TYPE APPROVAL CERTIFICATE

Certificate No:
TAA00002EY
Revision No:
2

This is to certify:

That the Measurement Converter

with type designation(s)
Isolators "ISpac" Series 92xx

Issued to
R. STAHL Schaltgeräte GmbH
Waldenburg, 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 **2019-12-19**

This Certificate is valid until **2024-11-28.**
DNV local station: **Augsburg**

Approval Engineer: **Heinz Scheffler**

for **DNV**
Digitally Signed By: Papanuskas, Joannis
Location: DNV GL SE Hamburg, Germany

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.

Product description

Transmitter supply unit	
9260/13-11-10s 9260/13-11-10k	• 1-channel • 0/4 mA ... 20 mA input,powered and not powered • Measuring transmitter supply voltage > 16 V • 0/4 ... 20 mA output, active up to 1000 Ω load or passive • Bidirectional HART signal transmission • Screw connection / Push-in connection
9260/23-11-10s 9260/23-11-10k	• 2-channel • 4 mA ... 20 mA inputs, intrinsically safe [Ex ia], powered • Outputs 4 mA ... 20 mA, active • HART-compatible • Error indication according to NAMUR NE 43 • Screw connection / Push-in connection
9260/19-11-10s 9260/19-11-10k	• 2-channel • 0/4 mA ... 20 mA input,powered and not powered • Measuring transmitter supply voltage > 16 V • 0/4 ... 20 mA output, active up to 1000 Ω load or passive • Bidirectional HART signal transmission • Screw connection / Push-in connection
Digital output	
9276/10-21-25-00s 9276/10-21-25-00k	• 1-channel • Loop-powered • Current limit 25 mA • Output [Ex ia] IIC • 2-way electrical isolation • Screw connection / Push-in connection
9275/10-21-25-11s 9275/10-21-25-11k	• Input: logic (low/high signal) • Output: intrinsically safe [Ex ia], 25.1 mA current - at 4.64 V • Line fault detection (LFD) can be enabled/disabled • 4-way electrical isolation • Screw connection / Push-in connection
9276/10-21-40-00s 9276/10-21-40-00k	• 1-channel • 19.2 V DC..30 V DC input, loop-powered • Intrinsically safe output [Ex ia] IIC, IIIC • 40 mA output current limitation Input loop-powered, no additional auxiliary power required • Screw connection / Push-in connection
9276/10-24-48-00s 9276/10-24-48-00k	• 1-channel • 19.2 V DC..30 V DC input, loop-powered • Intrinsically safe output [Ex ia] IIC, IIIC • 48 mA output current limitation Input loop-powered, no additional auxiliary power required • Screw connection / Push-in connection
9275/10-24-48-11s 9275/10-24-48-11k	• Input: logic (low/high signal) • Output: intrinsically safe [Ex ia], 48 mA current - at 9.7 V • Line fault detection (LFD) can be enabled/disabled • 4-way electrical isolation • Screw connection / Push-in connection
9276/10-21-60-00s 9276/10-21-60-00k	• 1-channel • 19.2 V DC...30 V DC input, loop-powered • Intrinsically safe output [Ex ia] IIB, IIIC • 58 mA output current limitation • Input loop-powered, no additional auxiliary power required • Screw connection / Push-in connection

Application/Limitation

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 and Test Reports: 9200 0 000 003 0 (Version 01)

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