

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Enclosure for Electrical Equipment

with type designation(s)

Klippon TB Multi Hinge, Klippon TB Quarter Lock, Klippon TB Fixing Screw

Issued to

Weidmüller Interface GmbH & Co. KG
Detmold, Germany

is found to comply with

DNV GL rules for classification – Ships

Application :

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

Enclosure protection **IP66/IP67**

Vibration class **A**

This Certificate is valid until **2020-10-25**.

Issued at **Hamburg** on **2016-08-30**

for **DNV GL**

DNV GL local station: **Magdeburg**

Approval Engineer: **Klaus-Peter Schröder**

Duy Nam Le
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: **262.1-020990-1**
Certificate No: **TAE000013S**

Product description

Type Klippon TB Multi Hinge (Stainless steel enclosures for use in areas exposed to explosion hazards)

Size	Height 150 – 1250mm Width 150 – 1000mm Depth 80 - 300 mm
Material	Stainless Steel 1.4404 (1.4301), Mild Steel (1.0330)
Material thickness	1,5 mm , gland plates min 3mm
Finish	Stainless Steel: electrochemical polish, nature with finish
Gasket	Silicon
Ingress protection	IP 66/67 as per IEC 60529
Temperature	-60°C to + 135°C (IP 66) -60°C to + 105°C (IP 67)
Type of Ex protection	Ex e, Ex tb as per certificate IECEx IBE 14.0004U

Type Klippon TB Quarter Lock (Stainless steel enclosures for use in areas exposed to explosion hazards)

Size	Height 150 – 980mm Width 150 – 740mm Depth 80 - 300 mm
Material	Stainless Steel 1.4404 (1.4301), Mild Steel (1.0330)
Material thickness	1,5 mm , gland plates min 3mm
Finish	Stainless Steel: electrochemical polish, nature with finish
Gasket	Silicon
Ingress protection	IP 66 as per IEC 60529
Temperature	-60°C to + 135°C (IP 66)
Type of Ex protection	Ex e, Ex tb as per certificate IECEx IBE 14.0004U

Type Klippon TB Fixing Screw (Stainless steel enclosures for use in areas exposed to explosion hazards)

Size	Height 150 – 1500mm Width 150 – 1000mm Depth 80 - 300 mm
Material	Stainless Steel 1.4404 (1.4301), Mild Steel (1.0330)
Material thickness	1,5 mm , gland plates min 3mm
Finish	Stainless Steel: electrochemical polish, nature with finish
Gasket	Silicon
Ingress protection	IP 66/67 as per IEC 60529
Temperature	-60°C to + 135°C (IP 66) -60°C to + 105°C (IP 67)
Type of Ex protection	Ex e, Ex tb as per certificate IECEx IBE 14.0004U

Application/Limitation

Stainless steel enclosures for use in areas exposed to explosion hazards.
Operating instruction of the manufacturer to be observed.

Type Approval documentation

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Tests carried out

Type tests in accordance with EN 62208, vibration test according to EN 60068-2-64, EN 60068-2-27, IEC 60529:2001

Place of manufacture

Marking of product

The products to be marked with:

- manufacture name
- device 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 at renewal and at least once in the period of the validity of this certificate.

END OF CERTIFICATE