

Hellenic Accreditation System



Annex F1A/4 to Certificate No 90-9

SCOPE of ACCREDITATION

of the

Electrical Testing and Measurement Section Laboratory

of the

**PPC TESTING, INSPECTION AND CERTIFICATION
SINGLE MEMBER S.A. (*PPC INSPECTRA)**

Materials/Product to be tested	Type of test/ Properties to be Measured	Applied methods/ Techniques to be used
Electrical tests		
Category I power transformers	Ability to withstand the dynamic effects of short-circuit / - Current RMS value - Current peak value - Time - Reactance and its variation	IEC 60076-5: 2006 (entire standard)
	Measurement of voltage ratio and check of phase displacement	IEC 60076-1: 2011-04 §11.3
	Measurement of winding resistance	IEC 60076-1: 2011-04 § 11.2
	Measurement of short circuit impedance and load loss	IEC 60076-1: 2011-04 §11.4
	Measurement of no-load loss and current	IEC 60076-1: 2011-04 §11.5
	Applied voltage test (power frequency voltage withstand test)	IEC 60076-1:2011-04 IEC 60076-3:2018-03 § 10 HEDNO TD DD-01.48/10.2017 § 6.2.7 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Induced voltage withstand test	IEC 60076-1:2011-04 IEC 60076-3:2018-03 § 11.1, 11.2 HEDNO TD DD-01.48/10.2017 § 6.2.6 IEC 60060-1:2010-09 IEC 60060-2:2010-11

Materials/Product to be tested	Type of test/ Properties to be Measured	Applied methods/ Techniques to be used
- AC High Voltage Switchgear and Controlgear - AC metal-enclosed Switchgear and Controlgear - AC prefabricated substations for rated voltages above 1kV and up to and including 52 kV	Resistance measurement in the main circuit	IEC 62271-200: 2021 §7.4 IEC 62271-1/2017+AMD1:2021 §7.4.4
	Short time withstand current and peak withstand current test	IEC 62271-200: 2021 §7.6 IEC 62271-1/2017+AMD1:2021 §7.6
	Continuous current test (Temperature rise test) -current values up to 2.000 A. -temperatures above 10 °C up to 150 °C	IEC 62271-200 2021 3 ed. §7.5 IEC 62271-1/2017+AMD1:2021 §7.5
	Lightning impulse voltage test	IEC 62271-1/2017+AMD1:2021 § 7.2.7.3 IEC 62271-200:2021-05 Edition 3.0 § 7.2.7.3 IEC 62271-202:2022-06 Edition 3.0 § 7.2.101.3 *PPC DKSD-179/31.05.2006 § 6.2.1.2 *PPC TD DD-180/04.09.06 § 6.2.1.2 *PPC DD-132/Revised April 2011 § 6.2.1 HEDNO DD-445/23.10.23 § 6.1.1.1.1 *PPC TD DD-148/26.11.08 § 6.1.1.1.1.1 HEDNO TD DD-439/20.07.23 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Power-frequency voltage test	IEC 62271-1/2017+AMD1:2021 § 7.2.7.2 IEC 62271-200:2021-05 § 7.2.7.2 IEC 62271-202:2022-06 § 7.2.101.4 IEEE Std C37.20.2-2022 § 6.2.1, § 6.2.1.1 *PPC DKSD-179/31.05.2006 § 6.2.1.1.1 *PPC TD DD-180/04.09.06 § 6.2.1.1.1 *PPC TD DD-132/Revised April 2011 § 6.2.2 HEDNO TD DD-445/23.10.23 § 6.1.1.1.1 *PPC TD DD-148/26.11.08 § 6.1.1.1.1.1 HEDNO TD DD-439/20.07.23 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Dielectric test on auxiliary and control circuits	IEC 62271-1/2017+AMD1:2021 § 7.2.11 IEC 62271-200:2021-05 § 7.2.11 IEC 62271-202:2022-06 § 7.2.11 *PPC DKSD-179/31.05.2006 § 6.2.1.4 *PPC TD DD-180/04.09.06 § 6.2.1.4 *PPC TD DD-132/Revised April 2011 § 6.2.4 HEDNO TD DD-445/23.10.23 § 6.1.1.1.1 *PPC TD DD-148/26.11.08 § 6.1.1.1.1.3 HEDNO TD DD-439/20.07.23 IEC 60060-1:2010-09 IEC 60060-2:2010-11
Compact outdoor distribution substation	Ingress Protection (IP) test against: solid particles entry of objects into hazardous parts	IEC 60529: Edition 2.2. 2013-08 §13.1, §13.2, §13.3, §13.4, §13.5, §13.6 *PPC TD DD-148/26.11.08 §5.3.7

Materials/Product to be tested	Type of test/ Properties to be Measured	Applied methods/ Techniques to be used
- Low voltage switchgear and controlgear assemblies - Empty enclosures for Low voltage switchgear and controlgear assemblies Equipment within low voltage supply system	Short circuit withstand strength	EN IEC 61439-1: 2021 §10.11 IEC 61439-1: 2020 §10.11
	Temperature rise test: - currents up to 2.000 A. - temperature above 10 °C up to 150 °C	EN IEC 61439-1: 2021 §9.2, §10.10 IEC 61439-1:2020 §9.2, §10.10 IEC 60269-1:2024 §9.3 IEC 60269-2:2013 AMD1:2016, AMD2:2024 § 8.3 IEC 60269-3:2006 §8.3 IEC 60269-4:2006 §8.3
	Dielectric strength test	EN 61180:2016 §5, §6 EN IEC 61439-1:2021 §10.9.2 IEC 61439-1:2020 §10.9.2 EN IEC 60664-1:2020 §6.5.3, §5.4.3.2, §6.4.5 EN 62208:2023 §9.11
	Marking durability test	EN IEC 61439-1:2021 §10.2.7 IEC 61439-1: 2020 §10.2.7 EN IEC 61439-2:2021 §10 EN IEC 61439-3:2012 §10.2.7
	IK mechanical strength test	EN 62262:2002 +A1:2021 EN 60068-2-75:2014 EN IEC 61439-1:2021 IEC 61439-1:2020 §8.2.1, §10.2.6 EN IEC 61439-2:2021 §8.2.1, §10.2.6 EN 61439-3:2012 §8.2.1, §10.2.6
	Insulation resistance test	EN IEC 61439-1:2021 §11.9 IEC 61439-1:2020 §11.9
	Power-frequency withstand test	EN IEC 61439-1:2021 § 10.9.2 IEC 61439-1:2020-05 § 10.9.2 IEC 62271-202:2022-06 § 7.2.102.3 *PPC TD DKSD-244/22-03-2006 § 6.1.1, § 6.2.2 *PPC TD GR-249/22.4.83 § 4.2.1, § 4.3.2 *PPC TD DD-328/08-07-2008 § 6.4.3 *PPC TD HK 07.01/14.6.89 Rev./26.10.1992 (GR-245) § 6.4.3 *PPC TD HK 07.02/14.6.89 Rev./26.10.1992 (GR-200) § 6.4.3 *PPC TD HK 07.04/14.6.89 Rev./26.10.1992 (GR-199) § 6.4.3 *PPC TD HK 07.58/02.02.2000 (GR-258) § 6.4.3 HEDNO TD DD-407/07.12.2020 § 6.2.3 HEDNO TD DD-403/07.12.2020 § 6.2.3 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Ground/Earth Continuity Test	EN IEC 61439-1:2021 §10.5.2 IEC 61439-1: 2020 §10.5.2
	Ingress Protection (IP) test against: solid particles, water entry of objects into hazardous parts	IEC 60529: Edition 2.2. 2013-08 §13.1, §13.2, §13.3, §13.4, §13.5, §13.6 IEC 62208: 2023-06 §9.9.1.2 EN IEC 61439-1:2021 §8.2.2, §10.3 IEC 61439-1: 2020 §8.2.2

Materials/Product to be tested	Type of test/ Properties to be Measured	Applied methods/ Techniques to be used
AC Disconnectors and earthing switches: Triple Pole Disconnector	Temperature rise test (Continuous current test): - currents up to 2000 A. - temperature above 10 °C up to 150 °C	IEC 62271-102:2022 CSV §5.5, §7.5 IEC 62271-1/2017+AMD1:2021 §7.5
	Short-time withstand current and peak withstand current tests	IEC 62271-102:2022-04 CSV § 5.6, §5.7, §5.8, §7.6 IEC 62271-1/2017+AMD1:2021 §7.6
	Lightning impulse voltage tests	IEC 62271-1/2017+AMD1:2021 § 7.2.7.3 IEC 62271-102:2022-04, CSV § 7.2.7 *PPC TD DD-310/30.08.06 § 6.2.3 *PPC TD DD-312/05.09.06 § 6.2.2.3 *PPC TD-69/2 :2011-01 *PPC TD-68/2 :2011-01 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Power-frequency voltage tests (in dry conditions)	IEC 62271-1/2017+AMD1:2021 § 7.2.7.2 IEC 62271-102:2022-04, CSV §7.2.7 *PPC TD DD-310/30.08.06 § 6.3.1 *PPC TD DD-312/05.09.06 § 6.2.3.1 *PPC TD-69/2 :2011-01 *PPC TD-68/2 :2011-01 IEC 60060-1:2010-09 IEC 60060-2:2010-11
AC Disconnectors and earthing switches: Single Pole Disconnector	Continuous current test (Temperature rise test) - current values up to 2.000 A. - temperatures above 10°C up to 150°C	IEC 62271-102:2022 CSV §5.5, §7.5 IEC 62271-1/2017+AMD1:2021 §7.5
	Short-time withstand current and peak withstand current tests	IEC 62271-102:2022-04 CSV § 5.6, §5.7, §5.8, §7.6 IEC 62271-1/2017+AMD1:2021 §7.6
	Lightning impulse voltage tests	IEC 62271-1/2017+AMD1:2021 § 7.2.7.3 IEC 62271-102:2022-04, CSV § 7.2.7 *PPC TD DD-309/14.03.23 § 6.1.2.1 *PPC TD DD-311/06.06.23 § 6.1.2.1 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Power-frequency voltage test (in dry conditions)	IEC 62271-1/2017+AMD1:2021 § 7.2.7.2 IEC 62271-102:2022-04 CSV § 7.2.7 *PPC TD DD-309/14.03.23 § 6.3.1 *PPC TD DD-311/06.06.23 § 6.3.1 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Power-frequency voltage wet test	IEC 62271-1/2017+AMD1:2021 § 7.2.7.2 IEC 62271-102:2022-04 CSV § 7.2.7 *PPC TD DD-309/14.03.23 § 6.1.2.2 *PPC TD DD-311/06.06.23 § 6.1.2.2 IEC 60060-1:2010-09 IEC 60060-2:2010-11

Materials/Product to be tested	Type of test/ Properties to be Measured	Applied methods/ Techniques to be used
AC Disconnectors: Fuse Cutout	Continuous current test (Temperature rise test) -current value up to 2.000 A. -temperatures from 10 °C up to 150 °C	IEC 62271-102:2022 CSV §5.5, §7.5 IEC 62271-1/2017+AMD1:2021 §7.5
	Interrupting tests (Series 1, 2, 3, 4 and 5. Series 4 only for Class B Fuse Cutouts)	IEEE Std C37.41 -2016 §9
	Manual operation tests	IEEE Std C37.41 -2016 §13.2
	Lightning impulse voltage tests	IEC 62271-1/2017+AMD1:2021 § 7.2.7.3 IEC 62271-102:2022-04 CSV § 7.2.7 *PPC TD DD-313/23.09.2009 § 6.2.6.1 HEDNO TD DD-314/01.07.22 § 6.2.6.1 HEDNO TD DD-437/31.01.23 § 6.2.6.1 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Power-frequency voltage test (in dry conditions)	IEC 62271-1/2017+AMD1:2021 § 7.2.7.2 IEC 62271-102:2022-04 CSV § 7.2.7 *PPC TD DD-313/23.09.2009 § 6.3.2 HEDNO TD DD-314/01.07.22 § 6.3.2 HEDNO TD DD-437/31.01.23 § 6.3.2 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Power-frequency voltage wet test	IEC 62271-1/2017+AMD1:2021 § 7.2.7.2 IEC 62271-102:2022-04 CSV § 7.2.7 *PPC TD DD-313/23.09.2009 § 6.2.6.2 HEDNO TD DD-314/01.07.22 § 6.2.6.2 HEDNO TD DD-437/31.01.23 § 6.2.6.2 IEC 60060-1:2010-09 IEC 60060-2:2010-11
Voltage Instrument Transformer (medium voltage)	Power-frequency voltage withstand test on primary terminals	IEC 61869-1:2023-6 §7.3.1 IEC 61869-3:2011 §7.3.1
	Power-frequency voltage withstand test on secondary terminals	IEC 61869-1:2023 §7.3.4 IEC 61869-3:2011
	Lightning impulse voltage withstand test on primary terminals	IEC 61869-1:2023 § 7.2.3 IEC 61869-3:2011 § 7.2.3 HEDNO TD DD-362/10.01.2022 § 6.2, § 6.4 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Power-frequency voltage withstand wet test for outdoor type voltage instrument transformer	IEC 61869-1:2023 § 7.2.4 IEC 61869-3:2011 HEDNO TD DD-362/10.01.2022 § 6.2, § 6.4 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Short-circuit withstand capability test: -Active current	IEC 61869-3:2011 § 7.2.301 HEDNO TD DD-362/10.01.2022
Current Instrument transformer (medium & low voltage)	Power-frequency voltage withstand test on primary terminals	IEC 61869-1: 2023 §7.3.1 EN IEC 61869-2:2012 §7.3.1
	Power-frequency voltage withstand test on secondary terminals	IEC 61869-1: 2023 §7.3.4 EN IEC 61869-2:2012

Materials/Product to be tested	Type of test/ Properties to be Measured	Applied methods/ Techniques to be used
Current Instrument transformer (medium & low voltage) (continued)	Lightning impulse voltage withstand test on primary terminals	IEC 61869-1:2023 § 7.2.3 EN IEC 61869-2:2012 § 7.2.3 HEDNO TD DD /362/10.01.2022 § 6.2, § 6.4 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Power-frequency voltage withstand wet test for outdoor type current instrument transformer	IEC 61869-1:2023 § 7.2.4 EN IEC 61869-2:2012-09 HEDNO TD DD /362/10.01.2022 § 6.2, § 6.4 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Inter-turn overvoltage test	IEC 61869-1:2023 EN IEC 61869-2:2012 § 7.3.204 HEDNO TD DD /362/10.01.2022 § 6.3, § 6.4 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Power-frequency voltage withstand test on primary terminals	IEC 61869-1:2023-06 § 7.3.1 EN IEC 61869-2:2012-09 § 7.3.1 HEDNO TD DD -404/10.12.2018 § 6.3 IEC 60060-1:2010-09 IEC 60060-2:2010-11
Current Instrument transformer (medium voltage)	Short time current tests	EN IEC 61869-2:2012 § 7.2.201 HEDNO TD DD-362/10.01.2022
	Temperature rise test - current values up to 2.000 A. - temperatures from 10 °C up to 150 °C	EN IEC 61869-2:2012 §7.2.2 IEC 61869-1:2023 §7.2.2
- Low voltage supply cables - Power cables with extruded insulation for rated voltages 1 kV and 3 kV - Low voltage Aerial Bundled Cables for use by distribution utilities	Insulation resistance measurement test - at ambient temperature - at maximum conductor temperature	IEC 60502-1:2021 §17.2, 17.3 *PPC TD KK 03.02/ 13.07.1993 (GR - 104A) §6.2.1. *PPC TD GR - 269/17.09.1981 §7.3.
	4 hours voltage test	IEC 60502-1:2021 §17.4 *PPC TD KK 03.02/ 13.07.1993 (GR - 104A) §6.2.2
	Impulse test at ambient temperature	IEC 60502-1:2021 §17.5 *PPC TD DMKLD-211/29.05.97 § 6.2.6 *PPC TD KT 10.01/23.11.90 § 6.2.6 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Electrical resistance of conductors	IEC 60502-1:2021 §15.2
	AC dielectric test	IEC 60502-1:2021 §15.3
Power cable of rated voltage DC or AC up to 3,6 kV	Insulation resistance measurement test - at ambient temperature - at maximum conductor temperature	BS 7870-1:2011+A1:2022 Annex B (Table .1, & B.2) BS 7870-2:2022 §3.3.1, §3.3.2, §3.3.4 BS 7870-3.40:2023 §6, §16.2
	AC dielectric test	BS 7870-3.40:2023 §14.3 BS 7870-2.40:2022 §8.2.1
Low voltage insulated cable with semi conducting screen	Measurement of electrical resistivity of the semi conducting screen	BS 7870-2:2022 §3.9
Low voltage XLPE – PVC insulated underground cables	Electrical resistance of conductors	*ΔEH TH GR-269 §7.2

Materials/Product to be tested	Type of test/ Properties to be Measured	Applied methods/ Techniques to be used
Medium voltage power cable	AC Voltage withstand test on sheath	*PPC TD DMKLD-182/15.11.94 § 6.2.16 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Lightning impulse voltage test (at elevated temperature) followed by a power frequency voltage test (at ambient temperature)	IEC 60502-2:2014 § 18.2.8 BS 7870-2:2022 § 8.2.4 *PPC TD DMKLD-182/15.11.94 § 6.2.13 *PPC TD DKSD-143/October 2001 § 6.3.1 *PPC TD DMKD/Φ 142 GR-268 6.11.80 § 7.3 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Power-frequency voltage test for 4 hours	IEC 60502-2:2014 § 18.2.9 BS 7870-2:2022 § 8.2.5 *PPC TD DMKLD-182/15.11.94 § 6.2.14 *PPC TD DKSD-143/October 2001 § 6.3.1 *PPC TD DMKD/Φ 142 GR-268 6.11.80 § 7.3 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Voltage test	IEC 60502-2:2014 § 16.4 *PPC TD DMKD/Φ 142 GR-268 6.11.80 § 7.1 IEC 60060-1:2010-09 IEC 60060-2:2010-11 IEC 60060-3:2006-02
	Resistivity of semiconducting screens	BS 7870-2:2022 §3.9
Accessories for use on power cables of rated voltage from 3,6/6(7,2) kV up to 20,8/36(42) kV: - Indoor and outdoor terminations - straight-joints, branch-joints suitable for use underground, indoors or outdoors	AC voltage withstand dry test	HD 629-1 S3 March 2019 IEC 61442:2023 § 5.1 *PPC TD DKSD-213/11.6.04 § 6.2 *PPC TD DKSD-160/02.08.04 § 6.2.2 *PPC TD DKSD-159/02.08.04 § 6.2.2 HEDNO TD DD-361/23.07.12 § 6.3 *PPC TD DKSD-184/11.06.04 § 6.2 *PPC TD GR-277/01.10.84 § 4.1.1 *PPC TD DD-340/22.12.10 § 6.2 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Lightning impulse voltage test at ambient temperature	HD 629-1 S3 March 2019 IEC 61442:2023 § 7.1, § 7.2 *PPC TD DCD-213/11.6.04 § 6.2 *PPC TD DKSD-160/02.08.04 § 6.2.2.2 *PPC TD DKSD-159/02.08.04 § 6.2.2.2 HEDNO TD DD-361/23.07.12 § 6.3 *PPC TD DKSD-184/11.06.04 § 6.2 *PPC TD GR-277/01.10.84 § 4.1.4 *PPC TD DD-340/22.12.10 § 6.2 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Lightning impulse voltage test at elevated temperature	HD 629-1 S3 March 2019 IEC 61442:2023 § 7, § 9 *PPC TD DKSD-213/11.6.04 § 6.2 *PPC TD DKSD-160/02.08.04 § 6.2.2 *PPC TD DKSD-159/02.08.04 § 6.2.2 HEDNO TD DD-361/23.07.12 § 6.3 *PPC TD DXD-184/11.06.04 § 6.2 *PPC TD DD-340/22.12.10 § 6.2 IEC 60060-1:2010-09 IEC 60060-2:2010-11

Materials/Product to be tested	Type of test/ Properties to be Measured	Applied methods/ Techniques to be used
Accessories for use on power cables of rated voltage from 3,6/6(7,2) kV up to 20,8/36(42) kV: - Indoor and outdoor terminations - straight-joints, branch-joints suitable for use underground, indoors or outdoors (continued)	AC voltage withstand wet test	HD 629-1 S3 March 2019 IEC 61442:2023 § 5 *PPC TD DKSD-159/02.08.04 § 6.2.2 *PPC TD DKSD-184/11.06.04 § 6.2 *PPC TD GR-277/01.10.84 § 4.1.2 *PPC TD DD-340/22.12.10 § 6.2 IEC 60060-1:2010-09 IEC 60060-2:2010-11
Accessories for use on power cables of rated medium voltage (continued)	Short circuit test: - Active current value in screen - Thermal (screen) - Thermal (conductor) - Dynamic (conductor)	IEC 61442:2023 §11, §12, §13 HD 629.2-S2:2016 §7, §8 HD 629.1-S3:2023 §7.1, §8 *PPC TD DKSD-213/11.6.04 §6.2.1
Accessories for use on distribution cables of rated voltage 0,6 / 1,0 (1,2) kV: - Joints - outdoor terminations	Short circuit test: -Active current price	IEC EN 50393: 2015 §8.9 BS EN 50393: 2015 §8.9 HEDNO TD PP 381:2017 §6.2.1
Permanent Connections used in substation grounding/earthing	Electromagnetic Force (EMF) test	IEEE 837:2014 § 5, § 7.2
	Fault Current Test	IEEE 837:2014 § 5, §11
	Current temperature cycling test	IEEE Std 837-2014 §5, §8
Rotating Electrical Machines	Measurement of insulation resistance and polarization index of winding insulation	IEC 60034-27-4:2018-01 IEC 60060-1:2010-09 IEC 60060-2:2010-11
Luminaires	Insulation resistance test	ELOT EN IEC 60598-1:2021 § 10.2, §10.2.1
	Dielectric Strength Test	EN IEC 60598-1 (2021-03-19) § 10.2
	Leakage/contact current test	EN IEC 60598-1 (2021-03-19) §10.3
Electrical and electronic devices intended for use in residential, commercial, public and light-industrial environments	Surge Immunity testing	EN 61000-4-5:2014+A1:2017 (IEC 61000-4-5:2014)
	Burst EFT Immunity testing (power lines only)	EN 61000-4-4:2012 (IEC 61000-4-4:2012)
	ElectroStatic Discharge (ESD) Immunity testing)	EN 61000-4-2:2009 (IEC 61000-4-2:2025)
	Voltage dips, short interruptions voltage variations immunity tests	EN IEC 61000-4-11:2020 (IEC 61000-4-11:2020) EN 61000-4-29:2001
Electrical and electronic devices intended for use in industrial environment	Surge Immunity testing	EN 61000-4-5:2014+A1:2017 (IEC 61000-4-5:2014)
	Burst EFT Immunity testing (power lines only)	EN 61000-4-4:2012
	Voltage dips, short interruptions voltage variations immunity tests	EN IEC 61000-4-11:2020 (IEC 61000-4-11:2020) EN 61000-4-29:2001

Materials/Product to be tested	Type of test/ Properties to be Measured	Applied methods/ Techniques to be used
Electric vehicle conductive charging system	Dielectric strength test	EN IEC 61851-1:2019 §12.7.1 EN 61180:2016 §5 & 6 EN 61851-21:2002 §8.1.1 EN 61851-22:2002 §10.1.1 EN 61851-23:2014 §11.4
	Insulation resistance test	EN IEC 61851-1:2019 §12.5 EN 61851-21:2002 §8.1.2 EN 61851-22:2002 §10.1.3 EN 61851-23:2014 §11.5
	Leakage/contact current test up to 22KW	EN 60990:2016 EN IEC 61851-1:2019 §12.6 EN 61851-21:2002 §8.2 EN 61851-22:2002 §10.2 EN 61851-23:2014 §11.7
	IK mechanical strength test	EN 62262:2002 +A1:2021 EN 60068-2-75:2014 EN IEC 61851-1:2019 §12.11 EN 61851-22:2002 §11.2.2
	Marking durability test	EN IEC 61851-1:2019 §16.5 EN 61851-21:2002 §12.2 EN 61851-22:2002 §14.2
	Surge Immunity testing	EN IEC 61851-21-2-2:2021 §5 EN 61000-4-5:2014+A1:2017 (IEC 61000-4-5:2014)
	Burst EFT Immunity testing (power lines only)	EN IEC 61851-21-2:2021 §5 EN 61000-4-4:2012 (IEC 61000-4-4:2012)
	ElectroStatic Discharge (ESD) Immunity testing	EN IEC 61851-21-2:2021 §5 EN 61000-4-2:2009 (IEC 61000-4-4:2012)
	Voltage dips, short interruptions voltage variations immunity tests	EN IEC 61851-21-2:2021 §5 EN IEC 61000-4-11 (IEC 61000-4-11:2020) EN 61000-4-29:2001
	Ingress Protection against (IP): solid particles, water, entry of objects into hazardous parts	EN IEC 61851-1:2019 §12.4 EN 61851-22:2002 §8.4 EN 61851-23:2014 §101.1.2 IEC 60529:2013 §12, §13, §14.1, §14.2.3 §14.2.4, §14.3, §15
	Temperature rise test up to 22KW	EN IEC 61851-1:2019 §12.8 EN 61851-22:2002 §8.3 EN IEC 61439-1: 2021 §10.10 EN IEC 61439-7:2023 §10.10
	Damp heat test	IEC 61851-1:2017 §12.5, §12.6, §12.9 EN IEC 61851-1:2019 §12.5, §12.6, §12.9 EN 61851-22:2002 §11.1.4 EN 60068-2-78:2013 IEC 60068-2-30, EN 60068-2-30:2005
	Test Z/AD: Composite temperature/humidity cyclic test	IEC 60068-2-38: 2009-01
	Low temperature test (Cold test)	EN IEC 61851-1:2019 §12.10 IEC 61851-1: 2017 §12.10 EN 61851-22:2002 §11.1.5 EN 60068-2-1:2007
	Dry Heat test	EN 60068-2-2:2007 EN 61851-22:2002 §11.1.3

Materials/Product to be tested	Type of test/ Properties to be Measured	Applied methods/ Techniques to be used
Electrical equipment of machines	Dielectric strength test	EN 61180:2016 §5 & 6 EN 60204-1: 2006 +A1:2009 §18.4 EN 60204-1: 2018 §18.4
	Insulation resistance test	EN 60204-1:2006 +A1:2009 §18.3 EN 60204-1:2018 §18.3
	Functionality test	EN 60204-1:2006 +A1:2009 §18.6 EN 60204-1:2018 §18.6
	Test to verify the continuity of the protection circuit	EN 60204-1:2006 +A1:2009 §18.6, §18.2.2 EN 60204-1:2018 §18.6, §18.2.2
	Leakage/contact current test	EN 60990:2016 EN 60204-1:2006 +A1:2009 §8.2.6 EN 60204-1:2018 §8.2.8
Electrical installations on ships	Insulation resistance test	IEC 60092-504:2016 §5.2 Table 1, Test 5
	Dielectric strength test	EN 61180:2016 §5 & 6 IEC 60092-504:2016 §5.2 Table 1, Test 3
	Surge Immunity testing	EN 61000-4-5:2014+A1:2017 (IEC 61000-4-5:2014)
	Damp heat test	IEC 60068-2-78:2013 IEC 60068-2-30 (2005-08)
	Burst EFT Immunity testing (power lines only)	EN 61000-4-4:2012 (IEC 61000-4-4:2012)
	ElectroStatic Discharge (ESD) Immunity testing	EN 61000-4-2:2009 (IEC 61000-4-2:2025)
	Voltage dips, short interruptions and voltage variations immunity tests	EN IEC 61000-4-11:2020 (IEC 61000-4-11:2020) EN 61000-4-29:2001
Audio/video, information and communication technology equipment	Dielectric strength test	EN 61180:2016 §5 & 6 EN IEC 62368-1:2020 +A11:2020 §5.4.9
	Leakage/contact current test	EN 60990:2016 EN IEC 62368-1:2020 +A11:2020 §5.7
	IK mechanical strength test	EN 62262:2002 +A1:2021 EN 60068-2-75:2014 EN IEC 62368-1:2020 +A11:2020 §4.4.3.4, §4.8.4.5, §T.6, §T.9, Y.6.2
	Test to verify the continuity of the protection circuit	EN IEC 62368-1:2020 +A11:2020 § 5.6.6
	Marking durability test	EN IEC 62368-1:2020 +A11:2020 §F.3.10
Shipping control, protection and safety equipment	Insulation resistance test	IACS E10 ((Rev.8 Feb 2021) (Corr.1 Jan 2022)), Table, Test N. 9
	Dielectric strength test	EN 61180:2016 §5 & 6 IACS E10 ((Rev.8 Feb 2021) (Corr.1 Jan 2022)), Table, Test N.10
Electrical – Electronic equipment	Surge Immunity testing	EN 61000-4-5:2014+A1:2017 (IEC 61000-4-5:2014)
	Burst EFT Immunity testing (power lines only)	EN 61000-4-4:2012 (IEC 61000-4-4:2012)
	Immunity to Electrostatic Discharge (ESD) test	EN 61000-4-2:2009 (IEC 61000-4-2:2025)
	Voltage dips, short interruptions and voltage variations immunity tests	EN IEC 61000-4-11:2020 (IEC 61000-4-11:2020) EN 61000-4-29:2001

Materials/Product to be tested	Type of test/ Properties to be Measured	Applied methods/ Techniques to be used
Fiber optic interconnection devices and passive components	Damp heat test	EN 61300-2-21:2010 §5 EN IEC 61300-2-46:2019
	Low temperature test (Cold test)	EN 61300-2-17:2011 §5 IEC 60068-2-1:2007
	Dry Heat test	EN 61300-2-18:2005 §5 IEC 60068-2-2 (2007-07)
	Environmental Testing, Test N: Change of temperature	IEC 61300-2-22 §5 EN 60068-2-14
Fibre optic cables	Water penetration test	IEC 60794-1-22 Edition 1.0 2012-06 § 7/ Method F5B
Defence equipment	Damp heat test	MIL-STD-810G:2008 Method: 507.5 proc II
Fuses, ignition safety devices other related parts	Damp heat test	MIL-STD-331C:2005 Test C1
Insulation Piercing Connectors of Aerial Bundled Cable of rated voltage 0,6/1,0 (1,2) kV	Test for checking electrical continuity, breaking torque of screw shear heads	*PPC TD DKSD-289:2004 § 6.1.2.1.1
	Installation test at low temperature (Low temperature connector assembly test)	EN 50483-4: 2009 § 8.1.4 *PPC TD GR-324 24.07.86 § 6.1.1 NF C 33-020: 1998 § 2.5.1
	AC dielectric voltage withstand test and water-tightness test 4kV, power frequency @ 30 min in water	EN 50483-1:2009 § 9 EN 50483-4:2009 § 8.1.3 *PPC TD DKSD-289:2004 § 6.1.2.5 NF C 33-020/1998 § 2.4 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	AC dielectric voltage withstand test, 4 kV / 6 kV, power frequency @ 1 min with metallic balls in air	EN 50483-1:2009 § 9 EN 50483-4:2009 § 8.1.3.1.3.2.1, § 8.1.5.2.4.1 *PPC TD DKSD-289:2004 § 6.1.2.6.3, § 6.1.2.6.4 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	AC dielectric voltage withstand test in water, 1kV power frequency @ 1 min (under conditions of artificial rain), climatic ageing test criterion	EN 50483-1:2009 § 9 EN 50483-4:2009 § 8.1.5.2.4.1 *PPC TD DKSD-289:2004 § 6.1.2.6.5
	Test for permanent marking (Durability test for marking)	*PPC TD DKSD-289:2004 § 6.1.2.9 EN 50483-1:2009 § 6, § 9.2 EN 50483-4 § 6 NF C 33-020/1998 §3.2
	Electrical aging test	*PPC TD DKSD-289:2004 § 6.1.2.7 *PPC TD GR-324 24.07.86 §6.1.3
Insulation Piercing Portable equipment of Aerial Bundled Cable of rated voltage 0,6/1,0 (1,2) kV for earthing or earthing and short-circuiting	Installation test at low temperature (Low temperature connector assembly test)	EN 50483-4: 2009 § 8.1.4 *PPC TD DMKLD 153 19/11/1999 § 6.1.2.4 NF C 33-020: 1998 § 2.5.1
	AC dielectric power frequency voltage withstand test and water-tightness test	*PPC TD DMKLD 153 19/11/1999 § 6.1.2.5 NF C 33-020/1998 § 2.4 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	AC dielectric power frequency voltage withstand test with metallic balls in air	*PPC TD DMKLD 153 19/11/1999 § 6.1.2.7.2 NF C 33-020/1998 § 2.6 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	AC dielectric voltage withstand test in water, 1kV power frequency @ 1 min (under conditions of artificial rain), climatic ageing test criterion	*PPC TD DMKLD 153 19/11/1999 § 6.1.2.7.2 NF C 33-020/1998 § 2.6
	Test for permanent marking (Durability test for marking)	*PPC TD DMKLD 153 19/11/1999 § 6.1.2.10 NF C 33-020/1998 §3.2
	Equipment handling endurance test	*PPC TD DMKLD 153 19/11/1999 §6.1.2.3

Materials/Product to be tested	Type of test/ Properties to be Measured	Applied methods/ Techniques to be used
Low Voltage Single Pole Bridge, low voltage aerial bundled cable accessories	Equipment handling endurance test	HEDNO TD DED-163/12.05.2023 §6.1.1, §6.2.2
Screw-type and non-screw- type clamping units for connecting devices, for the electrical connection of copper	Bolt tightening torque test	IEC 60999-1: 1999 §9.6
Tension clamps for low voltage aerial bundled cable (accessories)	AC dielectric voltage withstand test 4kV / power frequency AC	EN 50483-1:2009 § 9 EN 50483-2:2009 § 8.3.1 EN 50483-3:2009 § 8.1.5.1 *PPC TD DKSD-288/March 2004 §6.1.2.1 *PPC TD DD-336/10.11.09 § 6.1.5.1 *PPC TD GR-325/31.3.86 § 5.1.1.1 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	AC dielectric voltage withstand test 4 kV /6 kV, power frequency AC for criterion of climatic ageing test	EN 50483-1:2009 § 9 EN 50483-2:2009 § 8.3.1 EN 50483-3:2009 § 8.1.5.2 *PPC TD DD-336/10.11.09 § 6.1.5.2 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	AC dielectric voltage withstand test in water 4kV/10kV, power frequency, 30 min for criterion of tensile test at high temperature	EN 50483-1:2009 § 9 EN 50483-3:2009 § 8.1.5.3 *PPC TD DD-336/10.11.09 § 6.1.5.3 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	AC dielectric voltage withstand test in water 4 kV power frequency, 4 h for criterion of tensile test at high temperature	EN 50483-1:2009 § 9 EN 50483-2:2009 § 8.3.2 IEC 60060-1:2010-09 IEC 60060-2:2010-11
Electrical insulating matting	AC dielectric power frequency voltage withstand test	IEC 61111:2009-04, Edition 2.0 §5.6.4.2.1 §5.6.4.3 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	AC dielectric power frequency voltage withstand test– Periodic test	IEC 61111:2009-04, Edition 2.0 § 5.6.4.2.2 IEC 60060-1:2010-09 IEC 60060-2:2010-11
Insulating foam-filled tubes and solids rods – tubes and rods of a circular cross-section	AC dielectric power frequency voltage withstand dry test	IEC 60855-1:2016-04 Edition 2.0 § 5.4.2.2.1 IEC 60060-1:2010-09 IEC 60060-2:2010-11

Materials/Product to be tested	Type of test/ Properties to be Measured	Applied methods/ Techniques to be used
Suspension clamps for low voltage aerial bundled cable (accessories)	AC dielectric voltage withstand test 4 kV, power frequency	EN 50483-1:2009 § 9 EN 50483-2:2009 § 8.3.1 EN 50483-3:2009 § 8.2.4.1 *PPC TD DD-335/10.11.09 § 6.1.3.1 *PPC TD DKSD- 287/March 2004 § 6.1.2.1 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	AC dielectric voltage withstand test, in water, 4 kV/10 kV, power frequency, 30 min	EN 50483-1:2009 § 9 EN 50483-3:2009 § 8.2.4.2 *PPC TD DD-335/10.11.09 § 6.1.3.2 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	AC dielectric voltage withstand test, in water, 4 kV, power frequency, 4h	EN 50483-1:2009 § 9 EN 50483-2:2009 § 8.3.2 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	AC dielectric voltage withstand test in water (10kV, power frequency /30min) 1 st criterion for swing test	*PPC TD DKSD-287/ March 2004 § 6.1.2.2.6.2 *PPC TD DMKLD-211/ 29.05.1997 § 6.2.5 IEC 60060-1:2010-09 IEC 60060-2:2010-11
Electrical insulating gloves	AC dielectric power frequency voltage withstand test	IEC 60903:2014-07, § 5.6.1.4.2, § 5.6.1.4.3 HEDNO Code. TP-HERI-2 22/09/2023 HEDNO Code. TP-HERI-3 22/09/2023 HEDNO Code E110-2/1 15/01/2018 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	AC dielectric power frequency voltage withstand test - periodic test	IEC 60903:2014-07, Edition 3.0 § 5.6.2 IEC 60060-1:2010-09 IEC 60060-2:2010-11
Multi-purpose insulating sticks	Leakage current test	EN 50508:2009 § 5.2.2 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Bridging test	EN 50508:2009 § 5.2.3 IEC 60060-1:2010-09 IEC 60060-2:2010-11
Water fire extinguisher, aerosol fire extinguisher	Dielectric test	EN 3-7:2004+A1 August 2007 § 9, Annex C EN 16856 April 2020 § 5.9, Annex J IEC 60060-1:2010-09 IEC 60060-2:2010-11
Fire extinguishing media - powder	Electrical insulation test	ISO 7202:2012 § 11, § 13.8, Annex C IEC 60060-1:2010-09 IEC 60060-2:2010-11
Insulating aerial devices for mounting on a chassis	Periodic AC dielectric testing	ANSI/SAIA A92.2-2021 § 5.4.3.2, § 5.4.3.4 IEC 61057:2017 § E.5.1.1, § E.5.1.3, § E.5.1.4 IEC 60060-1:2010-09 IEC 60060-2:2010-11 IEC 60060-3:2006-02
Insulating basket /liner	Dielectric test in water	IEC 61057:2017 § 6.6.3, § E.5.1.8 IEC 60060-1:2010-09 IEC 60060-2:2010-11
Protective safety footwear	Electric hazard resistant on footwear	ASTM F2412 - 18a § 9 ASTM F2413 - 18 § 5.6 IEC 60060-1:2010-09 IEC 60060-2:2010-11

Materials/Product to be tested	Type of test/ Properties to be Measured	Applied methods/ Techniques to be used
Insulating oils	Determination of the breakdown voltage at power frequency	IEC 60156:2018-08, Edition 3.0 § 9, § 10 HEDNO TD DEED DD-394/09.2018 IEC 60060-1:2010-09 IEC 60060-2:2010-11
Electrical insulators and other solid materials	Test for evaluating resistance to tracking and erosion	IEC 60587: 2007 EN IEC 60587: 2022-05-13 §6.1, §6.2, §6.4 HEDNO TD DD-204-06.06.23 §6.3.1 *PPC TD DD-204/07.06.2021 §6.3.1.1.1, §6.3.2.1 *PPC TD DD-441: 2010 (§6.1.4) *PPCTD DD-204/20.11.2008 §6.2.1.3, §6.2.2.3
	Glow wire test	IEC 60695-2-13: 2010-10 §8, §9, §10 IEC 60695-2-12: 2010-10 §8, §9, §10 IEC 60695-2-11: 2021-12-03 §8, §9, §10 IEC 60695-2-10: 2021-12-03 §7
	Ball pressure test	IEC 60695-10-2:2014 §8
	Dielectric Strength Test	IEC 60243-1: 2013 §6, §7.4, §9, §10.1, §12
Insulating stools for electrical work	AC dielectric power frequency voltage withstand test – periodic test	UNE 204001 HEDNO TD Code:E-110-2/1 1/3/2013 IEC 60060-1:2010-09 §6.3.1 IEC 60060-1:2010-09 IEC 60060-2:2010-11
Household and similar electrical appliances	Ball pressure test	IEC 60335-1 § 30.1 IEC 60695-10-2:2014 §8
Surge protective devices (SPD) to low voltage power systems	Ball pressure test	IEC 61643-11: 2011-03 §8.5.3 IEC 60695-10-2:2014 §8
	Dry Heat test	IEC 61643-11: 2011 §8.5.2
Mounting polyester boxes reinforced with fiber glass (SMC) used for metering equipment in low voltage loads	Glow wire test	HEDNO TD DD-380/Rev. 29.04.21 §6.2.2.7 (a) HEDNO TD DD-GR 226A/Add. 22.07.2021. §6.2.2.7 (a) IEC 60695-2-11: 2021-12-03 (§8, §9, §10)
	Protection against (IP) test: solid particles, water ingress, entry of objects into hazardous parts	IEC 60529:2013 §12, §13, §14.1, §14.2.3, §14.2.4, §14.3, §15 HEDNO TD DD-380/Rev. 29.04.21 §5.2.3, §6.2.2.5 a, §6.2.2.5 b HEDNO TD DD-GR 226A/Rev 22.07.2021 §5.2.6, §6.2.2 §6.2.2.5 (α)
	Dielectric Strength Test	*PPC TD GR 226/ 23.09.2004 §6.2.2.6 HEDNO TD DD-GR 226A/Rev 22.07.2021. §6.2.2.6, §9.1.3 HEDNO TD DD-380/Rev. 29.04.21 §6.2.2.6, §9.1.3, §9.1.5 HEDNO TD DD 151/Rev.02.08.2021 §6.2.2.6
	Dry Heat test	EN IEC 60068-2-2:2007 (Test Bd)
Low voltage fuse boxes	Ingress Protection (IP) test against: solid particles, water entry of objects into hazardous parts	IEC 60529:2013 §12, §13, §14.1, §14.2.3, §14.2.4, §14.3, §15 HEDNO TD DD-403/07.12.20 §6.1.4 HEDNO TD DD-328/10.05.2024 §6.1.4
	Dielectric Strength Test	HEDNO TD DD -328/ 10.05.2024, §5.5 §6.2.3 §6.2.4
Underground coupling boxes synthetic material	Protection test against (IP): water ingress	*PPC TD DKSD-244/22-03-2006 §6.1.4 *PPC TD GR- 249/22.4.83 §4.2.3 IEC 60529:2013 §14.2.8, §14.3
	Equipment handling endurance test	*PPC TD DKSD-244/22-03-2006 §6.1.3

Materials/Product to be tested	Type of test/ Properties to be Measured	Applied methods/ Techniques to be used
Live working – Hand tools for use up to 1.000 V AC and 1.500 V DC	Dielectric testing	IEC 60900:2018-06 IEC 60060-1:2010-09 IEC 60060-2:2010-11
Industrial head protection Protective Helmet	AC dielectric power frequency voltage withstand test	ANSI/ISEA Z/89.1/2014 § 10.7.4.2 HEDNO TD E110-2/1 01/03/2013 IEC 60060-1:2010-09 IEC 60060-2:2010-11
Industrial head protection Protective Helmet	Electrical tests after and without headform	EN 397+A1:2013 § 5.2.3, § 6.10 HEDNO TD E110-2/1 01/03/2013 IEC 60060-1:2010-09 IEC 60060-2:2010-11
(continued)	AC dielectric power frequency voltage withstand test in water bath immersion test	EN 50365:2002 § 6.3 HEDNO TD E110-2/1 01/03/2013 IEC 60060-1:2010-09 IEC 60060-2:2010-11
Voltage detector – Capacitive type to be used for voltages exceeding 1 kV AC (Medium Voltage)	Measurement of threshold voltage Periodic test	IEC 61243-1:2021-04, Edition 3.0 § 6.2.1.2.2 HEDNO TD DED-185/10.11.2021 § 6.2, § 6.3 HEDNO TD DED-199/10.11.2021 § 6.2, § 6.3 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Measurement of threshold voltage	IEC 61243-1:2021-04, Edition 3.0 § 6.2.1.2.1 HEDNO TD DED -185/10.11.2021 § 6.1 HEDNO TD DED -199/10.11.2021 § 6.1 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Influence of in-phase interference field	IEC 61243-1:2021-04, Edition 3.0 § 6.2.1.3 HEDNO TD DED -185/10.11.2021 § 6.1 HEDNO TD DED -199/10.11.2021 § 6.1 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Influence of phase opposition interference field	IEC 61243-1:2021-04, Edition 3.0 § 6.2.1.4 HEDNO TD DED -185/10.11.2021 § 6.1 HEDNO TD DED -199/10.11.2021 § 6.1 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Influence of interference voltage	IEC 61243-1:2021-04, Edition 3.0 § 6.2.1.5 HEDNO TD DED -185/10.11.2021 § 6.1 HEDNO TD DED -199/10.11.2021 § 6.1 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Time rating	IEC 61243-1:2021-04, § 6.2.10 HEDNO TD DED-185/10.11.2021 § 6.1 HEDNO TD DED-199/10.11.2021 § 6.1 IEC 60060-1:2010-09 IEC 60060-2:2010-11
	Test for stand-by state	IEC 61243-1:2021-04, § 7.2 HEDNO TD DED -185/10.11.2021 § 6.1 HEDNO TD DED -199/10.11.2021 § 6.1 IEC 60060-1:2010-09, IEC 60060-2:2010-11
	Test for ready to operate state	IEC 61243-1:2021-04, § 5.4, § 7.3 HEDNO TD DED-185/10.11.2021 § 6.1 HEDNO TD DED 199/10.11.2021 § 6.1
	Check of testing element	IEC 61243-1:2021-04, § 6.2.8 HEDNO TD DED-185/10.11.2021 § 6.1 HEDNO TD DED-199/10.11.2021 § 6.1

Materials/Product to be tested	Type of test/ Properties to be Measured	Applied methods/ Techniques to be used
Insulators for overhead lines with a nominal voltage greater than 1.000 V (Medium Voltage)	Dry lightning impulse withstand voltage test on M.V. insulator.	IEC 61952:2008-05, Edition 2.0 § 11.1 IEC 61109:2008-05, Edition 2.0 § 11.1 IEC 60383-1:2023-07, Edition 5.0 § ANSI/NEMA C29.8-2017 § 8.2.3 ANSI/NEMA C29.9-2017 § 8.2.3 ANSI/NEMA C29.1-2018 § 4.8 HEDNO TD DED DD-204/06.06.23 § 6.2.1.1, 6.2.1.1, 6.2.2.1 *PPC TD DD-284/20.11.2008 § 6.1.2 IEC 60060-1:2010-09 IEC 60060-2:2010-11 IEEE Std 4-2013
	AC dielectric power frequency voltage withstand test in water on M.V. insulator	IEC 61952:2008-05, Edition 2.0 § 11.1 IEC 61109:2008-05, Edition 2.0 § 11.1 IEC 60383-1:2023-07, Edition 5.0 § 13 ANSI/NEMA C29.8-2017 § 8.2.1 ANSI/NEMA C29.9-2017 § 8.2.1 ANSI/NEMA C29.1-2018 § 4.5 HEDNO TD DED DD-204/06.06.23 § 6.2.1.1.1, § 6.2.2.1 *PPC TD DD-284/20.11.2008 § 6.1.3 IEC 60060-1:2010-09 IEC 60060-2:2010-11 IEEE Std 4-2013
	Low-frequency dry flashover voltage test on insulator M.V.	ANSI/NEMA C29.1-2018 § 4.2 ANSI/NEMA C29.2A-2020 § 8.2.3 ANSI/NEMA C29.2B-2013 (R2023) § 8.2.1 ANSI/NEMA C29.3-2015 (R2022) § 8.2.1 ANSI/NEMA C29.4-2022 § 8.2.1 ANSI/NEMA C29.5-2022 § 8.2.1 ANSI/NEMA C29.6-2022 § 8.2.1 ANSI/NEMA C29.7-2015 § 8.2.1 *PPC TD GR-47S/14.10.81 § 4.1.1.1 *PPC TD GR-47P/14.10.81 § 6.1.1.1 *PPC TD DD-330/20.11.2008 § 6.1.1 IEEE Std 4-2013
	Critical impulse flashover voltage test on M.V. insulator.	ANSI/NEMA C29.8-2017 (R2023) § 8.2.2 ANSI/NEMA C29.9-2017 § 8.2.2 ANSI/NEMA C29.1-2018 § 4.7 ANSI/NEMA C29.2A-2020 § 8.2.5 ANSI/NEMA C29.2B-2013 (R2023) § 8.2.3 ANSI/NEMA C29.5-2022 § 8.2.3 ANSI/NEMA C29.6-2022 § 8.2.3 ANSI/NEMA C29.7-2015 (R2023) § 8.2.3 *PPC TD DD-329/20.11.2008 § 6.1.3 *PPC TD GR-47S/14.10.81 § 4.1.3 *PPC TD GR-47P/14.10.81 § 6.1.3 IEEE Std 4-2013
	Low-frequency wet flashover voltage test on insulator M.V.	ANSI/NEMA C29.1-2018 § 4.3 ANSI/NEMA C29.2A-2020 § 8.2.4 ANSI/NEMA C29.2B-2013 (R2023) § 8.2.2 ANSI/NEMA C29.3-2015 (R2022) § 8.2.2 ANSI/NEMA C29.4-2022 § 8.2.2 ANSI/NEMA C29.5-2022 § 8.2.2.2 ANSI/NEMA C29.6-2022 § 8.2.2.2 ANSI/NEMA C29.7-2015 § 8.2.2.2 *PPC TD DD-329/20.11.2008 § 6.1.2 *PPC TD GR-47S/14.10.81 § 4.1.2 *PPC TD GR-47P/14.10.81 § 6.1.2 *PPC TD DD-330/20.11.2008 § 6.1.2 IEEE Std 4-2013

**Internal Technical Documents*

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This Scope of Accreditation replaces the previous one dated 24.01.2025.

The Accreditation Certificate No. **90-9**, to ELOT EN ISO/IEC 17025: 2017, is valid until 02.07.2027.

Athens, 23.06.2025

Konstantinou Evangelos Apostolos
CEO of *ESYD*

