

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Miscellaneous

with type designation(s)
Multiple Plug-in Device 28 G1/2 GDM 2014 J

Issued to
GSR Ventiltechnik GmbH & Co. KG
Vlotho-Exter, Germany

is found to comply with
DNV GL rules for classification – High speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Temperature	B
Humidity	B
Vibration	A
EMC	NA
Enclosure	B

Issued at **Hamburg** on **2017-11-17**

This Certificate is valid until **2022-11-16**.

DNV GL local station: **Essen**

Approval Engineer: **Marco Rinkel**

for **DNV GL**

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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.



Job Id: **262.1-026002-1**
Certificate No: **TAA00001G3**

Product description

Plug-in Device with contact arrangement according to DIN 43650
Rated voltage: 250 V AC/DC
Contact rating: 10 A
Number of contacts: 2 + PE (2 terminals + earth contact, cable gland ISO 228 G-1/2)
Cable type: Studer BETAflam 145 flex 3 G 0.75mm²

Application/Limitation

Cable length is maximal 3m
For the degree of protection (IP 65) gasket is necessary.
The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, 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 GL rules for classification of ships Pt.4 Ch.9 Control and monitoring systems

Type Approval documentation

(hidden)

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2016.

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 proved 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