



LOVAG

GENERAL INSTRUCTION G.1

CERTIFICATES AND TEST REPORTS

This instruction is of a general nature and does not relate to specific standards.

It provides additional information on the presentation of test information in the form of certificates and test reports between the different certification bodies.

Changes from the previous issue are indicated by marginal lines.

A handwritten signature in blue ink, appearing to be 'Michel Brenon', is positioned above the name and title.

Michel Brenon
Chairman of LOVAG

1. SCOPE

- 1.1 This LOVAG General Instruction specifies the general procedures adopted by signatories to the LOVAG Agreement for the issue of Type Test Certificates.
- 1.2 Two basic types of certificates are described together with their applications and the common form of presentation of the test results is explained.

2. DEFINITIONS

2.1 Certificate of Conformity

Document issued under the rules of a certification system indicating that adequate confidence is provided that

- a clearly identified apparatus
- or a homogeneous series of apparatus

conform(s) with type test requirements of a standard listed by LOVAG.

A homogeneous series of apparatus are products having the fundamental parts in common and differing in some components only .

The definition of a homogeneous series of apparatus has to be given in the LOVAG Test Instructions adjusted to each product.

A certificate of conformity may be issued for tests to:

- a) The complete standard.
- b) Complete sequence(s), if any, as defined in a standard.
- c) An individual requirement not included in a sequence, if any mentioned in a standard.
- d) and EMC testing additional to a) or b) when required in the standard

Where a sequence is defined in the standard, the tests must be made to the full sequence.

2.2. Certificate of Conformity of Supplementary Tests

A Certificate of Conformity of Supplementary Tests extends the applicability of an existing Certificate of Conformity. This Certificate is issued for apparatus on which successful supplementary tests have been conducted in accordance with the relevant IEC or EN Standard to verify an additional rating, feature or characteristic. It is not necessary to repeat in the Certificate of Conformity of Supplementary Tests all the drawings and schedules that

appeared in the original Certificate. The Front Sheet shall identify the original certificate number and date.

The issuing authority for this type of Certificate shall be preferably be the same as for the original Certificate of Conformity.

2.3 Supplement to Certificate

Document issued where corrections to a previously issued LOVAG certificate are found to be necessary (See ISO/IEC 17025).

2.4 Manufacturer

An organisation situated at a location or stated locations, which carries out or controls the following stages in the manufacture, final assembly, assessment, testing /inspection verification, handling and storage of the product. A Manufacturer has full responsibility for continued compliance of the product with the relevant requirements and undertakes all obligations in that connection.

2.5 Responsible Vendor

A firm whose name appears on the product for commercial reasons and who accepts the responsibility in law for placing the product on the market, the product having been manufactured by a different firm.

Note: It is permissible to show the Manufacturer as well as the Responsible Vendor on a LOVAG Certificate but the Responsible Vendor must hold the LOVAG Certificate.

3. CERTIFICATION PROCEDURES - GENERAL

3.1 The LOVAG listed laboratory shall normally perform all the tests which it is contracted to undertake for type test certification. However in exceptional cases, another LOVAG listed laboratory may be sub-contracted.

3.2 When a product has satisfied the specified requirements the LOVAG Signatory, designated as a LOVAG Certification Body (LCB), will, upon request, issue a Certificate of Conformity. This Certificate provides the verification of the rated characteristics of a product as assigned by the manufacturer and as mentioned in the certificate.

3.3 Alternative brand name certificates can only be issued if the tests were completed no more than three years prior to submission for issue.
A certificate can be extended to a new brand name with the same product identification file as the initial certificate.

If there is a new reference product identification file (e.g.: in case of assembling the identical product according to the specific rules of the original manufacturer by another manufacturer) or a change in the standard, a decision related to the need of re-testing has to be made

3.4 CONTENT OF CERTIFICATE

Each LOVAG Certificate has the same fundamental structure

a) LOVAG Certificate Front Sheet

b) Test Report

c) Summary of Testing (if required by the applicant of the certificate)

3.4.1 The Test Report contains records of the proving tests with evaluated results, copies of oscillograms, or equivalent, and photographs. Also included is a description of the apparatus tested supported by copies of the essential drawings or a view of the equipment tested plus a complete list of drawings with issue status and a complete parts list, description of the test circuits and information on the quantities measured. See clause 5 for the information to be included in Certificates.

3.4.2 The Certificate Front Sheet indicates the designation and type of apparatus tested and refers to the tests performed for verification of the assigned rated characteristics. In the event of a Certificate referred to in 3.2 above incorporating type tests necessary to verify one or more assigned ratings all the tests prescribed by a Standard for these ratings must have been completed satisfactorily. Before issuing a LOVAG Certificate, the test report is evaluated by a Certification Officer (CO) pertaining to and located in the LCB.

3.4.3 The front sheet and test report and - if applicable- the Summary of Testing are bound and sealed, but certificate holders may provide copies of the front sheet alone or the front sheet with the Summary of testing to their clients.

3.4.4 The Summary of testing, which may be used upon request by the applicant of the Certificate indicates the Manufacturer, the Model and Type of reference, the test specification and a listing of the successfully passed clauses. Additional information can be given on types covered by testing, type designation break down, drawing or pictures and rated characteristics. A form sheet of this Summary of testing is given in Annex C.

3.4.5 Where only a report of the results of certain tests as required by the client is requested, or where the series of various type tests as given above is not completed, the testing laboratory at which the tests were undertaken, may issue such a report. The report must not carry any of the Certificate titles nor

must its title or presentation be such as to lead to confusion with LOVAG Certificates.

4. CERTIFICATES

- 4.1 To ensure a common application of the Universal Certificate Front Sheet, LOVAG Signatories have agreed the following rules of procedure which must be followed when preparing Certificates and Reports for tests made in accordance with LOVAG listed standards and associated LOVAG instructions. The procedures set down in this and any other LOVAG Instruction appropriate to the Standard shall be observed.

The Universal Certificate Front Sheet shall be used for any certification tests made against a standard for which agreed applications have been published in a LOVAG Instruction.

- 4.2 By participating in the activities of LOVAG, each of the signatories has accepted an obligation that national certificates that it issues follow national test instructions which must correspond to the LOVAG Instructions. The national Certificate Front Sheet must not give the possibility of confusion with LOVAG Certificates.

5. INFORMATION TO BE INCLUDED IN CERTIFICATES

- 5.1 In order to harmonize the format of the Certificates issued by LOVAG Signatories the information to be included in the test documentation shall appear in the following sequence:

- a) The appropriate Certificate Front Sheet as given in Annex A
(example from Certification Body ALPHA)

This shall include the following:-

- i) Certificate number
- ii) A description of the apparatus tested
- iii) Rated voltage, current and frequency
- iv) Designation
- v) Manufacturer or Responsible Vendor or both
- vi) For whom tested
- vii) The identification code of the laboratory who conducted the tests
(not the laboratory name)
- viii) The information shown in Annex B on the reverse of the Certificate Front Sheet (Annex B has to be actualised according to the actual number of members)
- ix) Test Report number and issue date

- x) Reference to Summary of testing and issue date
- xi) Test made and standard used
- xii) Complete details of the ratings assigned by the manufacturer and proved by the tests. A sample Certificate Front Sheet showing the position for each of the above items is shown at appendix A)

b) The appropriate test report shall include the following:

- i) A list of the tests performed and, if appropriate, a list of persons witnessing the tests, subject to their approval.

Any deviations from strict compliance with the standard or the LOVAG Instructions should be detailed.

- ii) Test Results. The presentation of the test results should include description of the test arrangements, the condition before and after the test and any observations made during the test.

5.2 LOVAG Certificates and test reports shall be arranged in the following overall order:

(The records of all tests should be grouped together and should not be intermingled with photographs and copies of oscillograms.)

- i) Certificate Front Sheet - original with original signature with no corrections.
- ii) Ratings page (to be used when there is insufficient space on the Certificate Front Sheet - for full details of assigned ratings).
- iii) The LOVAG Test Report Form - original with original signatures and no corrections.
- iv) Diagram of Test Circuits.
- v) Oscillograms* (all records appropriate to the same test and/or test-duty may be grouped together) or other representations of the oscillographic records.
- vi) Photographs of equipment.
- vii) A view of the equipment tested plus a complete list of drawings, with issue status and a complete parts list.

viii) If applicable: Summary of Testing

*Note: With the introduction of computer techniques in the field of data acquisition and handling within testing laboratories it is possible to

obtain graphic representation of quantities by other means than traditional oscillographs.

5.3 The LOVAG Certificate shall be sealed by using ribbon and the LOVAG Seal as follows:

1. Sufficient Royal Blue "China Ribbon Tape" shall be used to enable a double knot at the position of the lower punched hole and the two ends of the tape to extend approximately 30 to 50mm from the bottom of the Certificate when sealed,
2. The unique LOVAG Seal for the certification body shall be applied in the space provided on the left hand bottom corner of the Certificate on to a "Royal Blue" label.
3. The Certificate shall be sealed into a suitable cover.

5.4 Use of electronic documents within LOVAG Certification

As an alternative to the bound and sealed Certificate, a LOVAG Certificate can be produced in an electronic form. This electronic certificate will be a PDF-File.

It shall be composed by the LOVAG certificate and the relevant LOVAG Test Report.

As the LOVAG certificate is always issued by the certification body, the first page of the electronic document shall be a scan from the original front page of the LOVAG certificate.

The relevant test report could be directly provided in electronic version otherwise a scan of the paper version has to be used.

The complete PDF-document shall be protected with a password according to the procedures of the Adobe Acrobat programme.

On the first page of the electronic document, the following stamp has to be added:



and in order to guaranty the integrity of the document a specific footer has to added with the following information:

LOVAG Certificate N° xxxxxxxxxxxx and the pages numbers, in the following format (XX / XX)

.....



Gesellschaft zur Prüfung und
Zertifizierung von Niederspannungsgeräten e.V.



Certificate of Conformity

LOVAG-Certificate No.:

Apparatus

This Certificate applies only to the apparatus tested. The responsibility for conformity of any apparatus having the same designation with that tested rests with the manufacturer or responsible vendor.

This certificate has been prepared according to LOVAG (Low Voltage Agreement Group) Objectives and Operating Principles of mutual recognition. The responsible certification body as a member of LOVAG issues a Certificate of Conformity with the above mentioned Standard(s) following the exclusive use of LOVAG Test instruction wherever applicable.

Only integral reproduction of this Certificate or reproductions of this page accompanied by any page(s) on which are stated the tests performed and the assigned rated characteristics of the apparatus tested, are permitted without written permission from the LOVAG Signatory responsible for this Certificate.

Designation Type

Manufacturer or responsible vendor

Tested for:

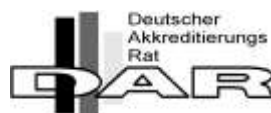
Tested by:

The apparatus, constructed in accordance with the description mentioned in the Test Report listed in this Certificate has been subjected to the series of proving tests in accordance with

The results are shown in the Test Report in accordance to LOVAG. The values obtained and the general performance are considered to comply with the above Standard(s) and to justify the characteristics assigned by the manufacturer as stated below

This document includes Report No.:
Issue Date :

Responsible Certification Body: **ALPHA-Zertifizierungsstelle**
Lyoner Strasse 9
D-60528 Frankfurt am Main



DAT-ZE-001/92-04

Dr. Horst Huthmann

Authorized Signature








Date:

LOVAG CERTIFICATES

LOVAG	is the Low Voltage Agreement Group which is a Mutual Agreement Group of Certification Bodies founded in 1991 which has achieved a high level of competence in testing and certification of low voltage equipment. LOVAG's main purpose as an Agreement Group shall be for the mutual recognition of the test reports and/or certificates of conformity by its signatories.
Membership	LOVAG presently has seven signatories (Certification Bodies) to the Agreement: ACAE (Italy), ALPHA (Germany), Applus ⁺ LGAI (Spain), ASEFA (France), Intertek Semko AB (Sweden), SGS Belgium NV - Division SGS CEPEC (Belgium) and VEIKI-VNL (Hungary) and employs more than 30 Testing Laboratories.
Certificates	LOVAG Certificates are issued by the LOVAG Certification Bodies using test reports and certificates in a common and recognisable format in the market. They are recognised and accepted in the European Economic Area and elsewhere in the world.
Test Instructions	LOVAG uses common LOVAG Test Instructions for each of the International and European Standards covered by the Agreement and signatories to the Agreement abide by these when testing for LOVAG Certification.
Qualifications	All signatory bodies to the Agreement are accredited to EN 45011 (ISO/IEC Guide 65) by accreditors being members of IAF, the International Accreditation Forum. They are located in a member country of the EU and their laboratories are accredited and/or assessed to EN ISO/IEC 17025.

For further information contact your local certification body from the list below or contact the Secretariat of LOVAG at: ALPHA e.V., Lyoner Strasse 9, D-60528 Frankfurt am Main, Phone: + 49 69 9620 6343, Fax: + 49 69 9620 6344, e-mail: secretariat@lovag.net

List of LOVAG Certification Bodies:

<p>ACAE Via Tito Livio 5 I-24123 Bergamo ITALY Fax: + 39 035 453 4662 e-mail: acaecert@tin.it</p> 	<p>SGS Belgium N.V. Division SGS CEPEC Business Riverside Park Avenue Internationalelaan, 55 B-1070-Brussels BELGIUM Fax: + 32 2 556 00 36 e-mail: silvio.piras@sgs.com</p> 
<p>ALPHA Lyoner Strasse 9 D-60528Frankfurt am Main GERMANY Fax: + 49 69 9620 6344 e-mail: office@alpha-cert.de</p> 	<p>Intertek Semko AB Box 1103, Torshamnsgatan 43 SE-164 22 Kista SWEDEN Fax: + 46 8 750 6030 e-mail: lovag@semko.se</p> 
<p>Applus⁺LGAI Campus UAB E-08193 Bellaterra (Barcelona) SPAIN Fax: + 34 93 567 20 01 e-mail: amarginet@appluscorp.com</p> 	<p>VEIKI-VNL Electric Large Laboratories Ltd. Vasgolyó u. 2-4 H-1158 Budapest HUNGARY Fax: + 36 1 417-3163 e-mail: vnl@vnl.hu</p> 
<p>ASEFA 33 av du general leclerc F-92260 Fontenay-aux-roses FRANCE Fax: + 33 1 40 95 88 18 e-mail: asefa@lcie.fr</p> 	



Summary of Testing

Manufacturer:

Model / Type reference:

Test specification:

The following tests have been passed successfully:

Clause	Test item description	Test report no.

Additional information can be given in agreement between Applicant, Certification Body and Test Laboratory for:

- Types covered by testing
- Type designation breakdown
- Drawing or pictures
- Rated characteristics, confirmed by test report

Page 1 of x

Responsible test laboratory:

Name, Logo (if applicable)
complete address

Authorized representative Date

Logo of Acc. Body (if applicable)
Reg. No of accreditation of the
Laboratory