Certificate No:
TAE00004SS

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Enclosure for Electrical Equipment

with type designation(s)
Abox Pro

Issued to
Günther Spelsberg GmbH + Co. KG
Schalksmühle, **Germany**

is found to comply with
DNV 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.

Issued at **Hamburg** on **2023-07-26**
This Certificate is valid until **2028-07-24**.
DNV local unit: **Essen**

Approval Engineer: **Harald Amberger**

for **DNV**

Marta Alonso Pontes
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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Product description

Junction Box Type Abox Pro

Type code designation / example

	I	II	III	IV	V
	Version	Dimensions	Mounting	Terminals	Color
Abox Pro		025	AB	-L	

Version	I	( )			
		SL	Junction box with screwless terminal		
		SLK	Junction box with screwless terminal compact		
Dimensions	II		Width	Length	Height
[mm]		( )	SL/SLK junction boxes with fixed cross-section		
		025	80	80	52
		040	93	93	55
		060	110	110	67
		100	140	140	79
		160	180	180	91
		250	250	200	115
		350	250	250	115
Mounting	III	( )	Internal fixation		
		AB	External attachment lugs		
Terminals	IV	-L	Without terminal block		
		-X²	5 pol. Feed-through terminal block 2,5mm² up to 35mm²		
Colour	V	( )	grey		
		/sw	black		
		/w	white		
		/SB	grey with red cover		

Halogen-free
Material: Box / Cover: Polycarbonate, glass fiber-reinforced, Sealing: Polyurethane
Rated insulation voltage AC or DC: Ui = 400V / 450V with terminal block, 690V without terminal block
Ingress protection : IP66/P67/IP69

Application/Limitation

Location Classes:
Temperature: D, Humidity: B, Vibration: B

Operating instruction of the manufacturer to be observed

Type Approval documentation

Tests carried out

IEC 60670-22, vibration, flame retardancy V-2 acc. UL 94.

Marking of product

Spelsberg - Type designation - Main data.

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