al fuoco e alle correnti superficiali Resistance to heat, fire and tracking		Up to 300 °C 550 to 960°C 600 V, 1 A	
		Resistenza alla corrosione Resistance to corrosion		60 °C 95% RH to 98% RH	
		Condizioni anormali della lampada Abnormal lamp conditions		Up to 16 A 450 V	
		Protezione dei componenti associati Protection of associated components			



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Electrical ^F	Unità di alimentazione di lampada Parte 2-11: Prescrizioni particolari per circuiti elettronici eterogenei usati con gli apparecchi di illuminazione Lamp controlgear - Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires	Marchatura Durability and legibility of marking	IEC 61347-2-11:2001 +AMD1:2017	Visual Evaluation
		Protezione dal contatto accidentale con parti in tensione Protection against accidental contact with lives parts	EN 61347-2-11:2001	Up to 250 Vac 0.7 mA (peak) or 2 mA D.C.
		Morsetti Terminals		1 Nm to 100 Nm
		Disposizioni per la messa a terra Provision for protective earthing		10 A to 25 A 0.01 Ω to 0.5 Ω
		Resistenza all'umidità e all'isolamento Moisture resistance and insulation		20 °C to 30 °C 91% RH to 95% RH and 0.5 M Ω to 50 M Ω
		Rigidità dielettrica Electric strength		1 V to 5 000 V 0 mA to 100 mA
		Prova di Durata degli Avvolgimenti Thermal endurance of windings		Up to 16 A 450 V, 300 °C
		Condizioni di guasto Fault conditions		Up to 16 A 450 V, 300 °C
		Distanze di isolamento superficiali e in aria Creepage distances and clearances		0.1 mm to 150 mm
		Viti, parti che portano corrente e connessioni Screws, current-carrying parts and connections		Up to 10 Nm
		Resistenza al calore, al fuoco e alle correnti superficiali Resistance to heat, fire and tracking		Up to 300 °C 550 to 960°C 600 V, 1 A
		Resistenza alla corrosione Resistance to corrosion		60 °C 95% RH to 98% RH



Certificate of Accreditation: Supplement

DEKRA Testing and Certification S.r.l.
Via Martiri della Liberazione 12, 23875-Osnago (LC), Italia
Contact Name: Sig. Franco Vasta Phone: 0399280293

Accreditation is granted to the facility to perform the following testing:

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT
Electrical ^F	Unità di alimentazione di lampada Parte 2-13: Prescrizioni particolari per unità di alimentazione elettroniche alimentate in corrente continua o in corrente alternata per moduli LED Lamp controlgear - Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules	Marchatura Durability and legibility of marking	IEC 61347-2-13:2014 +AMD1:2016	Visual Evaluation
		Protezione dal contatto accidentale con parti in tensione Protection against accidental contact with lives parts	EN 61347-2-13:2014 +AMD1:2017	Up to 250 Vac 07 mA (peak) or 2 mA DC
		Morsetti Terminals		1 Nm to 100 Nm
		Disposizioni per la messa a terra Provision for protective earthing		10 A to 25 A 0.01 Ω to 0.5 Ω
		Resistenza all'umidità e all'isolamento Moisture resistance and insulation		20 °C to 30 °C 91% RH to 95% RH and 0.5 M Ω to 50 M Ω
		Rigidità dielettrica Electric strength		1 V to 5 000 V 0 mA to 100 mA
		Prova di Durata degli Avvolgimenti Thermal endurance of windings		Up to 16 A 450 V, 300 °C
		Condizioni di guasto Fault conditions		Up to 16 A 450 V, 300 °C
		Prova di Riscaldamento dei Trasformatori Transformer heating		
		Distanze di isolamento superficiali e in aria Creepage distances and clearances		0.1 mm to 150 mm
		Viti, parti che portano corrente e connessioni Screws, current-carrying parts and connections		Up to 10 Nm



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Electrical ^F	Unità di alimentazione di lampada Parte 2-13: Prescrizioni particolari per unità di alimentazione elettroniche alimentate in corrente continua o in corrente alternata per moduli LED Lamp controlgear - Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules	Resistenza al calore, al fuoco e alle correnti superficiali Resistance to heat, fire and tracking	IEC 61347-2-13:2014 +AMD1:2016 EN 61347-2-13:2014 +AMD1:2017	Up to 300 °C 550 to 960°C 600 V, 1 A
		Resistenza alla corrosione Resistance to corrosion		60°C 95% RH to 98% RH
		Massima tensione di lavoro (Uout) in ogni condizione Maximum working voltage (Uout) in any load condition		Up to 16 A 450 V

1. The presence of a superscript F means that the laboratory performs testing of the indicated parameter at its fixed location. Example: Outside Micrometer^F would mean that the laboratory performs this testing at its fixed location.