

Certificate

Nr. SEBS-A.165736/13, V1.0

TÜV NORD Systems GmbH & Co. KG hereby certifies to

ifm electronic GmbH

Friedrichstraße 1
45128 Essen

for the safety AS-I circuite board

AC015S

meets the requirements listed in the below listed standards

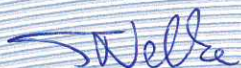
- IEC 61508: 2010; SIL 3
- ISO 13849-1:2006; PL e (Cat.4)
- IEC 62061: 2012; SILcl 3

Base of certification is the report
SEBS-A.165736/13TB and the tracking
list in the valid version.

This certificate entitles the holder to
use the pictured safety approved mark.

Valid until: 31-03-2020
File reference: 8110895608

Hamburg, 31-03-2015



Tobias Nelke
Leiter SEECERT

Certification Body SEECERT
TÜV NORD Systems GmbH & Co. KG
Große Bahnstraße 31, 22525 Hamburg, Germany

Please note our Test and Certification-Regulation on the back



Certification Body SEECERT of TÜV NORD Systems GmbH & Co. KG

Test and Certification Regulations for Granting of Certificates and for Use of Marks of Conformity for Products

1 Scope

The test and certification regulations apply to the granting of certificates for products by SEECERT (hereinafter called "certificate" and "certification body") and the use of marks of conformity.

2 Test and Certification Procedures

2.1 The client charges the certification body by letter with the certification and the issue of a mark of conformity. The certification body and the client shall enter into a contract when the first order for certification is placed.

2.2 If possible, the product to be tested including the relevant documentation should be submitted to the certification body together with the order. If more than one test specimen is required, the certification body will inform the client of the number of test specimens required.

2.3 The test and certification orders shall be handled in the sequence of the arrival of the necessary documents and test specimens.

2.4 The test venue shall be determined by the certification body. The tests shall be conducted by the internal or external test laboratory determined by the certification body or – if required or permitted by the nature of the product – on the client's premises. If the tests are to be conducted by a test laboratory not belonging to TÜV NORD Systems GmbH & Co. KG, this shall be done in coordination with the client.

2.5 On completion of the test and certification procedure, the client shall receive a written test report and, if no faults were found during the test, a certificate and the permission to use a mark of conformity, if applicable.

2.6 For each certification procedure the client shall pay fees.

2.7 On completion of the order, the test specimens submitted shall, where permitted by their nature, be taken into storage by the certification body, or returned with signature to the client for safekeeping. If the safekeeping of test specimens is not possible, an adequate documentation shall be drawn up.

Concerning the whereabouts of test specimens which did not result in a certificate, individual arrangements shall be made with the client.

The certification body shall assume no liability for damage to test specimens and documents submitted by the client which has been sustained during the course of testing or as a result of burglary, theft, fire or water. The certification body shall be obliged to exercise only the same degree of care as it would exercise in similar matters of its own (§ 690 German Civil Code).

2.8 In the case of refusal of the certificate the certification body shall not be liable for any disadvantages consequently arising for the client.

2.9 The certification body shall conduct an initial inspection of the production plant at the expense of the client. A report shall be given on that inspection and the intervals for regular surveillance inspections according to section 4 will be fixed.

3 Certificates

3.1 Granting of the certificate and use of the mark of conformity

3.1.1 The permission to use a mark of conformity is only valid for the company, the production plants and those products stated in the effective certificate. The bearer of the certificate shall be obliged to give due notice to the certification body of any planned relocation of a production plant or transfer of the company to a different company or different company owner.

Only the certification body shall be entitled to transfer the certificate to a third party.

3.1.2 The bearer of the certificate shall pay annual fees for each certificate.

3.1.3 The mark of conformity granted may be altered in size only, not in design. Graphic representations of marks of conformity with a height of less than 5 mm or deviations in colour shall be settled in special agreements.

The way of labelling the certified products with the mark of conformity shall be explained to the certification body prior to marketing.

3.1.4 The bearer of the certificate shall be obliged to ensure that the manufacturing of the products bearing the mark of conformity is performed in conformance with the test specimen and to perform the inspection checks required by the certification body in an orderly manner.

3.1.5 On the transfer of a certificate to legal successors

of the former bearer of the certificate as well as for other special reasons the certification body shall demand the application of another control mark defined by the certification body besides the mark of conformity by the new bearer of the certificate, thus enabling the certification body to distinguish products of different manufacturing periods.

3.1.6 Modifications of products in comparison with the version certified shall be immediately notified to the certification body. The certification body may make the granting of the certificate conditional on the manufacturer's proof that he has satisfied the technical rules or on additional testing.

3.1.7 If during the tests on a product serious faults are detected and the client has already delivered products according to the test specimen, a certificate can only be granted for the newly presented and modified test specimen, if the manufacturer changes the type designation as compared to the products already delivered.

3.1.8 The certificate is only valid for the complete product (tested as model).

3.2 Termination or withdrawal of certificates

3.2.1 A certificate shall terminate if:

- the contract on the certification of products and the use of the mark of conformity (as shown in the certificate) expires;
- the bearer of the certificate disclaims the certificate or ceases the manufacturing of the product certified;
- the bearer of the certificate does not recognize changes to the General Terms and Conditions, the Test and Certification Regulations or the Fee Regulations of the certification body on expiration of the transitional period defined in section 8;
- the bearer of the certificate becomes insolvent or a petition for bankruptcy filed against him is rejected because of lack of assets;
- the technical rules the certificate was based on have been changed. The validity of the certificate can be maintained if within a fixed period at the expense of the bearer of the certificate it can be shown by re-testing that the products certified also meet the new technical rules.

3.2.2 In addition a certificate can be declared invalid or withdrawn by the certification body if:

- the products subsequently show faults which were not detectable or not identified during the tests;
- the inspection of products bearing a mark of conformity results in faults;
- products bearing a mark of conformity do not correspond with the test specimen certified;
- the correct performance of the manufacturing inspections at the plant of the bearer of the certificate or at another testing site is not established within a 4-week period in spite of a written request by the certification body (see section 3.1.4);
- the bearer of the certificate refuses the inspection of manufacturing and testing facilities or storage areas by the authorized representative of the certification body or the sampling of products for the purpose of inspection by the certification body;
- faults within the quality assurance system are detected during the routine check according to section 4.1 (follow-up service);
- the fees are not paid within the prescribed period despite a demand for payment. If the fees do not refer to a specific certificate, the certification body shall decide to which certificate the measure is to apply;
- the mark of conformity is used for misleading or other inadmissible advertising;
- further use of the mark of conformity with respect to its informative function in the market cannot reasonably be accepted for reasons not clearly evident at the time of testing.

3.2.3 The declaration of invalidation may be published by the certification body.

3.2.4 If the certificate has been terminated (section 3.2.1) or withdrawn (section 3.2.2), the bearer of the certificate shall no longer have the right to use the mark of conformity in labelling the products specified in the certificate (exceptions see section 3.3.1).

3.2.5 After the expiry or invalidation of a certificate the certificate must be returned to the certification body, even if the permission to sell the remaining stocks bearing the mark of conformity has been given.

3.3 Marketing of products bearing the mark of conformity

after expiry of the certificate (marketing permission)

3.3.1 After the expiry of a certificate the bearer of the certificate may be permitted:

- to market the remaining stocks of ready-for-use products existing at that moment for a reasonable period and at most for 2 years;
- to assemble the components already prefabricated at that moment and meant for the fabrication of ready-for-use products of the type originally certified, for a number of ready-for-use products to be specified by the client, for 6 months at most after the expiry of the certificate.

3.3.2 On demand, the certification body must be immediately informed about any existing stocks of ready-for-use products bearing a mark of conformity in the form of a statutory declaration suitable for a court of law.

3.3.3 In the course of the marketing permission the General Terms and Conditions as well as the Test and Certification Regulations remain valid.

3.3.4 If a marketing permission is not granted or is withdrawn, the bearer of the certificate is bound to remove the mark of conformity from all accessible products of the type in question or to destroy such products and make checking possible for the certification body.

4 Regular Surveillance

4.1 After each successful product certification, the certification body shall monitor the correct use of the certificate and the mark of conformity.

4.2 With regard to this the certification body shall ask the client for sources of supply or evidence of use for the certified products as well as for complaints about these products.

4.3 At two sources of supply or users the certification body shall check by inspection the correspondence of certified and delivered product.

4.4 The determination of access rights for the personnel of the certification body at the user's premises shall be regulated by contract, if necessary.

5 Publication of Test Reports and Certificates

The bearer of the certificate shall pass on test reports and certificates only as a whole indicating the date of issue. Publication or duplication must be previously approved by the certification body.

6 Consumer Information

The certification body reserves the right to publish a list of certified products for the information of the consumers.

7 Violation of the Test and Certification Regulations

The certification body has the right to claim a contractual penalty of up to 5,000.00 EUR for each case of culpable violation of the Test and Certification Regulations, in particular for an illegal use of the mark of conformity agreed upon.

An illegal use of a mark of conformity is also given if products labelled with a mark of conformity are offered or put into circulation or inadmissibly promoted before the certificate has been granted.

8 Taking Effect and Modification of the Test and Certification Regulations

These Test and Certification Regulations take effect from 2014-06-10.

8.1 These Test and Certification Regulations will become invalid after a new version has been prepared, with a transition period of 6 months.

8.2 The certification body shall indicate to the clients and the bearers of certificates in particular the coming into effect of a new version of the Test and Certification Regulations or the annulment of the present version.

2014-06-10