



Certificate no.:
TAE00004ZM

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Electric Bus Bar

with type designation(s)

CFX – Coflex Plus Insulated copper flexible busbar

issued to

TEKNOMEGA S.r.l.

Corsico MI, Italy

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 **Høvik** on **2024-11-27**

This Certificate is valid until **2029-11-26**.

for **DNV**

DNV local unit: **Italy/Malta CMC**

Approval Engineer: **Nicolay Horn**

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 USD 300 000.



Form code: TA 251

Revision: 2023-09

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Product description

Type: CFX – Coflex Plus Insulated copper flexible busbar

Type name*	Reference	Current (A)	Rated short- time withstand current lcw 1 sec (kA)	Rated short- time withstand current 0,2 sec (kA)
CFX5005	CFP 3X9X0.8	172	3.6	8.1
CFX5020	CFP 6X9X0.8	257	7.2	16.2
CFX5021	CFP 9X9X0.8	330	10.9	24.3
CFX5022	CFP 3X13X0.5	172	3.3	7.3
...	...			...
...	...			
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CFX5290	CFP 6X100X1	1738	50	50
CFX5295	CFP 8X100X18	1999	50	50
CFX5300	CFP 10X100X18	2227	50	50
CFX5305	CFP 12X100X1	2433	50	50

* For all types see Product information.

- Bus-bar material: Tinned electrolytic copper.
- Current ratings given are for temperature rise dT at 55 °C
- Frequency (Hz): 50 or 60
- Rated voltage (V): 1000 AC, 1500 DC
- Flame retardance: UL94 V0
- Insulation : TPE compound

Application/Limitation

Installation/fixing to the structure to be done in accordance with the manufacturer's instructions. The distances of the supports for the busbar system must not exceed 600 mm.

Not to be used in hazardous zones and on open deck and in wet spaces such as cargo holds and below floor plates in engine rooms.

Type Approval documentation

Tests carried out

Type tests according to IEC 61439-1 & 2 Environmental tests in accordance with DNV-CG-0339 Aug.2021 (Vibration, Dry heat, Humidity, Low temperature, High voltage).

Marking of product

TEKNOMEGA S.r.l. – CFXxxxx – 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

Job ID: **262.1-042270-1**
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