



TYPE APPROVAL CERTIFICATE

Certificate No:
TAA000021E
Revision No:
2

This is to certify:

That the Measurement Converter

with type designation(s)
MINI MCR-2 Series

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	B
Humidity	B
Vibration	A
EMC	A
Enclosure	Required protection according to the Rules shall be provided upon installation on board.

Issued at **Hamburg** on **2023-12-13**

for **DNV**

This Certificate is valid until **2028-12-12**.

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

Universal 4-way signal conditioner with limit switch	
2902026	MINI MCR-2-UNI-UI-UIRO
2902024	MINI MCR-2-UNI-UI-UIRO-C
2902028	MINI MCR-2-UNI-UI-UIRO-PT
2902027	MINI MCR-2-UNI-UI-UIRO-PT-C
Output loop-powered 2-way isolator	
2902063	MINI MCR-2-UI-I-OLP-PT
2902061	MINI MCR-2-UI-I-OLP
2902062	MINI MCR-2-UI-I-OLP-PT-C
2902060	MINI MCR-2-UI-I-OLP-C
Analog frequency converter with limit function	
2902032	MINI MCR-2-UI-FRO-PT
2902031	MINI MCR-2-UI-FRO
2906202	MINI MCR-2-UI-FRO-PT-C
2906201	MINI MCR-2-UI-FRO-C
Threshold value switch	
2905632	MINI MCR-2-T-REL
2905633	MINI MCR-2-T-REL-PT
2906876	MINI MCR-2-T-2RO
2906877	MINI MCR-2-T-2RO-PT
2902035	MINI MCR-2-UI-REL-PT
2902033	MINI MCR-2-UI-REL
2909886	MINI MCR-2-UI-REL-C
2909887	MINI MCR-2-UI-REL-PT-C
NAMUR isolation amplifier	
2902005	MINI MCR-2-NAM-2RO-PT
2902004	MINI MCR-2-NAM-2RO
Constant voltage/current source	
2902065	MINI MCR-2-CVCS-PT
2902064	MINI MCR-2-CVCS
1033202	MINI MCR-2-SPS-24-15
1033201	MINI MCR-2-SPS-24-15-PT
Universal 4-way signal duplicator	
2905026	MINI MCR-2-UNI-UI-2UI
2905025	MINI MCR-2-UNI-UI-2UI-C
2905028	MINI MCR-2-UNI-UI-2UI-PT
2905027	MINI MCR-2-UNI-UI-2UI-PT-C
Programming adapter	
2905872	IFS-BT-PROG-ADAPTER
3-way frequency transducer	
2902056	MINI MCR-2-F-UI
2902057	MINI MCR-2-F-UI-C
2902058	MINI MCR-2-F-UI-PT
2902059	MINI MCR-2-F-UI-PT-C
Power supply doubler for HART(R) protocol	
2905628	MINI MCR-2-RPSS-I-2I
2905629	MINI MCR-2-RPSS-I-2I-PT

Application/Limitation

IFS-BT-PROG-ADAPTER were not tested and is only a Programming adapter

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

Test Reports: E135151E72; E160215E2; E146085FE2; E153867REE2; E153867ROE2; E151593E2; E146085RE2; E150152E2; E153867UIE2; E161338E2; E170862E2; U172469E1; E211327E1

Documents: TAA000021E_Overview_Test-Reports_Docs_2021-09-22

Tests carried out

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

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