

PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

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

A.C. & E. s.r.l. Via Del Perlar, 37/A, Verona (VR), 37135

(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:

Issue Date:

Expiration Date:

December 8, 2020

March 2, 2021

June 30, 2023

Revision Date:

Accreditation No.:

Certificate No.:

August 07, 2022

113455

L21-161-R2

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.pjlabs.com



Issue: 03/2021

Certificate of Accreditation: Supplement

A.C. & E. s.r.l

Via Del Perlar, 37/A, Verona (VR), 37135 Contact Name: Dott.ssa Cristina Alba Phone: 045/8200894

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 O	Low-voltage switchgear and controlgear assembliesPart 1: General rules	Power-frequency withstand voltage	IEC 61439-2:2020 + IEC 61439-1:2020 CEI EN 61439-2:2012 + CEI EN 61439- 1:2012 § 10.9.2	Dielectric strength up to 5 kV Grounding and bonding up to 25 A Insulation resistance up to 1 000 V
	Electrical equipment of machines	Continuity of the equipment grounding circuit	NFPA 79:2021 NFPA 79:2018, NFPA 79:2015, NFPA 79:2012, NFPA 79:2007 § 18.2 (2)	1 A to 10 A (50 mΩ to 500 mΩ) 10.01 A to 25 A (50 mΩ to 500 mΩ)
		Part 1: Safety of machinery – Electrical equipment of machines – Part 1204: General requirements: Test 1 - Verification of the continuity of the protective bonding circuit	AS/NZS 4024.1204 ed 2019	1 A to 10 A 50 m Ω to 500 m Ω 10.01 A to 25 A 50 m Ω to 500 m Ω
		Safety of machinery – Electrical equipment of machines – Part 1204: General requirements. Verification of conditions for protection by automatic disconnection of supply: Test 2 - Fault loop impedance verification and suitability of the associated overcurrent protective device (calculation)	AS/NZS 4024.1204 ed 2019	N/A
		Part 1: General requirements. Verification of conditions for protection by automatic disconnection of supply: Test 1 - Verification of the continuity of the protective bonding circuit	AS 60204.1-2005 § 18.2.2	1 A to 10 A (50 mΩ to 500 mΩ) 10.01 A to 25 A (50 mΩ to 500 mΩ)
		Part1 General requirements. Verification of conditions for protection by automatic disconnection of supply: Test 2 - Fault loop impedance verification and suitability of the associated overcurrent protective device (calculation)	AS 60204.1-2005 § 18.2.3	N/A





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Electrical O	Electrical equipment of machines	Part1: General requirements. Verification of conditions for protection by automatic disconnection of supply: Test 1 - Verification of the continuity of the protective bonding circuit	CEI EN 60204- 1:2006 CEI EN 60204- 1:2018 IEC 60204-1:2016 § 18.2.2	1 A to 10 A (50 mΩ to 500 mΩ)
		Part 1: General requirements. Verification of conditions for protection by automatic disconnection of supply: Test 2 - Fault loop impedance verification and suitability of the associated overcurrent protective device (calculation)	CEI EN 60204- 1:2006 CEI EN 60204- 1:2018 IEC 60204-1:2016 § 18.2.3	N/A
		Part1: General requirements. Verification of conditions for protection by automatic disconnection of supply: Test 1 - Verification of the continuity of the protective bonding circuit	JIS B 9960-1 ed. 2019 § 18.2.2	1 A to 10 A 50 mΩ to 500 mΩ 10.01 A to 25 A 50 mΩ to 500 mΩ
		Part 1: General requirements. Verification of conditions for protection by automatic disconnection of supply: Test 2 - Fault loop impedance verification and suitability of the associated overcurrent protective device (calculation)	JIS B 9960-1 ed. 2019 § 18.2.3	N/A
		Part1: General requirements. Verification of conditions for protection by automatic disconnection of supply: Test 1 - Verification of the continuity of the protective bonding circuit	EN 60204-1:2018 § 18.2.2	1 A to 10 A 50 m Ω to 500 m Ω 10.01 A to 25 A 50 m Ω to 500 m Ω
		Part 1: General requirements. Verification of conditions for protection by automatic disconnection of supply: Test 2 - Fault loop impedance verification and suitability of the associated overcurrent protective device (calculation)	EN 60204-1:2018 § 18.2.3	N/A





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FIELD	ITEMS, MATERIALS OR	SPECIFIC TESTS OR PROPERTIES	SPECIFICATION,	RANGE (WHERE APPROPRIATE)
OF TEST	PRODUCTS TESTED	MEASURED	STANDARD METHOD OR TECHNIQUE USED	AND DETECTION LIMIT
Electrical O	Electrical equipment	Part 34: Requirements for machine	IEC TS 60204-	1 A to 10 A
	of machines	tools. Verification of conditions for	34:2016 § 18.1 b	$(50 \text{ m}\Omega \text{ to } 500 \text{ m}\Omega)$
		protection by automatic		10.01 A to 25 A
		disconnection of supply.		$(50 \text{ m}\Omega \text{ to } 500 \text{ m}\Omega)$
		Verification of continuity of the		
		protective bonding circuit (Test 1		
		according to § 18.2.2 of IEC		
		60204-1)		
	Industrial control	Dielectric strength	CSA C22.2 n°14-18	Dielectric strength up to 5 kV
	equipment		§ 6.8	
	Industrial control	Dielectric strength test	CSA C22.2 n°286-	
	panels and assemblies	_	17 § 7.3	
	Industrial electrical	Dielectric strength test	CSA C22.2 n°301-	
	machinery		16 § 19.4	
	Low-voltage	Part 1: General rules	AS/NZS 61439-	
	switchgear and	Part 2: Power switchgear and	1:2016 + AS/NZS	
	controlgear assemblies	control gear assemblies	61439-2:2016	
			§ 10.9.2	
	Assembled protection	Part 1: General rules. Withstand	GOST IEC 61439-	Dielectric strength up to 5 kV
	and switching	voltage at operating frequency	2:2015 + GOST IEC	Grounding and bonding up to
	equipment for low		61439-1:2013	25 A Insulation resistance up
	voltage (LV panels)		§ 10.9.2	to 1 000 V
Electrical O	Electrical equipment	Test 2 - Fault loop impedance	GOST R IEC	N/A
	of machines	verification and suitability of the	60204-1:2007	
		associated overcurrent protective	§ 18.2.3	
		device (calculation) Part 1: General		
		requirements. Verification of the		
		protection conditions for automatic		
		disconnection of the power supply:		
		verification of the impedance of		
		the fault loop associated with the		
		overcurrent protection device (by		
		calculation)		
		Part 1: General requirements.	GOST R IEC	1 A to 10 A
		Verification of the protection	60204-1:2007	$(50 \text{ m}\Omega \text{ to } 500 \text{ m}\Omega)$
		conditions for automatic	§ 18.2.2	10.01 A to 25 A
		disconnection of the power supply:		$(50 \text{ m}\Omega \text{ to } 500 \text{ m}\Omega)$
		Test 1 - verification of the		
		continuity of the protective		
		equipotential circuit		





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FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	on is granted to the facility to perform SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT
Electrical O	Electrical equipment	Part 1: General requirements.	SASO IEC 60204-	1 A to 10 A
	of machines	Verification of conditions for	1:2016	$(50 \text{ m}\Omega \text{ to } 500 \text{ m}\Omega)$
		protection by automatic	§ 18.2.2	10.01 A to 25 A
		disconnection of supply: Test 1 -		$(50 \text{ m}\Omega \text{ to } 500 \text{ m}\Omega)$
		Verification of the continuity of the		
		protective bonding circuit		
		Part 1: General requirements.	SASO IEC 60204-	N/A
		Verification of conditions for	1:2016	
		protection by automatic	§ 18.2.3	
		disconnection of supply: Test 2 -		
		Fault loop impedance verification		
		and suitability of the associated		
		overcurrent protective device		
		(calculation)		
Electrical FO	Safety of machinery	Safety-related parts of control	ISO 13849-1:2015	
(calculation)		systems - Part 1: General principles		
		for design by calculation (limited to	70	
		verifying reached Performance		
		Level) (Calculation)		
	UV-C Lamps	UV-C lamp power and exposure time	Not normalized	
		with reference to the abatement	method –	
		coefficient of viruses, bacteria, fungi	Calculation of the	
		and spores (Calculation)-rev00	level of abatement	
		Jan2021 Not normalized method	of viruses, bacteria,	
			fungi and spores	
			using UV-C lamps	
			both in static mode	
			and in air ducts	
F1 1 F0	T		TT 10011 1 1 1017	27/4
Electrical FO	Electrical equipment	Rotating Electrical Machines -	UL1004-1; ed. 2017	N/A
(calculation)	of machines	General Requirements Temperature		
	Motor and generator	rise resistance method – calculation	GG + G22 2 100	NYA
		Rotating Electrical Machines -	CSA C22.2 n 100;	N/A
		General Requirements Temperature	ed. 2019	
		rise resistance method – calculation	TEGG0024.1. 1	NYA
		Rotating Electrical Machines -	IEC60034-1; ed.	N/A
		General Requirements Temperature	2017	
		rise resistance method – calculation		

- 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.
- 2. The presence of a superscript FO means that the laboratory performs testing of the indicated parameter both at its fixed location and onsite at customer locations. Example: Outside MicrometerFO would mean that the laboratory performs this testing at its fixed location and onsite at customer locations