

TYPE APPROVAL CERTIFICATE

Certificate No:
TAA0000015
Revision No:
2

This is to certify:

That the Generator Automation System

with type designation(s)
C6200 FlexGen Gencontroller

Issued to

SELCO ApS
Roskilde, Sjælland, Denmark

is found to comply with

DNV 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.

Location classes:

Temperature	B
Humidity	B
Vibration	B
EMC	A
Enclosure	Required protection according to relevant rules shall be provided upon installation on board

Issued at **Hamburg** on **2023-01-04**

This Certificate is valid until **2028-01-03**.

DNV local unit: **Denmark CMC**

Approval Engineer: **Heinz Scheffler**

for **DNV**



Digitally Signed By: Papanuskas, Joannis
Location: DNV GL SE Hamburg, Germany

Joannis Papanuskas
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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

C6200 Gencontroller Module (phase/phase) provides automatic and semi-automatic synchronizing, active and reactive load sharing, frequency and voltage control, load depending start/stop of generators, reverse power protection and excitation loss protection.

C6200 also includes 8 programmable inputs and outputs that can be used for functions such as indication of protection trips, external commands for start of synchronizing or load sharing and manual control of speed and voltage.

Firmware Versions:

C6200: 191026 version 1-1-78

Major changes should affect first digit. Minor changes causing change in second or third digit of the software version will not require any update in the type approval certificate.

Application/Limitation

Protection functions in addition to those listed above are not included in this type approval.

The type approval cover hardware and software (firmware) listed under product description.

The following documentation for the actual application shall be submitted for approval in each case (normally as part of the documentation for the switchboard):

- Reference to this Type Approval Certificate and other type relevant type approval certificates, if applicable
- System functional description, including configuration set up for the actual application
- Firmware Log document for C6200, if not identical to approved firmware listed under Product description
- System block diagram
- Power supply arrangement (may be part of the System block diagram)
- Test program for the certification test

Product certificate

Each delivery of the application system is to be certified according to Pt.4 Ch.9 Sec.1. The certification test is to be performed before the system is installed onboard at the company defined as responsible for the system, typically at the switchboard manufacturer. The product certificate must identify this Type Approval Certificate. After the certification the clause for application software control will be put into force.

Software control

All changes in software are to be recorded as long as the system is in use on board. Documentation of major changes is to be forwarded to DNV for evaluation and approval before implemented on board. Certification of modified functionality may be required for the particular vessel.

Type Approval documentation

Documents & Test Reports: TAA00001KR List of Documents and Test Reports; Rev.0, dated 04.01.2023

Tests carried out

Applicable tests according to class guideline DNV-CG-0339, August 2021.

Function Test, witnessed by DNV Copenhagen, dated 22.09.2009

Marking of product

The products to be marked with:

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

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

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE