DNV·GL

Certificate No: E-13914 File No: 827.20 Job Id: 262.1-008723-2

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Low Voltage Cable

with type designation(s) DWZR-CKEE80/DA-X105 250 V,

Issued to

Anhui Tiankang (Group) Shares Co., Ltd. Tianchang, China

is found to comply with

Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

IEC 60092-350 (2008-02)

IEC 60092-376 (2003-05)

IEC 60332-3-22 (2009-02)

IEC 60754-1/2 (2011-11)

IEC 61034-1/2 (2013-07/2013-09)

Application:

Control and instrumentation.

Flame retardant Cat. A. Halogen free. Low smoke.

Type Voltage class (V) Temp. class (°C) DWZR-CKEE80/DA-X105 250 V 250 90

This Certificate is valid until 2018-12-31.

Issued at Høvik on 2015-02-16

DNV GL local station: Nanjing

Approval Engineer: Ludovico Gullifa

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.

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Job Id:

262.1-008723-2

Product description

Type: DWZR-CKEE80/DA-X105 250 V

Construction:

Conductors:

Tinned, stranded copper class 2

Core insulation: Sheath: HF XLPE SHF1

Sneath:

Tinned copper wire braid

	Number of cores x
CO	nductor cross-section
	mm ²
	2 x 0,50
	$4 \times 0,50$
	$7 \times 0,50$
	$10 \times 0,50$
	$14 \times 0,50$
	19 x 0,50
	24 x 0,50
	30×0.50

j	Number of cores x
cor	nductor cross-section
	mm ² -
	37 x 0,50
	2 x 0,75
	$4 \times 0,75$
	$7 \times 0,75$
	10 x 0,75
	14 x 0,75
	19 x 0,75

	lumber of cores x
con	ductor cross-section
	mm ²
	24 x 0,75
	30 x 0,75
	37 x 0,75

Application/Limitation

The requirements of SOLAS Amendments Chapter II-1, Part D, Reg. 45, 5.2 (provision to be taken to limit Fire Propagation along Bunches of Cables or Wires) are fulfilled without any additional measures.

Type Approval documentation

Data sheets

Test report dated 2010-08-03.

Tests carried out

Type tests according to IEC 60092-353, IEC 60332-3-22, IEC 60754-2 and IEC 61034-2.

Marking of product

Anhui Tiankang - DWZR-CKEE80/DA -X105 250 V - size - IEC 60332-3 - 250 V

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 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.

Assessment to be performed at least every second year.

END OF CERTIFICATE