

LOVAG Registered Laboratory 2014

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LOVAG Scheme Scope

Main Standards in the LOVAG Scheme			
	Category	Standards	Description
<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 (*)		
Type of tests:	Test description:	Maximum Test limits:
<input checked="" type="checkbox"/> Hight-current tests	<input checked="" type="checkbox"/> Short-circuit switching capacity <input checked="" type="checkbox"/> AC <input checked="" type="checkbox"/> DC <input checked="" type="checkbox"/> Overload switching capacity <input checked="" type="checkbox"/> AC <input checked="" type="checkbox"/> DC <input checked="" type="checkbox"/> Making/breaking capacity <input checked="" type="checkbox"/> AC <input checked="" type="checkbox"/> DC <input checked="" type="checkbox"/> Short-time withstand current <input checked="" type="checkbox"/> Impulse withstand current <input checked="" type="checkbox"/> Arc fault withstand capacity	Voltage : 1100 V / Current : 200 kA Voltage : 1500 V / Current : 100 kA Voltage : 1100 V / Current : 15 kA Voltage : 1500 V / Current : 12 kA Voltage : 1100 V / Current : 200 kA Voltage : 1500 V / Current : 100 kA Current : 150 kA Time : 1 s Current : 90 kA Time : 3 s Current : 400 kA Voltage : 726 V / Current : 100 kA 1 s
<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 : 5 kV at 50 Hz Voltage : 20 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 : 6300 A / Current : 7000 A 1*10 ⁻⁴ Ω
<input checked="" type="checkbox"/> Tripping behaviour	<input checked="" type="checkbox"/> AC / <input checked="" type="checkbox"/> DC max. current	Current : 9 kA / Current : 9 kA
<input checked="" type="checkbox"/> Lifespan	<input checked="" type="checkbox"/> Mechanical lifespan <input checked="" type="checkbox"/> Electrical durability: <input checked="" type="checkbox"/> AC <input checked="" type="checkbox"/> DC	Voltage : 1500 V Current : 6300 A Voltage : 1500 V Current : 7000 A
<input checked="" type="checkbox"/> Mechanical properties of terminals		From 1,5 mm ² to 185 mm ²
<input checked="" type="checkbox"/> EMC tests		
<input checked="" type="checkbox"/> Climatic tests		From -40°C to + 180 °C; up to 98% RH
<input checked="" type="checkbox"/> Vibration and shock tests		Vibr.: 5 Hz-2000 Hz, 95 g; Shock: 30 g
<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 4X 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.