DNV·GL

Certificate No:
TAA000027E

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Peripheral Equipment

with type designation(s)
Remote control panels RCP-1, RCP-2, RCP-B

Issued to
Siemens AS
Oslo, Norway

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:

Temperature	**B**
Humidity	**B**
Vibration	**A**
EMC	**B**
Enclosure	**A / IP22 (panel front)**

Issued at **Høvik** on **2019-02-08**
This Certificate is valid until **2024-02-07**.
DNV GL local station: **Trondheim**

for **DNV GL**

Approval Engineer: **Ståle Sneen**

Marta Alonso Pontes
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.

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Job Id: **262.1-012723-2**
Certificate No: **TAA000027E**

Product description
Operator panels for Remote Control Systems (RCS).
Remote Control Panels (RCP) overview:

Description	Siemens Part No.
RCP – 1 ProfiBus variant	6GP1011-0AA00
RCP – 2 ProfiBus variant	6GP1021-0AA00
RCP – 1 ProfiNet variant	6GP1012-0AA00
RCP – 2 ProfiNet variant	6GP1022-0AA00
RCP – B	6GP1031-0AA00

Place of manufacture
Keytouch Technology AS,
Horten, Norway

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.

Application/Limitation
The High Voltage Test has not been documented for RCP-1, RCP-2 and RCP-B. Hence the units are not approved for direct connection to the ships distribution board, and are to be powered via an instrument power supply.

Shielded cables are required for the following interfaces: ProfiNET, ProfiBUS, X4 Misc, X5 Digital in, X6 Digital out.

Type Approval documentation

Tests carried out
Applicable tests according to Standard for Certification No. 2.4, April 2006.
The mounted panel has been tested for IP22 according to IEC 60529 Ed.2.1 (2001).
For the bridge mounted components the 'Compass safe distance' was measured according to section 11.2 of IEC 60945 4th edition (2002). Standard Compass Safe Distance: 40 cm, Steering Compass Safe Distance: 25 cm.

Marking of product
SIEMENS
RCP-1, RCP-2 or RCP-B
Part No. as listed under Product description
Unique serial number

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