



TURKISH ACCREDITATION AGENCY

ACCREDITATION CERTIFICATE

As a Testing Laboratory,

ALCE ELEKTRİK SANAYİ VE TİCARET A.Ş.

Ramazanođlu Mah. Transtek Cad. No:6 Şeyhli Pendik 34906
ISTANBUL / 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-0948-T

Accreditation Date : 12 October 2015

Revision Date / Number : 07 February 2020 / 03

This certificate shall remain in force until **10 October 2023**, subject to continuing compliance with the standard **TS EN ISO/IEC 17025:2017**, related regulations and requirements.



Banur
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.

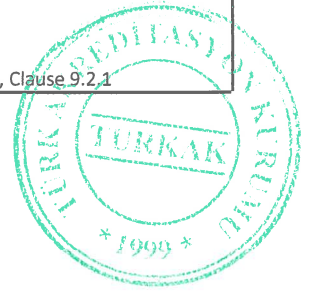
Annex of the certificate (Page 1/4)

Accreditation Scope

 Test TS EN ISO/IEC 17025 AB-0948-T	ALCE ELEKTRİK SANAYİ VE TİCARET A.Ş. Accreditation Nr: AB-0948-T Revision Nr: 03 Date: 07.02.2020	
	As a Testing Laboratory	
Address: Ramazanoğlu Mah. Transtek Cad. No:6 Şeyhli Pendik 34906 İSTANBUL/TÜRKİYE	Phone : 0216 585 4200 Fax : 0216 378 2643 E-Mail : ismail.erturk@alce-elektrik.com.tr Website : www.alce-elektrik.com.tr	


Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Current Transformers	Instrument transformers - Part 2: Additional requirements for current transformers	IEC 61869-1, IEC 61869-2, Madde 7.3.3, Madde 7.3.4 IEEE ANSI C57.13 Madde 8.5 TS EN 61869-1, TS EN 61869-2, Madde 7.3.3, Madde 7.3.4 AS 60044.1 Madde 8.3 GOST 7746 Madde 9.2.4
	Power-frequency voltage withstand tests between sections and Power-frequency voltage withstand tests on secondary terminals (Max. 5 kV AC, 500 V DC)	IEC 61869-1, IEC 61869-2, Clause 7.2.2 IEEE ANSI C57.13 Clause 4.6, Clause 8.7 TS EN 61869-1, TS EN 61869-2, Clause 7.2.2 AS 60044.1 Clause 7.2
	Determination of the secondary winding resistance	IEC 61869-2 Clause 7.3.201 TS EN 61869-2 Clause 7.3.201 AS 60044.1 Clause 13.3.4, Clause 14.4.2 GOST 7746 Clause 9.11
	Temperature-rise test	IEC 61869-1, IEC 61869-2, Clause 7.2.2 IEEE ANSI C57.13 Clause 4.6, Clause 8.7 TS EN 61869-1, TS EN 61869-2, Clause 7.2.2 AS 60044.1 Clause 7.2
	Inter-turn overvoltage test (Max.10 kV, F: 50 - 400 Hz)	IEC 61869-2 Clause 7.3.204 IEEE ANSI C57.13 Clause 6.7 TS EN 61869-2 Clause 7.3.204 AS 60044.1 Clause 8.4 GOST 7746 Clause 9.4
	Measurement of capacitance and dielectric dissipation factor (U: 1 -10 kV / F: 50 Hz)	IEC 61869-1, IEC 61869-2, Clause 7.4.3 TS EN 61869-1, TS EN 61869-2, Clause 7.4.3 AS 60044.1 Clause 9.2
	Test for rated knee point e.m.f. (Ek) and exciting current (Ie) at rated knee point e.m.f. (Max. 2000 V / 0,1 - 5 A)	IEC 61869-2 Clause 7.3.203 IEEE ANSI C57.13 Clause 6.4 TS EN 61869-2 Clause 7.3.203 AS 60044.1 Clause 14.4.1
	Power-frequency voltage withstand tests on primary terminals (Max.100 kV, F: 50 Hz, 60 Hz)	IEC 61869-1, IEC 61869-2 Clause 7.3.1 IEEE ANSI C57.13 Clause 8.8.1 TS EN 61869-1, TS EN 61869-2 Clause 7.3.1 AS 60044.1 Clause 8.2.1 GOST 7746 Clause 6.3.1, Clause 9.2.1

(Handwritten Signature)



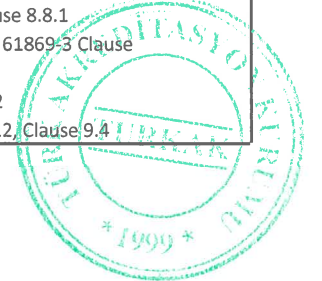
Annex of the certificate (Page 2/4)

Accreditation Scope

 Test TS EN ISO IEC 17025 AB-0948-T	ALCE ELEKTRİK SANAYİ VE TİCARET A.Ş. Accreditation Nr: AB-0948-T Revision Nr: 03 Date: 07.02.2020
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Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
(Current Transformers, continued)	Partial discharge measurement	IEC 61869-1, IEC 61869-2 Clause 7.3.2 IEEE ANSI C57.13 Clause 8.10 TS EN 61869-1, TS EN 61869-2 Clause 7.3.2 AS 60044.1 Clause 8.2.2 GOST 7746 Clause 6.3.6, Clause 9.2.5
	Test for accuracy (I _p : 1 A - 5000 A , I _s : 1 A, 5 A, -F: 50 Hz, 60 Hz)	IEC 61869-1, IEC 61869-2 Clause 7.3.5 TS EN 61869-1, TS EN 61869-2 Clause 7.3.5 AS 60044.1 Clause 11.1, Clause 11.5, Clause 12.1, Clause 12.4 GOST 7746 Clause 6.4.2, Clause 9.5
	Verification of markings	IEC 61869-1, IEC 61869-2 Clause 7.3.6 TS EN 61869-1, TS EN 61869-2 Clause 7.3.6 AS 60044.1 Clause 10.1 GOST 7746 Clause 6.9, Clause 9.5
Voltage Transformers	Instrument transformers - Part 3: Additional requirements for inductive voltage transformers	IEC 61869-1, IEC 61869-3 Madde 7.3.3, Madde 7.3.4 IEEE ANSI C57.13 Madde 8.8
	Power-frequency voltage withstand tests between sections and power-frequency voltage withstand tests on secondary terminals (Max.5 kV AC, 500 V DC)	TS EN 61869-1, TS EN 61869-3 Madde 7.3.3, Madde 7.3.4 AS 60044.2 Madde 9.3 GOST 1983 Madde 9.4
	Measurement of capacitance and dielectric dissipation factor (1 kV - 10 kV, F: 50 Hz)	IEC 61869-1, IEC 61869-3 Clause 7.4.3 TS EN 61869-1, TS EN 61869-3 Clause 7.4.3 AS 60044.2 Clause 10.2
	Temperature Rise Test	IEC 61869-1, IEC 61869-3, Madde 7.2.2 TS EN 61869-1, TS EN 61869-3, Madde 7.2.2 AS 60044.2 Madde 7.2
	Power-frequency voltage withstand tests on primary terminals (Max. 100 kV, F: 50 Hz, 60 Hz)	IEC 61869-1, IEC 61869-3 Clause 7.3.1 IEEE ANSI C57.13 Clause 8.8.1 TS EN 61869-1, TS EN 61869-3 Clause 7.3.1 AS 60044.2 Clause 9.2 GOST 1983 Clause 6.12, Clause 9.4

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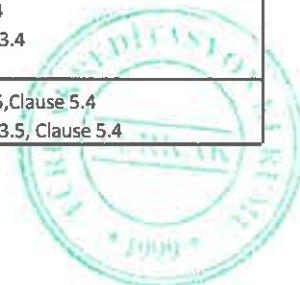
Annex of the certificate (Page 3/4)

Accreditation Scope

  AB-0948-T	ALCE ELEKTRİK SANAYİ VE TİCARET A.Ş. Accreditation Nr: AB-0948-T Revision Nr: 03 Date: 07.02.2020
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Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
(Voltage Transformers, continued)	Partial discharge measurement	IEC 61869-1, IEC 61869-3 Clause 7.3.2 IEEE ANSI C57.13 Clause 8.10 TS EN 61869-1, TS EN 61869-3 Clause 7.3.2 AS 60044.2 Clause 9.2.4 GOST 1983 Clause 6.12.5, Clause 9.17
	Test for accuracy (U: 3 - 36 kV / F:50 Hz, 60 Hz)	IEC 61869-1, IEC 61869-3 Clause 7.3.5 TS EN 61869-1, TS EN 61869-3 Clause 7.3.5 AS 60044.2 Clause 12.1, Clause 12.4, Clause 13.1, Clause 13.6 GOST 1983 Clause 6.15, Clause 9.6
	Verification of markings	IEC 61869-1 Clause 7.3.6, IEC 61869-3 Clause 6.13.301 TS EN 61869-1 Clause 7.3.6, TS EN 61869-3 Clause 6.13.301 AS 60044.2 Clause 11.2 GOST 1983 Clause 5.10, Clause 9.6
Insulated Bushings	Insulated bushings for alternating voltages above 1000 V Measurement of dielectric dissipation factor (tan δ) and capacitance at ambient temperature	IEC 60137 Clause 9.2 TS EN 60137 Clause 9.2
	Dry power-frequency voltage withstand test (Max.100 kV)	IEC 60137 Clause 9.4 TS EN 60137 Clause 9.4
	Measurement of partial discharge quantity	IEC 60137 Clause 9.5 TS EN 60137 Clause 9.5
	Visual inspection and dimensional check	IEC 60137 Clause 9.11 TS EN 60137 Clause 9.11
Indoor Post Insulators (Including Capacitive Voltage Divider Types)	Dry power-frequency withstand voltage test (Max. 100 kV)	IEC 60660 Clause 3.4 TS EN 60660 Clause 3.4
	Partial discharge extinction voltage test	IEC 60660 Clause 3.5, Clause 5.4 TS EN 60660 Clause 3.5, Clause 5.4

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Annex of the certificate (Page 4/4)

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 <p>TÜRKAK Test TS EN ISO IEC 17025 AB-0948-T</p>	<p>ALCE ELEKTRİK SANAYİ VE TİCARET A.Ş.</p> <p>Accreditation Nr: AB-0948-T Revision Nr: 03 Date: 07.02.2020</p>
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Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
(Indoor Post Insulators (Including Capacitive Voltage Divider Types), continued)	Verification of dimensions and visual examination	IEC 60660 Clause 4.2, Clause 5.2 TS EN 60660 Clause 4.2, Clause 5.2

End of Scope

Banuyıl

G. Banu MÜDERRİSOĞLU
Secretary General

