

# TYPE APPROVAL CERTIFICATE

**This is to certify:****That the Enclosure for Electrical Equipment**with type designation(s)  
**Aluminium Enclosure Series CA**

Issued to

**Bernstein AG**  
**Porta Westfalica, 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.****Enclosure protection** IP66  
**Vibration class** AIssued at **Hamburg** on **2017-05-18**This Certificate is valid until **2022-05-17**.DNV GL local station: **Magdeburg**for **DNV GL**Approval Engineer: **Harald Amberger**

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**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

1. Aluminium Enclosure CA-... Empty Enclosures
2. Aluminium Enclosure CA-... U, Ex-protected Empty Enclosures
3. Aluminium Enclosure CA-... Ex, Ex-protected Junction boxes

Type

1. Aluminium Enclosure Series CA ...

|                      |                                      |
|----------------------|--------------------------------------|
| CA-020 up to CA-480  | Aluminium pressure die-casting       |
| Seal                 | Different materials                  |
| Dimensions           | LxWxH(mm) 50x45x30 up to 600x310x180 |
| Degree of Protection | IP66                                 |

2. Aluminium Enclosures Series CA ...U

|                         |                                                                      |
|-------------------------|----------------------------------------------------------------------|
| CA-060 up to CA-480     | Aluminium pressure die-casting                                       |
| Seal                    | EPDM or silicone seal                                                |
| Dimensions              | LxWxH(mm) 58x64x36 up to 600x310x180                                 |
| Degree of EX-Protection | ATEX see Certificate<br>IECEX see Certificate<br>EAC see Certificate |

Rated Voltage: max. 1100V  
max. 60 V for intrinsically safe circuits

3. Aluminium Enclosure Series CA... EX

|                          |                                                                      |
|--------------------------|----------------------------------------------------------------------|
| CA-060 up to CA- 480     | Aluminium pressure die-casting                                       |
| Seal                     | EPDM or silicone seal                                                |
| Dimensions               | LxWxH(mm) 58x64x36 up to 600x310x180                                 |
| Degree of Ex -protection | ATEX see Certificate<br>IECEX see Certificate<br>EAC see Certificate |

Rated Voltage: max. 1100V  
max. 60 V for intrinsically safe circuits

## Application/Limitation

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

Conditions of the Certificates IBExU16ATEX1130 U, IBExU16ATEX1131 have to be observed

Job Id: **262.1-024971-1**  
Certificate No: **TAE00001UB**

## Type Approval documentation

|       | CA-... | CA-...U | CA-... EX |
|-------|--------|---------|-----------|
| IBEXU |        | X       | X         |
| EAC   |        | X       | X         |
| cULus | X      |         |           |

IBEXU: IBExU16ATEX1130U, IBEXU16ATEX1131  
IBEXU: IECEX IBE 15.0025U, IECEX IBE 15.0029  
UL: File E182 164  
EAC: No. 0189981

## Tests carried out

EN 60079-0, EN 60079-7, EN 60079-11, EN 60079-31  
IEC 60079-0, IEC 60079-7, IEC 60079-11, IEC 60079-31  
Cold, dry heat, damp heat, vibration, flame retardancy

## Marking of product

Bernstein Trade Mark, Name of Product

## 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