

<u>LOVAG CB</u>	<u>Id Code</u>	<u>Name</u>	<u>Address</u>	<u>Observer</u>
ACAE LABORATORY (ITALY)	IL 01	Lovato Electric S.p.A.	Via Don E.Mazza 12 I-24020 Gorle (BG)	Pietro Dalmaggioni

**LOVAG Scheme Scope**

<b>Main Standards in the LOVAG Scheme</b>			
	<u>Category</u>	<u>Standards</u>	<u>Description</u>
<input type="checkbox"/>	POW	IEC/EN 60947-1	Low-voltage switchgear and controlgear
<input type="checkbox"/>	POW	IEC/EN 60947-2	Circuit-breakers
<input 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)

<b>General Overview of Scope of tests (*)</b>		
<u>Type of tests:</u>	<u>Test description:</u>	<u>Maximum Test limits:</u>
<input checked="" type="checkbox"/> Hight-current tests	<input checked="" type="checkbox"/> Short-circuit switching capacity <input checked="" type="checkbox"/> AC <input type="checkbox"/> DC <input checked="" type="checkbox"/> Overload switching capacity <input checked="" type="checkbox"/> AC <input type="checkbox"/> DC <input checked="" type="checkbox"/> Making/breaking capacity <input checked="" type="checkbox"/> AC <input type="checkbox"/> DC <input type="checkbox"/> Short-time withstand current <input type="checkbox"/> Impulse withstand current <input type="checkbox"/> Arc fault withstand capacity	Voltage : 707 V / Current : 3 kA Voltage : V / Current : kA  Voltage : 707 V / Current : 3 kA Voltage : V / Current : kA  Voltage : 707 V / Current : 3 kA Voltage : V / Current : A Current : kA Time : s Current : A Energy : kA <sup>2</sup> 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 Voltage : 19,5 kV Current : 0,05 mA
<input checked="" type="checkbox"/> Temperature-rise tests	<input checked="" type="checkbox"/> AC / <input type="checkbox"/> DC max. current <input checked="" type="checkbox"/> Minimum Impedance measurement	Current : 1500 A / Current : A R = 0,02 Ω
<input type="checkbox"/> Tripping behaviour	<input type="checkbox"/> AC / <input type="checkbox"/> DC max. current	Current : A / Current : A
<input checked="" type="checkbox"/> Lifespan	<input checked="" type="checkbox"/> Mechanical lifespan <input type="checkbox"/> Electrical durability: <input type="checkbox"/> AC <input type="checkbox"/> DC	Voltage : V Current : A Voltage : V Current : A
<input checked="" type="checkbox"/> Mechanical properties of terminals		
<input type="checkbox"/> EMC tests		
<input checked="" type="checkbox"/> Climatic tests		
<input type="checkbox"/> Vibration and shock tests		
<input type="checkbox"/> Degree of protection tests	<input type="checkbox"/> IP-code (water and solid bodies) <input type="checkbox"/> IK-code (impact resistance of enclosures)	

(\*) 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.