



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: IECEx SIR 11.0157U issue No.:3

Status: **Current**

Date of Issue: **2015-10-30** Page 1 of 5

Applicant: **TAB d.d., Tovarna akumulatorskih baterij**  
Polena 6  
2390  
Slovenia

Electrical Apparatus: **EPzS, EPzV, PzB and PzVB Traction Batteries**  
Optional accessory:

Type of Protection: **Increased Safety and Dust Protection**


Marking: Ex eb I Mb  
Ex eb IIC Gb  
Ex tb IIC Db IP 64

Approved for issue on behalf of the IECEx Certification Body: C Ellaby

Position: Deputy Certification Manager

Signature:  
(for printed version)

Date:

  
2015-10-30

Certificate history:  
Issue No. 3 (2015-10-30)  
Issue No. 2 (2015-2-4)  
Issue No. 1 (2013-10-17)  
Issue No. 0 (2012-1-27)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

**SIRA Certification Service**  
CSA Group  
Unit 6, Hawarden Industrial Park  
Hawarden  
Deeside  
CH5 3US  
United Kingdom

**sira**  
CERTIFICATION





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Manufacturer: **TAB d.d., Tovarna akumulatorskih baterij**  
Polena 6  
2390  
Slovenia

Additional Manufacturing location  
(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

#### STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

<b>IEC 60079-0 : 2011</b> Edition: 6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-31 : 2013</b> Edition: 2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
<b>IEC 60079-7 : 2015</b> Edition: 5.0	Explosive atmospheres – Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

#### TEST & ASSESSMENT REPORTS:

*A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in*

##### Test Report:

[GB/SIR/ExTR12.0016/00](#)

[GB/SIR/ExTR14.0138/00](#)

[GB/SIR/ExTR15.0279/00](#)

##### Quality Assessment Report:

[SI/SIQ/QAR11.0004/00](#)

[SI/SIQ/QAR11.0004/01](#)



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## Schedule

### EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The EPzS, EPzV, PzB and PzBV are types of lead acid traction cells. The cells have the following ratings:

Drawing	Cell Reference	Ah rating
B 315 1000	2 PzB, 3 PzB, 4 PzB, 5 PzB, 6 PzB, 7 PzB, 8 PzB	46-864 Ah, 2 V max
B 315 1005	9 PzB, 10 PzB, 11 PzB	207-1188 Ah, 2 V max
B 315 1010	2 EPzS, 3 EPzS, 4 EPzS, 5 EPzS, 6 EPzS, 7 EPzS, 8 EPzS, 9 EPzS, 10 EPzS	100-1550 Ah, 2 V max
B 315 1020	2 PzVB, 3 PzVB, 4 PzVB	122-340 Ah, 2 V max
B 315 1030	2 EPzV, 3 EPzV, 4 EPzV, 5 EPzV, 6 EPzV, 7 EPzV	110-720 Ah, 2 V max
B 315 1040	6 EPzS, 7 EPzS, 8 EPzS, 9 EPzS, 10 EPzS, 12 EPzS	300-1860 Ah, 2 V max
B 315 1050	2 EPzS, 3 EPzS, 4 EPzS, 5 EPzS, 6 EPzS, 7 EPzS, 8 EPzS, 9 EPzS, 10 EPzS	100-1550 Ah, 2 V max
B 315 1060	6 EPzS, 7 EPzS, 8 EPzS, 9 EPzS, 10 EPzS, 12 EPzS	300-1860 Ah, 2 V max
B 315 1070	2 PzB, 3 PzB, 4 PzB, 5 PzB, 6 PzB, 7 PzB, 8 PzB	46-864 Ah, 2 V max
B 315 1075	9 PzB, 10 PzB, 11 PzB	207-1188 Ah, 2 V max

CONDITIONS OF CERTIFICATION: NO



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## EQUIPMENT(continued):

The EPzS and EPzV cells are between 196 mm and 198 mm wide and have 2 to 10 positive plates terminated on 2 or 4 terminal posts. The PzB and PzVB cells are 157.5 mm wide and have 2 to 8 positive plates terminated on 2 terminal posts. Connection to the cells is via female threaded inserts secured with metallic bolts with insulated covers, which maintain the minimum ingress protection level of IP 64.

All the cells are of similar design and construction, the variation in capacities being achieved by permutations of cell height, cell length and plate number, although the EPzS and PzB are flooded type that require electrolyte being topped up via vent plugs fitted to the top of the cell casing and the EPzV and PzVB are gel type, hence maintenance free. The EPzS and PzB cells are only to be topped up in a non-hazardous area.

All cells shall be used in an appropriate ventilated battery container.

### Schedule of limitations

The user/installer shall comply with the following:

1. These cells shall be installed in a ventilated battery container that is suitable for the application and has been appropriately certified by a notified body; in addition, the container used to house the EPzS and PzB cells shall also have an IP 64 ingress protection rating or have facilities that maintain the IP64 ingress protection rating of the vent plug.
2. The cells are intended for use in a maximum service temperature range of -20°C to +95°C.
3. The EPzS and PzB cells shall only be topped up in a non-hazardous area.
4. The Cells have the following maximum rated discharge current which shall not to be exceeded:
  - \* PzVB (2 terminals): 244 A
  - \* EPzV (2 terminals): 475 A
  - \* PzB (2 terminals): 500 A
  - \* EPzS (2 terminals): 500 A
  - \* EPzS (4 terminals): 500 A



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## DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

**Issue 1** – this Issue introduced the following change:

1. QAR SI/SIQ/QAR10.0001/01 was removed and replaced with SI/SIQ/QAR11.0004/00 and SI/SIQ/QAR11.0004/01. Note: this is a retrospective change to correct a typographical error and, because it is of an administrative nature, it is not associated with an ExTR.

**Issue 2** – this Issue introduced the following change:

1. The product description was updated to add clarity to the cell references covered and to introduce new cells to the range.

**Issue 3** – this Issue introduced the following change:

1. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-0:2007 Ed 5; IEC 60079-7:2006 Ed 4 and IEC 60079-31:2008 Ed 1, were replaced by IEC 60079-0:2011-06 Ed 6.0, IEC 60079-7:2015 Ed 5 and IEC 60079-31:2013-11 Ed 2.0, the markings were updated to reflect the new standards.
2. The Schedule of Limitations was reviewed and revised.