DNV·GL

Certificate No:
TAA00000V4

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Peripheral Equipment

with type designation(s)
Condition Monitoring Module, SIMATIC TOUCH PANEL

Issued to
Siemens AG
DF FA SE, Breslauer Straße 5
Fürth Bayern, 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.

Temperature	**B**
Humidity	**B**
Vibration	**A**
EMC	**B (see remarks under Application/Limitation)**
Enclosure	**Required protection shall be provided upon installation on board.**

This Certificate is valid until **2022-02-14**.

Issued at **Hamburg** on **2017-02-15**
DNV GL local station: **Augsburg** for **DNV GL**

Approval Engineer: **Andrea Grün**

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.

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

Job Id:
Certificate No: **TAA00000V4**

Product description

CMS for S7-1200:
SIPLUS CMS1200 SM 1281 Condition Monitoring Module
6AT8007-1AA10-, SM1281
Degree of Protection: IP 20
Supply Voltage: 24 VDC
Supply voltage at DC rated value
min 20.4 V
max 28.8 V
Sensor Inputs: 4
Speed Inputs: 1

Alfa Laval TP900 Comfort	(6AV2144-6JC10-….)
Alfa Laval TP1500 Comfort	(6AV2144-6QC10-….)
Alfa Laval TP2200 Comfort	(6AV2144-6XC10-….)
TP1500 Comfort INOX	(6AV2144-8QC10-….)
TP1900 Comfort INOX	(6AV2144-8UC10-….)
ITC1900 INOX	(6AV6646-8AC10-….)
SIMATIC HMI TP1500 Comfort Marine	(6AV2144-6QC00-….)
SIMATIC HMI TP2200 Comfort Marine	(6AV2144-6XC00-….)

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

Product certificate
If specified in the Rules, ref. Pt.4 Ch.9 Sec.1, the control and monitoring system in which the above listed hardware is used shall be delivered with a product certificate. For each such delivery the certification test is to be performed at the manufacturer of the application system before the system is shipped to the yard. The test shall be done according to an approved test program.
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 for evaluation and approval. Major changes in the software are to be approved before being installed in the computer.

Application/Limitation

For using SIMATIC Touch Panel on the Bridge zone a filter(I=3A, C=2x0,47µF+2x4700pF, L=4x4,7mH) has to be connected.

Job Id:
Certificate No: **TAA00000V4**

Type Approval documentation

Test reports : 15-E006451-BM-T01 dated 15-04-2016 and 21244108-001 dated 12-01-2015
Type Test Report for Marine Type Approval Alfa Laval & INOX No. 16-E007019-BM-A01 dated 22-08-2016

K005301_01_2016_E_A01	dated 16-08-2016
K005301_01_2016_E_B01	dated 16-08-2016
K005301_01_2016_K_A01	dated 16-08-2016
K005301_01_2016_K_B01	dated 11-08-2016
K005301_01_2016_K_C01	dated 16-08-2016
K005301_01_2016_K_D01	dated 16-08-2016
K005301_01_2016_M_A01	dated 12-08-2016
K005301_01_2016_M_B02	dated 19-08-2016
K00301_High-Voltage-Test	dated 19-08-2016

Documentation: Product Masterlist dated 01.04.2016
Technical Specification and Operating Instructions A5E36912951-AA dated 11/2015

Operating Instructions: Compact Operating Instructions HMI devices Comfort Panels INOX, ITC INOX A5E33472156-AF dated 04/2016
Operating Instructions HMI devices Comfort Panels A5E03404994-02 dated 03/2012
Product Information Alfa Laval Comfort Panels A5E38804131-AA dated 07/2016

Tests carried out

Applicable tests according to Class Guideline DNVGL CG-0339, November 2016.

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