

# TYPE APPROVAL CERTIFICATE

**This is to certify:****That the Control and Monitoring System**

with type designation(s)

**M1000C, M1000D, M2000B, M2000C, M2100, M0500, M0600**

Issued to

**SELCO****Roskilde Sjælland, Denmark**

is found to comply with

**DNV GL rules for classification – Ships, offshore units, and high speed and light craft****Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.****Location classes:**

<b>Temperature</b>	<b>B</b>
<b>Humidity</b>	<b>B</b>
<b>Vibration</b>	<b>A</b>
<b>EMC</b>	<b>B</b>
<b>Enclosure</b>	<b>Required protection according to the Rules to be performed before installation on board</b>

Issued at **Høvik** on **2017-04-26**for **DNV GL**This Certificate is valid until **2019-06-30**.DNV GL local station: **Copenhagen**Approval Engineer: **Nils Jarem****Odd Magne Nesvåg**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



## Product description

Alarm Annunciator	M1000D, M1000C (SMD components)
Engine Controller	M2000C (SMD components)
Engine Controller	M2000B
Emergency Controller	M2100
Tacho Detector	M0500
Shutdown unit	M0600

## Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV GL rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

## Type Approval documentation

	Document	Version	Description
Data sheets:	M1095-111UK	-	M1000 Process Alarm Monitor
	-	2-M1000D	M1000 Alarm Monitor Plus - D-version
	M2095-94UK	-	M2000 Engine Controller
	M0695-63E	-	M0600 Shutdown Unit
	M0595-63E	-	M0500 Tacho Voltage Detector
	02-2017	-	M2100 Emergency Controller
Manuals:	-	2016-08-24	SELCO-M1000D-User-Manual
	M0695-23E	-	M0600-Manual
Test Reports:	R 860811-01 E, Delta K251196-3 DANAK-195381, DANAK-198611, DANAK-19/14491	rev.2 / E501822-1, dated 09.01.2001. dated 20 December 2006; 2014-09-18.	
Drawings:	M1010 sheet 1-2		

Type approval renewal assessment report for A-14210, DNV GL Copenhagen 2017-03-29.

## Tests carried out

Applicable tests according to Standard for Certification 2.4, April 2006

## Marking of product

The products to be marked with:

- manufacturer name
- model name
- serial number
- power supply ratings

Job Id: **262.1-004227-5**  
Certificate No: **TAA000014N**

### **Periodical assessment**

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE