

LOVAG Registered Laboratory 2015

<u>LOVAG CB</u>	<u>Id Code</u>	<u>Name</u>	<u>Address</u>	<u>Observer</u>
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LOVAG Scheme Scope

Main Standards in the LOVAG Scheme			
	<u>Category</u>	<u>Standards</u>	<u>Description</u>
<input checked="" type="checkbox"/>	POW	IEC/EN 60947-1	Low-voltage switchgear and controlgear
<input checked="" type="checkbox"/>	POW	IEC/EN 60947-2	Circuit-breakers
<input checked="" type="checkbox"/>	POW	IEC/EN 60947-3	Switches, disconnectors, switch-disconnectors and fuse-combination units
<input checked="" type="checkbox"/>	POW	IEC/EN 60947-4-1	Electromechanical contactors and motor starters
<input checked="" type="checkbox"/>	POW	IEC/EN 60947-5-1	Auxiliary Switch
<input type="checkbox"/>	POW	IEC/EN 60439-1 IEC/EN 61439-1 & IEC/EN 61439-2	Low-voltage switchgear and controlgear assemblies Part 2: Power switchgear and controlgear assemblies
<input type="checkbox"/>	POW	IEC/EN 61439-1 & IEC/EN 61439-6	Low-voltage switchgear and controlgear assemblies Part 6: Busbar trunking systems (busways)

General Overview of Scope of tests (*)		
<u>Type of tests:</u>	<u>Test description:</u>	<u>Maximum Test limits:</u>
<input checked="" type="checkbox"/> Insulation tests	<input checked="" type="checkbox"/> High voltage <input checked="" type="checkbox"/> Impulse withstand voltage <input checked="" type="checkbox"/> Minimum Leakage current detection	Voltage : 6 kV Voltage : 15 kV Current : 1 mA
<input checked="" type="checkbox"/> Temperature-rise tests	<input checked="" type="checkbox"/> AC / <input checked="" type="checkbox"/> DC max. current <input checked="" type="checkbox"/> Minimum Impedance measurement	Current : 125 A / Current : 160 A 0.01 Ω
<input checked="" type="checkbox"/> EMC tests	<input checked="" type="checkbox"/> Radiated Disturbances <input checked="" type="checkbox"/> Conducted Disturbances <input checked="" type="checkbox"/> Common Mode Disturbances <input checked="" type="checkbox"/> Harmonic Current Emissions <input checked="" type="checkbox"/> Voltage Fluctuations and Flicker Emissions <input checked="" type="checkbox"/> Radiated Electromagnetic Field Immunity <input checked="" type="checkbox"/> Electrostatic Discharges Immunity <input checked="" type="checkbox"/> Electrical Fast Transients/Burst Immunity <input checked="" type="checkbox"/> Surge Immunity <input checked="" type="checkbox"/> Immunity to Conducted Disturbances induced by Radio-Frequency Fields <input checked="" type="checkbox"/> Damped Oscillatory Magnetic Field Immunity <input checked="" type="checkbox"/> AC/DC Voltage Dips, Short Interruptions and Voltage Variations Immunity <input checked="" type="checkbox"/> Ring Wave Immunity <input checked="" type="checkbox"/> Damped Oscillatory Wave Immunity <input checked="" type="checkbox"/> Ripple on DC supplies	
<input checked="" type="checkbox"/> Climatic tests	<input checked="" type="checkbox"/> Cold test <input checked="" type="checkbox"/> Heat test <input checked="" type="checkbox"/> Damp heat test <input checked="" type="checkbox"/> Cyclic test <input checked="" type="checkbox"/> Damp heat cyclic test	min value: - 60°C max value: 250°C max 90°C / 98% RH
<input checked="" type="checkbox"/> Vibration and shock tests	<input checked="" type="checkbox"/> Sinusoidal vibrations <input checked="" type="checkbox"/> Random vibrations <input checked="" type="checkbox"/> Shocks	
<input checked="" type="checkbox"/> Degree of protection tests	<input checked="" type="checkbox"/> IP-code (water and solid bodies) <input checked="" type="checkbox"/> IK-code (impact resistance of enclosures)	IP 68 IK 10

(*) The provided technical information are not contractual and could be different, according to the relevant test specifications of a specific product standard.

For more technical specifications or details, please refer to laboratory documentations or website.