

TYPE APPROVAL CERTIFICATE

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

with type designation(s)

Medium Voltage cable joints: MXSU, MXST, MXSW, Medium Voltage cable joints: SXSU, SXST, SXSU

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 cable joints 12 & 17,5 kV.****MX-types are for plastic cables, while SX-types are for plastic and rubber cables.****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: MXSU for screened polymeric insulated cable:

Kit number	Voltage class	Cross-section
	kV	mm ²
Single core		
MXSU - 3111	12	25-95
MXSU - 3121	12	70-150
MXSU - 3131	12	95-240
MXSU - 3132	12	150-300
MXSU - 3141	12	240-400
MXSU - 3151	12	500
MXSU - 3161	12	630
MXSU - 4111	17,5	50-95
MXSU - 4121	17,5	70-150
MXSU - 4131	17,5	120-240
MXSU - 4132	17,5	150-300
MXSU - 4141	17,5	240-400
MXSU - 4151	17,5	500
Three core:		
MXSU - 3311	12	25-95
MXSU - 3321	12	70-150
MXSU - 3331	12	95-240
MXSU - 3332	12	150-300

Kit number	Voltage class	Cross-section
	kV	mm ²
MXSU - 4311	17,5	50-95
MXSU - 4321	17,5	70-150
MXSU - 4331	17,5	120-240
MXSU - 4332	17,5	150-300
MXSW - 3331	12	95-240
MXSW - 3332	12	150-300
MXSW - 4331	17,5	120-240
MXSW - 4332	17,5	150-300
MXSW - 5331	24	95-240
MXSW - 5332	24	150-300
MXST - 3331	12	95-240
MXST - 3332	12	150-300
MXST - 4331	17,5	120-240
MXST - 4332	17,5	150-300
MXST - 5331	24	95-240
MXST - 5332	24	150-300

Type: SXSU for screened polymeric and rubber insulated cable:

Kit number	Voltage class	Cross-section
	kV	mm ²
Single core		
SXSU - 3111	12	35 - 70
SXSU - 3121	12	95 - 185
SXSU - 3131	12	185 - 300
SXSU - 3141	12	300 - 500
SXSU - 4111	17,5	25-50
SXSU - 4121	17,5	50-150
SXSU - 4131	17,5	150-300
SXSU - 4141	17,5	400-500
SXSU - 4151	17,5	630-800
Three core:		
SXSU - 3311	12	35 - 70
SXSU - 3321	12	95 - 185
SXSU - 3331	12	185 - 300
SXSU - 4302	17,5	10-25
SXSU - 4312	17,5	25-50
SXSU - 4322	17,5	50-150
SXSU - 4332	17,5	150-300

Kit number	Voltage class	Cross-section
	kV	mm ²
SXSW - 4304	12	16-35
SXSW - 4314	12	50-70
SXSW - 4324	12	95-185
SXSW - 4334	12	185-300
SXSW - 4304	17,5	10 - 25
SXSW - 4314	17,5	25 - 50
SXSW - 4324	17,5	50 - 150
SXSW - 4334	17,5	150 - 300
SXST - 4303	12	16-35
SXST - 4313	12	50-70
SXST - 4323	12	95-185
SXST - 4333	12	185-300
SXST - 4303	17,5	10 - 25
SXST - 4313	17,5	25 - 50
SXST - 4323	17,5	50 - 150
SXST - 4333	17,5	150 - 300

Job Id: **262.1-009445-12**
Certificate No: **TAE00003E2**

Application/Limitation

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

Type Approval documentation

Tests carried out

Tested according to CENELEC HD 629.1, IEC 60502-4, IEC61442.

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