



## TYPE APPROVAL CERTIFICATE

**Certificate No.** : HMB27973-AC004                      **Initial Approval** : 23rd June, 2017

**Product** : Control Panel System

**Manufacturer** : NORIS Automation GmbH  
Friedrich-Barnewitz Strasse 10, D-18119 Rostock, Germany

**Product Description** : Type : MP-12L12B, MP-TU-23L9B, SP-6L, SP-4B, SP-3L3B, SP-6L6B,  
SP-12L12B-LS4/LT4/LA4, SP-TU-7L2B

" See Appendix 1 "

**Approval Condition** : 1. This approval is granted on the basis of the approved documentation and test reports.  
2. The product or packing is to be marked with the manufacturer's name and type designation on a suitable position.  
3. Individual Product Certification is not required.

**THIS IS TO CERTIFY** that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt. 6, Ch. 2, Art. 301 of the Rules for Classification, Steel Ships.

This Certificate is valid until 22nd June, 2022

Issued at Busan, Korea on 23rd June, 2017



**KOREAN REGISTER OF SHIPPING**

*General Manager of  
Marine & Ocean Equipment Team*

*Note : 1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.  
2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.  
3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.  
4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.*

## Appendix 1

# Product Description and/or Approval Condition

Certificate No : HMB27973-AC004

Date of Issue :23rd June, 2017

### Product Description:

NORISYS 4 Control Panel System

(Type: MP-12L12B, MP-TU-23L9B,  
SP-6L, SP-4B, SP-3L3B, SP-6L6B, SP-12L12B-LS4/LT4/LA4, SP-TU-7L2B)

|                       |  |
|-----------------------|--|
| MP-12L12B             | Master control panel, 12 lamps, 12 buttons, 1 buzzer, 2 PWM Out, 4 DI, 4 relay output, 4 AO, 1 RS-422/485, 2 CAN, 1 N4ExtBus |
| MP-TU-23L9B           | Master control panel, 23 lamps, 9 buttons, 1 buzzer, 2 PWM Out, 4 DI, 4 relay output, 4 AO, 1 RS-422/485, 2 CAN, 1 N4ExtBus  |
| SP-6L                 | Slave panel, 6 lamps, 1 buzzer, 1 PWM Out, 1 N4ExtBus  |
| SP-4B                 | Slave panel, 4 buttons, 1 buzzer, 1 PWM Out, 1 N4ExtBus  |
| SP-3L3B               | Slave panel, 3 lamps, 3 buttons, 1 buzzer, 1 PWM Out, 1 N4ExtBus   |
| SP-6L6B               | Slave panel, 6 lamps, 6 buttons, 1 buzzer, 1 PWM Out, 1 N4ExtBus   |
| SP-12L12B-LS4/LT4/LA4 | Slave panel, 2 x SP-6L6B with integrated NORISYS control lever   |
| SP-TU-7L2B            | Slave panel, 7 lamps, 2 buttons, 1 buzzer, 1 PWM Out, 1 N4ExtBus   |

Power supply : 24V DC  
Degree of protection : IP56 (front), IP30 (rear)

### 1. Documents and Drawings

#### - Drawings

092.008.03.100.B, 092.008.03.101.B, 092.008.03.103.B, 092.008.03.109.B  
092.008.03.124.A, 092.008.03.125.A, 092.008.03.127.A, 092.008.03.128.A  
092.008.03.129.A, 092.008.03.130.A, 092.008.03.131.A, 092.008.03.132.A  
092.008.03.133.A, 092.008.03.134.A, 092.008.03.135.A, 092.008.03.136.A  
092.008.03.137.A, 092.008.03.138.A, 092.008.03.139.A, 092.008.03.140.A  
092.008.03.141.A, 092.008.03.145.A, 092.008.03.153.A  
092.022.03.100.B, 092.022.03.104.A

SAR62-a, SAR63-a, SAR64-a, SAR65-a, SAR68-a, SAR69-a, SAR70-a, SAR71-a  
- NAR-KD-0104-1-en\_V135\_NORISYS\_4\_Control\_Panel\_Platform\_Manual  
NAR-PD-0100-3-en\_V102\_NORISYS\_4\_Slaves\_Software\_Description  
NAR-PD-0104-1-en\_V102\_NORISYS\_4\_Control\_Panel\_Platform\_Hardware\_Description  
NAR-PD-0104-2-en\_V100\_NORISYS\_4\_Master\_Control\_Panel\_Software\_Description  
NAR-PD-0104-8-en\_V102\_NORISYS\_Master\_Control\_Panel\_Product\_FMEA  
NAR-PD-0104-9-en\_V100\_NORISYS\_Slave\_Control\_Panel\_Product\_FMEA  
NAR-PD-0110-1-en\_V101\_NORISYS\_4\_Firmware\_element\_modbus\_description  
NAR-RaD-0002-1-de\_V101\_NORIS\_Products\_Rededication\_List

### 2. Test Reports

NORIS Automation GmbH:

- NAR-PB-0104-1-en\_V105\_NORISTAR\_4\_FSP\_Product Test Report  
NAR-PB-0104-2-en\_V103\_NORISTAR\_4\_FSP\_TU\_Product Test Report

TREO - Labor für Umweltsimulation GmbH:

- 037-13 Ver. 2, 038-13 Ver. 2, 039.13 Ver. 2, 040.13 Ver. 3, 041.13 Ver. 2,  
042-13 Ver. 5, 043-13 Ver. 5, 044-13 Ver. 2, 067-13 Ver. 2  
- 255-13 Ver. 1, 288-13 Ver. 1

Teseq GmbH:

- D/13/4085/01, D/13/4085/02, D/13/4085/03, D/13/4085/04,  
D/13/4085/05, D/13/4085/06, D/13/4085/07, D/13/4085/08

TUV Rheinland:

- 21207886 001

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