

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Terminal Block**

with type designation(s)
Surge protection device Linetrab LIT...

Issued to

Phoenix Contact GmbH & Co. KG
Blomberg, Germany

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

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

This Certificate is valid until **2022-01-25**.

Issued at **Hamburg** on **2017-01-26**

DNV GL local station: **Magdeburg**

for **DNV GL**

Approval Engineer: **Harald Amberger**

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.

Product description

Surge protection for MCR technology

LIT 1x2-24	Double wire (loop), floating
LIT 2x2-24	2 double wire (loop), floating
LIT 2x1-24	2-wire, with common reference potential
LIT 4x1-24	4-wire, with common reference potential
LIT 2-12, LIT 2-24	2-wire, floating, impedance-free, intrinsically safe
LIT 4-12, LIT 4-24	4-wire, floating, impedance-free, intrinsically safe

Ratings:	
Nom. current In, 350mA (40°C)	LIT 1x2-24, LIT 2x2-24, LIT 2x1-24, LIT 4x1-24
Nom. current In, 500mA (40°C)	LIT 2-12, LIT 2-24, LIT 4-12, LIT 4-24
Nom. discharge current In 8/20µs Line-Line / Line-Gnd, 5kA / 5kA	LIT 1x2-24, LIT 2x2-24
Nom. discharge current In 8/20µs Line-Line / Line-Gnd, - / 5kA	LIT 2x1-24, LIT 4x1-24
Nom. discharge current In 8/20µs Line-Line / Line-Gnd, 350A / 5kA	LIT 2-12, LIT 4-12
Nom. discharge current In 8/20µs Line-Line / Line-Gnd, 250A / 5kA	LIT 2-24, LIT 4-24
Residual surge current 8/20µs	20 kA
Degree of protection	IP20
Overvoltage category	III
Pollution degree	2
Further ratings according manufactures documentation.	

Application/Limitation

Location Classes:

Temperature: B, Humidity: B, Vibration: B

Operating instruction of the manufacturer to be observed

Type Approval documentation

Tests carried out

EN 61643-21:2001+A1:2009+A2:2013, cold, dry heat, damp heat, vibration, flame retardancy

Marking of product

Phoenix Contact - Type designation - Main data.

All type designation may be followed by suffix such as color or packaging options.

Job Id: **262.1-024727-1**
Certificate No: **TAE00001N8**

Place of production

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany

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