



Lloyd's  
Register

## Type Approval Certificate Extension

*This is to certify* that Certificate No.13/ 00047 for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

**PRODUCER** Kongsberg Maritime AS  
P.O. Box 483  
NO-3601 Kongsberg  
Norway

**PLACES OF PRODUCTION** Kongsberg Maritime AS  
Kirkegårdsveien 45  
NO-3616 Kongsberg  
Norway

Kongsberg Maritime AS  
Bekkajordet 8  
NO-3189 Horten  
Norway

Kongsberg Maritime AS  
Søndre Kullerød 1  
NO-3241 Sandefjord  
Norway

**DESCRIPTION** Dynamic Positioning Control System, Position Mooring Control System and Independent Joystick Control System

**TYPE** KONGSBERG K-Pos DP, K-Pos PM, K-Pos DPM, cJoy, K Master

**APPLICATION** Marine dynamic positioning systems


**SOFTWARE VERSIONS** DP basis release 8.3  
K-Master release 2.1

**Certificate No.** 13/ 00047(E1)

**Issue Date** 17 January 2017

**Expiry Date** 16 January 2022

**Sheet** 1 of 3

  
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Southampton Office  
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LR031.1.2016.06

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**TECHNICAL DETAILS**

System incorporates the following:  
The K-Pos OS (Operator Station) and operation peripheral devices including; display monitors, computer and printer.

- The cJoy DP-OT (Remote DP Operator Terminal)
- The cJoy OT (Operator Terminal for cJoy)
- The cWing (Remote Wing Terminal)
- K-Master Work Station (OS For DP and/ or Independent Joystick)
- The K-Pos DPC (DP Controller)
- Main processor
- I/ O bus
- I/ O units
- Serial lines
- Network switch

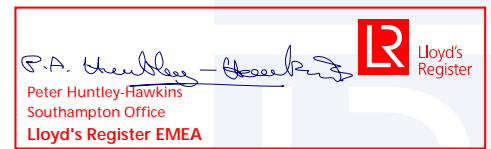
**SPECIFIED STANDARD**

Marine, offshore and industrial use in environmental categories ENV2, ENV3 and ENV5 as described in Lloyd's Register Test Specification No. 1: 2015

**ADDITIONAL TESTS**

- EN 60945 (2002) Acoustic Noise <60dBA at a distance of 1m
- EN 60945 (2002), EN 60533 (1999), EN ISO 694 (2001) Compass Safe Distance
- IEC 60529 (2001-02) IP22 – KM-05 Deepline and Slimline operator stations
- IEC 60529 (2001) Ed. 2.1 IP42 – KM-MOD joystick
- IEC 60529: 1989-11 + A1:1999 IP22 – COP ALC, COP ALC-NAV & COP UTILITY operator panels
- EN 60529 (1991) and EN 60529/ A1 (1991) IP22 – heading wheel 6200461
- EN 60529 (1991) and EN 60529/ A1 (2000) IP22 – tracker ball 6200463
- EN 60529 (2001) IP2X – tracker ball standalone panel
- IEC 60945 (2002), IEC61000-4-3 (2006),IEC60068-2-27 – ISIC Displays MD 22 Mk2, MD 24 Mk2 & MD 27 Mk2
- IEC 60945 (2002), IEC61000-4-3 (2006),IEC60068-2-27 IP2X – ISIC Displays MD 27 KM-05 Mk2

**Certificate No.** 13/ 00047(E1)  
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**ADDITIONAL TESTS  
(Continued)**

IEC 60529 (2001) Ed. 2.1 IP2X – Multi Display type HD13T21 KMD-DR1-CORP  
IEC 60529 (2001) Ed. 2.1 IP2X – Maritime Computer, type MXE-5104  
IEC 60529 (2001) Ed. 2.1 – K-Master Panel System:  
Complete K-Master without levers, with blind covers IPX3  
The armrests and the upper surfaces of the parts intended to be flush mounted in the bridge deck IP2X  
The section under the chair seat IP1X  
IEC 60529 (2001) Ed. 2.1 IP44 – DPC-3 cabinet  
IEC 60529 (2001-02) IP2X – RIO's, RSER200-4, RHUB200-5 & RMP200-8, RCU502, RCU602  
IEC60529 (2001),Ed.2.1 IP22-cJoy MK3 WIN7  
EN 60529 (1991) + A1:2000 IP56 – cWing (complete unit)

**OTHER CONDITIONS**



The Lloyd's Register Rules and Regulations are to be complied with when installed on Lloyd's Register classed vessels.

*"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."*

*The attached Design Appraisal Document No.13/00047(E1) and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

All other details remain as the previous Certificate No.13/ 00047 to which this extension should be attached.

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