

# EU RO MUTUAL RECOGNITION TYPE APPROVAL CERTIFICATE

This Certificate is issued to

**Data Respons Norge AS**  
**HØVIK, Norway**

for

**Computers and Programmable Logic Controllers**

with type designation(s)

**CE-BT-01/02 MXC-2300/DR (MXC-2300/M-3E3 & MXC-2300CD/M-3E3)**

The product is found to comply with

**Type Approval Programme for EU RO MR for Computers and Programmable Logic Controllers**

Intended service

**Computers for control, monitoring, alarm, and safety functions subject to classification requirements.**

**System context**

**Application of the control, monitoring, alarm, and safety systems are subject for approval of the individual RO classing the vessel.**

This Certificate is valid until **2021-02-14**.

Issued at **Høvik** on **2016-02-15**

for **DNV GL**

DNV GL local station: **Station Oslo Maritime and CAP**

Approval Engineer: **Nils Jarem**

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**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.

Job Id: **262.4-000036-1**  
Certificate No: **MRA000000K**

## Product description

CE-BT-01/02 Maritime Computer (MXC-2300/M-3E3 & MXC-2300CD/M-3E3) - expandable fanless embedded computer, including the following units::

Module	Manufacturer	Type
Profibus card	Molex	PCIE-DP2IO
LAN card	Intel	Intel I350 series
RS422/RS485 card	Moxa	CP-132EL/EL-I
Quad Gb LAN Adaptor	Intel	Pro/1000 Series
4 Port Serial Card	Moxa	CP 114 EL-I
2 Port Serial Card	Moxa	CP 132 IS

Tested firmware versions:  
BIOS version with Core Version: 5.0009

Compass safe distances :  
Standard : 65 cm  
Steering : 110 cm

Overview of tested firmware versions and revision history up to date of issue of this certificate are listed in "Data Respons CE-BT-01 MXC-2300/DR FW release statement, Rev. A2" listed under Type Approval documentation

## Place of manufacture

ADLINK TECHNOLOGY INC.  
9F, No. 166, Jian Yi Rd., Zhonghe Dist.,  
New Taipei City, 235 Taiwan

## Application/Limitation

This approval covers hardware only. This excludes firmware, application software, and hardware designed for specific applications subject to classification. Firmware, system software, and application software are subject to additional separate approval, according to UR E22 and the rules of the classing RO (FAT and on-board review / tests).

## Type Approval documentation

	<b>Document:</b>	<b>Revision:</b>
Data sheet:	Datasheet CE-BT-XX MXC-2300DR	A2 / 2016-02-08
User manual:	5100069-007	A1 / 2016-02-01
Test reports:	T150910D05-E	01 / 2016-01-14
	20761	0 / 2016-01-06
	2013-3094	0 / 2013-03-18
Other:	5100069-005, CE-BT-01 MXC-2300/DR FW release statement, rev A2 / 2016-02-09	

## Marking of product

Manufacture: Data Respons Norge AS  
Model number: As listed under product description  
Serial number: Unique for each delivered item  
Power supply: 24V DC

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### **Other Conditions**

The units have been verified for compliance with EU Mutual Recognition Technical Requirements for Computers and programmable logic controllers (PLC) version 0.2, dated 2015-01-31.

Applicable tests for protected equipment according to IEC 60945, 4th edition (2002) have additionally been verified; except salt mist test (8.12).

Environmental test parameters

Temperature: -15°C and 70°C

Vibration: ±1mm / 0.7g

EMC: All locations including bridge and open deck

Enclosure: IP20

### **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 annually and at renewal of this certificate.

END OF CERTIFICATE