

TYPE EXAMINATION CERTIFICATE

This is to certify:**That the Battery (Accumulator)**

with type designation(s)

KH 280 P - KH 800 P, RH 280 - RH 800, TSP 280 - TSP 800**KL 11 P - KL 625 P; KM 11 P - KM 570 P; KL 30 - KL 500; KM 90 - KM 380; KH 7,5 P - KH 235 P****TP 10 - TP 570****KL 650 P - KL 1700 P; KM 600 P - KM 1390 P, TP 600 - TP 1390**

Issued to

**GAZ Geräte- und Akkumulatorenwerk Zwickau GmbH
Zwickau, Germany**is found to comply with
IEC 60623 (2017-01)**Application :****UPS, Safety Lighting, Power Stations and Switching Stations, Alternative Energy Stations,
Railway, Telecom**Issued at **Hamburg** on **2018-02-15**This Certificate is valid until **2022-06-10**.for **DNV GL**DNV GL local station: **Hamburg**Approval Engineer: **Maik Gagern**

**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 Examination Certificate and not to the approval of equipment/systems installed.



Product description

KH 280 P - KH 800 P, RH 280 - RH 800, TSP 280 - TSP 800

NiCd-cells with pocket plates in plastic container, cells from 280 Ah up to 800Ah (5H)/ 1,2V
The cells fulfil all requirements of IEC 60623 (2017-01).

KL 11 P - KL 625 P; KM 11 P - KM 570 P; KL 30 - KL 500; KM 90 - KM 380; KH 7,5 P - KH 235 P; TP 10 - TP 570

NiCd-cells with pocket type plate electrodes and batteries consisting of such cells, cells from 11Ah up to 625 Ah (5h) / 1,2 V

The types with Code "P" are cells / batteries with plastic container, the remaining types with steel container.

The cells / batteries fulfil all requirements of IEC 60623 (2017-01), the "TP" types the requirements of DIN 40 771-1 (2013-01).

KL 650 P - KL 1700 P; KM 600 P - KM 1390 P, TP 600 - TP 1390

NiCd-cells with pocket type plate electrodes, batteries from 650 Ah up to 1700 Ah (5h) / 1,2 V
The types with Code "P" are cells / batteries with plastic container, the remaining types with steel container.

The cells / batteries fulfil all requirements of IEC 60623 (2017-01), the "TP" types the requirements of DIN 40 771-1 (2013-01).

Application/Limitation

Temperature Class: A
Humidity Class: A
Vibration Class: A
EMC Class: N/A

For charging conditions manufacturer's specification should be observed.

For **KH 280 P - KH 800 P, RH 280 - RH 800, TSP 280 - TSP 800 and KL 650 P - KL 1700 P; KM 600 P - KM 1390 P, TP 600 - TP 1390** restricted angle of inclination according manufacturer's specification

Type Examination documentation

Tests carried out

GL Guidelines for the Performance of Type Approvals, Chapter 2, Edition 2012

Marking of product

The products to be marked with:

- Model name
- Manufacturer name
- Serial number

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



Job Id: **262.1-021085-2**
Certificate No: **TAE00002U8**

- 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