

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Enclosure for Electrical Equipment

with type designation(s)
KF

Issued to
Gustav Hensel GmbH & Co.KG
Lennestadt, Germany

is found to comply with
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

Application :

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

Enclosure protection 66/67
Vibration class

This Certificate is valid until **2019-09-08**.

Issued at **Høvik** on **2015-09-09**

DNV GL local station: **Essen Business Support**

Approval Engineer: **Andreas Kristoffersen**

for **DNV GL**

Marit Laumann
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

Cable junction boxes for indoor or outdoor use, with and without terminals, impact resistant, UV-resistant, saltwater proof, halogen free, silicon free, according to IEC 60670-22.

Type : KF xxxx X
Enclosure class : IP 66/67
Rated insulation voltage : AC/DC 690V
Impact protection class : IK 09
Enclosure material : Polycarbonate (PC 5)

Cable connection box

Type designation	Colour
KF 0202 G	RAL 7035
KF 0200 G	RAL 7035
KF 0202 B	RAL 9011
KF 0200 B	RAL 9011
KF 0200 H	RAL 7035
KF 0200 C	RAL 9011
KF 0402 G	RAL 7035
KF 0404 G	RAL 7035
KF 0400 G	RAL 7035
KF 0402 B	RAL 9011
KF 0404 B	RAL 9011
KF 0400 B	RAL 9011
KF 0400 H	RAL 7035
KF 0400 C	RAL 9011
KF 0604 G	RAL 7035
KF 0606 G	RAL 7035
KF 0600 G	RAL 7035
KF 0604 B	RAL 9011
KF 0606 B	RAL 9011
KF 0600 B	RAL 9011
KF 0600 H	RAL 7035
KF 0600 C	RAL 9011
KF 1006 G	RAL 7035
KF 1010 G	RAL 7035
KF 1006 B	RAL 9011
KF 1010 B	RAL 9011
KF 1000 B	RAL 9011
KF 1000 H	RAL 7035
KF 1000 C	RAL 9011
KF 1610 G	RAL 7035
KF 1616 G	RAL 7035
KF 1600 G	RAL 7035
KF 1610 B	RAL 9011
KF 1616 B	RAL 9011
KF 1600 B	RAL 9011
KF 1600 H	RAL 7035
KF 1600 C	RAL 9011
KF 2525 G	RAL 7035
KF 2500 G	RAL 7035
KF 2525 B	RAL 9011
KF 2500 B	RAL 9011
KF 2500 H	RAL 7035

Job Id: **262.1-004143-5**
Certificate No: **TAE00000EE**

KF 2500 C	RAL 9011
KF 3500 H	RAL 7035
KF 3500 B	RAL 9011
KF 3500 C	RAL 9011
KF 5000 G	RAL 7035
KF 5000 B	RAL 9011
KF 5000 H	RAL 7035
KF 5000 C	RAL 9011

Type Approval documentation

Tests carried out

Tests according to IEC 60670-22: Heat ageing test, Insulation resistance and electric strength test, UV-test, Resistance to heat test and resistance to corrosion test. Glow wire test (IEC 60695-2-11). IP-test (IEC 60529). Mechanical Strength (IK code IEC 62262).

Marking of product

Hensel – type designation - Size

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the periodical assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Production Sample Tests (PST) and Routines (RT) checked (if not available tests according to PST and RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment shall be performed at least every second year.

END OF CERTIFICATE