



Product Service



(1) EU-Type Examination Certificate

(2) Equipment or Protective Systems Intended for Use in Potentially Explosive Atmospheres – **Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number:

TPS 18 ATEX 089761 0007 X

(4) Equipment or Protective System: Explosion-proof LED Tank Inspection Vessel Light
Fitting Type: BAK85 Series

(5) Manufacturer: WAROM TECHNOLOGY INCORPORATED COMPANY.

(6) Address: 555 Baoqian Road, Jiading, Shanghai, China

(7) This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) TÜV SÜD Product Service GmbH, Notified Body no. 0123, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports with no. 88.500.18.126.01.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-28:2015 EN 60079-31:2014

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the product shall include the following:



II 2G Ex db op is IIC T6 Gb

II 2D Ex tb op is IIIC T80°C Db

Certification Office Of Explosion Protection

München, 11.10.2018

Ing. Kristof De Gersem, MSc.

Page 1 / 4

Certificates without signature shall not be valid. The Certificates may only be circulated in full including its schedule(s). Extracts or alterations are subject to approval by TÜV SÜD Product Service GmbH. In case of dispute, the German text shall prevail. The document is administrated under the following number: EX5A 089761 0007 Rev.00

Doc. Name: Temp-ExNBG-EU-Type-Cert-Iss.03-2018

TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 München • Germany

TÜV®

(14) **EU-Type Examination Certificate no. TPS 18 ATEX 089761 0007 X**

(15) Model designation:

1: Explosion-proof LED Tank Inspection Vessel Light Fittings

2: Design No.

3: Lamp power

4: Support type

A, B

5: Button (Optional)

D

(16) Description of equipment:

BAK85 Series Explosion-proof LED Tank Inspection Vessel Light Fittings are used as lighting for use in Zone 1 and Zone 21 (ENAC-AISi2(b)). The cover and enclosure is made of ZL102, the light-transmitting part is made of glass. It includes a power chamber where the driver and terminals are fixed and a lamp chamber where the LED is fixed. A cable gland on the enclosure is used for power supply connection.

Technical data:

Power supply	100...277VAC, 50/60Hz 100...250VDC 12...36VAC 50/60HZ 12...48VDC
Ambient temperature	-40°C≤Ta≤55°C
Degree of protection by enclosure	IP66/IP67 (tested according to EN/IEC 60079-0)

Warning label:

WARNING-DO NOT OPEN WHEN ENERGIZED

WARNING-AFTER DE-ENERGIZING, DELAY 10 MINUTES BEFORE OPENING.

Installation instruction:

See installation instructions provided by the manufacturer and part of this certification.

See also (18) Special conditions for safe use.

(17) Test report(s): 88.500.18.126.01

(13)

Schedule



Product Service

(14) **EU-Type Examination Certificate no. TPS 18 ATEX 089761 0007 X**

Routine tests:

The manufacturer shall carry out a static overpressure test on the lamp chamber at 8.6 bar and on the power chamber at 10.6 bar for at least 10 seconds without any permanent deformation or damage invalidating the type of protection occurring.

Document List:

File no.	Description:	Pages:	Rev:	Date:
3HR 514 118.1	General drawing	1	1.0	2018-05-24
3HR 514 118.2	General drawing	1	1.0	2018-05-24
5HR 101 232	Lamp	1	1.0	2018-05-24
8HR 003 1432	Enclosure	1	1.0	2018-05-24
8HR 091 475	Clamping ring	1	1.0	2018-05-24
8HR 254 201	Push rod	1	1.0	2018-05-24
8HR 260 219	Button body	1	1.0	2018-05-24
8HR 370 622	Flexible Sealing ring	1	1.0	2018-05-24
8HR 313 1289	Cover	1	1.0	2018-05-24
8HR 313 1294	Cover	1	1.0	2018-05-24
8HR 403 415	Glass	1	1.0	2018-05-24
8HR 459 017	Gland nut	1	1.0	2018-05-24
8HRGJ 004 001.1-9	Washer	1	1.0	2018-05-24
8HRGJ 022 001.1	Sealing ring	1	1.0	2018-05-24
8HR 860 888.1	Nameplate	1	1.0	2018-05-24
0HR 354 579	Electrical schematic diagram	1	1.0	2018-05-24
0HR 354 580	Electrical schematic diagram	1	1.0	2018-05-24
0HR 306 762	PCB	1	1.0	2018-05-24
0HR 306 763	PCB	1	1.0	2018-05-24
/	Power material list	7	1.0	2017-03-31
Q/HRCY J205 009-2011	Regulations of Surface Treatment and Spraying Technology	2	0	2018-05-24
FM-WI-YF-24	Technical requirements of cementing joint for chambers	5	B/01	2018-03-14

Page 3 / 4

Certificates without signature shall not be valid. The Certificates may only be circulated in full including its schedule(s). Extracts or alterations are subject to approval by TÜV SÜD Product Service GmbH. In case of dispute, the German text shall prevail. The document is administrated under the following number: EX5A 089761 0007 Rev.00

Doc. Name: Temp-ExNBG-EU-Type-Cert-Iss.03-2018

TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 München • Germany

TÜV®

(13)

Schedule



Product Service

(14) EU-Type Examination Certificate no. TPS 18 ATEX 089761 0007 X

File no.	Description:	Pages:	Rev:	Date:
0HRW 110 064	Technical requirements of cementing joint for glass and aluminum enclosure	2	0	2018-05-24
0HR 464 428	Instruction	5	0	2018-05-24

One copy of all documentation is kept at TÜV SÜD files.

(18) Special conditions for safe use:

1. Use fasteners with yield stress not less than 450MPa, A2-70.
2. The cable entry is certificated together with the light fittings. The manufacturer has to be consulted in case of damage or replacement.
3. Repairs of the flameproof joints may only be made by the manufacturer or on behalf of the manufacturer and on his own responsibility. Repair in compliance with the values EN/IEC 60079-1 is not accepted.

(19) Essential health and safety requirements:

Assured by compliance with standards set out in (9).

Page 4 / 4

Certificates without signature shall not be valid. The Certificates may only be circulated in full including its schedule(s). Extracts or alterations are subject to approval by TÜV SÜD Product Service GmbH. In case of dispute, the German text shall prevail. The document is administrated under the following number: EX5A 089761 0007 Rev.00

Doc. Name: Temp-ExNBG-EU-Type-Cert-Iss.03-2018

TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 München • Germany

TÜV®