



# 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

*Initial Accreditation Date:*

March 01, 2019

*Issue Date:*

June 23, 2023

*Expiration Date:*

July 31, 2025

*Accreditation No.:*

101871

*Certificate No.:*

L23-488

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

*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](http://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: 039-928-0293

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 <sup>F</sup>	Sicurezza degli apparecchi elettrici d'uso domestico e similare	Classificazione Classification	IEC 60335-1:2020 IEC 60335-	Visual Evaluation	
		Marcatura e istruzioni Marking and instructions	1:2010+C1:2010+C2:2011 +A1:2013+C1:2014+A2:2016+C1:2016;		
	Household and similar electrical appliances	Protezione contro l'accesso a parti in tensione Protection against access to live parts	EN 60335-1:2012+AC:2014 A11:2014+A13:2017+A14:2019+ A1:2019+A2:2019+A15:2021 CEI EN 60335-1/A15:2022		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 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 <sup>F</sup>	Sicurezza degli apparecchi elettrici d'uso domestico e similare  Household and similar electrical appliances	Stabilità e pericoli meccanici Stability and Mechanical Hazards	IEC 60335-1:2020 IEC 60335-1:2010+C1:2010+C2:2011 +A1:2013+C1:2014+A2:2016+C1:2016;	Up to 63 A
		Resistenza meccanica Mechanical Resistance	EN 60335-1:2012+AC:2014	Visual Evaluation
		Costruzione Construction	A11:2014+A13:2017+A14:2019+A1:2019+A2:2019+A15:2021	
		Cavi interni Internal wiring	CEI EN 60335-1/A15:2022	
		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		EMF: Up to 100 %		
Radiazioni tossicità e pericoli analoghi Toxicity Radiation and Similar Hazards		100 °C ± 5 °C; 10 min		



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Electrical <sup>F</sup>	Sicurezza degli apparecchi elettrici d'uso domestico e similare  Household and Similar Electrical appliances	Classificazione (§ 6), Marcatura e istruzioni (§ 7), Protezione contro l'accesso a parti in tensione (§ 8), Avviamento degli apparecchi a motore (§ 9), Potenza e corrente assorbita (§ 10), Riscaldamento (§ 11), Corrente di dispersione e rigidità dielettrica alla temperatura di funzionamento (§ 13), Resistenza all'umidità (§ 15), Corrente di dispersione e rigidità dielettrica (§ 16), Protezione contro il sovraccarico dei trasformatori e dei circuiti associati (§ 17), Funzionamento anormale (§ 19), Stabilità e pericoli meccanici (§ 20), Resistenza meccanica (§ 21), Costruzione (§ 22), Cavi interni (§ 23), Componenti (§ 24), Collegamento alla rete e cavi flessibili esterni (§ 25), Morsetti per cavi esterni (§ 26), Disposizioni per la messa a terra (§ 27), Viti e connessioni (§ 28), Distanze superficiali, in aria e distanze attraverso un isolamento solido (§ 29), Resistenza al calore e al fuoco (§ 30), Protezione contro la ruggine (§ 31), Radiazioni tossicità e pericoli analoghi (§ 32)	JIS C 9335-1:2023 and previous edition: JIS C 9335-1:2014, with corresponding J60335-1 (H27)  (technically equivalent to standards already in scope: IEC 60335-1:2020 and previous editions IEC 60335-1:2001 +A1:2004+A2:2006; IEC 60335-1:2010 +A1:2013+A2:2016; EN 60335-1:2002 +A1:2004+A11:2004+A2:2006+ A12:2006+A13:2008+A14:2010+A15:2011; EN 60335-1:2012+ A11:2014 CEI EN 60335-1:2008 +A13:2009+A14:2012+A15:2012; CEI EN 60335-1:2013+A11:2015)	§ 8: test gauges, force Up to 20 N § 10: Up to 63 A, 50-60 Hz § 11, 17 and 19: Up to 450 V, 300°C § 13.2: 300 mA, and Up to 1 mA/kW § 13.3: Up to 4000 V § 15.1: Up to IP68 § 15.3: Up to 95 % § 16.2: 300 mA, and Up to 1 mA/kW § 16.3: Up to 4000 V § 20: Up to 20° § 21: Up to 1 J § 25.14: Flexing test Up to 10 N; 20000 flexing; 360° § 25.15: Pull force Up to 100 N; Torque 0,35 Nm § 27.5: Up to 12 V; 25 A § 28.1: Up to 2,5 Nm § 29: 0,01 mm Up to 1 m § 30.1: Up to 300°C § 30.2 and 30.3: Up to 960°C § 32: EMF Up to 100 %



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Electrical <sup>F</sup>	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 60335-2-2:2019	Visual Evaluation
		Marcatura e istruzioni Marking and instructions	IEC 60335-2-2:2009 +A1:2012+A2:2016;	
		Protezione contro l'accesso a parti in tensione Protection against access to live parts	EN 60335-2-2:2010+A1:2013; CEI EN 61335-2-2/A11:2013 <del>;</del>	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		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		
Funzionamento anormale Abnormal Operation				



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Electrical <sup>F</sup>	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	Stabilità e pericoli meccanici Stability and Mechanical Hazards	IEC 60335-2-2:2019 IEC 60335-2-2:2009 +A1:2012+A2:2016; EN 60335-2-2:2010+A1:2013; CEI EN 61335-2-2/A11:2013	Up to 20° Up to 1 J	
		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			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 <sup>F</sup>	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+A1:2019; IEC 60335-2-14:2006	Visual Evaluation           Climatic chamber: 5 °C to 60 °C Data Recorder: -10 °C to 400 °C  Up to 1 mA/kW; Up to 5 000 Vac Up to 95 % RH Up to 1 mA/kW; Up to 5 000 Vac
		Marcatura e istruzioni Marking and instructions	+A1:2008+A2:2012; EN 60335-2-14:2016; EN 60335-2-14:2006+AC:2007	
		Protezione contro l'accesso a parti in tensione Protection against access to live parts	+A1:2008+A11:2012 +A12:2016+AC:2016 CEI EN 60335-2-14/A12:2017	
		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		
		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		
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Electrical <sup>F</sup>	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+A1:2019; IEC 60335-2-14:2006 +A1:2008+A2:2012; EN 60335-2-14:2016;	Up to 20 °
		Resistenza meccanica Mechanical Resistance	EN 60335-2-14:2006+AC:2007 +A1:2008+A11:2012	Up to 1 J
		Costruzione Construction	+A12:2016+AC:2016 CEI EN 60335-2-14/A12:2017	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 <sup>F</sup>	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 15:2012 +A1:2016+A2:2016; IEC 60335-2-15:2002 +A1:2005+A2:2008; EN 60335-2-15:2016+A12:2021 CEI EN 60335-2-15/A1/A2/A12:2022	Visual Evaluation
		Marking and instructions		Force Up to 20 N
		Construction Internal cables		Up to 63 A
		Components		Visual Evaluation
		Terminals for external cables		Up to 20 N Up to 63 A
		Protection against access to live parts		Visual Evaluation
		Starting of Motor Appliances		Up to 20 N Up to 63 A
		Power and current absorbed		Visual Evaluation
		Protection against overload of transformers and associated circuits		Up to 20 N Up to 63 A
		Classificazione Classification		Visual Evaluation
		Marcatura e istruzioni Marking and instructions		Up to 20 N Up to 63 A
		Protezione contro l'accesso a parti in tensione Protection against access to live parts		Visual Evaluation
		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		Visual Evaluation
		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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Electrical <sup>F</sup>	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	Resistenza all'umidità Resistance to humidity	IEC 60335-2 15:2012 +A1:2016+A2:2016;	Up to 95 % RH
		Corrente di dispersione e rigidità dielettrica Leakage current and Dielectric strength	IEC 60335-2-15:2002 +A1:2005+A2:2008; EN 60335-2-15:2016+A12:2021 CEI EN 60335-2-15/A1/A2/A12:2022	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		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 <sup>F</sup>	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 15:2012 +A1:2016+A2:2016; IEC 60335-2-15:2002 +A1:2005+A2:2008; EN 60335-2-15:2016+A12:2021 CEI EN 60335-2-15/A1/A2/A12:2022	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 %
		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 <sup>F</sup>	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 60335-2-23:2016+A1:2019; EN 60335-2-23:2003	Visual Evaluation Up to 20 N Up to 63 A
		Marcatura e istruzioni Marking and instructions	+A1:2008+A11:2010+AC:2012 +A2:2015;	
		Protezione contro l'accesso a parti in tensione Protection against access to live parts	CEI EN 60335-2-23:2004 +A1:2009+A11:2011+Ec:2012+A2:2016	
		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		Up to 12 V; 0.01 Ω to 0.5 Ω
		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		Up to 960 °C
		Viti e connessioni Screws and Connections		100 °C ± 5 °C; 10 min
		Distanze superficiali, in aria e distanze attraverso un isolamento solido Surface distances, in the air and distances through a solid insulation		EMF: Up to 100 %
		Resistenza al calore e al fuoco Resistance to Heat and Fire		
Protezione contro la ruggine Protection against rust				
Radiazioni tossicità e pericoli analoghi Toxicity Radiation and Similar Hazards				



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Electrical <sup>F</sup>	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 60335-2-64:2021 IEC 60335-2-64:2002	Up to 20° Up to 1 J          Climatic chamber: 5 °C to 60 °C Data Recorder: -10 °C to 400 °C  Up to 1 mA/kW; Up to 5 000 Vac Up to 95 % RH Up to 1 mA/kW; Up to 5 000 Vac   Up to 63 A
		Marcatura e istruzioni Marking and instructions	+A1:2007+A2:2017; EN 60335-2-64:2000+A1:2002; CEI EN 60335-2-64+A1:2004;	
		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		
		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		
Funzionamento anormale Abnormal Operation				



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Electrical <sup>F</sup>	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	Stabilità e pericoli meccanici Stability and Mechanical Hazards	IEC 60335-2-64:2021 IEC 60335-2-64:2002 +A1:2007+A2:2017; EN 60335-2-64:2000+A1:2002; CEI EN 60335-2-64+A1:2004;	Up to 20° Up to 1 J	
		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			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 <sup>F</sup>	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  Household and similar electrical appliances - Safety - Part 2: Particular requirements for wet and dry vacuum cleaners, including power brush, for industrial and commercial use	Classificazione Classification	IEC 60335-2-69:2021 IEC 60335-2-69:2016;	Visual Evaluation	
		Marchatura e istruzioni Marking and instructions	IEC 60335-2-69:2012; EN 60335-2-69:2012; CEI EN 60335-2-69:2014		
		Protezione contro l'accesso a parti in tensione Protection against access to live parts			
			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 <sup>F</sup>	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  Household and similar electrical appliances - Safety - Part 2: Particular requirements for wet and dry vacuum cleaners, including power brush, for industrial and commercial use	Funzionamento anormale Abnormal Operation	IEC 60335-2-69:2021 IEC 60335-2-69:2016; IEC 60335-2-69:2012; 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 <sup>F</sup>	<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 60335-2-69:2021            IEC 60335-2-69:2016;            IEC 60335-2-69:2012;            EN 60335-2-69:2012;            CEI EN 60335-2-69:2014</p>	EMF: Up to 100 %
	<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>Marcatura 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 60335-2-75:2012+A1:2015+A2:2018;            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 <sup>F</sup>	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 60335-2-75:2012+A1:2015+A2:2018; 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 <sup>F</sup>	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 60335-2-75:2012+A1:2015+A2:2018; 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 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 %
		Apparecchi di illuminazione Parte 1: Prescrizioni generali e prove”  Luminaires - Part 1: General requirements and tests		Componenti degli apparecchi Components of luminaires
	Classificazione degli apparecchi Classification of luminaires	Visual Evaluation		
	Marchatura Marking	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		
	Costruzione (esclusione 4.9.2, 4.16.2, 4.16.3, 4.20) Construction			
	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 <sup>F</sup>	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 60598-1:2020 IEC 60598-1:2014 + AMD1:2017; EN 60598-1:2021+A11:2022 EN 60598-1:2015 + AC:2015 + AC:2016 + A1:2018; CEI EN 60598-1: 2015 +EC:2015+EC:2016 CEI EN 60598-1/A1:2023	Test gauges D.L. = 100 Nm  Up to 250 Vac 1 Nm to 3 Nm 0.07 l/m to 100 l/m
		Protezione contro la penetrazione di polvere, corpi solidi e umidità Resistance to dust, solid object and moisture		
		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 $\Omega$ to 50 M $\Omega$ 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 <sup>F</sup>	Apparecchi di illuminazione Parte 2: Prescrizioni particolari Apparecchi fissi per uso generale  Part 2: Particular requirements Section 1: Fixed general purpose luminaires	Classificazione	IEC 60598-2-1:2020	Visual Evaluation
		Classification	IEC 60598-2-1:1979 +	Visual Evaluation
		Marcatura	AMD1:1987;	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
		Marking	EN 60598-2-1:2021;	
		Costruzione	EN 60598-2-1:1989;	0.1 mm to 150 mm
		Construction	CEI EN 60598-2-1: 2022 CEI EN 60598-2-1: 1997	
		Distanze superficiali e distanze in aria		0.01 Ω to 0.5 Ω
		Creepage distances and clearances		1 Nm to 100 Nm
		Messa a terra		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
		Provision for earthing		Test gauges D.L. = 100 Nm
		Morsetti		Climatic chamber: 5 °C to 60 °C Data Recorder: -10 °C to 400 °C
		Terminals		
		Cablaggio esterno ed interno		1 Nm to 3 Nm 0.07 l/m to 100 l/m
External and internal wiring		0.5 M Ω to 50 M Ω 1 V to 5 000 V 0 mA to 10 mA		
Protezione contro la scossa elettrica		25 °C to 280 °C 550 °C to 960 °C		
Protection against electric shock				
Prove di durata e di riscaldamento				
Endurance tests and thermal tests				
Protezione contro la penetrazione di corpi solidi e di acqua				
Resistance to dust and moisture				
Resistenza di isolamento e prova di tensione applicata				
Insulation resistance and electric strength				
Resistenza al calore, al fuoco e alle correnti superficiali				
Resistance to heat, fire and tracking				



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Electrical <sup>F</sup>	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 $\Omega$ to 0.5 $\Omega$
		Scarica dei condensatori Capacitors discharge		Up to 250 Vac
	Part 2: Particular requirements Section 2: Recessed luminaires	Resistenza di isolamento e prova di tensione applicata Insulation resistance and electric strength		0.5 M $\Omega$ to 50 M $\Omega$ 1 V to 5 000 V 0 mA to 10 mA
		Parte 2: Prescrizioni per apparecchi d'illuminazione stradale	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
	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 $\Omega$ to 0.5 $\Omega$	
	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	
	Part 2: Particular requirements Section 3: Luminaires for road and street lightin			





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Electrical <sup>F</sup>	Parte 2: Prescrizioni per apparecchi d'illuminazione stradale	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;	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	CEI EN 60598-2-3: 2003 + EC 2005 + A1:2012	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		
	Part 2: Particular requirements Section 3: Luminaires for road and street lighting					
	Parte 2: Prescrizioni per proiettori	Classificazione Classification		IEC 60598-2-5:2015; EN 60598-2-5:2015;	Visual Evaluation	
			Marcatura Marking	CEI EN 60598-2-5: 2016	Visual Evaluation	
		Part 2: Particular requirements Section 5: Floodlights	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	Marcatura Durability and legibility of marking		IEC 613471:2015 +AMD1:2017 EN 61347-1:2015+A1:2021 CEI EN 61347-1/A1:2021	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		
Lamp controlgear - Part 1: General and safety requirements						



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Electrical <sup>F</sup>	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+A1:2021 CEI EN 61347-1/A1:2021	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 <sup>F</sup>	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+A2:2021	Visual Evaluation
		Marcatura Marking	EN 61347-2-7:2012 +A1:2019+A2:2022	Visual Evaluation
		Protezione dal contatto accidentale con parti in tensione Protection against accidental contact with lives parts	CEI EN 61347-2-7/A2:2023	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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*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 <sup>F</sup>	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+A2:2021 EN 61347-2-7:2012 +A1:2019+A2:2022	5 °C to 50 °C up to 16 A 450 V
		Indicatore-Indicator	CEI EN 61347-2-7/A2:2023	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 <sup>F</sup>	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	Marcatura Durability and legibility of marking	IEC 61347-2-11:2001 +AMD1:2017 EN 61347-2-11:2001+A1:2019 CEI EN 61347-2-11/A1:2020	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 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



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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 <sup>F</sup>	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	Marcatura Durability and legibility of marking	IEC 61347-2-13:2014 +AMD1:2016 EN 61347-2-13:2014	Visual Evaluation
		Protezione dal contatto accidentale con parti in tensione Protection against accidental contact with lives parts	+AMD1:2017 CEI EN 61347-2-13/A1:2018	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 $\Omega$ to 0.5 $\Omega$
		Resistenza all'umidità e all'isolamento Moisture resistance and insulation		20 °C to 30 °C 91% RH to 95% RH and 0.5 M $\Omega$ to 50 M $\Omega$
		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 <sup>F</sup>	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 CEI EN 61347-2-13/A1:2018	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



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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 <sup>F</sup>	<p>Sicurezza degli apparecchi elettrici d'uso domestico e similare - Parte 2-120: Norme particolari per aspirapolvere ed apparecchi per la pulizia ad aspirazione acqua</p> <p>Household and similar electrical appliances – Part 2-120: Particular requirements for heated tobacco device</p>	<p>Classificazione (§ 6),            Marcatura e istruzioni (§ 7),            Protezione contro l'accesso a parti in tensione (§ 8),            Avviamento degli apparecchi a motore (§ 9),            Potenza e corrente assorbita (§ 10),            Riscaldamento (§ 11),            Corrente di dispersione e rigidità dielettrica alla temperatura di funzionamento (§ 13),            Resistenza all'umidità (§ 15),            Corrente di dispersione e rigidità dielettrica (§ 16),            Protezione contro il sovraccarico dei trasformatori e dei circuiti associati (§ 17),            Funzionamento anormale (§ 19),            Stabilità e pericoli meccanici (§ 20),            Resistenza meccanica (§ 21),            Costruzione (§ 22),            Cavi interni (§ 23),            Componenti (§ 24),            Collegamento alla rete e cavi flessibili esterni (§ 25),            Morsetti per cavi esterni (§ 26),            Disposizioni per la messa a terra (§ 27),            Viti e connessioni (§ 28),            Distanze superficiali, in aria e distanze attraverso un isolamento solido (§ 29),            Resistenza al calore e al fuoco (§ 30),            Protezione contro la ruggine (§ 31),            Radiazioni tossicità e pericoli analoghi (§ 32)</p>	JIS C 9335-2-120:2020	<p>§ 8: test gauges, force Up to 20 N            § 10: Up to 63 A, 50-60 Hz            § 11, 17 and 19: Up to 450 V, 300°C            § 13.2: 300 mA, and Up to 1mA/kW            § 13.3: Up to 4000 V            § 15.1: Up to IP68            § 15.3: Up to 95 %            § 16.2: 300 mA, and Up to 1 mA/kW            § 16.3: Up to 4000 V            § 20: Up to 20°            § 21: Up to 1 J            § 25.14: Flexing test Up to 10 N; 20000 flexing; 360°            § 25.15: Pull force Up to 100 N; Torque 0,35 Nm            § 27.5: Up to 12 V; 25 A            § 28.1: Up to 2,5 Nm            § 29: 0,01 mm Up to 1 m            § 30.1: Up to 300°C            § 30.2 and 30.3: Up to 960°C            § 32: EMF Up to 100 %</p>

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