

LOVAG Registered Laboratory 2014

<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 checked="" 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 checked="" 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	Voltage : 80 kV 50 Hz Voltage : 300 kV
<input checked="" type="checkbox"/> Temperature-rise tests	<input checked="" type="checkbox"/> AC / <input checked="" type="checkbox"/> DC max. current	Current : 6000 A / Current: 2500 A
<input checked="" type="checkbox"/> Lifespan	<input checked="" type="checkbox"/> Mechanical lifespan	
<input checked="" type="checkbox"/> EMC tests	<input checked="" type="checkbox"/> Conducted and Radiated Interferences <input checked="" type="checkbox"/> Harmonic Emissions <input checked="" type="checkbox"/> Electrostatic Discharges (Air/Contact) <input checked="" type="checkbox"/> Radiated Susceptibility <input checked="" type="checkbox"/> Fast Transients/Burst <input checked="" type="checkbox"/> Voltage / Current Surge <input checked="" type="checkbox"/> Radio Frequency Conducted Disturbances Induced by Electromagnetic Fields <input checked="" type="checkbox"/> Power Frequency Magnetic Field <input checked="" type="checkbox"/> Pulse Magnetic Field <input checked="" type="checkbox"/> AC/DC Dips, Voltage variations <input checked="" type="checkbox"/> Ring waves <input checked="" type="checkbox"/> Damped oscillatory waves <input checked="" type="checkbox"/> Voltage Fluctuations <input checked="" type="checkbox"/> Common Mode Disturbances <input checked="" type="checkbox"/> Ripple on DC supply	8 / 15 kV 30 V/m 4,4 kV 6 kV / 3 kA 30 Vrms 1200 A/m 3000 A/m 6 kV 4,5 kV 15 % 10 Vrms, 500 V (1 s) 15 %
<input checked="" type="checkbox"/> Climatic tests		From -50 °C to 180 °C; up to 98% RH
<input checked="" type="checkbox"/> Degree of protection tests	<input checked="" type="checkbox"/> IP-code (water and solid bodies)	IP 4X

(*) 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.