Certificate No:
TAE00003W8

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Enclosure for Electrical Equipment

with type designation(s)
ECS Outdoor Housing

Issued to
Phoenix Contact GmbH & Co. KG
Blomberg, Nordrhein-Westfalen, 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.

Degree of protection	**IP69**
Vibration class	**B, C**

Issued at **Hamburg** on **2021-10-19**
This Certificate is valid until **2026-10-18**.
DNV local station: **Hamburg – CMC North/East**

Approval Engineer: **Harald Amberger**

for **DNV**

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.

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

Types of ECS outdoor housings

ECS-B-122X169-L-UV…	Snap-in locking,	(WxHxD) [mm] 170x176x64
ECS-B-122X109-L-UV…	Snap-in locking,	(WxHxD) [mm] 172x116x64
ECS-B-122X169-S-UV…	Screw locking,	(WxHxD) [mm] 164x176x64
ECS-B-122X109-S-UV…	Screw locking,	(WxHxD) [mm] 164x116x64

Also available with pressure compensation membrane.

Necessary Front Plate for IP Protection

ECS-P-122X169-L-UV…	Snap-in locking,	Without Connection
ECS-P-122X169-L-UV…1M12	Snap-in locking,	1x M12 nut Connection
ECS-P-122X169-L-UV…2M12	Snap-in locking,	2x M12 nut Connection
ECS-P-122X169-L-UV…CG	Snap-in locking,	Cable gland M20 x 1.5 Connection
ECS-P-122X169-S-UV…	Screw locking,	Without Connection
ECS-P-122X169-S-UV…1M12	Screw locking,	1x M12 nut Connection
ECS-P-122X169-S-UV…2M12	Screw locking,	2x M12 nut Connection
ECS-P-122X169-S-UV…CG	Screw locking,	Cable gland M20x1.5 Connection
ECS-P-122X169-S-UV…1M1F…	Screw locking,	1xM12 nut and 1xM12 male Connection

Material: PC (polycarbonate), V0 (UL94) Colour: Grey or Black

Application/Limitation

Location Classes:
Temperature: -40 … +100, Humidity: B, Vibration: B and C, Degree of protection: IP69

Operating instruction of the manufacturer to be observed.

Type Approval documentation

Tests carried out

Environmental tests acc. DNV-CG-0339, Salt mist test, Flame retardancy, IEC 62208 Ed 2.0

Marking of product

Phoenix Contact - 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