



TURKISH ACCREDITATION AGENCY

ACCREDITATION CERTIFICATE

As a Testing Laboratory,

**ULUSOY Elektrik İmalat Taah. Ve Tic. A.ş. Trafo Test
Laboratuvarı**

Anadolu Organize Sanayi Bölgesi Dumlupınar Caddesi No: 8 Malıköy
Sincan 06935 ANKARA / TURKEY

is accredited in accordance with TS EN ISO/IEC 17025:2017 standard within the scope given in Annex following the assessment conducted by **TURKAK**.

Accreditation Number : AB-1042-T

Accreditation Date : 25 February 2016

Revision Date / Number : 02 March 2020 / 04

This certificate shall remain in force until **24 February 2024**, subject to continuing compliance with the standard **TS EN ISO/IEC 17025:2017**, related regulations and requirements.




Banül

G. Banu MÜDERRİSOĞLU
Secretary General

Turkish Accreditation Agency (TURKAK) is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Agreement (MRA) in the scope of ISO/IEC 17025.

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Accreditation Scope

 <p style="font-size: small; text-align: center;">Test TS EN ISO/IEC 17025 AB-1042-T</p>	<p>ULUSOY Elektrik İmalat Taah. Ve Tic. A.ş. Trafo Test Laboratuvarı</p> <p>Accreditation Nr: AB-1042-T Revision Nr: 04 Date: 02.03.2020</p>
As a Testing Laboratory	
<p>Address: Anadolu Organize Sanayi Bölgesi Dumlupınar Caddesi No: 8 Malıköy Sincan 06935 ANKARA/TÜRKİYE</p>	<p>Phone : 0 312 502 06 63 Fax : 0 312 502 05 22 E-Mail : info@eaton.com Website : www.ulusoyelektrik.com.tr</p>


Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Power Transformers	Power transformers - Part 1: General Measurement of Winding Resistance	TS EN 60076-1 Madde: 11.2.3 IEC 60076-1 Clause:11.2.3
Power Transformers	Power transformers - Part 1: General Measurement of Voltage Ratio and Check of Phase Displacement	TS EN 60076-1 Madde: 11.3 IEC 60076-1 Clause:11.3
Power Transformers	Power transformers - Part 1: General Measurement of Short-Circuit Impedance and Load Loss	TS EN 60076-1 Madde: 11.4 IEC 60076-1 Clause:11.4
Power Transformers	Power transformers - Part 1: General Measurement of No-Load Loss and Current	TS EN 60076-1 Madde: 11.5 IEC 60076-1 Clause:11.5
Power Transformers	Power Transformers - Part 3: Insulation Levels, Dielectric Tests and External Clearances in Air Applied Voltage Test(AC)	TS EN 60076-3 Madde:10 IEC 60076-3 Clause:10
Power Transformers	Power Transformers - Part 3: Insulation Levels, Dielectric Tests and External Clearances in Air Induced Voltage Withstand Test (IVW)	TS EN 60076-3 Madde:11.2 IEC 60076-3 Clause:11.2
Power Transformers	Power Transformers Part 10: Determination of Sound Levels	TS EN 60076-10 IEC 60076-10
Power Transformers	Power Transformers - Part 1: General Measurement of DC. Insulation Resistance each Winding to Earth and Between Windings	TS EN 60076-1 Madde:11.1.4 (h) IEC 60076-1 Clause:11.1.4(h) IEEE C57.12.90 Cl:10.11
Power Transformers	Power transformers - Part 1: General Leak Testing with Pressure for Liquid Immersed Transformers(Tightness Test)	TS EN 60076-1 Madde: 11.8 IEC 60076-1 Clause:11.8

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Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Power Transformers	Power Transformers - Part 2: Temperature Rise for Liquid-Immersed Transformers Temperature Rise Test Power Transformers - Part 11: Dry-Type Transformers Temperature Rise Test	TS EN 60076-2 IEC 60076-2 TS EN 60076-11 Madde: 23 IEC 60076-11 Clause: 14.3.2
Power Transformers	Power Transformers -Part 1: General Check of Core and Frame Insulation	TS EN 60076-1 Madde: 11.12 IEC 60076-1 Clause:11.12
Power Transformers	Power Transformers -Part 1: General Measurement of No-Load Loss and Current at 90 % and 110 % of Rated Voltage	TS EN 60076-1 Madde: 11.1.3 - 11.5 IEC 60076-1 Clause: 11.1.3 - 11.5
Power Transformers	Power Transformers -Part 1: General Measurement of Zero-Sequence Impedance	TS EN 60076-1 Madde:11.6 IEC 60076-1 Clause:11.6
Power Transformers	Power Transformers -Part 1: General Determination of Capacitances Windings-To-Earth, and Between Windings Measurement of Dissipation Factor (tan δ) of The Insulation System Capacitances	TS EN 60076-1 Madde:11.1.4(c) TS EN 60076-1 Madde:11.1.4(d) IEC 60076-1 Clause: 11.1.4(c) IEC 60076-1 Clause: 11.1.4(d)
Power Transformers	Power transformers - Part 3: Insulation levels, dielectric tests and external clearances in air Power transformers - Part 11: Dry-type transformers Partial Discharge Measurement	TS EN 60076-3 Madde: 11.3 IEC 60076-3 Clause: 11.3 TS EN 60076-11 Madde : 14.2.7 IEC 60076-11 Clause: 14.2.7 IEEE Std. C57.12.90 Madde 10.9
Power Transformers	Power Transformers - Part 3: Insulation Levels, Dielectric Tests and External Clearances in Air Lightning Impulse Test (LI)	TS EN 60076-3 Madde:13 IEC 60076-3 Clause:13

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Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Power Transformers	Power Transformers -Part 1: General Measurement of the harmonics of the no-load current	TS 267 EN 60076-1:1998 (iptal standard) madde 10.6 IEC 60076-1:2000 (revised standard) : CL 10.6 *This standard had been revised on 12.04.2012 but stayed on accreditation scope upon laboratory's request.
Power Transformers	Medium Power Transformers 50 Hz, with Highest Voltage for Equipment not Exceeding 36 kV - Part 1: General Requirements Tank Endurance and Leakage Test	TS EN 50588-1 madde :9.4 EN 50588-1 Clause: 9.4
High-voltage switchgear and controlgear - Part 202: High-voltage/ low-voltage prefabricated substation	Temperature-rise tests	TS EN 62271-202 Madde: 6.5 TS EN 60076-2 TS EN 60076-11 TS EN 61439-1 Madde :10.10 IEC 62271-202 Clause: 6.5 IEC 60076-2 IEC 60076-11 IEC 61439-1 Clause :10.10
High-voltage switchgear and controlgear - Part 100: Alternating-current circuit-breakers	Power-frequency voltage tests	TS EN 62271-1 Madde: 6.2.6.1 TS EN 62271-100 Madde : 6.2.6.1 TS EN 60060-1 Madde: 6 IEC 62271-1 Clause: 6.2.6.1 IEC 62271-100 Clause: 6.2.6.1 IEC 60060-1 Clause: 6

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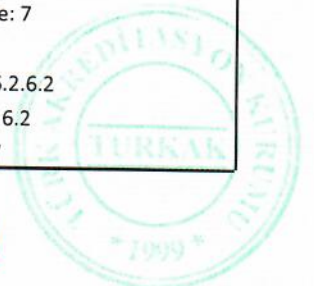
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Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
High-voltage switchgear and controlgear - Part 100: Alternating-current circuit-breakers	Lightning impulse voltage tests	TS EN 62271-1 Madde: 6.2.6.2 TS EN 62271-100 Madde: 6.2.6.2 TS EN 60060-1 Madde: 7 IEC 62271-1 Clause: 6.2.6.2 IEC 62271-100 Clause: 6.2.6.2 IEC 60060-1 Clause: 7
High-voltage switchgear and controlgear - Part 102: Alternating current disconnectors and earthing switches	Power-frequency voltage tests	TS EN 62271-1 Madde: 6.2.6.1 TS EN 62271-102 Madde: 6.2 TS EN 60060-1 Madde :6 IEC 62271-1 Clause: 6.2.6.1 IEC 62271-102 Clause: 6.2. IEC 60060-1 Clause: 6
High-voltage switchgear and controlgear - Part 102: Alternating current disconnectors and earthing switches	Lightning impulse voltage tests	TS EN 62271-1 Madde: 6.2.6.2 TS EN 62271-102 Madde :6.2 TS EN 60060-1 Madde: 7 IEC 62271-1 Clause 6.2.6.2 IEC 62271-102 Clause: 6.2 IEC 60060-1 Clause :7
High-voltage switchgear and controlgear - Part 103: Switches for rated voltages above 1 kV up to and including 52 kV	Power-frequency voltage tests	TS EN 62271-1 Madde: 6.2.6.1 TS EN 62271-103 Madde: 6.2 TS EN 60060-1 Madde: 6 IEC 62271-1 Clause: 6.2.6.1 IEC 62271-103 Clause: 6.2 IEC 60060-1 Clause: 6
High-voltage switchgear and controlgear - Part 103: Switches for rated voltages above 1 kV up to and including 52 kV	Lightning impulse voltage tests	TS EN 62271-1 Madde: 6.2.6.2 TS EN 62271-103 Madde: 6.2 TS EN 60060-1 Madde: 7 IEC 62271-1 Clause :6.2.6.2 IEC 6227-103 Clause: 6.2 IEC 60060-1 Clause: 7

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Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
High-voltage switchgear and controlgear - Part 105: Alternating current switch-fuse combinations for rated voltages above 1 kV up to and including 52 kV	Power-frequency voltage tests	TS EN 62271-1 Madde : 6.2.6.1 TS EN 62271-105 Madde: 6.2 TS EN 60060-1 Madde: 6 IEC 62271-1 Clause :6.2.6.1 IEC 62271-105 Clause :6.2 IEC 60060-1 Clause :6
High-voltage switchgear and controlgear - Part 105: Alternating current switch-fuse combinations for rated voltages above 1 kV up to and including 52 kV	Lightning impulse voltage tests	TS EN 62271-1 Madde 6.2.6.2 TS EN 62271-105 Madde 6.2 TS EN 60060-1 Madde 7 IEC 62271-1 Clause 6.2.6.2 IEC 6227-105 Clause 6.2. IEC 60060-1 Clause 7
High-voltage switchgear and controlgear - Part 200: AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV	Power-frequency voltage tests	TS EN 62271-1 Madde: 6.2.6.1 TS EN 62271-200 Madde: 6.2 TS EN 60060-1 Madde: 6 IEC 62271-1 Clause: 6.2.6.1 IEC 62271-200 Clause: 6.2 IEC 60060-1 Clause :6

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Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
High-voltage switchgear and controlgear - Part 200: AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV	Lightning impulse voltage tests	TS EN 62271-1 Madde:6.2.6.2 TS EN 62271-200 Madde: 6.2 TS EN 60060-1 Madde: 7 IEC 62271-1 Clause: 6.2.6.2 IEC 62271-200 Clause :6.2 IEC 60060-1 Clause: 7

End of Scope


G. Banu MÜDERRİSOĞLU
Secretary General

