

[1]

EU-TYPE EXAMINATION CERTIFICATE

[2] **Equipment and protective Systems intended for use in potentially explosive atmospheres
Directive 2014/34/EU**

[3] Certificate Number: **EPT 16 ATEX 2504 X** issue 0

[4] Equipment: **Explosion-proof Light Fittings**

Series: **BAY51-D □□ x 2□ Series**

[5] Manufacturer: **WAROM TECHNOLOGY INCORPORATED COMPANY**

[6] Address: No.555, Baoqian Road, Jiading District, Shanghai, China

[7] This equipment and its accepted variations are specified in the annex to this Certificate.

[8] Eurofins Product Testing Italy S.r.l., Notified Body n. 0477 in accordance with Article 21 of the Directive 2014/34/EU of the European Parliament and of the Council of 26th February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II of the Directive.

The examination and test results are recorded in the confidential Report N° EPT.16.REL.01/54673


[9] Compliance with the essential health and safety requirements is assured through the verification of them and by compliance with the standard:

EN60079-0:2012+A11:2013; EN60079-1:2014; EN 60079-31:2014

[10] If the sign "X" is placed after the Certificate number, it indicates that the equipment is subject to the special conditions for safe use specified in the annex to this Certificate.

[11] This EU -TYPE EXAMINATION CERTIFICATE relates only to the design, the exam and the tests of the specified equipment.

Further requirements of the Directive 2014/34/EU apply to the manufacture and supply of this equipment. These requirements are not object of this Certificate.

[12] The equipment shall include the sign  and the following strings:



II2 G Ex db IIB+H₂ T6 Gb
II2 G Ex db IIB T6 Gb
II2 D Ex tb IIIC T80°C Db

Tamb: -20°C ~ +55°C

Tamb: -60°C ~ +55°C

Tamb: -60°C ~ +55°C

Place and date of issue:

Torino, 2016-09-05



Dionisio Bucchieri
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SGQ N° 133A
PRD N° 119B

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This Certificate has 7 pages and it is reproducible only in its entirety. Conditions of validity are reported below.

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[15] Equipment description

The BAY51-D □□x2□ series explosion-proof light fittings can be implemented in Zone 1 and 2 where explosive atmospheres, other than mines susceptible to firedamp, caused by mixtures of air and gases, vapours or mists of groups IIA, IIB & IIB+H₂ are present occasionally or rarely and are also capable of being applied in Zone 21 and 22 where air/dust mixtures with combustible dust atmospheres other than mines susceptible to firedamp are present occasionally or rarely.

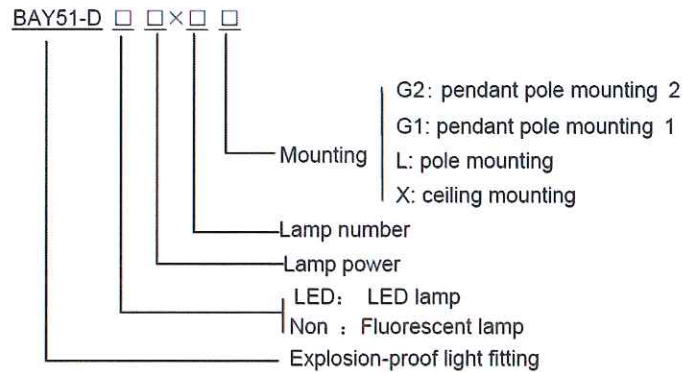
The BAY51-D □□x2□ series explosion-proof light fittings are of flameproof type structure with flameproof enclosure consisting mainly of a body, an openable cover, an end cover and a light-transmitting part.

The body and cover (openable and end) are pressure-casted with aluminium alloy ENAC-ALSi12 (b) (ZL102) and then high-pressure electrostatic plastic-sprayed; the minimum walls thickness is 5mm.

Light-transmitting parts are tempered with high strength roughened glass, with 8mm thickness, glued with end cover and openable cover with a cementing-length not less than 20mm.

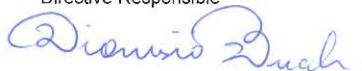
Each joint surface is provided with O-rings in order to obtain a degree of protection IP66 according to EN 60079-0 and EN 60529.

Two entry holes are provided in the enclosure of the connection compartment, where suitable ATEX certified cable glands or blanking elements (M25x1.5 or NPT3/4) should be installed. The certified cable gland and blanking element should have protection level no less than Ex db IIC Gb / Ex tb IIIC Db.

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Following types are covered:

 -Type BAY51-D LED x 2
 Input voltage: 100~275V AC

Type	Tube Type	Rated Voltage	Rated Power	Net Volume Exd Cavity
BAY51-D LED 9 x 2 <input type="checkbox"/>	T8 LED LED lamp	110V AC, 120V AC, 208V AC, 220V AC, 230V AC, 240V AC, 250V AC 50/60Hz	9W×2	2500cm ³
BAY51-D LED 18 x 2 <input type="checkbox"/>			18W×2	5000cm ³
BAY51-D LED 28 x 2 <input type="checkbox"/>			28W×2	6200cm ³

 -Type BAY51-D x 2
 Input voltage: 100~305V AC

Type	Tube Type	Rated Voltage	Rated Power	Net Volume Exd Cavity
BAY51-D 18 x 2 <input type="checkbox"/>	T8 fluorescent lamp	110V AC, 120V AC, 208V AC, 220V AC, 230V AC, 240V AC, 250V AC, 277V AC 50/60Hz	18W×2	2500cm ³
BAY51-D 36 x 2 <input type="checkbox"/>			36W×2	5000cm ³
BAY51-D 58 x 2 <input type="checkbox"/>			58W×2	6200cm ³
BAY51-D 14 x 2 <input type="checkbox"/>	T5 fluorescent lamp		14W×2	2900cm ³
BAY51-D 28 x 2 <input type="checkbox"/>			28W×2	5700cm ³
BAY51-D 35 x 2 <input type="checkbox"/>			35W×2	7100cm ³

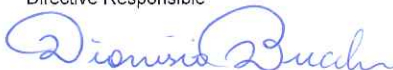
Warning label

- WARNING: DO NOT OPEN WHEN ENERGIZED
- WARNING: POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS
- WARNING: DO NOT OPEN WHEN EXPLOSIVE ATMOSPHERE PRESENTS
- CAUTION- USE FASTENERS WITH YIELD STRESS \geq 450MPa
- THREAD SPECIFICATION OF THE ENTRY HOLE - SEE THE MANUAL


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**Routine tests**

Static overpressure test for 10 s minimum:

- “Exd” chamber of Ex db IIB+H₂ luminaire at a pressure not less than 20.5 bar
- “Exd” chamber of Ex db IIB luminaire at a pressure not less than 11,9 bar

[16] **Assessment Report n° EPT.16.REL.01/54673**

This EU-Type Examination Certificate is released after the positive result of the conformity assessment of the Council Directive 2014/34/EU and to harmonized technical standards listed in this certificate performed by the Notified Body Eurofins Product Testing Italy S.r.l., and reported in the Assessment Report above cited.

[17] **Special condition for a safe use**

The flameproof joints of the equipment mustn't be repaired.
Use fasteners with yield stress ≥ 450 MPa.

[18] **Essential Health and Safety Requirements**

Assured by compliance with harmonized standards.

[19] **Descriptive documents**

The equipment objects of this Certificate is described by the following documents.
Scheduled documents are indicated with the symbol “✓”. They cannot be modified without the explicit authorization of the Notified Body.

Documents	Drawing No	Rev.	Date	Scheduled
BAY51-D Series Explosion-proof Light Fittings	1HRW 000 063.1~6	0	2014-05-14	✓
Body	1HRW 020 058.1~2	0	2014-05-14	✓
Openable cover	1HRW 050 037	0	2014-05-14	✓
End cover	1HRW 050 038	0	2014-05-14	✓
Reflector	1HRW 080 057.1~6	0	2014-05-14	✓
Mounting plate	1HRW 080 058	0	2014-05-14	✓

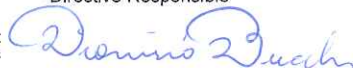


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Threaded stud	1HRW 090 233.1~3	0	2014-05-14	✓
Reflector	1HRW 090 234.1~3	0	2014-05-14	✓
Bush	1HRW 100 117	0	2014-05-14	✓
Glass cover	1HRW 100 118.1~3	0	2014-05-14	✓
Lamp holder	1HRW 110 068	0	2014-05-14	✓
Schematic diagram of user	1HRW 110 098	0	2014-05-14	✓
Nameplate	4HRW 110 265.1~2	0	2014-05-14	✓
Inner hexagon screw	8HR 903 230	0	2014-05-14	✓
Assembly of wiring base	WM5HR 512 029	0	2014-05-14	✓
Screw assembly	WM5HR 906 004	0	2014-05-14	✓
Cover of terminal	WM8HR 305 002	0	2014-05-14	✓
Connecting plate	WM8HR 570 201	0	2014-05-14	✓
Conducting strip 2	WM8HR 588 228	0	2014-05-14	✓
Marking pad printing drawing	WM8HR 865 419	0	2014-05-14	✓
Screw	WM8HR 903 207	0	2014-05-14	✓
Tile shape pad	WM8HR 950 224	0	2014-05-14	✓
Illustration about the Certification of BAY51-D Series Explosion-proof Light Fittings (DOC. No.: 0HRW 110 448)	Annex 1	0	2014-05-14	✓
Thermal endurance to burn test report of E44 Epoxy-resin	Annex 2	0	2011-05-06	✓
PC data sheet (DOC. No.: 0HRW 110 080)	Annex 3	0	2014-05-14	✓
VMQ silicon rubber data sheet (DOC. No.: 0HRW 110 091)	Annex 4	0	2014-05-14	✓
NBR rubber data sheet (DOC. No.: 0HRW 110 094)	Annex 5	0	2014-05-14	✓
E44 Epoxy-resin data sheet (DOC. No.: 0HRW 110 077)	Annex 6	0	2014-05-14	✓
ENAC-AISi12 (b) cast aluminium alloy material report (DOC. No.: 0HRW 110 101)	Annex 7	0	2014-05-14	✓
Instruction of T039 (A) Broad-range	Annex 8	0	2014-05-14	✓



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temperature Aviation Grease (DOC.No.: 0HRW 110 100)				
Instruction of Terylene sticker (DOC.No.: 0HRW 110 086)	Annex 9	0	2014-05-14	✓
Manual of 509 transparent glue (DOC.No.: 0HRW 110 095)	Annex 10	0	2014-05-14	✓
Static Pressure Test Specification (DOC. No.: 0HR 599 002)	Annex 11	0	2014-05-14	✓
Specifications of power-frequency withstand voltage (DOC. No.: 0HR 599 007)	Annex 12	0	2014-05-14	✓
Technical conditions of power frequency withstand voltage test (DOC. No.: 0HR 599 010)	Annex 13	0	2014-05-14	✓
Elements resin encapsulation process (DOC. No.: WM0HR 599 036)	Annex 14	0	2014-05-14	✓
Manual of BAY51-D (0HRW 110 450)	Annex 15	0	2014-05-14	✓
IECEx certificate of conformity of BPT stopping plug	Annex 16	-	-	✓
The Statement of Yield Strength and Tensile Strength of BAY51-D Explosion-proof Light Fittings Enclosure Material ENAC-ALSi12 (b) (ZL102) below -60°	Annex 17	-	-	✓


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[20] **Terms and conditions**

The product liability rests with the Manufacturer, his representative or, in the absence of a representative, with the importer, in accordance with the General Product Safety Directive 2001/95/EC.

The following conditions may render this certificate invalid:

- changes in the design or construction of the product;
- changes or amendments to the Directive;
- changes or amendments in the standards which form the basis for documenting compliance with the essential requirements of the 2014/34/EU Directive.

[21] **History**

This certificate is at its first issue.



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End of Certificate

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