



# OBAC



AC 099

**Ośrodek Badań, Atestacji i Certyfikacji Sp. z o.o.**  
**44-121 Gliwice, ul. Łabędzka 21**

## Schedule No. 1

to

## the certificate no. **OBAC 21 ATEX 0135X, Issue 0**

- (2) Equipment, components and protective systems intended for use in potentially explosive atmospheres. Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014.
- (3) Product: **Explosion-proof LED luminaire OREx1 G2 and OREx2 G2**  
/original type designation: OREX 1 Ex and OREX 2 Ex/
- (4) Manufacturer: **Zalux S.A.**
- (5) Address: Avenida Manuel Rodríguez Ayuso, 114. Centro Empresarial Miralbueno  
Planta 1a, Local P-2, 50012 Zaragoza, SPAIN
- (6) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN IEC 60079-0:2018**  
**EN 60079-1:2014**  
**EN 60079-7:2015+A1:2018**  
**EN 60079-11:2012**  
**EN 60079-18:2015+A1:2017**  
**EN 60079-28:2015**  
**EN 60079-31:2014**

- (7) Description of changes:  
New versions of the OREX luminaires, marked as OREx1 G2 and OREx2 G2, using following components:
- new enclosure's body
  - alternative LEDs
  - separately certified light module UNIVEx
  - separately certified overvoltage module UNIVExd SPD
  - new types of power supplies (for OREx2 G2)



**Head of Certification Body**

**Piotr Tarnawski M.Com.**

Gliwice, 13<sup>th</sup> December 2023.



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**Rated data:**

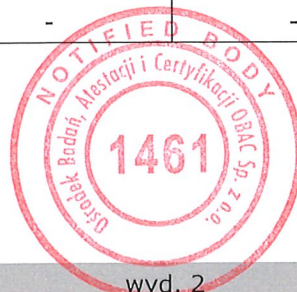
|                      |  |
|----------------------|--|
| Nominal voltage      | OREx1 G2:<br>198-277 VAC, 198-250 VDC, 50-60/0Hz standard version<br>90-250 VAC, 140-250 VDC, 50-60/0Hz NV version<br>90-277 VAC, 140-250 VDC, 50-60/0Hz WV version<br><br>OREx2 G2:<br>90-305 VAC, 140-250 VDC, 50-60/0Hz |
| Nominal power        | OREx1 G2: 40-160 W<br>OREx2 G2: 40-270 W   |
| Degree of protection | IP66/67  |

**OREx1 G2 - standard version**

| Power [W]                        | Ambient temperature range [°C] |                    |                    |
|----------------------------------|--------------------------------|--------------------|--------------------|
|                                  | -32°C ≤ Ta ≤ +50°C             | -32°C ≤ Ta ≤ +55°C | -32°C ≤ Ta ≤ +60°C |
| Class temp. / max. surface temp. |                                |                    |                    |
| 40 - 80                          | -                              | -                  | T5 / T95°C         |
| 81 - 120                         | -                              | T5 / T95°C         | -                  |
| 121 - 160                        | T5 / T95°C                     | -                  | -                  |

**OREx1 G2 – HT version**

| Power [W]                        | Ambient temperature range [°C] |                    |                    |
|----------------------------------|--------------------------------|--------------------|--------------------|
|                                  | -32°C ≤ Ta ≤ +65°C             | -32°C ≤ Ta ≤ +70°C | -32°C ≤ Ta ≤ +75°C |
| Class temp. / max. surface temp. |                                |                    |                    |
| 40 - 50                          | -                              | -                  | T4 / T121°C        |
| 51 - 60                          | -                              | T4 / T121°C        | -                  |
| 61 - 80                          | T4 / T121°C                    | -                  | -                  |





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### OREx2 G2 – standard, ICB, SD and IPS versions

| Power [W] | Ambient temperature range [°C]   |                    |                    |                    |                    |
|-----------|----------------------------------|--------------------|--------------------|--------------------|--------------------|
|           | -32°C ≤ Ta ≤ +40°C               | -32°C ≤ Ta ≤ +45°C | -32°C ≤ Ta ≤ +50°C | -32°C ≤ Ta ≤ +55°C | -32°C ≤ Ta ≤ +60°C |
|           | Class temp. / max. surface temp. |                    |                    |                    |                    |
| 40 – 80   | T5 / T80°C                       | T5 / T85°C         | T5 / T90°C         | T5 / T95°C         | T4 / T100°C        |
| 81 – 120  | T5 / T80°C                       | T5 / T85°C         | T5 / T90°C         | T5 / T95°C         | T4 / T100°C        |
| 121 – 160 | T5 / T85°C                       | T5 / T90°C         | T5 / T95°C         | T4 / T100°C        | –                  |
| 161 – 200 | T5 / T85°C                       | T5 / T90°C         | T5 / T95°C         | T4 / T100°C        | –                  |
| 201 – 240 | T5 / T85°C                       | T5 / T90°C         | T5 / T95°C         | T4 / T100°C        | –                  |
| 241 – 270 | T5 / T90°C                       | T4 / T95°C         | T4 / T100°C        | –                  | –                  |

### OREx2 G2 – HT version

| Power [W] | Ambient temperature range [°C]   |                    |                    |                    |                    |
|-----------|----------------------------------|--------------------|--------------------|--------------------|--------------------|
|           | -32°C ≤ Ta ≤ +55°C               | -32°C ≤ Ta ≤ +60°C | -32°C ≤ Ta ≤ +65°C | -32°C ≤ Ta ≤ +70°C | -32°C ≤ Ta ≤ +75°C |
|           | Class temp. / max. surface temp. |                    |                    |                    |                    |
| 40 - 80   | T5 / T95°C                       | T4 / T100°C        | T4 / T105°C        | T4 / T110°C        | T4 / T115°C        |





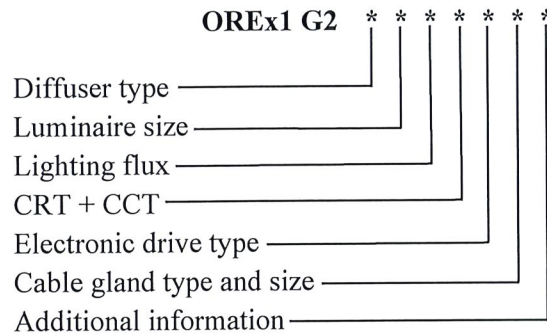
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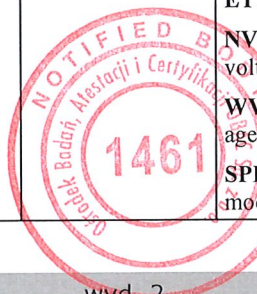
(1) **Schedule No. 1**  
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**Marking:**



OREx1 G2 - standard and HT version

| Diffuser type  | Luminaire size     | Lighting flux tolerance ± 10%   | CRT + CCT  | Electronic driver type  | Cable gland type and size   | Additional information   |
|--|--------------------|---|--|---|---|--|
| <b>None:</b> standard glass<br><b>GL1:</b> milky glass<br><b>GL...:</b> other glass on request | <b>38:</b> Ø380 mm | <b>64:</b> 6400 for 40W<br><b>96:</b> 9600 for 60W<br><b>128:</b> 12800 for 80W<br><b>160:</b> 16000 for 100W<br><b>192:</b> 19200 for 120W<br><b>224:</b> 22400 for 140W<br><b>240:</b> 24000 for 150W<br><b>256:</b> 25600 for 160W<br>... other on request | <b>840:</b> CRI 80 and 4000K<br><b>850:</b> CRI 80 and 5000K<br>other on request | <b>None:</b> standard version<br><b>P:</b> service connector<br><b>ETDD:</b> Digital diming DALI<br><b>PDA:</b> service connector and digital dimming DALI<br><b>10V:</b> analog diming 1-10V<br><b>P10V:</b> service connector and analog dimming 1-10V<br><b>ET:</b> power cord<br><b>NV:</b> narrow voltage range<br><b>WV:</b> wide voltage range<br><b>SPD:</b> overvoltage module | <b>CG:</b> plastic cable gland<br><b>NiCG:</b> nickel-plated brass cable gland<br><b>BCG:</b> brass cable gland<br><b>ACG:</b> cable gland for armored cable<br><b>H:</b> housing with a hole for cable gland<br>Standard size cable/hole M20 and one cable gland. Other size and quantity of cable gland on request. | <b>Painting:</b> RAL.. type<br><b>HT:</b> high ambient temperature<br>... other on request |





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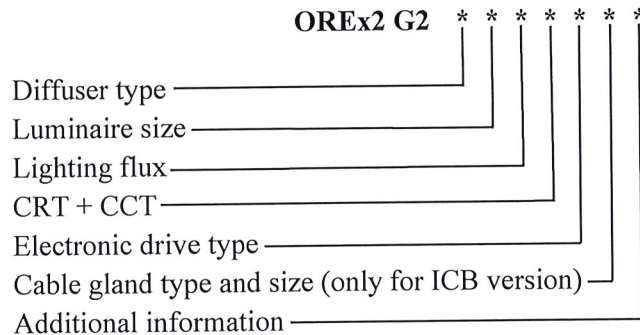
**Osrodek Badań, Atestacji i Certyfikacji Sp. z o.o.**  
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Examples of type designation:

**OREx1 G2 38 240 840 CG** – OREx1 G2, 24000 lm, CRI 80, 4000K LED matrix, plastic cable gland M20.

**OREx1 G2 38 150 930 2HM25 R WU JB** – OREx1 G2, 15 000 lm, CRI 90, 3000K LED matrix, two holes for the M25 cable gland, symmetrical reflector, universal mounting, additional connection box





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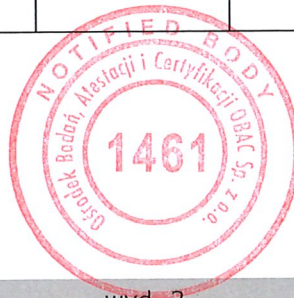
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OREx2 G2 – standard, ICB, SD and IPS versions

| Diffuser type   | Luminaire size     | Lighting flux tolerance $\pm 10\%$  | CRT + CCT  | Electronic driver type   | Cable gland type and size (only for ICB version)  | Additional information   |
|---|--------------------|---|--|--|---|--|
| <b>None:</b> standard glass<br><b>GL1:</b> milky glass<br><b>GL..:</b> other glass on request | <b>38:</b> Ø380 mm | <b>62:</b> 6200 for 40W<br><b>93:</b> 9300 for 60W<br><b>124:</b> 12400 for 80W<br><b>155:</b> 15500 for 100W<br><b>186:</b> 18600 for 120W<br><b>217:</b> 21700 for 140W<br><b>232:</b> 23250 for 150W<br><b>248:</b> 24800 for 160W<br><b>279:</b> 27900 for 180W<br><b>310:</b> 31000 for 200W<br><b>341:</b> 34100 for 220W<br><b>372:</b> 37200 for 240W<br><b>403:</b> 40300 for 260W<br><b>418:</b> 41850 for 270W<br>... other on request | <b>840:</b> CRI 80 and 4000K<br><b>850:</b> CRI 80 and 5000K<br>other on request | <b>P:</b> service connector<br><b>ETDD:</b> Digital dimming DALI<br><b>PDA:</b> service connector and digital dimming DALI<br><b>10V:</b> analog dimming 1-10V<br><b>P10V:</b> service connector and analog dimming 1-10V<br><b>ET:</b> power cord | <b>CG:</b> plastic cable gland<br><b>NiCG:</b> nickel-plated brass cable gland<br><b>BCG:</b> brass cable gland<br><b>ACG:</b> cable gland for armored cable<br><b>H:</b> housing with a hole for cable gland<br>Standard size cable/hole M20 and one cable gland. Other size and quantity of cable gland on request. | <b>Painting:</b> RAL.. type<br><b>IPS:</b> external industrial power supply equipped with integrated connected cable (increased service live)<br><b>SD:</b> power supply assembly and lighting assembly separated, connected with cable<br><b>ICB:</b> version with industrial power supply and connection box<br>... other on request |





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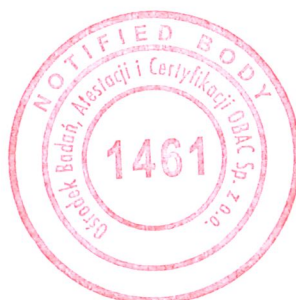
OREx2 G2 – HT versions:

| Diffuser type   | Luminaire size     | Lighting flux  | CRT + CCT  | Electronic driver type   | Cable gland type and size (only for ICBHT version)  | Additional information  |
|---|--------------------|--|--|--|---|---|
| <b>None:</b> standard glass<br><b>GL1:</b> milky glass<br><b>GL..:</b> other glass on request | <b>38:</b> Ø380 mm | <b>62:</b> 6200 for 40W<br><b>93:</b> 9300 for 60W<br><b>124:</b> 12400 for 80W<br>Tolerance ± 10% | <b>840:</b> CRI 80 and 4000K<br><b>850:</b> CRI 80 and 5000K<br>Other on request | <b>P:</b> service connector<br><b>ETDD:</b> Digital dimming DALI<br><b>PDA:</b> service connector and digital dimming DALI<br><b>10V:</b> analog dimming 1-10V<br><b>P10V:</b> service connector and analog dimming 1-10V<br><b>ET:</b> power cord | <b>CG:</b> plastic cable gland<br><b>NiCG:</b> nickel-plated brass cable gland<br><b>BCG:</b> brass cable gland<br><b>ACG:</b> cable gland for armored cable<br><b>H:</b> housing with a hole for cable gland<br>Standard size cable/hole M20 and one cable gland. Other size and quantity of cable gland on request. | <b>Painting:</b> RAL.. type<br><b>HT:</b> industrial power supply with an additional heat sink<br><b>SDHT:</b> power supply assembly and lighting assembly separated, connected with cable<br><b>ICBHT:</b> version with industrial power supply and connection box<br>... other on request |

Examples of type designation:

**OREx2 G2 38 62-840 P** – OREx2 G2, 40W power, 4000K CRI80 LED matrix and with diagnostic connector.

**OREx2 G2 GL1 38 155-930 P10V 2NiCG20 ICB AR WM** – OREx2 G2 with milk glass 100W fitting, 3000K CRI 90 LED matrix. Equipped with a diagnostic connector with analog 1-10V dimming, with an integrated connection chamber with two cable glands made of nickel-plated brass, size M20. Additional accessories asymmetrical reflector and wall mount.





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## Schedule No. 1 to the certificate no. OBAC 21 ATEX 0135X, Issue 0

OREx1 G2 and OREx2 G2 - Accessories

| Lighting system   | Mounting accessories  | Others  |
|---|---|---|
| None – no reflector;<br>R – symmetrical reflector;<br>AR – asymmetrical reflector;<br>WG – steel mesh;<br>... – other on request; | None – single eyebolt;<br>WM – wall mount;<br>ST – pipe mount;<br>WU – universal mounting;<br>NA – luminaire without mounting accessories<br>.. – other on request; | JB.. – junction box;<br>CR – power cords with an Ex connector;<br>... – other on request; |

(8) Explosion-proof execution was confirmed in the confidential product evaluation report: OBAC/23/ATEX/0464.

The explosion-proof designation:

**OREx1 G2 – standard version:**

II 2G Ex eb ib mb op is IIC T5 Gb

II 2D Ex tb op is IIIC T95°C Db

**OREx1 G2 – SPD version:**

II 2G Ex db eb ib mb op is IIC T5 Gb

II 2D Ex tb op is IIIC T95°C Db

**OREx1 G2 – HT version:**

II 2G Ex eb ib mb op is IIC T4 Gb

II 2D Ex tb op is IIIC T121°C Db





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**OREx2 G2 – all versions:**

 **II 3G Ex ec op is IIC T5...T4 Gc**

 **II 3D Ex tc op is IIC T80°C...T115°C Dc**

(9) Specific conditions of use:

Remain unchanged - the same as in the OBAC 21 ATEX 0135X certificate.

(10) Technical documentation:

The technical documentation is specified in the confidential report no. OBAC/23/ATEX/0464.

