

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Peripheral Equipment

with type designation(s)

Exicom Terminals ET-306(-A), 316(-A), 336(-A), 406(-A), 416(-A), 436(-A), 456(-A), 506, 516, 536, 556(-A); Provicom Terminals MT-306(-A), 316(-A), 336(-A), 406(-A), 416(-A), 436(-A), 456(-A), 506, 516, 536, 556(-A)

Issued to

R. Stahl HMI Systems GmbH
Köln, Germany

is found to comply with

DNV GL rules for classification – Ships

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Location classes:

Temperature	A
Humidity	B
Vibration	A
EMC	B
Enclosure	B

This Certificate is valid until **2021-11-15**.

Issued at **Hamburg** on **2016-11-16**

DNV GL local station: **Essen**

Approval Engineer: **Dariusz Lesniewski**

for **DNV GL**

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Duy Nam Le
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

Operating terminal units covering:

Exicom Terminal Types:

ET-306/306-A, ET-316/316-A, ET-336/336-A, ET-406/406-A, ET-416/416-A,
ET-436/436-A, ET-456/456-A, ET-506, ET-516, ET-536 and ET-556/556-A

Provicom Terminal Types:

MT-306/306-A, MT-316/316-A, MT-336/336-A, MT-406/406-A, MT-416/416-A,
MT-436/436-A, MT-456/456-A, MT-506, MT-516, MT-536 and MT-556/556-A

Application/Limitation

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 Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

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 at the manufacturer of the application system according to an approved test program before the system is shipped to the yard. After the certification the clause for application software control will be put into force.

Clause for application software control

All changes in software are to be recorded as long as the system is in use on board. The records of all changes are to be forwarded to DNV GL for evaluation and approval. Major changes in the software are to be approved before being installed in the computer.

Type Approval documentation

Tests carried out

Applicable tests according to Class Guidance DNVGL-CG-0339, November 2015.

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



Job Id:
Certificate No: **TAA00000WA**