

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Termination and Joint for Cable**

with type designation(s)

Medium voltage terminations for single core cables: TFTI/TFTO

Issued to

**Tyco Electronics Raychem GmbH
Ottobrunn, Germany**

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft**Application :****Medium voltage terminations for indoor and outdoor applications
for single core cables. 12 kV and 17,5 kV.****Product(s) approved by this certificate is/are accepted for installation on all vessels classed
by DNV GL.**Issued at **Hamburg** on **2019-04-11**This Certificate is valid until **2024-04-10**.for **DNV GL**DNV GL local station: **Augsburg**Approval Engineer: **Carsten Hunsalz**

**Arne Schaarmann
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

Type: TFTI / TFTO

Kit number	Voltage class	Cross-section
TFTX-XXXX	kV	mm ²
TFTI – 3111	12	25 – 70
TFTI – 3121	12	50 – 185
TFTI – 3131	12	150 – 400
TFTI – 4121	17,5	25 – 95
TFTI – 4131	17,5	95 – 300
TFTO – 3111	12	25 – 70
TFTO – 3121	12	50 – 185
TFTO – 3131	12	150 – 400
TFTO – 4121	17,5	25 – 95
TFTO – 4131	17,5	95 – 300
TFTO – 4141	17,5	240 – 400

Application/Limitation

Installation has to be done in accordance with the installation instructions.

Type Approval documentation

Tests carried out

Tested according to CENELEC HD 628 S1 and HD 629.1 S1

Marking of product

Raychem – Product Type – Batch no.

Periodical assessment

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

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to 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 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