


Annex of the certificate (Page 1/25)


Accreditation Scope

 Test TS EN ISO/IEC 17025 AB-0341-T	LVT TEST LABORATUVARLARI LTD. ŞTİ.	
	Accreditation Nr: AB-0341-T Revision Nr: 012 Date: 28.10.2019	
As a Testing Laboratory		
Address:	Saray Modern Keresteciler San. Sitesi 4. Cad. No:9 Saray Kazan 06980 ANKARA/TÜRKİYE	Phone : 0312 815 13 25-26 Fax : 0312 815 13 27 E-Mail : arslanli@lvt.com.tr Website : www.lvt.com.tr

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Low-Voltage Switchgear And Controlgear- Part 1:General Rules	Temperature Rise Test Dielectric Properties (Power-Frequency Withstand Voltage & Impulse Withstand Voltage) Making And Breaking Capacities Short-Circuit making and Breaking Capacities Operating Limits Operational Performance Degree Of Protection Of Enclosed Equipment Electromagnetic Compatibility:(Clause 7.3:TS EN 61000- 4-13:Harmonics And Interharmonics Including Mains Signalling At A.C. Power Port, Low Frequency Immunity Tests TS EN 61000-4-3:Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m, TS EN 55011:radiated emission (Up To1Ghz) Marking The Mechanical Properties Of Terminals Verification Of The Effectiveness Of Indication Of The Main Contact Position Of Equipment Suitable For Isolation Clearances and creepage distances	TS EN 60947-1 IEC 60947-1

Annex of the certificate (Page 2/25)

Accreditation Scope

 <p style="font-size: small; margin-top: 5px;">Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p style="margin-top: 20px;">Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
--	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
<p>Low-Voltage Switchgear And Controlgear- Part 2: Circuit Breakers</p>	<p>Temperature Rise Test Tripping Limits & Characteristics Dielectric Properties (Power-Frequency Withstand Voltage & Impulse Withstand Voltage) Operational Performance Capability Overload Performance Short-Circuit Breaking Capacity Short-Time Withstand Current Performance of integrally fused circuit-breakers Marking Clearances and creepage distances Mechanical Operation And Operational Performance Capability Verification of Dielectric Withstand Verification of Overload Releases Verification of Main Contact Position Enclosed Equipment Degree Of Protection Of Enclosed Equipment Electromagnetic Compatibility: (Clause 7.3: TS EN 61000-4-13: Harmonics And Interharmonics Including Mains Signalling At A.C. Power Port, Low Frequency Immunity Tests TS EN 61000-4-3: Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m, TS EN 55011: radiated emission (Up To 1Ghz)</p>	<p>TS EN 60947-2 IEC 60947-2</p>
<p>Low-Voltage Switchgear And Controlgear-Part 3: Switches , Disconnectors, Switch-Disconnectors And Fuse-Combination Units</p>	<p>Temperature Rise Test Verification of temperature-rise Dielectric Properties (Power-Frequency Withstand Voltage & Impulse Withstand Voltage) Verification Of Dielectric Leakage Current Rated Making And Breaking Capacities Operational Performance Capability Rated Short-Time Withstand Current Test Overload Performance Capability Rated Short-Circuit Making Capacity Rated Conditional Short-Circuit Current Strength Of Actuator Mechanism Overload Test Electromagnetic Compatibility: (Clause 7.3: TS EN 61000-4-13: Harmonics And Interharmonics Including Mains Signalling At A.C. Power Port, Low Frequency Immunity Tests, TS EN 61000-4-3: Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m, TS EN 55011: radiated emission (Up To 1Ghz) Marking Clearances and Creepage distances Degree Of Protection Of Enclosed Equipment</p>	<p>TS EN 60947-3 IEC 60947-3</p>

Annex of the certificate (Page 3/25)


Accreditation Scope

 <p style="font-size: small; margin-top: 5px;">Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p style="margin-top: 20px;">Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
--	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Low-Voltage Switchgear And Controlgear - Part 4-1: Contactors And Motor-Starters -Electromechanical Contactors And Motor-Starters	Rated Making And Breaking Capacities Dielectric Properties Performance Under Short-Circuit Conditions Mechanical Properties Of Terminals Change-over ability and reversibility Marking Conventional Operational Performance Operation And Operating Limits Degrees Of Protection Of Enclosed Contactors And Starters Ability Of contactors to Withstand Overload Current Temperature Rise Limits	TS EN 60947-4-1 IEC 60947-4-1
Low-Voltage Switchgear And Controlgear - Part 4-1: Contactors And Motor-Starters -Electromechanical Contactors And Motor-Starters	Electromagnetic Compatibility: (Clause 8.3: TS EN 61000-4-13: Harmonics And Interharmonics Including Mains Signalling At A.C. Power Port, Low Frequency Immunity Tests, TS EN 61000-4-3: Part 4 -3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m, TS EN 55011: radiated emission (Up To 1Ghz)	TS EN 60947-4-1 IEC 60947-4-1
Low-Voltage Switchgear And Controlgear Part 5-1: Control Circuit Devices And Switching Elements -Electromechanical Control Circuit Devices	Operating Limits Of Contactor Relays Temperature Rise Dielectric Properties Making And Breaking Capacities of switching elements under Normal Conditions Making And Breaking Capacities of switching elements under Abnormal Conditions Dielectric Verification Performance Under Conditional Short-Circuit Current Verification Of Actuation Force or Moment Measurement Of Clearances And Creepage Distances Verification Of Limitation Of Rotation Of A Rotary Switch Degree Of Protection Of Enclosed Control Circuit Devices Marking Constructional And Performance Requirements	TS EN 60947-5-1 IEC 60947-5-1
Circuit Breakers For Over current Protection For Household & Similar Installations Part 1: Circuit-Breakers For A.C Operation	Short-Circuit Tests Test Of Temperature-Rise And Measurement Of Power Loss Test Of Resistance To Rusting Test Of Indelibility Of Marking Test Of Protection Against Electric Shock Test Of Resistance To Heat Test Of Tripping Characteristic Test Of Dielectric Properties and Isolating Capability Measurements of Clearances And Creepage Distances	TS 5018-1 EN 60898-1 IEC 60898-1

Annex of the certificate (Page 4/25)


Accreditation Scope

 <p style="font-size: small; text-align: center;">Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p>Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
---	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Instrument Transformers Part 1:General Requirements Instrument Part 8:Electronic Current Transformers	Short-Time Current Tests Temperature Rise Test Power Frequency Voltage Withstand Test On Primary Terminals Test For Accuracy (rated input current up to 2000 A) Electromagnetic Compatibility (Clause 6.11) TS EN 61000-4-13:Harmonics And Interharmonics Including Mains Signalling At A.C. Power Port, Low Frequency Immunity Tests, TS EN 61000-4-3:Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m, TS EN 55011:radiated emission (Up To 1Ghz)	TS EN 61869-1 IEC 61869-1 TS EN 61869-2 IEC 61869-2 TS EN 60044-8 IEC 60044-8
Low-Voltage Switchgear & Controlgear Assemblies - Part 1: General Rules	Short-Circuit Withstand Strength Short-Circuit Withstand Strength Protective Circuit Verification Temperature Rise Test Dielectric Properties (Power-Frequency Withstand Voltage & Impulse Withstand Voltage & Testing Of Enclosures Made Of Insulating Material) Clearances And Creepage Distances Marking Mechanical Operation Electromagnetic Compatibility (Clause 10.12) TS EN 61000-4-13: Harmonics And Interharmonics Including Mains Signalling At A.C. Power Port, Low Frequency Immunity Tests TS EN 61000-4-3:Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m, TS EN 55011:radiated emission (Up To 1Ghz) Resistance To Corrosion Degree Of Protection Of Assemblies Mechanical Impact	TS EN IEC 61439-1 TS 3033 EN 60529 IEC 60529 TS EN 62262 IEC 62262
Low-Voltage Switchgear & Controlgear Assemblies - Part 1: General Rules	Verification Of Resistance Of Insulating Materials To Abnormal Heat And Fire Due To Internal Electric Effects Protection Against Electric Shock And Integrity Of Protective Circuits Verification Of Thermal Stability Of Enclosures Lifting Terminals For External Conductors Internal Electrical Circuits And Connections Incorporation Of Switching Devices And Components Resistance To Ultra-Violet (UV) Radiation	TS EN 61439-1 IEC 61439-1

Annex of the certificate (Page 5/25)

Accreditation Scope

 <p style="font-size: small; margin-top: 5px;">Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p style="margin-top: 20px;">Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
--	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Low-Voltage Switchgear & Controlgear Assemblies - Part1: General Rules	Short Circuit Withstand Test For up to 40 kA for 3 sec	TS EN 61439-1 IEC 61439-1
Low-Voltage Switchgear And Controlgear Assemblies- Part 2:Power Switchgear &Controlgear Assemblies	Short-Circuit Withstand Strength Short-Circuit Withstand Strength Protective Circuit Verification Temperature Rise Test Dielectric Properties (Power-Frequency Withstand Voltage & Impulse,Withstand Voltage & Testing,Of Enclosures Made Of Insulating Material) Clearances And Creepage Distances Marking Mechanical Operation Electromagnetic Compatibility Clause 10.12 TS EN61000-4-13: Harmonics AndInterharmonics Including MainsSignalling At A.C. Power Port, LowFrequency Immunity TS EN 61000-4-3:Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m, TS EN 55011:radiated emission (Up To1Ghz)	TS EN 61439-2 IEC 61439-2 TS 3033 EN 60529 IEC 60529 TS EN 62262 IEC 62262
Low-Voltage Switchgear And Controlgear Assemblies-Part 2:Power Switchgear & Controlgear Assemblies	Resistance To Corrosion Degree Of Protection Of Assemblies Mechanical Impact Verification Of Resistance Of Insulating Materials To Abnormal Heat And Fire Due To Internal Electric Effects Protection Against Electric Shock And Integrity Of Protective Circuit Verification Of Thermal Stability Of Enclosures Lifting Terminals For External Conductors Internal Electrical Circuits And Connections Incorporation Of Switching Devices And Components Resistance To Ultra-Violet (UV) Radiation	TS EN 61439-2 IEC 61439-2 TS 3033 EN 60529 IEC 60529 TS EN 62262 IEC 62262
Low-Voltage Switchgear And Controlgear Assemblies-Part 2:Power Switchgear & Controlgear Assemblies	Short Circuit Withstand Test For up to 40 kA for 3 sec	TS EN 61439-2 IEC 61439-2

Annex of the certificate (Page 6/25)

Accreditation Scope

 <p style="font-size: small; text-align: center;">Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p>Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
---	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Switchgear And Controlgear Assemblies -Part3: Distribution Boards Intended To Be Operated By Ordinary Persons(DBO)	Resistance To Corrosion Degree Of Protection Of Assemblies Mechanical Impact Verification Of Resistance Of Insulating Materials To Abnormal Heat And Fire Due To Internal Electric Effects Protection Against Electric Shock And Integrity Of Protective Circuits Verification Of Thermal Stability Of Enclosures Lifting Terminals For External Conductors Internal Electrical Circuits And Connections Incorporation Of Switching Devices And Components Resistance To Ultra-Violet (UV) Radiation	IEC 61439-3 TS 3033 EN 60529 IEC 60529 TS EN 62262 IEC 62262
Switchgear And Controlgear Assemblies -Part 3: Distribution Boards Intended To Be Operated By Ordinary Persons(DBO)	Short-Circuit Withstand Strength Protective Circuit Verification Temperature Rise Test Dielectric Properties (Power-Frequency, Withstand Voltage & Impulse, Withstand Voltage & Testing Of Enclosures Made Of Insulating Material) Clearances And Creepage Distances Marking Mechanical Operation Electromagnetic Compatibility (TS EN 61439-1 Clause 10.12 TS EN 61000-4-13: Harmonics And Interharmonics Including Mains Signalling At A.C. Power Port, Low Frequency Immunity Tests, TS EN 61000-4-3: Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80 -1000 MHz, field strength: 3V/m-10V/m, TS EN 55011: radiated emission (Up To 1Ghz)	TS EN 61439-3 IEC 61439-3 TS 3033 EN 60529 IEC 60529 TS EN 62262 IEC 62262
Switchgear And Controlgear Assemblies -Part 3: Distribution Boards Intended To Be Operated By Ordinary Persons(DBO)	Short Circuit Withstand Test For up to 40 kA for 3 sec	TS EN 61439-3 IEC 61439-3

Annex of the certificate (Page 7/25)



Accreditation Scope

 <p style="font-size: small; margin-top: 5px;">Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p style="margin-top: 20px;">Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
--	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Low-Voltage Switchgear And Controlgear Assemblies Part 4: Particular Requirements For Assemblies For Construction Sites (ACS)	Short-Circuit Withstand Strength Short-Circuit Withstand Strength Protective Circuit Verification Temperature Rise Test Dielectric Properties (Power-Frequency Withstand Voltage & Impulse Withstand Voltage & Testing Of Enclosures Made Of Insulating Material) Clearances And Creepage Distances Marking Mechanical Operation Electromagnetic Compatibility (TS EN61439-1 Clause 10.12 TS EN 61000-4-13:Harmonics And InterharmonicsIncluding Mains Signalling At A.C.Power Port Low Frequency ImmunityTS EN 61000-4-3:Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80 -1000 MHz, field strength: 3V/m-10V/m, TS EN 55011:radiated emission (Up To1Ghz)Resistance To Corrosion Degree Of Protection Of Assemblies Mechanical Impact	TS EN IEC 61439-4 TS 3033 EN 60529 IEC 60529 TS EN IEC 62262
Low-Voltage Switchgear And Controlgear Assemblies Part 4: Particular Requirements For Assemblies For Construction Sites (ACS)	Verification Of Resistance Of Insulating Materials To Abnormal Heat And Fire Due To Internal Electric Effects Protection Against Electric Shock And Integrity Of Protective Circuits Verification Of Thermal Stability Of Enclosures Lifting Terminals For External Conductors Internal Electrical Circuits And Connections Incorporation Of Switching Devices And Components Resistance To Ultra-Violet (UV) Radiation Verification Of Resistance To Corrosion In A Heavily Polluted Atmosphere Lifting	TS EN 61439-4 IEC 61439-4
Low-Voltage Switchgear And Controlgear Assemblies Part 4: Particular Requirements For Assemblies For Construction Sites (ACS)	Short Circuit Withstand Test For up to 40 kA for 3 sec	TS EN 61439-4 IEC 61439-4

Annex of the certificate (Page 8/25)


Accreditation Scope

 	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p>Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
--	---

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Low-Voltage Switchgear And Controlgear Assemblies - Part 5: Assemblies For Power Distribution In Public Networks	Short-Circuit Withstand Strength Short-Circuit Withstand Strength Protective Circuit Verification Temperature Rise Test Dielectric Properties (Power-Frequency Withstand Voltage & Impulse Withstand Voltage & Testing Of Enclosures Made Of Insulating Material) Clearances And Creepage Distances Marking Mechanical Operation Electromagnetic Compatibility (Clause10.12 TS EN 61000-4-13:Harmonics And InterharmonicsIncluding Mains Signalling At A.C.Power Port, Low Frequency ImmunityTests, TS EN 61000-4-3:Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80 -1000 MHz, field strength: 3V/m-10V/m, TS EN 55011:radiated emission (Up To1Ghz)Resistance To Corrosion Degree Of Protection Of Assemblies	TS EN 61439-5 IEC 61439-5 TS 3033 EN 60529 IEC 60529
Low-Voltage Switchgear And Controlgear Assemblies - Part 5: Assemblies For Power Distribution In Public Networks	Verification Of Resistance Of Insulating Materials To Abnormal Heat And Fire Due To Internal Electric Effects Protection Against Electric Shock And Integrity Of Protective Circuits Verification Of Thermal Stability Of Enclosures Lifting Terminals For External Conductors Internal Electrical Circuits And Connections Incorporation Of Switching Devices And Components Resistance To Ultra-Violet (UV) Radiation Verification Of Mechanical Strength Verification Of Category Of Flammability Dry Heat Test	IEC 61439-5 TS EN 60695-11-10 IEC 60695-11-10
Low-Voltage Switchgear And Controlgear Assemblies - Part 5: Assemblies For Power Distribution In Public Networks	Short Circuit Withstand Test For up to 40 kA for 3 sec	TS EN 61439-5 IEC 61439-5

Annex of the certificate (Page 9/25)


Accreditation Scope

 	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p>Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
--	---

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Part 6: Busbar Trunking systems (Busways)	Short-Circuit Withstand Strength Short-Circuit Withstand Strength Protective Circuit Verification Temperature Rise Test Dielectric Properties (Power-Frequency, Withstand Voltage & Impulse Withstand Voltage & Testing Of Enclosures Made Of Insulating Material) Clearances And Creepage Distances Marking Mechanical Operation Electromagnetic Compatibility (Clause 10.12 TS EN 61000-4-13: Harmonics And Interharmonics Including Mains Signalling At A.C. Power Port, Low Frequency Immunity Tests, TS EN 61000-4-3: Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m, TS EN 55011: radiated emission (Up To 1Ghz) Resistance To Corrosion Degree Of Protection Of Assemblies Mechanical Impact	IEC 61439-6 TS 3033 EN 60529 IEC 60529 TS EN IEC 62262
Part 6: Busbar Trunking systems (Busways)	Verification Of Resistance Of Insulating Materials to Abnormal Heat And Fire Due To Internal Electric Effects Protection Against Electric Shock And Integrity Of Protective Circuits Verification Of Thermal Stability Of Enclosures Lifting Terminals For External Conductors Internal Electrical Circuits And Connections Incorporation Of Switching Devices And Components Resistance To Ultra-Violet (UV) Radiation Ability To Withstand Mechanical Loads Thermal Cycling Test	TS EN 61439-6 IEC 61439-6
Part 6: Busbar Trunking systems (Busways)	Short Circuit Withstand Test For up to 40 kA for 3 sec	TS EN 61439-6 IEC 61439-6
Electrical Installations In Ships - Part 302: Low-Voltage Switchgear And Controlgear Assemblies	Dielectric Test Verification Of Insulation Resistance Verification Of Temperature Rise Limits Verification Of Short-Circuit Strength Electrical Functional Tests Clearances And Creepage Distances Protection Against Direct Contact Wiring Electrical Operation	IEC 60092-302
Low Voltage Switchgear And Controlgear	A Method Of Temperature Rise Assessment By Extrapolation For Partially Type Tested Assemblies (PTTA)	IEC 60890 TSECLC/TR60890
L.V Switchgear & Controlgear	Short -Circuit Currents-Calculation Of Effects	TS EN 60865-1 IEC 60865-1

Annex of the certificate (Page 10/25)

Accreditation Scope

 <p style="font-size: small; margin-top: 5px;">Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p style="margin-top: 20px;">Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
--	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Enclosed Low-Voltage Switchgear And Controlgear Assemblies	Arcing Due To Internal Fault	IEC 61641
Empty Enclosures For LowVoltage Switchgear And Controlgear Assemblies - General Requirements	Static Loads And LiftingAxial Loads Of Metal InsertsDegree Of Protection Against External Mechanical Impacts (IK Code)Thermal Stability Mechanical Strenght Heat to Fire Resistance To Abnormal Heat And To Fire Marking Continuity Of The Protective Circuit Resistance To Corrosion Verification of Dielectric Strength Resistance To Normal Heat Resistance To Ultra-Violet (UV) RadiationThermal Power Dissipation Capability	TS EN IEC 62208 TS EN IEC 62262 TS 3033 EN 60529 IEC 60529
High-voltage switchgear and controlgear - Part 1: Common specifications for alternating current switchgear and controlgear	Short Circuit Withstand Test For up to 40 kA for 3 sec	TS EN 62271-1 IEC 62271-1
High-Voltage Switchgear And Controlgear -Part 103: Switches ForRated Voltages Above 1 kV Up ToAnd Including 52 kV	Temperature-Rise Tests Short-Time Withstand Current And Peak Withstand Current Tests Dielectric Tests On Auxiliary And Control Circuits Electromagnetic Compatibility (Clause 6.9 TS EN 61000-4-13:Harmonics AndInterharmonics Including MainsSignalling At A.C.Power Port LowFrequency Immunity Tests TS EN 61000-4-3:Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80 -1000 MHz, field strength: 3V/m-10V/m, TS EN 55011:radiated emission (Up To1Ghz)Power-Frequency Withstand Voltage Measurement Of The Resistance Of Circuits Operating And Mechanical Endurance Tests Operation Under Severe Ice Conditions Verification Of The Protection Low And High Temperature TestsImpulse Withstand Voltage	TS EN 62271-103 IEC 62271-103 TS EN 62271-1 IEC 62271-1 IEC 60060-1 TS 3033 EN 60529 IEC 60529
High-Voltage Switchgear AndControlgear -Part 103:Switches ForRatedVoltages Above1 kV Up ToAndIncluding 52 kV	Short Circuit Withstand Test For up to 40 kA for 3 sec	TS EN 62271-103 IEC 62271-103

Annex of the certificate (Page 11/25)


Accreditation Scope

 <p style="font-size: small; margin-top: 5px;">Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p style="margin-top: 20px;">Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
--	--

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	Temperature-Rise Tests Short-Time Withstand Current And Peak Withstand Current Tests Dielectric Tests On Auxiliary And Control Circuits Electromagnetic Compatibility (Clause 6.9 TS EN 61000-4-13: Harmonics And Interharmonics Including Mains Signalling At A.C. Power Port Low Frequency Immunity TS EN 61000-4-3: Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80 -1000 MHz, field strength: 3V/m-10V/m, TS EN 55011: radiated emission (Up To 1Ghz) Power-Frequency Withstand Voltage Measurement Of The Resistance Of The Circuits Operating And Mechanical Endurance Tests Verification Of The Protection Impulse Withstand Voltage Operation At The Temperature Limits	TS EN IEC 62271-105 TS EN IEC 62271-1 IEC 60060-1 TS 3033 EN 60529 IEC 60529
High-Voltage Switchgear And Controlgear Part 105: Alternating Current Switch Fuse Combinations For Rated Voltages Above 1 kV Up To And Including 52 kV	Short Circuit Withstand Test For up to 40 kA for 3 sec	TS EN 62271-105 IEC 62271-105
High-Voltage Switchgear And Controlgear - Part 100: Alternating-Current Circuit-Breakers	Short-Time Withstand Current And Peak Withstand Current Tests Measurement Of The Resistance Of The Main Circuit Dielectric Tests On Auxiliary And Control Circuits Temperature-Rise Tests Electromagnetic Compatibility (Clause 6.9 TS EN 61000-4-13: Harmonics And Interharmonics Including Mains Signalling At A.C. Power Port, Low Frequency Immunity Tests, TS EN 61000-4-3: Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m, TS EN 55011: radiated emission (Up To 1Ghz) Power-Frequency Withstand Voltage Test Verification Of The Degree Of Protection Mechanical Operation Test At Ambient Air Temperature Low And High Temperature Tests Impulse Withstand Voltage Test	IEC 62271-100 IEC 62271-1 IEC 60060-1 TS 3033 EN 60529 IEC 60529

Annex of the certificate (Page 12/25)

Accreditation Scope

 <p style="font-size: small; margin-top: 5px;">Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p style="margin-top: 20px;">Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
--	--

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	Short Circuit Withstand Test For up to 40 kA for 3 sec	TS EN 62271-100 IEC 62271-100
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	Short-Time Withstand Current And Peak Withstand Current Tests Temperature-Rise Tests Measurement Of The Resistance Of The Circuits Power-Frequency Withstand Voltage Test Dielectric Tests On Auxiliary And Control Circuits Electromagnetic Compatibility: (Clause 6.9) TS EN 61000-4-13: Harmonics And Interharmonics Including Mains Signalling At A.C. Power Port, Low Frequency Immunity Tests TS EN 61000-4-3: Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80 -1000 MHz, field strength: 3V/m-10V/m, TS EN 55011: radiated emission (Up To 1GHz) Verification Of The Protection Mechanical Operation Test Verification Of The IK Coding Impulse Withstand Voltage Test	IEC 62271-200 IEC 62271-1 IEC 60060-1 TS 3033 EN 60529 IEC 60529 TS EN 62262 IEC 62262
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	Short Circuit Withstand Test For up to 40 kA for 3 sec	TS EN 62271-200 IEC 62271-200
High-Voltage Switchgear And Controlgear — Part 202: High Voltage/Low Voltage Prefabricated Substation	Measurement Of The Resistance Of The Circuits Power-Frequency Withstand Voltage Dielectric Tests On Auxiliary And Control Circuits Verification Of The Degree Of Protection Mechanical Impacts	IEC 62271-202 IEC 62271-1 IEC 60060-1 TS 3033 EN 60529 IEC 60529 TS EN 62262 IEC 62262

Annex of the certificate (Page 13/25)


Accreditation Scope

	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p>Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
---	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Part 202:High Voltage /Low Voltage Prefabricated Substation	Short-Time Withstand Current And Peak Withstand Current Tests On Main And Earthing Circuits Electromagnetic Compatibility::(Clause 6.9 TS EN 61000-4-13:Harmonics AndInterharmonics Including MainsSignalling At A.C. Power Port, LowFrequency Immunity Tests, TS EN 61000-4-3:Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m, TS EN 55011:radiated emission (Up To1Ghz)	IEC 62271-202 IEC 62271-1 IEC 60060-1 TS 3033 EN 60529 IEC 60529 TS EN 62262 IEC 62262
Part 202:High Voltage /Low Voltage Prefabricated Substation	Short Circuit Withstand Test For up to 40 kA for 3 sec	TS EN 62271-202 IEC 62271-202
Boxes And Enclosures For Electrical Accessories For Household And Similar Fixed Electrical Installations Part 1: General Requirements Part 21: For Boxes And Enclosures With Provision For Suspension Means Part22: For Connecting Boxes And Enclosures Part 23 : For Floor Boxes And Enclosures Part 24 : For Enclosures For Housing Protective Devices And Other Power Dissipating Electrical Equipment	Marking Dimensions Provision For Earthing Construction Drain Holes Cable Gland Entry Boxes and enclosures with inlets (outlets) or spouts (hubs) for conduits Resistance To Ageing Protection Against Ingress Of Solid Objects And Against harmful Ingress Of Water Insulation Resistance And Electric Strenght Mechanical Strenght Resistance To Heat	IEC 60670-1 EN 60670-1 IEC 60670-21 EN 60670-21 IEC 60670-22 EN 60670-22 IEC 60670-23 EN 60670-23 IEC 60670-24 EN 60670-24

Annex of the certificate (Page 14/25)

Accreditation Scope

 <p>Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p>Accreditation Nr: AB-0341-T Revision Nr: 012 Date: 28.10.2019</p>
---	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Boxes And Enclosures For Electrical Accessories For Household And Similar Fixed Electrical Installations Part 1: General Requirements Part 21: For Boxes And Enclosures With Provision For Suspension Means Part 22: For Connecting Boxes And Enclosures Part 23 : For Floor Boxes And Enclosures Part 24 : For Enclosures For Housing Protective Devices And Other Power Dissipating Electrical Equipment	Creepage Distances Clearances And Distances Through Sealing Compound Resistance Of Insulating Material To Abnormal Heat And Fire Resistance To Tracking Resistance To Corrosion Classifications Construction	IEC 60670-1 EN 60670-1 IEC 60670-21 EN 60670-21 IEC 60670-22 EN 60670-22 IEC 60670-23 EN 60670-23 IEC 60670-24 EN 60670-24
Electric Vehicle Conductive Charging System - Part 1: General Requirements Electric Vehicle Conductive Charging System -Part 21: Electric Vehicle Requirements For Conductive Connection To An A.C./D.C. Supply Electric Vehicle Conductive Charging System -Part 22: AC Electric Vehicle Charging Station	Latching Of The Retaining Device, Marking And Instructions, Telecommunication Network, Earthing electrode and continuity, Detection Of The Electrical Continuity Of The Protective Conductor, Overcurrent Characteristics Of Charges, Drive train interlock, Electric vehicle inlet or plug (case A) requirements, Specific Socket-Outlet / Connector Requirements (Socket/Connector), Plug And Socket-Outlet	TS EN IEC 61851-1 TS EN IEC 61851-21 TS EN IEC 61851-22 IEC 61851-22

Annex of the certificate (Page 15/25)


Accreditation Scope

 	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p>Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
--	---

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Electric Vehicle Conductive Charging System - Part 1: General Requirements Electric Vehicle Conductive Charging System - Part 21: Electric Vehicle Requirements For Conductive Connection To An A.C./ D.C. Supply Electric Vehicle Conductive Charging System - Part 22: AC Electric Vehicle Charging Station	Test Of Protection Against Electric Shock Classification IP Degrees For Basic And Universal Interfaces Dielectric Withstand Characteristics Insulation Resistance Clearances And Creepage Distances Leakage - Touch Current Environmental Tests Permissible Surface Temperature Environmental Conditions Mechanical Environmental Tests Electromagnetic Compatibility (Clause 11.12 TS EN 61000-3-11: limits-limitation of voltage changes , voltage fluctuations and flicker in public low voltage supply systems-equipment with rated currents ≤ 75 A and subject to conditional connection, TS EN 61000-3-12: limits for harmonic currents produced by equipment connected to public low voltage systems with input current >16A and ≤ 75 A per phase, TS EN 61000-4-3: Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m, TS EN 55011: radiated emission (Up To 1Ghz)	TS EN IEC 61851-1 TS EN IEC 61851-21 TS EN IEC 61851-22 IEC 61851-22
Final Goods	Degrees Of Protection Provided By Enclosures (IP Code) (IPX9 is Excluded) (In Electrical Hardware)	TS 3033 EN 60529 IEC 60529
Power Transformers -Part 10: Determination Of Sound Levels	Determination Of Sound Levels	TS EN 60076-10 IEC 60076-10
Electrotechnical Products	Strength Of Environmental Conditions - Conditioning / Ageing Tests Change Of Temperature (Test Ka: Salt Mist, Test Kb: Salt Mist , Cyclic- Sodium Chloride Solution, Test Db: Damp Heat , Cyclic, Damp Sulfur Atmosphere , Ammonia Atmosphere Test Appendix C/D Test) (Underground Earth Connection Components) Temperature Cycle Tests	TS EN IEC 62561-1 TS EN IEC 62561-2 TS EN IEC 60068-2-14 TS EN IEC 60068-2-11 TS EN IEC 60068-2-52 TS EN IEC 60660 TS EN IEC 60068-2-30

Annex of the certificate (Page 16/25)


Accreditation Scope

 <p style="font-size: small; margin-top: 5px;">Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p style="margin-top: 20px;">Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
--	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Residential, Commercial And Light-Industrial Environments	Electromagnetic Compatibility (EMC) - Part 6-1: Generic Standards -ImmunityStandard For Residential,CommercialAnd Light-Industrial Environments (Clause 9: TS EN 61000-4-3:Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m	TS EN 61000-6-1 IEC 61000-6-1
Residential, Commercial And Light-Industrial Environments	Electromagnetic Compatibility (EMC) Part6.3 Generic Standards Emission Standard For Residential, Commercial And Light-Industrial Environments (30 MHz To 1 GHz)	TS EN 61000-6-3 IEC 61000-6-3
Industrial Environments	Electromagnetic Compatibility (EMC) - Part 6-4: Generic Standards - Emission Standard For Industrial Environments (30MHz To 1GHz)	TSEN 61000-6-4 IEC 61000-6-4
Industrial Environments	EMC) Part 6-2: Generic Standards -Immunity Standard For IndustrialEnvironments (Clause 9: TS EN 61000-4-3:Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m	TSEN 61000-6-2 IEC 61000-6-2
Electrical And Electronic Equipment To Repetitive Elelctrical Fast Transients	Electromagnetic Compatibility (EMC) - Part 4-4: Testing And Measurement Techniques - Electrical Fast Transient/Burst Immunity Test (Power Ports:0,25-4 kV, 2,5-5-100 kHz; Data Ports :0.25-2 kV,2,5-5-100 kHz)	IEC 61000-4-4 EN 61000-4-4
Equipment To Undirectional Surges Caused By Over voltages From Switching And Lightning Transients	Electromagnetic Compatibility (EMC) - Part 4-5:Testing And Measurement Techniques - Surge Immunity Test (Power Ports: 0.5, 1, 2, 4kV; 1.2/50 µs) (Communication Ports Are Excluded)	IEC 61000-4-5 TS EN 61000-4-5 EN 61000-4-5

Annex of the certificate (Page 17/25)


Accreditation Scope

 <p style="font-size: small; text-align: center;">Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p>Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
---	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Electrical And Electronic Equipment To Electromagnetic Disturbances Coming From Intended Radio Frequency (RF) Transmitters In The Frequency Range 9 kHz up to 230 MHz	Electromagnetic Compatibility (EMC) -Part 4-6: Testing And Measurement Techniques - Immunity To Conducted Disturbances, Induced By Radio- Frequency Fields (Frequency Range: 0.15 MHz -230 MHz; level 3V - 10V)	IEC 61000-4-6 EN 61000-4-6
Equipments of only under operational conditions, to magnetic disturbances at power frequencies 50 Hz-60 Hz	(EMC) Part 4-8: Testing And Measurement Techniques Power Frequency Magnetic Field Immunity Test 1A/m, 3 A/m, 10 A/m, 30A/m, 60A/m	IEC 61000-4-8 EN 61000-4-8
Connected To Low Voltage Power Supply Networks For Voltage Dips, Short Interruptions And Voltage Variations	Electromagnetic Compatibility (EMC) Part 4-11: Testing & Measurement Techniques-Voltage Dips, Short Interruptions And Voltage Variations Immunity Tests (%0.UT-%100.UT 0.05-9990ms)	IEC 61000-4-11 EN 61000-4-11
Industrial, Scientific And Medical Equipment	Radio-Frequency Disturbance Characteristics-Limits And Methods Of Measurement (Radiated Emission: 30 MHz To 1 GHz, Conducted Emission: 150 kHz To 30 MHz)	TS EN 55011 CISPR 11
Information Technology Equipment	Information Technology Equipment Immunity Characteristics Limits And Methods Of Measurement	TS EN 55024 CISPR 24
Medical Electrical Equipment	Medical Electrical Equipment - Part 1-2 General Requirements For Basic Safety And Essential Performance-Collateral Standard: Electromagnetic Disturbances Requirements And Tests (TS EN 55011: Radiated Emission is up to 1 GHz, TS EN 61000-4-3: Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80 -1000 MHz, field strength: 3V/m-10V/m)	TS EN 60601-1-2 IEC 60601-1-2
Household Appliances, Electric Tools And Similar Apparatus	EMC-Requirements For Household Appliances Electric Tools And Similar Apparatus	TS EN 55014-2 CISPR 14-2

Annex of the certificate (Page 18/25)

Accreditation Scope

 <p style="font-size: small; text-align: center;">Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p>Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
---	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Electrical Equipment For Measurement, Control And Laboratory Use	Electrical Equipment For Measurement, Control And Laboratory Use- EMC Requirements (Clause7-TS EN 55011:Radiated Emmision is up to1GHz, TS EN 61000-4-3:Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80 -1000 MHz, field strength: 3V/m-10V/m)	TS EN 61326-1 IEC 61326-1
Arc Welding Equipment	(EMC) Requirements (Clause 6-TS EN 61000-3-11: limits-limitation voltage fluctuations an flicker in public low voltage supply systems-equipment withrated current ≤75 A and subject to conditional connection TS EN61000-3-12: limits limits for harmonic currents produced by equipment connected to public low volatge systems with input current > 16 A and ≤ 75 A per phase,TS EN 61000-4-3: Radiated Immunity Is Excluded)	EN60974-10 IEC60974-10
Household And Similar Electrical Appliances	Requirements-Safety(Clause25.14,22.16,22.32 ,30.2.1, 19.11.4.7 are Excluded) (Clause:19.11.4.2: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m)(Clause 11 Temperature rise test is for devices having dimenasons up to100x130x100cm)	TSEN60335-1 EN60335-1 IEC60335-1
Electrical Equipment For Measurement Control And Laboratory Use	Safety Requirements Part 1:General Requirements	TS EN 61010-1 EN 61010-1 IEC 61010-1
Electrical Equipment Of Machines	Safety Of Machinery-Electrical Equipment Of Machines-Part1:General Requirements	TS EN 60204-1 EN 60204-1 IEC60204-1
Arc Welding Equipment	Part 1: Welding Power Sources Safety Tests	TS EN 60974-1EN 60974-1IEC 60974-1
Medical Electrical Equipment	Part1:General Requirements For Basic Safety And Essential Performance	TS EN 60601-1 EN 60601-1 IEC 60601-1

Annex of the certificate (Page 19/25)


Accreditation Scope

 <p style="font-size: small; text-align: center;"> Test TS EN ISO/IEC 17025 AB-0341-T </p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p>Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
---	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Electrical Equipments	Dielectric Tests	TS EN IEC 61439-1 TS EN IEC 61439-2 TS EN IEC 61439-3 TS EN IEC 61439-4 TS EN IEC 60947-1 TS EN IEC 60947-2 TS EN IEC 60947-3 IEC 60947-4-1 TS 620 EN IEC60044-1 TS 5018 EN 60898-1 IEC 60898-1 (Tests are performed in and laboratory and also mobile service included)
Electrical Equipments	Determination Of Sound Levels	TS EN 60076-10 IEC 60076-10 (Tests are performed in and lab and also mobile service included)
Electrical Equipments	Impulse Withstand Voltage	TS EN 61439-1 IEC 61439-1 IEC 61439-2 IEC 61439-3 IEC 61439-4 IEC 60947-1 IEC 60947-2 IEC 60947-3 IEC 6044-1 IEC 60947-4-1 IEC60898 (Tests are performed in and laboratory and also mobile service included)
Electrical Equipments	Power-Frequency Withstand Voltage	IEC 62271-102 / 105 IEC62271-1 IEC 60060-1 IEC62271-100 & 200 EN 62271-202 EN 62271-1 (in and lab.and also mobile service included)
Electrical Equipments	Verification Of The Degree Of Protection (IP1X-IP2X-IP3X-IP4X)	IEC 60529 (performed in and lab and also mobile service included)
Electrical Equipments	Safety Tests	IEC60950-1 TS EN 60950-1 IEC61010-1 TS EN 61010-1 IEC 60204-1 IEC60947-1 (Tests are performed in and laboratory and also mobile service included)

Annex of the certificate (Page 20/25)


Accreditation Scope

 <p style="font-size: small; margin-top: 5px;">Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p style="margin-top: 20px;">Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
--	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Plugs and Sockets	(Clause7) Classification (Clause8) Marking (Clause9) Checking Of Dimensions (Clause10) Protection Against Electric Shock (Clause11) Provision For Earthing (Clause12) Terminals And Terminations (Clause13) Construction Of Fixed Socket-Outlets (Clause14) Construction Of Plugs And Portable Socket-Outlets (Clause15) Interlocked Socket-Outlets (Clause16) Resistance To Ageing, Protection Provided By Enclosures And Resistance To Humidity (Clause17) Insulation Resistance And Electric Strength (Clause18) Operation Of Earthing Contacts (Clause19) Temperature Rise	TSE IEC60884-1+A1+A2
Plugs and Sockets	(Clause20) Breaking Capacity (Clause21) Normal Operation (Clause22) Force Necessary To Withdraw The Plug (Clause23) Flexible Cables And Their Connection (Clause24) Mechanical Strength (Clause25) Resistance To Heat (Clause26) Screws Current-Carrying Parts And Connections (Clause27) Creepage Distances Clearances And Distances Through Sealing Compound (Clause28) Resistance Of Insulating Material To Abnormal Heat To Fire And To Tracking (Clause29) Resistance To Rusting (Clause30) Additional Tests On Pins Provided With Insulating Sleeves	TSE IEC60884-1+A1+A2
Luminaires	Luminaires- Part1: General Rules and Tests(TS EN 60598-1 Clause 4.24: Photobiological Hazards Test, excluded)	TS EN 60598-1 IEC 60598-1
Luminaires	Luminaires-Part 2: Special Rules- Section 1: General purpose, fixed(TS EN 60598-1 Clause 4.24: Photobiological Hazards Test, excluded)	TS 8698 EN 60598-2-1 IEC 60598-2-1 EN 60598-2-1
Recessed Luminaires	Luminaires-Part 2: Special Rules- Section 2: Recessed Luminaires (TS EN 60598-1 Clause 4.24: Photobiological Hazards Test, excluded)	TS EN 60598-2-2 IEC 60598-2-2 EN 60598-2-2
Road and Street Luminaires	Luminaires-Part 2-3: Specific objectivity- Road and Street Luminaires (TS EN 60598-1 Clause 4.24: Photobiological Hazards Test, excluded)	TS 8700 EN 60598-2-3 IEC 60598-2-3 EN 60598-2-3

Annex of the certificate (Page 21/25)

Accreditation Scope

 <p style="font-size: small; margin-top: 5px;">Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p style="margin-top: 20px;">Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
--	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
General Purpose, Portable Luminaires	Luminaires-Part 2: Special Rules- Section 4: General Purpose, Portable (TS EN 60598-1 Clause 4.24: Photobiological Hazards Test, excluded)	TS EN 60598-2-4 IEC 60598-2-4 EN 60598-2-4
Projectors	Luminaires-Part 2: Special Rules- Section 5: Projectors (TS EN 60598-1 Clause 4.24: Photobiological Hazards Test, excluded)	TS EN 60598-2-5 IEC 60598-2-5 EN 60598-2-5
Electrical Insulating Gloves	Dielectric Tests	TS EN 60903 /Cl.8.4 IEC 60903/Cl.8.4
EMC Equipment Input Current ≤ 16 A Per Phase	Electromagnetic Compatibility (EMC) Part 3-2: Limits - Limits For Harmonic Current Emissions (Equipment Input Currents ≤ 16 A Per Phase Between 2. And 40.Harmonics)	EN 61000-3-2
Electromagnetic Compatibility Equipment Input Current ≤ 16 A Per Phase	Limitation Of Voltage Changes Voltage Fluctuations And Flicker (Short And Long-Term)	TS EN 61000-3-3 EN 61000-3-3
Electromechanical Products	Environmental Testing Part 2-1 Tests-Test A Cold	TS EN IEC 60068-2-1
Electro mechanical Products	Environmental Testing Part 2-2 Tests-Test B Dry Heat	TS EN 60068-2-2 IEC 60068-2-2
Cable Management Cable Tray Systems And Cable Leader Systems	Classification Construction Marking And Documentation Dimensions Mechanical Properties Electrical Properties Thermal Properties External Influences (14.2.2. System Components With Metallic Coating Is Excluded)	TS EN61537 IEC 61537
Equipment For General Lighting Purposes	EMC Immunity Requirements	TS EN 61547 IEC 61547 EN 61547
Electrical Lighting And Similar Equipments	Clause 4.3.1 conducted Emission (9 kHz-30 MHz) Clause 4.4.2 Radiated Emission (30 MHz-1 GHz), Clause 8.1.2 Load Terminal Voltage Measurement is Excluded, Clause 4.4.1 Radiated Emission 9 kHz-30 MHz	TS EN 55015 EN 55015 CISPR 55015
Rotating electrical machines	Rating And Performance Characteristics (Clause 13)	TS EN 60034-1 IEC 60034-1
Household Appliances, Electric Tools And Similar Apparatus	Electromagnetic compatibility -Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission	TS EN 55014-1 EN 5504-1 CISPR14-1

Annex of the certificate (Page 22/25)

Accreditation Scope

 <p style="font-size: small; margin-top: 5px;">Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p style="margin-top: 20px;">Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
--	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Multimedia Equipment (Broadcast receivers are excluded)	Radiated emission (30 MHz-1 GHz) Conducted emission (150 kHz-30 MHz)	TS EN 55032EN 55032CISPR55032
Household Electric Cooking Appliances Ranges, Ovens, Steam Ovens And Grills	Methods For Measuring Performance	TS EN 60350-1 IEC 60350-1(annex ZZA and ZZB for the directive on energy labeling)
Electrotechnics Products	Fire Hazard Testing -Part 11.5 :Test Flames -Needle -Flame Test Method-Apparatus Confirmatory Test Arrangement And Guidance	TS EN 60695-11-5 EN 60695-11-5
Electrotechnics Products	Fire Hazard Testing -Part 11.10 :Test Flames-50 W Horizontal And Vertical Flame Test Methods	TS EN 60695-11-10 EN 60695-11-10
Final Goods	Degrees Of Protection Provided By Enclosures For Electrical Equipment Against External Mechanical Impacts	TS EN 62262 IEC 62262
High-Voltage Switchgear And Controlgear Part 102: Alternating Current Disconnectors And Earthing Switches	Continuous Current Tests Short-Time Withstand Current And Peak Withstand Current Tests Dielectric Tests On Auxiliary And Control Circuits Electromagnetic Compatibility (Clause6.9 TS EN61000-4-13:Harmonics AndInterharmonics Including MainsSignalling At A.C.Power Port LowFrequency Immunity Tests TS EN 61000-4-3:Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m, TS EN 55011:radiated emission (Up To1Ghz)Power-Frequency Withstand Voltage Resistance Measurement Operating And Mechanical Endurance Test Operation At The Temperature Limits Operation Under Severe Ice Conditions Verification Of The Protection Impulse Withstand Voltage	TS EN IEC 62271-102 TS EN IEC 62271-1 IEC 60060-1 TS3033 EN 60529 IEC 60529
High-Voltage Switchgear And Controlgear Part 102: Alternating Current Disconnectors And Earthing Switches	Short Circuit Withstand Test For up to 40 kA for 3 sec	TS EN 62271-102 IEC 62271-102
Electrotechnics Products	Fire Hazard Testing-Part 2.11:Glowing / Hot Wire Based Test Methods Glow Wire Flammability Test Method For End Products (GWEPT)	TS EN IEC 60695-2-11

Annex of the certificate (Page 23/25)


Accreditation Scope

 <p style="font-size: small; margin-top: 5px;">Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p style="margin-top: 20px;">Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
--	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Solid Insulation Materials	Method For The Determination Of The Proof And The Comparative Tracking Indices Of Solid Insulating Materials	TS EN 60112 IEC 60112
Insulation Materials	Electrical Strength Of Insulating Materials Part 1:Test At Power Frequencies	TS 5119 EN 60243-1 IEC 60243-1
Electric And Electronic Equipment Subjected To Static Electricity Discharges From Operators Directly,From Personel To Adjacent Object	(EMC) -Part 4-2:Testing And Measurement Techniques-Electrostatic Discharge Immunity Test(contact: 2,4,6,8 kV - air: 2,4,8,15 kV)	IEC 61000-4-2
Mechanical Structures For Electronic Equipment Tests For IEC 60917 And IEC 60297 Series Part 1: Environmental Requirements, Test Set-Up And Safety Aspects For Cabinets,	Racks, Subracks And Chassis Under Indoor Condition Use And Transportation Cold, Dry Heat And Damp Heat (Cyclic),Industrial Atmosphere,Static Mechanical Load Tests,Cabinet - Impact Test,Earth Bond,Flammability,Degrees Of Protection Provided By,Enclosures (IP Code)	TS EN IEC 61587-1 TS3033 EN60529 IEC 60529
Information Technology Equipment	Safety - Part 1:General Requirements (TS EN 60950-1 Clause Zx,EN 60950-1Clause Zx Are Excluded)	TS EN IEC 60950-1
Road Traffic Signal Systems	EMC Tests-(Clasuse8.4: TS EN 61000-4-3:Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m)	TSEN 50293 EN 50293
Electrotechnic Products	Fire Hazard Testing -Part 2-10:Glowing / Hot-Wire Based Test Methods Glow-Wire Apparatus And CommonTest Procedure	TS EN IEC 60695-2-10
Low-voltage switch mode powersupplies-Part 3:	EMC Tests(Table2 Clause7.2 TS EN 61000-4-3:Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m, TS EN 55011:radiated emission (Up To1Ghz)	TS EN 61204-3 IEC 61204-3 EN 61204-3

Annex of the certificate (Page 24/25)

Accreditation Scope

 <p style="font-size: small; margin-top: 5px;">Test TS EN ISO/IEC 17025 AB-0341-T</p>	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p style="margin-top: 20px;">Accreditation Nr: AB-0341-T</p> <p>Revision Nr: 012 Date: 28.10.2019</p>
--	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
EMC- Product Family Standard For Lifts, Escalators And Moving Walks	Immunity Test TS EN 61000-4-3: Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test, frequency: 80-1000 MHz, field strength: 3V/m-10V/m, TS EN 55011: radiated emission (Up To 1GHz)	TS EN 12016 EN 12016
Electromagnetic Compatibility -Product Family Standard For Lifts, Escalators And Moving Walks	Emission Test (Clause 6.4: Impulse Noise Click Clause 6.5: Voltage Fluctuations, Clause 6.6: Mains Supply Current Harmonics Is Excluded)	TS EN 12015 EN 12015
Information Technology Equipment	Radio Disturbance Characteristics - Limits And Methods Of Measurement (Radiated Emission: 30 MHz To 1GHz, Conducted Emission: 150 kHz To 30 MHz)	TS EN 55022 EN 55022 CISPR 22
Industrial, Scientific And Medical Equipment	Radio-Frequency Disturbance Characteristics-Limits And Methods Of Measurement (Radiated Emission: 30MHz To 1GHz, Conducted Emission: 150 kHz To 30 MHz) Radio-Frequency Disturbance Characteristics-Limits And Methods Of Measurement (Radiated Emission: 30MHz To 1GHz, Conducted Emission: 150 kHz To 30 MHz)	TS EN 55011 EN 55011 CISPR 11
Devices Containing Electronic Components	Electromagnetic compatibility (EMC)- Part 4-3: Testing and measurement techniques; Radiated, radio-frequency, electromagnetic field immunity test (Frequency: 80-1000MHz, Field Strength: 3V/m-10V/m)	TS EN 61000-4-3 IEC 61000-4-3 EN 61000-4-3
Electronic Devices Mechanical Structures - IEC 60917 and IEC 60297 for Tests - Chapter 3: Cabin, Roof and Drawers	Mechanical Structures for Electronic Devices - Tests for IEC 60917 and IEC 60297 - Part 3: For Cabinet, Roof and Drawers Electromagnetic Shielding Performance tests	TS EN 61587-3 IEC 61587-3
Audio-Video, Information and Communication Technology Hardware	Audio-Video, Information and Communication Technology New Hardware-Part 1: Security Rules (Clause 10: Radiation, Annex C: UV Radiation Test)	TS EN 62368 -1 IEC 62368 -1 EN 62368-1

Annex of the certificate (Page 25/25)

Accreditation Scope

	<p>LVT TEST LABORATUVARLARI LTD. ŞTİ.</p> <p>Accreditation Nr: AB-0341-T Revision Nr: 012 Date: 28.10.2019</p>
---	--

Tested Materials / Products	Name of Test	Testing Method (National, International standards, in house methods)
Conduit Systems	Conduit systems for cable management - Part 1: General requirements	TS EN 61386-1 IEC 61386-1 EN 61386-1
Rigid Conduit	Conduit systems for cable management - Part 21: Particular requirements - Rigid conduit systems	TS EN 61386-21 IEC 61386-21 EN 61386-21
Pliable Conduit	Conduit Systems for cable management - Part 22: Particular requirements - Pliable conduit systems	TS EN 61386-22 IEC 61386-22 EN 61386-22
Flexible Conduit	Conduit systems for cable management - Part 23: Particular requirements - Flexible conduit systems	TS EN 61386-23 IEC 61386-23 EN 61386-23
Conduit Systems Buried Underground	Conduit systems for cable management - Part 24: Particular requirements - Conduit systems buried underground	TS EN 61386-24 IEC 61386-24 EN 61386-24
Redressor	Semiconductor converters - General requirements and line commutated converters - Part 1-1: Specification of basic requirements	TS EN 60146-1-1 IEC 60146-1-1 EN 60146-1-1

End of Scope

Orbay EVRENSEVDİ
Acting Secretary General