

OR CHINA COMPULSORY PRODUCT CERTIFICATION) CETTIFICATION OF THE PROPERTY OF THE PROPERT

Applicant ROSE Systemtechnik GmbH

Address Erbeweg 13-15, 32457 Porta Westfalica, Germany

Manufacturer ROSE Systemtechnik GmbH

Address Erbeweg 13-15, 32457 Porta Westfalica, Germany

Production Factory Phoenix Mecano S.E. Asia Pte. Ltd.

Production Address 53 Ubi Ave 3#04-01, Travelite Building, Singapore 408863

Product Enclosure Model/Type TBE****

Ex marking Ex db IIB Gb, Ex db IIC Gb, Ex tb IIIC Db

GB/T3836.1-2021, GB/T3836.2-2021, GB/T3836.31-2021 **Reference Standards**

Certification mode Type Test + Initial Factory Inspection + Post-Certification Surveillance

The product(s) is verified and certified according to CNCA-C23-01: 2019 China Compulsory Implementation Rule on Explosion Protected Electrical Product and Certification CNEX-C2301-2019 Guideline of China Compulsory Certification Implementation Rule on Explosion Protected Electrical Product.

See Annex for the detailed product information (3 pages)

Initial issue date: 2021-05-21

Issued date: 2023-11-27 Valid to: 2026-05-20

The validity of this certificate is maintained through the regular supervision of the issuing authority during the validity period.

Where any discrepancy arises between the English translation and the original Chinese version, the Chinese version shall prevail. Director:



Nanyang Explosion Protected Electrical Apparatus Research Institute Co., Ltd.



http://www.ccc-cnex.com ccc.china-ex.com

Add: No. 20, North Zhongjing Road, Nanyang, Henan, P. R. China P.C.: 473008 Tel: 0377-63239734 Email: ccc@cn-ex.com



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(A **No.**: 2021312313000382

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Product information:

This certificate covers the following models

The TBE series consists of 6 types:

TBE 100T, TBE 130T and TBE 160T: enclosures in 3 different sizes, without display window

TBE 100TW, TBE 130TW and TBE 160 TW: enclosures in 3 different sizes, with display window

Ingress protection: IP66

Technical data:

maximum surface The relation between enclosure type, temperature class, temperature, maximum ambient temperature and maximum allowed power dissipation

is given in the table below.

| Type TBE | Dimensions (H x W x D) | Temperature class | T6 | T5 | T4 | T6 | T5 | T4 |
|-------------|---------------------------|------------------------------|-----------|-------|---------------|-------|-------------------------|-----------------|
| | (mm) | Maximum surface temperature* | T85 °C | T100℃ | T135 ℃ | T85 ℃ | T100℃ | T135℃ |
| | | Maximum ambient temperature | +40 ℃ | +55 ℃ | +90 ℃ | +60 ℃ | +75 ℃ | +110 °C |
| 100T | 130 × 116 × 98 | Maximum allowed | 20 W 12 W | | | | | |
| 130T | 160 × 148 × 107 | power dissipation | 29 W | | | 15 W | | |
| 160T | 190 × 180 × 116 | | 41 | W | | 24 | W ₍₍₍₍₍₍₍₍₍₍ | |
| 100T | 130 × 116 × | | 20 | W | | 12 | W | 2000)) <u>1</u> |



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(Annex)

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| W | 110 | (((((((((((((((((((((((((((((((((((((((| | | | |
|------|-------------|---|--|---|------|----------|
| 130T | 160 × 148 × | | 29 W | (((((////////////////////////////////// | 15 W | <u> </u> |
| W | 124 | |)))))))))))))))))))))))))))))))))))))) | | | |
| 160T | 190 × 180 × | // | 41 W | - \\\\\\\ | 24 W | |
| W | 134 | | |), | | |

Options:

The threaded flamepaths may be provided with a max. 0.008 mm thick electro-plating.

The enclosures may be supplied in natural finish, electro-plated, powder coated or liquid painted. The painting thickness does not exceed 0.18 mm.

Ex marking: Ex db IIB Gb, Ex db IIC Gb, Ex tb IIIC Db

- Producers should organize production in accordance with the technical documents approved by the certification body.
- 2. Specific conditions of safety use:
 - Service temperature range:

Enclosure without display window: -60°C to +110°C

Enclosure with 12 mm thick display window: -60°C to +75°C

Enclosure with 8 mm thick display window: -20°C to +75°C

- The application of the TBE enclosures shall be in accordance with the specified temperature limits.
- the pressure applied during the routine overpressure test and on the glass thickness. The ambient temperature range depends on the model (with or without glass window),

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- For enclosures provided with a powder coating or liquid painting and intended for use in dust Group applications, the user shall minimize the risk from electrostatic discharge by suitable selection and installation.
- The maximum number of apertures, their maximum sizes and their positions are specified in the instruction manual IM.TBE.U
- Oil-filled circuit-breakers and contactors shall not be used.
- The content of the TBE enclosure may be placed in any arrangement provided that an area of at least 20 % (Group IIB) or 40 % (Group IIC) of each crosss-sectional area remains free. Separate relief areas may be aggregated provided that each area has a minimum dimension in any direction of 12.5 mm.
- The threaded flame path of the cover is more than required by GB/T3836.2. Contact the manufacturer for information on the dimensions of the flameproof joints.
- See instruction for other information.
- 3. Certificate related report(s):
 - Type test report: CQST2010C043, CQST2010C043/01
- Certificate change information:
 - 1st change on April 11, 2023:Updated the standards for certification.
 - 2nd change on November 27, 2023: Changed the address name of the Production Factory.

Issued date: 2023-11-27

Director:



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