

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Peripheral Equipment**

with type designation(s)

Remote and Local I/O

Issued to

Autic System AS
TØNSBERG, Norway

is found to comply with

Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards**Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.****Location classes:**

Temperature	D
Humidity	B
Vibration	A
EMC	A*
Enclosure	Required protection according to DNV Rules shall be provided upon installation on board

*** See page 2 for more details**This Certificate is valid until **2019-06-30**.Issued at **Høvik** on **2015-08-31**for **DNV GL**DNV GL local station: **Sandefjord**Approval Engineer: **Nils Jarem**

Odd Magne Nesvåg
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

Remote and Local I/O Modules as listed below:

ET:	RM:	ST:
- 16AI2/16DI2/16DO2-H	- 8DI2-F/-U	- DI-005/024/048/120/240/-08F/U
- 8INS-U	- 16DI2-H	- DI-024/-16H/-32D
- 8DI2-8DO2-H	- 8DO2 / 8AI2 / 4AO2 / 8AO2-F	- DO-AC1/AC2/DC1/DC3-08F/U
- 8DI2-8AI2-H	- 16DO2-H	- DO-DC2-16H
- 8AI2-4AO2-H	- 16AI2-H	- DO-RLY-06U
- 4RTD-4DI2-U	- 8INS-U	- AI-10V/20M-08F
- MIX24480-D	- 4DI2-4AI2 / 4DI2-4DO2-U	- AI-20M-16H
- GT-232/485-1	- RTU-8440-F	- AI-INS-08U
		- AI-RTC/RTD-06U
		- AO-10V/20M-08F
		- AO-20M-04F
		- DI-CNT-08U
		- MIX16880/MIX12884-D

Power Input: 10-30VDC.

Manufactured by

CREATION TECHNOLOGIES L P, CANADA
Sixnet (a Red Lion Controls business), USA, is responsible for the design.

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, 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.

Shielded Ethernet cables are necessary to satisfy EMC location class A.

Type Approval documentation

Sixnet Datasheets:

- ET-4RTD-4DI2 dated 2009-05-20; ET-8AI2-4AO2 dated 2009-05-20; ET-8CNT dated 2009-05-20; ET-8DI2-8AI2 / ET-8DI2-8DO2 dated 2009-05-20; ET-8INS dated 2009-03-02; ET-16AI2 dated 2009-05-20; ET-16DI2 dated 2009-02-28; ET-16DO2 dated 2009-03-02; ET-16DO2 dated 2009-03-02; ET-MIX24880 dated 2009-04-15; RM-4DI2-4AI2 & RM-4DI2-4DO2 dated 2009-02-28; RM-8AO2 & RM-4AO2 dated March 2009; RM-8DI2 dated 2009-02-28; RM-8DO2 dated 2009-02-28; RM-8DO2 dated 2009-02-28; RM-8INS dated 2009-08-17; RM-8AI2 & RM-16AI2 dated 2009-02-28; RM-16DI2 dated 2009-02-28; RM-4DI2-4AI2 & RM-4DI2-4DO2 dated 2009-02-28; ST_AI-XXX; ST_AO20M_10V-0XF; st_di32; st_dicnt; ST_DIXXX; ST_DODC2; ST_DORLY; ST_DOXXX; ET_GT232; RM_8440; st_16880; ST_AI10V; st_ai208; st_ai216; st_aiins; ST_AO10V.

Test Reports:

- GME ENV Test Report for EB-MIX-24882-D, doc. No.: GM28043E dated 2008-08-11
- GME Maritime EMC Test Report for EB-MIX-24882-D, doc. No.: GM28063cr1 dated 2009-06-15
- GME Electrical Test Report for EB-MIX-24882-D No.: GM28042x dated 2008-09-16
- DAYTON T.BROWN Vibration Test Report No.: DTB04R08-0785 dated 2008-07-18

Initial Survey Report, DNV New York dated 2010-12-08.

DNV GL Sandefjord type approval assessment report for A-12235 dated 2015-06-10

Tests carried out

Applicable tests according to Standard for Certification No. 2.4, April 2006.

Marking of product

The products to be marked with:

- model name
- manufacturer name
- 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 at least every second year and at renewal of this certificate.

END OF CERTIFICATE