



TYPE APPROVAL CERTIFICATE

Certificate no.:
TAE000037S
Revision No:
2

This is to certify:

that the **Termination and Joint for Cable**

with type designation(s)
HEAVYCON HC Series

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.

Issued at **Hamburg** on **2024-07-02**

for **DNV**

This Certificate is valid until **2029-07-08**.

DNV local unit: **Essen**

Approval Engineer: **Harald Amberger**

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.



Form code: TA 251

Revision: 2023-09

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Product description

Industrial Connectors HC Series inserts with hoods and housings

The HEAVYCON system consists of different housing combinations configured with inserts to the final heavy duty connector.

HC-Inserts	X△Contacts	Rating	Wire gauge
HC-Ax	3-32	16A/230-400V	0,5-4,0mm²
HC-Bx	6-48	16A/230-500V	0,14-4mm²
HC-BBx	10-92	16A/500V	0,5-4mm²
HC-BBBx	40-64	16A/500V	0,5-4mm²
HC-Dx	7-64	10A/50-250V	0,14-2,5mm²
HC-DDx	24-216	10A/250V	0,14-2,5mm²
HC-HSx	6-12	35-40A/400-500V	0,5-10mm²
HC-HVx	3-10 power 2 signal	16A/400-830V	0,14-4mm²
HC-Kx	6	80A/1000V	6-16mm²
HC-Qx	2-12	10A/400V	0,14-2,5mm²
HC-M-X-AT...	1-2	40-200A/1000V	2,5-10/25-70mm²
HC-M-01-CT-...-CT-35	1	100A/830V	10-35mm²
HC-M-02-CT-...-HV-16	2	16A/2900V/5000V	0,5-4mm²
HC-M-X-CT...	2-25	1-40A/50-1000V	0,5-10mm²
HC-M-42-CT...	42	10A/150V	0,14-2,5mm²
HC-M-08-GBIT-CT...	1-8	1-5A/50V	0,08-0,5mm²
HC-M-DSUB 09-...	1-8	1-5A/50V	0,08-0,5mm²
HC-M-04-KT-...	1-4	1.5A/50V	Coaxial contacts, 50 / 75Ω
HC-M-RJ45...	8 RJ45 and RJ1		
HC-M-04-.CFC-...	For GI fiber 50/125 μm or 62.5/125 μm		
Termination: screw, crimp, push-in, IDC (insulation displacement connection), spring cage clamp			

HC-Hoods and housing	Material	Ingress Protection
HC-STA	Plastic	IP66
HC-STA	ALU die cast	IP66 / IP67, Nema 4/4X/12
HC-EVO	Plastic	IP66 / Nema 12
HC-EVO	ALU die cast	IP66 / IP67, Nema 4/4X/12
HC-ADV	Plastic	IP66 / IP67, Nema 12
HC-ADV	ALU die cast	IP66 / IP68 / IP69K / Nema 4/4X/12
HC-Bx-TMS	ALU die cast	IP65 / IP68(0.5bar, 24h) / IP69K
HC-D7	ALU die cast	IP54 / IP65
HC-D7	Zink die cast	IP54 / IP65
HC-D7	Plastic	IP54 / IP65
HC-D15/HC-D25/HC-D50	ALU die cast	IP65
HC-HPR	ALU die cast	IP68(0.5bar, 24h) / IP69K

Application/Limitation

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

Operating instruction of the manufacturer to be observed

Type Approval documentation

TPB-Reports:
097252754, 2703_01, 2743_01, 2752_01, 2829_00, 2841_00, 2964_00, 097590744
PB-Reports:
15197, 15235, 24480, 24481, 24482, 24483, 24484, 24485

Tests carried out

EN 61984:2009, Cold, dry heat, damp heat, vibration, flame retardancy.

Marking of product

Phoenix - 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