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OVE Certification
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OVE Certification
OVE CTF Program

Certificate No.: 85461/CABL

CERTIFICATE OF ACCEPTANCE

Customer's Testing Facility

Studer Cables

Studer Cables AG
Herrenmattstrasse 20
4658 Däniken
Switzerland

The above mentioned laboratory and its staff have been assessed in accordance with the **OVE Customers' Testing Facilities Program (SMT/CTF Stage 3)** and found to comply with the requirements of the latest editions of the OVE Certification Directive ZRL 2 (Stage 3) and the Operational Document ECS 032.

Scope of Approval

Power, Control and Communication Cables

The standards and test procedures for which the Customer's Testing Facility has been accepted to operate in OVE´s CTF Program are listed in the Annex.

File Ref. No.: 16062201

This certificate is valid until **2024-02-29**.

Change of standards, operational documents and procedure documents may have an influence to the validity of this certificate.

Österreichischer Verband für Elektrotechnik
Head of OVE Certification

Digitally signed by T. Neumayer
Email=t.neumayer@ove.at

Wien, 2023-02-14

Dipl.-Ing. T. Neumayer

OVE CTF Program

This Certificate Of Acceptance confirms the participation of the above mentioned laboratory in the CTF program of OVE and does not authorize the manufacturer to use any certification mark of OVE.

Scope of CTF:

Standard		Title
Tests on electric and optical fibre cables under fire conditions		
IEC 60332-1-2	EN 60332-1-2	Part 1-2: Test for vertical flame propagation for a single insulated wire or cable - Procedure for 1 kW pre-mixed flame
IEC 60332-1-3	EN 60332-1-3	Part 1-3: Test for vertical flame propagation for a single insulated wire or cable - Procedure for determination of flaming droplets/particles
IEC 60332-2-2	EN 60332-2-2	Part 2-2: Test for vertical flame propagation for a single small insulated wire or cable - Procedure for diffusion flame
IEC 60332-3-21	EN 60332-3-21	Part 3-21: Test for vertical flame spread of vertically-mounted bunched wires or cables - Category A F/R
IEC 60332-3-22	EN 60332-3-22	Part 3-22: Test for vertical flame spread of vertically-mounted bunched wires or cables - Category A
IEC 60332-3-23	EN 60332-3-23	Part 3-23: Test for vertical flame spread of vertically-mounted bunched wires or cables - Category B
IEC 60332-3-24	EN 60332-3-24	Part 3-24: Test for vertical flame spread of vertically-mounted bunched wires or cables - Category C
IEC 60332-3-25	EN 60332-3-25	Part 3-25: Test for vertical flame spread of vertically-mounted bunched wires or cables - Category D
Tests for electric cables under fire conditions - Circuit integrity		
IEC 60331-2	---	Part 2: Test method for fire with shock at a temperature of at least 830 °C for cables of rated voltage up to and including 0,6/1,0 kV and with an overall diameter not exceeding 20 mm
IEC 60331-21	VDE 472-814	Part 21: Procedures and requirements - Cables of rated voltage up to and including 0,6/1,0 kV
---	EN 50200	Method of test for resistance to fire of unprotected small cables for use in emergency circuits
Test on gases evolved during combustion of materials from cables		
IEC 60754-1	EN 60754-1	Part 1: Determination of the halogen acid gas content
IEC 60754-2	EN 60754-2	Part 2: Determination of acidity (by pH measurement) and conductivity
Electric and optical fibre cables - Test methods for non-metallic materials		
IEC 60811-201	EN 60811-201	Part 201: General tests - Measurement of insulation thickness
IEC 60811-202	EN 60811-202	Part 202: General tests - Measurement of thickness of non-metallic sheath
IEC 60811-203	EN 60811-203	Part 203: General tests - Measurement of overall dimensions
IEC 60811-401	EN 60811-401	Part 401: Miscellaneous tests - Thermal ageing methods - Ageing in an air oven
IEC 60811-402	EN 60811-402	Part 402: Miscellaneous tests - Water absorption tests
IEC 60811-404	EN 60811-404	Part 404: Miscellaneous tests - Mineral oil immersion tests for sheaths
IEC 60811-410	EN 60811-410	Part 410: Miscellaneous tests - Test method for copper-catalyzed oxidative degradation of polyolefin insulated conductors

Standard		Title
IEC 60811-501	EN 60811-501	Part 501: Mechanical tests - Tests for determining the mechanical properties of insulating and sheathing compounds
IEC 60811-502	EN 60811-502	Part 502: Mechanical tests - Shrinkage test for insulations
IEC 60811-503	EN 60811-503	Part 503: Mechanical tests - Shrinkage test for sheaths
IEC 60811-504	EN 60811-504	Part 504: Mechanical tests - Bending tests at low temperature for insulation and sheaths
IEC 60811-505	EN 60811-505	Part 505: Mechanical tests - Elongation at low temperature for insulations and sheaths
IEC 60811-506	EN 60811-506	Part 506: Mechanical tests - Impact test at low temperature for insulations and sheaths
IEC 60811-507	EN 60811-507	Part 507: Mechanical tests - Hot set test for cross-linked materials
IEC 60811-508	EN 60811-508	Part 508: Mechanical tests - Pressure test at high temperature for insulation and sheaths
IEC 60811-510	EN 60811-510	Part 510: Mechanical tests - Methods specific to polyethylene and polypropylene compounds - Wrapping test after thermal ageing in air
IEC 60811-512	EN 60811-512	Part 512: Mechanical tests - Methods specific to polyethylene and polypropylene compounds - Tensile strength and elongation
IEC 60811-513	EN 60811-513	Part 513: Mechanical tests - Methods specific to polyethylene and polypropylene compounds - Wrapping test after conditioning
IEC 60811-606	EN 60811-606	Part 606: Physical tests - Methods for determining the density
Common test methods for cables under fire conditions		
---	EN 50399	Heat release and smoke production measurement on cables during flame spread test - Test apparatus, procedures, results
Railway applications - Railway rolling stock cables having special fire performance - Test methods		
---	EN 50305 cl. 6.1	Electrical resistance of conductors
---	EN 50305 cl. 6.2	Voltage test on completed cable
---	EN 50305 cl. 6.4	Insulation resistance
---	EN 50305 cl. 6.5	Spark test
---	EN 50305 cl. 6.6	Surface resistance
---	EN 50305 cl. 6.7	D.C. stability
---	EN 50305 cl. 6.8	Dielectric strength
---	EN 50305 cl. 8.2	Acid and alkali resistance
Fire behaviour of building materials and building components		
---	DIN 4102-12	Part 12: Circuit integrity maintenance of electric cable systems - Requirements and testing

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