

Product change notification (PCN)

Title / short description	Inline – removal of DNV GL approval (TAA00002CU)
Affected article category	SPS and I/O systems
Change category	Restriction of the usage recommendation
Change number	CDR220072_IL_DNV_TAA00002CU-01
Reason for PCN/PDN Revision	Postponement of the PCN/certificate will be extended however

Purpose/objective of the change

Removal of DNV GL maritime approval

Detailed description of the change

The certificate for maritime approval DNV GL with the number "TAA00002CU" expires on 2024-06-11 and will be renewed up to 2026.

Old text: The certificate for maritime approval DNV GL with the number "TAA00002CU" expires on 2024-06-11 and will not be renewed.

Identifying characteristics

The certificate (see attachment) will be deleted.

Start of Production (SOP)	-	Last Time Delivery (LTD)	-
Effective date (EOP)	2026-06-30	End of Service (EOSR)	-
End of Sales (EOS)	-		

Short-term change (< 6 months) or discontinuation (< 12 months), due to:

- | | | |
|---|---|--|
| <input type="checkbox"/> Software / Firmware Bugfix | <input type="checkbox"/> Short-term delivery stop by supplier | <input type="checkbox"/> Short-term recall by supplier |
| <input type="checkbox"/> Force majeure | <input type="checkbox"/> Product improvement with customer benefits | |
| <input type="checkbox"/> Others | | |

Attachments

- CDR220072_IL_DNV_Certificate_TAA00002CU.pdf
- Material_list.csv
- PCN-CDR220072_IL_DNV_TAA00002CU-01_DE
- PCN-CDR220072_IL_DNV_TAA00002CU-01_EN

Material list

Item no.	Item Type	Hardware / Firmware		Item no.	Substitute item Type
2863533	IB IL 24 DO 8-NPN				
2863546	IB IL 24 DO 8-NPN-PAC				
2732732	IB IL AO 2/U/BP				
2861467	IB IL AO 2/U/BP-PAC				
2693033	IB IL 24 PWR IN/R/L-0.8A				
2693020	IB IL 24 PWR IN/R/L-0.8A-PAC				
2836337	IB IL CNT				
2861852	IB IL CNT-PAC				
2742612	IB IL PWM/2				
2861632	IB IL PWM/2-PAC				
2742748	IB IL AI 8-I/S				
2861661	IB IL AI 8/IS-PAC				
2700172	IB IL 24 DO8/HD-PAC				
2700173	IB IL 24 DI8/HD-PAC				
2700196	IB IL CAN-MA-PAC				
2692322	IL PB BK DI8 DO4/EF-PAC				
2703981	IL ETH BK DI8 DO4 2TX-PAC				
2897402	IB IL TEMP 4/8 RTD/EF-PAC				
2862990	IB IL PD GND-PAC				
2862987	IB IL PD 24V-PAC				
2861483	IB IL 24 DI 2-NPN-PAC				
2863520	IB IL 24 DI 16-NPN-PAC				
2878243	IB IL 24 DI 32/HD-NPN-PAC				
2861616	IB IL 24 EDO 2-PAC				
2863119	IB IL 24/48 DOR 2/W-PAC				
2878340	IB IL 24 DO 32/HD-NPN-PAC				
2700973	ILC 131 ETH				
2700974	ILC 151 ETH				
2700975	ILC 171 ETH 2TX				
2700976	ILC 191 ETH 2TX				
2701034	ILC 131 ETH/XC				
2701141	ILC 151 ETH/XC				



TYPE APPROVAL CERTIFICATE

Certificate No:
TAA00002CU
Revision No:
1

This is to certify:

That the Peripheral Equipment

with type designation(s)
Inline Modules

Issued to

Phoenix Contact GmbH & Co. KG
Blomberg, Nordrhein-Westfalen, Germany

is found to comply with

DNV 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.

Location classes

Temperature D

Humidity B

Vibration A

EMC A*/B*

Enclosure Required protection according to the Rules shall be provided upon installation on board

*** see Product description and Application/Limitation**

Issued at **Hamburg** on **2021-12-13**

for **DNV**

This Certificate is valid until **2024-06-11**.

DNV local station: **Essen**

Approval Engineer: **Heinz Scheffler**

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Joannis Papanuskas
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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: TA 251

Revision: 2021-03

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Product description
INTERBUS INLINE modules:

Order No.	Type	Description	EMC class
# 2863533 (# 2863546)	IB IL 24 DO 8-NPN(-PAC)	Inline Terminal with 8 Digital Outputs	A
# 2732732 (# 2861467)	IB IL AO 2/U/BP(-PAC)	Inline Terminal with 2 Analog Voltage Outputs	A
# 2693033 (# 2693020)	IB IL 24 PWR IN/R/L-0.8A(-PAC)	Inline Power Terminal	A
# 2836337 (# 2861852)	IB IL CNT(-PAC)	Inline Modular Counter Terminal	A
# 2742612 (# 2861632)	IB IL PWM/2(-PAC)	Inline Function Terminal	A
# 2742748 (# 2861661)	IB IL AI 8/IS(-PAC)	Inline Terminal with 8 Analog Input Channels	A
# 2700172	IB IL 24 DO8/HD-PAC	Inline Terminal 8 Digital Outputs	B*
# 2700173	IB IL 24 DI8/HD-PAC	Inline Terminal 8 Digital Inputs	B*
2700196	IB IL CAN-MA-PAC	Inline Terminal CAN Bus Communication	B*
# 2692322	IL PB BK DI8 DO4/EF-PAC	Inline bus coupler for PROFIBUS DP with 8 digital inputs and 4 digital outputs	B*
2703981	IL ETH BK DI8 DO4 2TX-PAC	Inline bus coupler for Ethernet with 8 digital inputs and 4 digital outputs	B*
2700197	FL MGuard GT/GT	Security appliance with Gigabit connectivity and SFP slots	B*
2700198	FL MGuard GT/GT VPN	Security appliance with Gigabit connectivity, VPN and SFP slots	B*
2897402	IB IL TEMP 4/8 RTD/EF-PAC	Inline terminal with eight analog input channels for the connection of resistive temperature detectors (RTD)	B*
#2862990	IB IL PD GND-PAC	Terminal for GND Potential Distribution	B*
# 2862987	IB IL PD 24V-PAC	Terminal for 24 V Potential Distribution	B*
# 2861483	IB IL 24 DI2-NPN-PAC	Inline Terminal With Two Digital Inputs; NPN-Wired	B*
# 2863520	IB IL 24 DI16-NPN-PAC	Inline Terminal With 16 Digital Inputs, NPN-Wired	B*
# 2878243	IB IL 24 DI32/HD-NPN-PAC	Inline Terminal With 32 Digital Inputs, NPN-Wired	B*
# 2861616	IB IL 24 EDO 2-PAC	Inline Terminal With Two Digital Outputs and Extended Diagnostics	B*
# 2863119	IB IL 24/48 DOR 2/W-PAC	Inline Terminal With Two SPDT (Form C) Relays	B*
# 2878340	IB IL 24 DO 32/HD-NPN-PAC	Inline Terminal With 32 Digital Outputs, NPN-Wired	B*
2700973	ILC 131 ETH	Inline controller with 8 digital inputs and 4 digital outputs	B*
2700974	ILC 151 ETH	Inline controller with 8 digital inputs and 4 digital outputs	B*
2700975	ILC 171 ETH 2TX	Inline controller with 8 digital inputs and 4 digital outputs	B*
2700976	ILC 191 ETH 2TX	Inline controller with 8 digital inputs and 4 digital outputs	B*
2701034	ILC 131 ETH/XC	Inline controller with 8 digital inputs and 4 digital outputs	B*
2701141	ILC 151 ETH/XC	Inline controller with 8 digital inputs and 4 digital outputs	B*

Option -PAC = complete article including connectors and labelling field

* Filter is required for EMC Class B. See Application/Limitation below.

Application/Limitation

Devices marked with # under product designation/order number column: "EMC in the range 2 GHz to 6 GHz according to DNV-CG-0339, August 2021 has not been documented. EMC up to 6 GHz must additionally be documented for installation on ships contracted for construction on or after 2022-01-01."

Location class EMC B: requires the Phoenix Contact power line filter ME-MAX-NEF/QUINT20A to be applied for the DC power supply inputs as specified by the manufacturer.

The equipment exceeds the radiated emission limit of 24 dB μ V/m in the VHF maritime mobile band. The limit is exceeded by a frequency stable, narrow band frequency between 159.900 MHz - 160.100 MHz. For this specific frequency range, DNV accepts radiated emission values below 54 dB μ V/m. Type Approval is granted based on the fact that this frequency band does not conflict with any transmitting frequencies currently recommended by ITU-R Radio Regulations Appendix 18 (WRC-07).

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, 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 Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

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

Documents: TAA00002CU_Overview_Documents_Rev.01

Test Reports: E110787E1; E092913E1; E1252451E1; E102169E1; U092913E1; U1252451E1; U102169E1; E201432E1; E202070E1; E200383E1; E200895E1; U200895E1

Tests carried out

Applicable tests according to class guideline DNV-CG-0339, August 2021

Applicable tests according to class guideline DNVGL-CG-0339, November 2016 (devices marked with #)

Marking of product

The products to be marked with:

- Model name
- Manufacturer name
- Serial number

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 after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE