

Polski Rejestr Statków

TYPE APPROVAL CERTIFICATE

This is to certify that the undernoted product type

SHIP AUTOMATION SYSTEM

Maxi/Mega Guard E-Series

manufactured by

Praxis Automation Technology B.V.
Zijldijk 24A
2352 AB Leiderdorp
Netherlands

is approved as complying with the requirements of the

PRS Rules and is suitable for use on board of ships classified by PRS or in appliances with PRS certificates.

Certificate No.

TE/1915/883128/11

Issued at

Gdańsk, 2011-09-20

C 030 02

Expiry date

2016-09-20

Signature

Polski Rejestr Statków S.A. al. Gen. Józefa Hallera 126 80-416 Gdańsk, Poland Tel. +(48) 58 346 17 00 Fax +(48) 58 346 03 92

Continued overleaf

e-mail: mailbox@prs.pl www: http://www.prs.pl/

Technical data

According to the system components specified in appendix to the certificate.

Basis of approval

- 1. The technical documentation was approved by PRS on 2011-09-09.
- 2. Functional tests was carried out in the presence of the PRS representative in September 2011.
- 3. The Quality Management System Certificate No. RQA657813 issued by Lloyd's Register Nederland B.V.
- 4. The inspection of the production process carried out in September 2011.
- 5. Reports from tests:
 - 1 MEGA-GUARD Ship Automation Systems Environmental Test Report (21-08-2006),
 - 2 MEGA-GUARD Ship Automation Systems Environmental Test Report (28-01-2008),
 - 3 MEGA-GUARD Ship Automation Systems Environmental Test Report (30-01-2008),
 - 4 MEGA-GUARD Ship Automation Systems Environmental Test Report (30-01-2008),
 - 5 MEGA-GUARD Ship Automation Systems Environmental Test Report (30-01-2008),
 - MEGA-GUARD Ship Automation Systems Environmental Test Report (17-06-2009),
 - MEGA-GUARD Ship Automation Systems Environmental Test Report (17-06-2009), MEGA-GUARD Ship Automation Systems Environmental Test Report (12-06-2009),
 - MEGA-GUARD Ship Automation Systems Environmental Test Report (08-04-2009),
 - WEGA-GOARD Stip Automation Systems Environmental Test Report (08-04-2007),
 - MEGA-GUARD Ship Automation Systems Environmental Test Report (09-09-2010),
 - MEGA-GUARD Ship Automation Systems Environmental Test Report (21-06-2011).

Additional conditions and remarks:

- 1. Software and hardware configuration are to be approved by PRS for each application..
- 2. Functional tests are to be carried out for each application in presence of a PRS surveyor.

Notes

- 1 The approval is valid only when the product is used in accordance with the manufacturer's conditions.
- 2 Changes of product design and materials which influence product quality are to be agreed with PRS.
- 3 Type Approval Certificate will be cancelled in the case of dissatisfactory service results, modifications made in the product structure or materials without PRS' consent, not advising PRS of the manufacturer's name change.

In carrying out survey activities Polski Rejestr Statków S.A. (PRS) makes efforts to ensure that they are conducted with conscientiousness and the principles of good practice, with due regard paid to the state-of-the-art technology. However, neither PRS nor its Surveyors shall bear any civil liability for damage, loss or expense which may arise in consequence or as the outcome of conducting these activities, or the result of information or advice given to the customer by PRS, irrespective of whether or not such were the result of neglect, error or lack of proper information. Nevertheless, should the customer prove that such damage, loss or expense was due to negligence on the part of the Society or its Surveyors, PRS will pay compensation to the customer for his loss up to but not exceeding the amount due for services provided, forming the basis of the customer's claim. In no cases will PRS be responsible for indirect losses (loss of prospective profits, loss of contract, inability to undertake activities, etc.) sustained by the customer and associated with the executing of a commission by PRS.



Polski Rejestr Statków

Appendix to certificate no. TE/1915/883128/11

OWS - Operator Work Station (also named 'All in one' Work Station) Application Range for the following typical processes:

- Alarm/Control and Monitoring,
- Pump- and Valve Control,
- Duty Alarm System,
- Patrol Alarm System,
- Electrical Power Management,
- PID Control,
- Graphic presentation of ship's data.

The OWS comprises the following components:

- Model 6001 Marine Personal Computer; including redundant network interface (type 98.6.001.7xx) and (type 98.6.001.8xx),
- TFT colour Graphic screen (type 98.6.02x.6xx),
- 17" widescreen TFT LCD monitor (type 98.6.02x.6xx),
- 26" widescreen TFT LCD monitor (type 98.6.02x.6xx),
- Operator Keyboard (type 93.6.02x.00x),
- Engineering Keyboard (type 76.0.200),
- Keyboard/Tracker ball (type 93.6.02x.x0x),
- Ethernet HUB/Router (type 76.0.81x),
- 6010 Fieldbus Driver Board (type 98.6.010.7x0),
- Engineering Keyboard (type 76.0.200),
- Keyboard/Tracker ball (type 93.6.02x.x0x).

EAS - Extension Alarm System for the remote alarm indication consisting of:

- Local Operator Panel (type 98.6.02x.6xx),
- 3 / 8 Channel LED Panel (type 93.0.31x),
- Fire Alarm Panel (type 98.6.021.60x),
- Watch Entrance Unit (type 93.0.359),
- Reset Box (type 93.0.351),
- Bedroom Buzzer (type 93.0.363).

PCU - Process Control Units Maxi-Guard/Mega-Guard DIN Rail Model (also called DPU or SAU) for processing of inputs, outputs, alarms and control loops, consisting of:

- Model 6030, 12 x Digital input / 8/12 x Digital output executed as Din rail model (Type 98.6.030.7xx),
- Model 6030, 18 x Digital input 18 x Digital output executed as Din rail model (Type 98.6.030.8xx),
- Model 6032, 24 x Digital Input unit executed as Din rail model (type 98.6.032.7xx),
- Model 6032, 36 x Digital Input unit executed as Din rail model (type 98.6.032.8xx),
- Model 6034, 16 x Analog input /mixed input output executed as Din rail model (type 98.6.034.7xx),
- Model 6034, 24 x Analog input executed as Din rail model (type 98.6.034.8xx),
- Model 6034, 24 x Analog mixed input/output executed as Din rail model (type 98.6.034.8xx),

Appendix to certificate no. TE/1915/883128/11

- Model 6049, Control Processor with redundant network interface executed as Din rail model (type 98.6.049.7xx),
- Model 6049, Control Processor with redundant network interface executed as Din rail model (type 98.6.049.8xx),
- Display Panel (type 98.6.02x.6xx),
- Serial Interface Converter (type 91.6.040.40x),
- Serial Link Isolator (type 98.6.040.80x),
- Sensor Supply Module (type 98.6.010.7xx),
- Alarm Panel 16 Channel (type 93.0.92x),
- Navigation Lights Panel (type 93.0.93x),
- Nav. Lights I/O-module (type 98.6.030.8xx),
- Fire Alarm Panel (type 93.0.94x),
- Window Wiper Panel (type 93.0.95x),
- Window Wiper I/O-module (type 98.6.030.8xx),
- LCD Operator Panel (type 93.0.96x).

PMS - Power Management System consisting of:

- All models mentioned under PCU,
- PMS input/output Din module (type 98.6.034.7xx),
- PMS input/output Din module (type 98.6.034.80x),
- Local Operator Panel (type 98.6.02x.6xx),
- 7" TFT Operator Panel (type 98.6.02x.6xx),
- Display and Operating module (type 98.6.02x.6xx).

Jan