#### **MARINE DIVISION**

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Certificate number: 13460/B0 BV

File number : ACE 10/721/02

Product code: 2658H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

## TYPE APPROVAL CERTIFICATE

as per Bureau Veritas Classification Rules

This certificate is issued to

# SELCO A/S

Roskilde - DENMARK

for the type of product

## **GENERATOR CONTROL AND PROTECTION UNITS**

SIGMA protection and control modules S6000, S6100 and S6500.

Regulations and standards:

BV Rules for the Classification of Steel Ships.

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements of the Regulations and standards mentioned above.

This certificate is valid until: 19 Sep 2013

At Paris la Défense, on : 19 Sep 2008

For BUREAU VERITAS, By order of the Secretary

L.COURREGELONGUE

Approval office

PARIS 1828

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Local office : BV FREDERICIA Surveyor : V. Simonsen

PARIS
1828

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This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine Division. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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## THE SCHEDULE OF APPROVAL

#### 1. PRODUCT DESCRIPTION:

"GENERATOR RELAY for protection against overload and short-circuit.

## Comprising:

- SIGMA S6000: IO/P Module - SIGMA S6100: S/LS Module - SIGMA S6500: UI Module

#### Software versions:

- SIGMA S6000: 3-2-x - SIGMA S6100: 3-5-x - SIGMA S6500: 1-4-x

### 2. DOCUMENTS AND DRAWINGS:

According to document filed in ACE 10/721/02.

### 3. TEST REPORTS:

- 3.1 NESELCO test report N° HJ/276 dated 1982-04.
- 3.2 DELTA Test report N° DANAK-197219/DELTA-E501273-1 dated 16/0ct./2003.

#### 4. APPLICATION / LIMITATION:

- 4.1 BV Rules for the Classification of Steel Ships.
- 4.2 The equipment, once installed on board ship, is to be tested in accordance with the above referred Regulations under the supervision of a Society's Surveyor.
- 4.3 Only Hardware and Software successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.
- 4.4 Software Modification:

Any modification of program contents and data, as well as a change of version, shall be documented and submitted to BV for appraisal.

## 5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 The above product sare to be manufactured, examined and tested by SELCO A/S in accordance with the type described in this certificate and Bureau Veritas Rules for the Classification of Steel Ships.
- 5.2 Production sites are to be recognized by Bureau Veritas as per NR320 for HBV products. To this end SELCO A/S has to make the necessary arrangements for a Society's Surveyor to perform visits and product audits at the production sites.
- 5.3 SELCO A/S has declared to Bureau Veritas that the type of product described in this certificate are manufactured at the following production site:

SELCO A/S Betonvej 10 DK-4000 Roskilde DENMARK

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## **6. MARKING OF PRODUCT:**

- Maker's name or trade mark,
- Serial number of the units,
- Equipment type number or model identification under which it was type-tested.

#### 7. OTHERS:

- 7.1 This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that SELCO A/S (Roskilde DENMARK), will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.
- 7.2 This certificate supersedes the Type Approval Certificate N°13460/A0 BV issued on 16/12/2003 by the Society.

\*\*\* END OF CERTIFICATE \*\*\*