DNV·GL

Certificate No:
TAA00001M2

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Security/ Surveillance Camera

with type designation(s)
C3000 TriMode Series, C3000 Series, C2000 Series, C1000 Series, ExJB/PSU Series, FEWS/2A, MEWS/4, MJB Series, SYN-071KB

Issued to
Synectic Systems Group Ltd
North Lincolnshire, United Kingdom

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

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

Location classes:

Type	Temperature	Humidity	Vibration	EMC	Enclosure
C3000 TriMode Series, C3000 Series, C2000 Series, C1000 Series, ExJB/PSU Series, FEWS/2A, MEWS/4, MJB Series	**D**	**B**	**A**	**B***	**C**
SYN-071KB	**B**	**B**	**A**	**B***	**A**

*** See Application/Limitation**

Issued at **Høvik** on **2018-01-30**
This Certificate is valid until **2019-12-31**.
DNV GL local station: **Manchester**

for **DNV GL**

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.

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Job Id: **262.1-015831-2**
Certificate No: **TAA00001M2**

Product description

CCTV Systems :

Description	Models	Rating
COEX™ C3000 Exd TriMode Camera stations	C3000-2 F, V, C, S, & E Models	24VAC/DC
COEX™ C3000 Exd Camera stations	C3000-1 F, V, C, S, & E Models	
COEX™ C2000 Marine camera stations	C2000-F, V, C, & S Models	
COEX™ C1000 Marine camera stations	C1000, C1000-W & C1000-F Models	
COEX™ Ex Junction box/Power supply units Output: 24V AC	ExJB	115V/230 VAC
	MJB	115V/230VAC
COEX™ FEWS/2A Exd Wash system	FEWS/2A	24V/115V /230V AC
COEX™ MEWS/4 Wash system	MEWS/4	
COEX™ MJB junction boxes	MJB1, MJB2, MJB3, MJB4	N/A
Synectic CCTV Control keyboard	SYN-071KB	(USB)

Compass safe distances :

C3000 series: Standard compass: 60 cm, Steering compass: 40 cm
C2000 series: Standard compass: 60 cm, Steering compass: 50 cm
C1000 series: Standard compass: 60 cm, Steering compass: 50 cm

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 classification of ships Pt.4 Ch.9 Control and monitoring systems.

Application/Limitation

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.

Type Approval documentation

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2016.
The 'Compass safe distances' was measured according to section 11.2 of IEC 60945 4th edition (2002).

Marking of product

Refer to product description.

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

A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE