



MARINE DIVISION

Certificate number: 04073/E0 BV

File number: AP 1744

Product code: 4121H

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

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## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**SELCO A/S**  
Roskilde - DENMARK

*for the type of product*

### SYNCHRONISING / LOAD SHARING / LOAD SHEDDING SYSTEMS

SYNCHRONISER T4000 - SYNCHRONISER T4500 - LOAD SHARER T4800 - PARALLELING RELAY T5000.

**Requirements:**

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 mentioned above.*

**This certificate will expire on: 26 Jan 2015**

**For BUREAU VERITAS,**

At BV FREDERICIA, on 26 Jan 2010,

Viki Normann Simonsen



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 available on the internet site www.veristar.com. 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.

## **THE SCHEDULE OF APPROVAL**

### **1. PRODUCT DESCRIPTION :**

"SYNCHRONISER (analog) T4000"  
 "SYNCHRONISER (digital) T4500"  
 "LOAD SHARER T4800"  
 "PARALLELING RELAY T5000"

### **2. DOCUMENTS AND DRAWINGS :**

According to Notices T 4095-04, T 4595-04 and T 4895-01.

### **3. TEST REPORTS :**

- SELCO Test Reports N°s 271078 - 274 584 - 275 395 - 274 570 - 274 025 - 274 197 - 214 584.
- LK Test Reports N°s R 900 703-01E / R 860 729-02E issued on 06/08/1986.
- DELTA Test Report ref.: DANAK-195724/DELTA-K251196-5 dated 11/09/2001.
- DELTA Test Report ref.: DANAK-198611/DELTA-A504377-1 dated 20/12/2006.
- DELTA Test Report ref.: DANAK-198449/DELTA-A503163-1 dated 28/07/2006.

### **4. APPLICATION / LIMITATION :**

4.1 - BUREAU VERITAS 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.

### **5. PRODUCTION SURVEY REQUIREMENTS :**

5.1 - The above products are 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 may be manufactured at the following production site:

**SELCO A/S  
 Betonvej 10  
 DK-4000 Roskilde  
 DENMARK**

### **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  
 Betonvej 10  
 DK-4000 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° 04073/D0 BV issued on 23/12/2004 by the Society.

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