



LOVAG
TEST INSTRUCTION IEC/EN 60439-3 Ed. 1.2

LOW VOLTAGE SWITCHGEAR AND CONTROLGEAR ASSEMBLIES

Part 3: Particular requirements for low-voltage switchgear and controlgear assemblies intended to be installed in places where unskilled persons have access for their use – Distribution boards

This test instruction is based on the following standards:

General Rules:

IEC 60439-1: 1999

EN 60439-1: 1999

Specific Requirements:

IEC 60439-3 Edition 1.2 (2001)

EN 60439-3 (1991)+A1 (1994) + A2(2001)

It complies with this standard in all respects, and provides additional information ensuring a suitable degree of repeatability of the tests between the different test stations.

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Valid from: 2005-05-02

Edition 1.2

23rd March 2005

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Edition 1.2
March 2005
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The test instruction consist of pages dated as shown in the following check list:

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PREAMBLE

The tests shall be carried out after the reference standard(s) have been studied, since this Test Instruction only provides details on certain specific points.

All references to clauses of the General Rules are preceded with the letter G.

For convenience in the use of this Test Instruction, the paragraphs are numbered according to the clauses in the standard IEC/EN 60439-3.

Modifications made since the preceding updated version are indicated by a vertical line in the margin.

4. ELECTRICAL CHARACTERISTICS OF ASSEMBLIES

4.8 Rated Diversity Factor

The diversity shall apply only to the number of main protected outgoing circuits. This shall not include auxiliary devices such as bell transformers and/or control relays.

Such auxiliary devices shall be the subject of a special test, agreed between manufacturer and user.

7. DESIGN AND CONSTRUCTION

Any link provided for the interruption of the neutral or earth conductor shall only be opened by the use of a tool. It shall only be accessible after the removal of any protective covers and shall clearly be visible when such interruption has taken place.

7.6.4 Removable Parts

The clause does not apply to short-circuit protective devices which can be withdrawn after any protective covers have been removed.

8. TEST SPECIFICATIONS

8.1 Classification of tests

Such assemblies shall be capable of meeting all the relevant requirements and tests specified in this standard. Where tolerances are not specified in this standard the values are to be regarded as nominal.

8.2.1 Verification of Temperature Rise Limits

The ratings of the protective devices used for the test shall be recorded, including their position and approximate watts loss.

8.2.11 Verification of Resistance to Rusting

Any specially prepared sample shall contain bends, corners, joints, and welded sections, similar to the product it represents.

8.2.13 Verification of resistance of insulating materials to abnormal heat and to fire due to internal electric effects.**8.2.13.3 Preconditioning**

The ambient atmosphere conditions before test shall be recorded in the test report in terms of temperature (OC) and relative humidity (%).

The test sample shall be stored for a minimum of 24 hours