



Type Approval Certificate

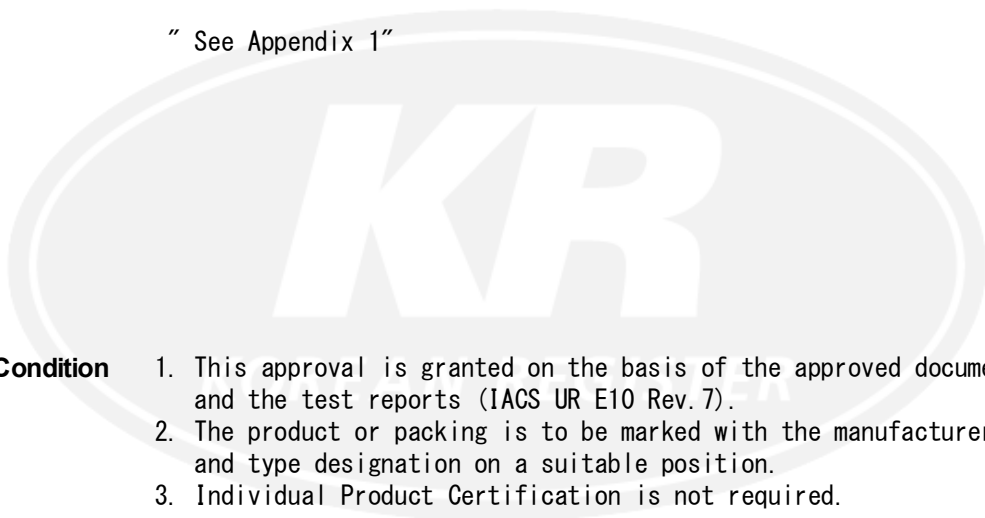
[Control Panel System]

Initial Approval 23 June 2017

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 the test reports (IACS UR E10 Rev. 7).
 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.

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

This Certificate is valid until 22 June 2027

Issued at Busan, Korea on 19 October 2022



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No(ME22030226723) and certificate No.(HMB27973-AC004).



KOREAN REGISTER

*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.

Product Description and/or Approval Condition

Date of Issue : 19 October 2022

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.D, 092.008.03.101.C, 092.008.03.103.D, 092.008.03.109.D,
092.008.03.124.C, 092.008.03.125.C, 092.008.03.127.B, 092.008.03.128.C,
092.008.03.129.C, 092.008.03.130.C, 092.008.03.131.C, 092.008.03.132.C,
092.008.03.133.B, 092.008.03.134.B, 092.008.03.135.B, 092.008.03.136.B,
092.008.03.137.B, 092.008.03.138.B, 092.008.03.139.B, 092.008.03.140.C,
092.008.03.141.B, 092.008.03.145.B, 092.008.03.153.B, 092.022.03.100.B,
092.022.03.104.A, 092.008.03.118.A, 092.008.03.148.A, 092.008.03.265.A,
092.008.03.266.A, 092.008.03.267.A, 092.008.03.400.D, 092.008.03.401.D,
092.008.03.402.D, 092.008.03.403.C, 092.008.03.404.B, 092.008.03.405.B,
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092.008.03.503.C, 092.008.03.504.B, 092.008.03.505.B, 092.008.03.506.C,
092.008.03.507.C, 092.008.03.508.C, 092.008.03.509.C, 092.008.03.510.C,
092.008.03.512.C, 092.008.03.513.C, 092.008.03.515.B, 092.008.03.516.B,
092.008.03.517.B, 092.008.03.519.B, 092.008.03.521.B, 092.008.03.522.C,
092.008.03.523.B, 092.008.03.524.B, 092.008.03.526.B, 092.008.03.527.B

- SAR62-e_BOM, SAR62-e_Schematic, SAR63-d_BOM, SAR63-d_Schematic, SAR64-e_BOM,
SAR64-e_Schematic, SAR65-a_BOM, SAR65-a_Schematic, SAR67-b_BOM, SAR67-b_Schematic
SAR68-c_BOM, SAR68-c_Schematic, SAR69-d_BOM, SAR69-d_Schematic, SAR70-c_BOM,
SAR70-c_Schematic, SAR71-b_BOM, SAR71-b_Schematic

- NAR-KD-0104-1-en_V142_NORISYS_4_Control_Panel_Platform_Manual
NAR-PD-0104-1-en_V103_NORISYS_4_Control_Panel_Platform_Hardware_Description
NAR-PD-0104-2-en_V201_NORISYS_4_Control_Panel_Master_Firmware_Description
NAR-PD-0104-7-en_V160_NORISYS_4_Control_Panel_Slave_Firmware_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_V103_NORISYS_4_Firmware_element_modbus_description
NAR-RaD-0002-1-de_V101_NORIS_Products_Rededication_List

Product Description and/or Approval Condition

Date of Issue : 19 October 2022

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
- NAR-PB-0104-3-en_V101_NORISYS_4_CP_Product Test Report_6GHz
- NAR-PB-0104-4-en_V101_NORISYS_4_CP_TU_Product Test Report_6GHz

TREQ - 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

AMETEK:

- D/20/4787/01 dated 2021-02-28
- D/20/4787/02 dated 2021-02-28
- D/20/4788/01 dated 2021-02-28
- D/20/4788/02 dated 2021-02-28

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