

INDUSTRIAL LIGHTING

Founded in Timisoara, the first European city with electrical light, ELBA has almost 100 years of experience in the sector. ELBA delivers professional lighting solutions that integrate new generation technology, designed for the highest efficiency and quality.

INDEX

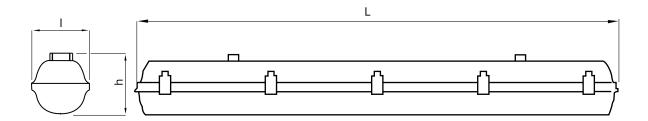
| FIPAD 06 GEN. 2 | 5 |
|-----------------|----|
| FIPAD ECO-LED | 9 |
| PREMIUM LED | 13 |
| POWER-FLEX | 17 |
| IEV-08 | 21 |
| AV-02C | 25 |
| ARIA-02 | 29 |
| LINETA NOVA | 33 |
| LINDA | 37 |
| AB-02 ANDA LED | 41 |
| CISA-04 LED | 45 |
| CISA-MARTE | 49 |
| CISA-02M | 53 |



FIPAD-06 GEN. 2

Essential in areas where dust and humidity are present. Mainly destined for areas in which technical or storing activities take place.

FIPAD-06 GFN. 2 General Information



Technical features

- Rated voltage: 230V/50Hz.
- Active power: 5.1W 63W.
- Initial luminous flux: 1050lm 10100lm.
- Ingress degree of protection: IP 65.
- Mechanical impact resistance: IK08 (IK08 PC body, IK09 PC diffuser)
- Glow wire test: 850°C PC body, PC diffuser, 650°C PMMA diffuser.
- Ambient temperature range: -20°C ÷ +40°C; +5°C - +35°C for the variants with emergency lighting
- Relative humidity: 80% at the temperature of +20°C.

Description and performances

- Light grey polycarbonate body, UV stable, resistant to impact, dust and moisture.
- Translucent opal polycarbonate diffuser (on request PMMA) for an optimal light distribution.
- White painted steel sheet driver rail.
- Polyamide with glass fibre clips that remains attached to the body when the luminaire is open.
- On request the luminaire could be equipped with stainless steel clips.
- On request: screws for locking the cover against unauthorized opening for both plastic stainless steel clips.

Polyurethane foam sealing gasket.

(male-female) Screws and stainless steel clips and brackets for

Distance part made of polyamide with glass fibre.

On request: Fast connection kit 2 connectors

- visible mounting on ceiling, and brackets and stainless steel hooks for suspended mounting included in the product.
- Driver (electronic driver) included in the product and manufactured according to the specific standards.
- Colour grey.

Light sources

- Medium power LEDs, colour temperature or neutral-white 4000K, CRI≥80 or 5000K CRI≥70 lifetime L80B10 de approximately 50.000 hours at Ta=25°C.
- On request the product could be equipped with LEDs with colour temperature cool-white day-light 6500K, CRI ≥70 or warm-white 3000K, CRI≥90.
- The LED system included in the product could replace or is equivalent with fluorescent lamp T8 Ø26mm, T5 Ø16mm.

- Low Voltage Directive.
- Electromagnetic Compatibility Directive.
- RoHS Directive, WEEE Directive.







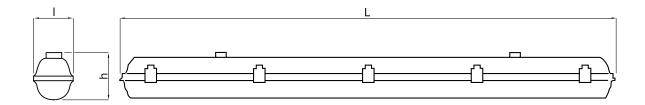
| Product Name | Variant [L x I x h] | Active Power [W] | Luminaire luminous flux net [Lm] | Luminaire efficacy [lm/W] |
|--------------|------------------------|---------------------|-------------------------------------|------------------------------|
| FIPAD-06-1x | 1272×95×111 | 16 | 2600 | 163 |
| FIPAD-06-1x | 1572x95x111 | 28 | 4500 | 161 |
| FIPAD-06-2x | 662x145x111 | 12 | 1950 | 163 |
| FIPAD-06-2x | 1272x145x111 | 28.5 | 4323 | 152 |
| FIPAD-06-2x | 1572x145x111 | 36.6 | 6330 | 173 |
| FIPAD-06-2x | 1572x145x111 | 52.5 | 8716 | 166 |
| FIPAD-06-2x | 1572x145x111 | 63 | 10100 | 160 |



FIPAD ECO-LED

A technically and commercially balanced product, used in industrial areas but not exclusive to them.

General Information FIPAD ECO-LED



Technical features

- Rated voltage: 230V/50Hz.
- Active power: 33.6W, 51.7W.
- Initial luminous flux: 4000lm, 6000lm.
- Ingress degree of protection: IP65.
- Mechanical impact resistance: IK08 (IK08 PC body, IK 09 PC diffuser).
- Glow wire test: 850°C PC body, PC diffuser, 650°C PMMA diffuser.
- Ambient temperature range: -25°C ÷ +35°C.
- Relative humidity: 80% at the temperature of +20°C.

Description and performances

- Light grey polycarbonate body, UV stable, resistant to impact, dust and moisture.
- Translucent opal polycarbonate diffuser (PMMA on request) for an optimal light distribution.
- White painted steel sheet driver rail.
- Polyamide with glass fibre clips that remains attached to the body when the luminaire is open.
- On request the luminaire could be equipped with stainless steel clips
- Polyurethane foam sealing gasket.

- Distance part made of polyamide with glass fibre.
- On request the luminaire could be equipped with fast connection kit 2 connectors (male-female)
- Visible mounting on ceiling or wall with screws and stainless brackets included in the product or suspended mounting with stainless steel hooks included in the product.
- Driver (electronic driver) included in the product and manufactured according to the specific standards.
- Colour: grey.

Light sources

- Medium power LEDs, colour temperature or neutral white 4000K CRI≥80, lifetime L70B50 approximately 50.000 hours at Ta=25°C.
- The LED system included in the product could replace or is equivalent with fluorescent lamps T8 Ø26mm, T5 Ø16mm.

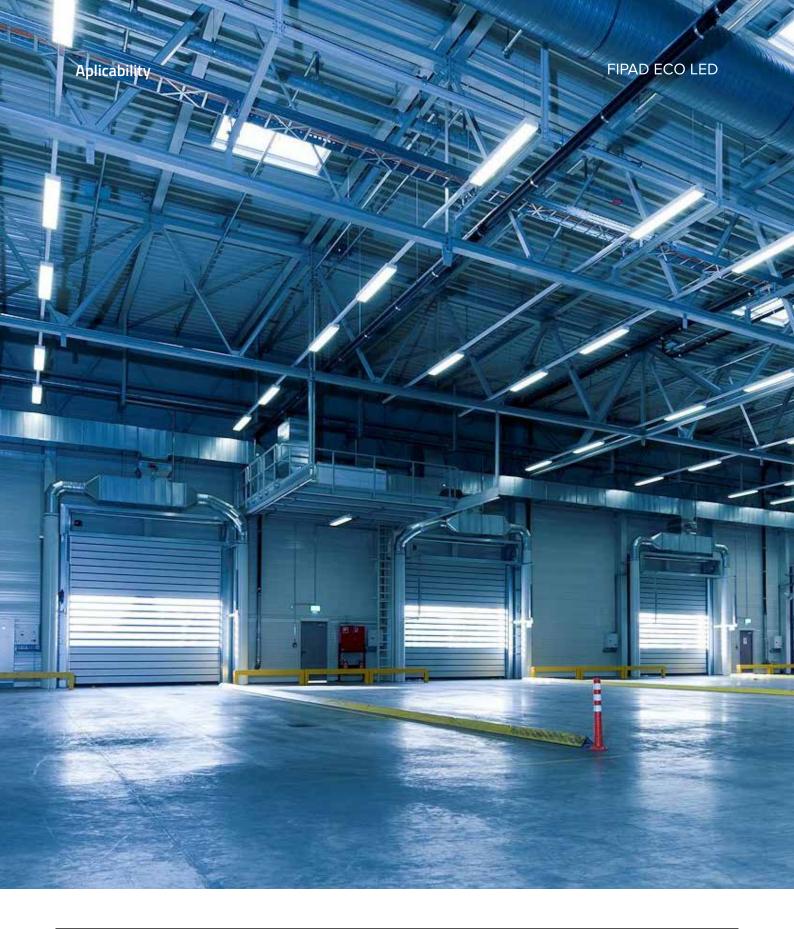
Compliance with the European Directives

- Low Voltage Directive.
- Electromagnetic Compatibility Directive.
- RoHS Directive, WEEE Directive.

⊕ **CE** RoHS



11 www.elbalighting.com



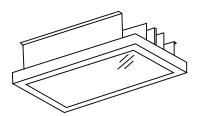
| Product Name | Variant [L x I x h] | Active Power [W] | Luminaire luminous flux net [Lm] | Luminaire efficacy [lm/W] |
|------------------|------------------------|---------------------|-------------------------------------|------------------------------|
| FIPAD-06 ECO-LED | 1200x95x111 | 33.6 | 4000 | 119 |
| FIPAD-06 ECO-LED | 1500x95x111 | 51.7 | 6000 | 116 |

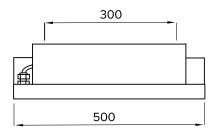


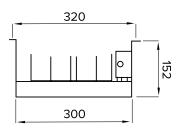
PREMIUM LED

A product with a high degree of protection, highly recommended for reducing energy expenditure in industrial activities.

General Information PREMIUM LED







Technical features

- Rated voltage: 230V/50Hz.
- Active power: 93.4W 143.7W.
- Initial luminous flux: 9700 lm ÷ 17624 lm.
- Ingress degree of protection: IP65.

- Mechanical impact resistance: IK08.
- Ambient temperature range: -40°C ÷ +45°C and +0°C ÷ +40°C for the variants with emergency lighting kit.
- Relative humidity: 80% at the temperature of +20°C.

Description and performances

- The body of the projector is made of steel sheet, in weldedconstruction, painted with powder.
- Tempered glass diffuser or on request clear polycarbonate diffuser.
- The optical unit (mirrored aluminium reflector, LED modules), steel sheet frame that sustains the diffuser.
- The product has a thermic management system, made from passive aluminium cooler to ensure the long lifetime.
- On request the luminaire could be equipped with dimmable driver protocol 1-10V.
- Connector with IP68 protection degree.

- Mounting system: visible on ceiling with screws or suspended on chain or rods.
- On request the luminaire could be equipped with emergency lighting kit.
- On request the luminaire could be equipped with: protective grid, lateral mask for the passive cooler.
- Driver (electronic driver) included in the product and manufactured according to the specific standards.
- Colour: white.

Light sources

- Power LEDs: cool-white 5700K CRI≥70 neutral white 4000K CRI ≥80, with long lifetime L70B50 over 50.000 hours at Ta=25°C.
- It is equivalent with projectors with high pressure mercury lamps HST, HSE 150W;

250W, high pressure metal halide lamps HIE 150W, 250W; HIT 150W, 250W, high pressure mercury lamps HME 250W, 400W.

- Low Voltage Directive.
- Electromagnetic Compatibility Directive.
- RoHS Directive, WEEE Directive.







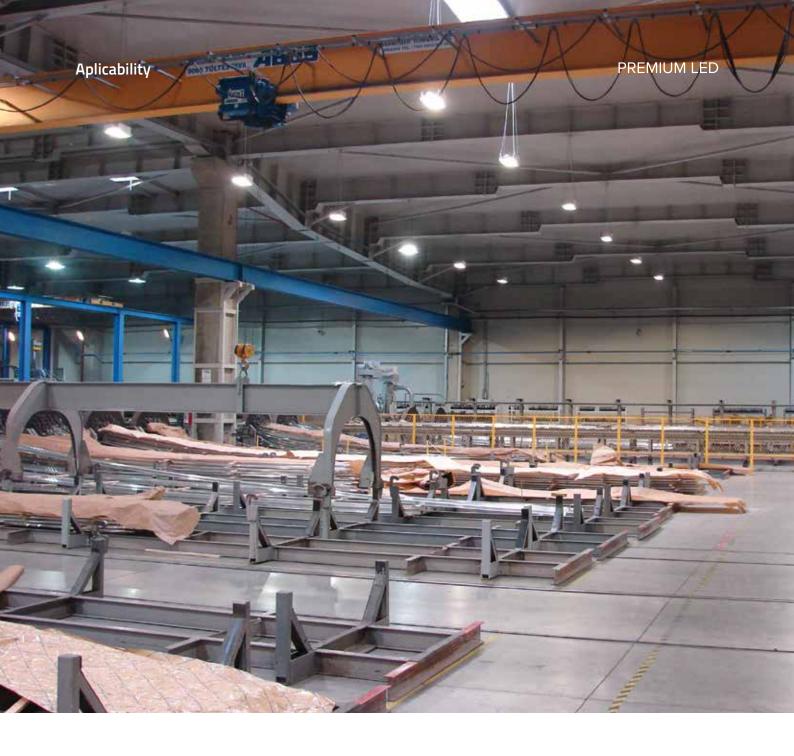










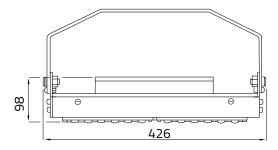


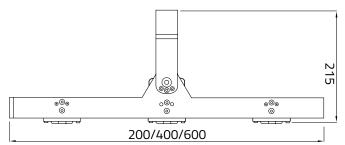
| Product Name | Variant [L x I x h] | Active Power [W] | Luminaire luminous flux net [Lm] | Luminaire efficacy [lm/W] |
|---------------------------|------------------------|---------------------|-------------------------------------|------------------------------|
| PREMIUM LED gen3 20LED | 20LED/350 5700K | 93.4 | 11200 | 120 |
| PREMIUM LED gen3 20LED | 20 LED/350 4000K | 93.4 | 9700 | 104 |
| PREMIUM LED gen3 24LED | 24LED/350 5700K | 110.9 | 13843 | 122 |
| PREMIUM LED gen3 24LED | 24LED/350 4000K | 110.9 | 11682 | 105 |
| PREMIUM LED gen3 32LED | 32 LED/350 5700K | 143.7 | 17624 | 123 |
| PREMIUM LED gen3 32LED | 32 LED/350 4000K | 138.9 | 15265 | 106 |



POWER FLEX

A versatile and robust product. Fit for industrial spaces with complex requirements.





Technical features

- Rated voltage: 230V/50 Hz.
- Active power: 58 W ÷ 244 W.
- Initial luminous flux: 9000 lm ÷ 34835 lm.
- Ingress degree of protection: IP66.

- Mechanical impact resistance: IK08.
- Ambient temperature range: -40°C ÷ +50°C.
- Relative humidity: 80% at the temperature of +20°C.

Description and performances

- The projector has a simple construction, it is robust, and easy to install and maintain.
- Aluminium profile body.
- Metallic frame made of steel sheet, in welded construction, painted with epoxypolyestheric powder, and mounting frame with index step 10°.
- Optical system made of sealed LED modules, with index 10°, 20°, with specific light distribution on choice: 60°(large), 101°(extra-large), 31°x96° (between racks).
- The product has a thermal management system made of a passive aluminium profile cooler to ensure the long lifetime.

- Fast connectors IP68.
- On request the product could be equipped with dimmable driver protocol 0-10V or PWM.
- Driver (electronic driver) included in the product and manufactured according to the specific standards, mounted on the body or on the metallic frame, sealed with the protection degree IP67, with active PFC function.
- Driver protection for conditions of: Output over voltage, Short circuit, Over Temperature).
- Surge Protection.
- Colour: grey.

Light sources

- Power LEDs, white, with the colour temperature cool white 5700K, CRI≥70, which ensure a wide light distribution
- On request the product could be equipped with LEDs with colour temperature neutral-white 4000K, CRI ≥70/80.
- The use of LEDs ensures a long lifetime L70B50, of over 50.000 hours at Ta=25°C, and a reduced power consumption.
- Equivalence: The LED system included in the product could replace projectors with: POWER-FLEX 72 LED:

high pressure mercury lamps HME400W, high pressure metal halide lamps HIE 250W, HIT 250W, high pressure sodium lamps HST 250W, HSE 250W; POWER-FLEX 48LED: high pressure sodium lamps HME 250W, high pressure metal halide lamps HIT 150W, high pressure sodium lamps HST 150W, HSE 150W; POWERFLEX 24 LED: high pressure sodium lamps HME 250W, high pressure metal halide lamps HIT 100W, high pressure sodium lamps HST 100W.

- Low Voltage Directive.
- Electromagnetic Compatibility Directive.
- RoHS Directive, WEEE Directive.



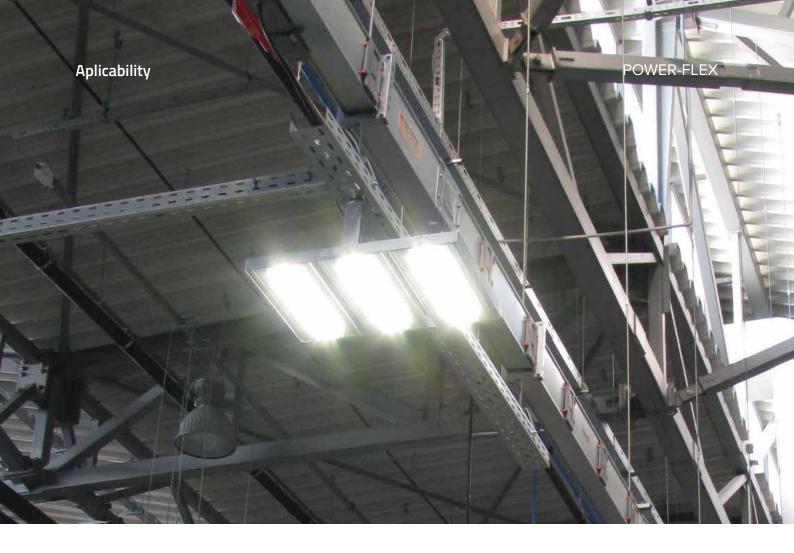












| Product Name | Variant [L x I x h] | Active Power [W] | Luminaire luminous flux net [Lm] | Luminaire efficacy [lm/W] |
|---------------|------------------------|---------------------|-------------------------------------|------------------------------|
| POWER FLEX-03 | 24 LED/200 5700K 70CR | 1 58 | 9000 | 155 |
| POWER FLEX-03 | 24 LED/200 4000K 80CR | 59.1 | 8380 | 142 |
| POWER FLEX-03 | 24 LED/280 5700K 70CR | 83.5 | 12100 | 145 |
| POWER FLEX-03 | 24 LED/320 4000K 80CR | 96 | 12100 | 126 |
| POWER FLEX-03 | 48 LED/200 5700K 70CR | l 117 | 18200 | 156 |
| POWER FLEX-02 | 48 LED/240 4000K 80CR | 140 | 18600 | 133 |
| POWER FLEX-01 | 72 LED/200 5700K 70CR | 175 | 27336 | 156 |
| POWER FLEX-01 | 72 LED/200 4000K 80CR | 175 | 23500 | 134 |
| POWER FLEX-01 | 72 LED/266 5700K 70CR | 244 | 34835 | 143 |
| POWER FLEX-01 | 72 LED/266 4000K 80CRI | 244 | 30100 | 123 |
| | | | | |

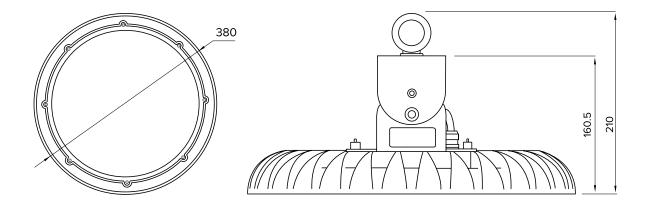
^{*}Range of products available from the 2nd semester



IEV-08

A high-performance product meant to be used in industrial spaces where there's exposure to higher-than-average temperatures.

General Information IEV-08



Technical features

- Rated voltage: 230V/50Hz.
- Active power: 61.2W 178.7W.
- Initial luminous flux: 8613 lm ÷22.860 lm.
- Ingress degree of protection: IP65.
- Ambient temperature range: -40°C ÷ + 50°C for the

Description and performances

- Die cast aluminium body.
- Diffuser from transparent secured glass.
- The optical system contains the power LED's that ensures a wide or narrow light distribution.
 Function of the specialised optics: 31°x96°, 16°, 42°, 60°, 82°.
- LED driver. On request the product could be equipped with dimmable driver – analogical 1-10V, emergency lighting kit.
- Mounting system with tilting facility for easy orientation of the luminous flux with index with 20° step.
- Driver (electronic driver) included in the product and manufactured according to the specific standards.
- Colour: grey.

- variants 16÷32 LED, -40°C ÷ +40°C for the variants 36÷40 LED +5°C ÷ +45°C for the variants with emergency lighting kit.
- Relative humidity: 80% at the temperature of +20°C.

Light sources

- Power LEDs: cool-white 5700K, CRI=70, neutralwhite 4000K, CRI=80, warm-white 3000K, CRI=70.
- The use of LEDs ensures a long lifetime L70B50, of over 60.000 hours at Ta=25°C, and a reduced power consumption.
- It is equivalent with projectors with high pressure sodium lamps HST 150W, HSE 250W, high pressure metal halide lamps HIT 250W.

- Low Voltage Directive.
- Electromagnetic Compatibility Directive.
- RoHS Directive, WEEE Directive.







23 www.elbalighting.com



| Product Name | Variant [L x I x h] | Active Power [W] | Luminaire luminous flux net [Lm] | Luminaire efficacy [lm/W] |
|----------------|------------------------|---------------------|-------------------------------------|------------------------------|
| IEV-08 16 LED | 16 LED/290 | 61.2 | 8613 | 141 |
| IEV-08 20 LED | 20 LED/370 | 91.2 | 12262 | 135 |
| IEV-08 24 LED* | 24LED/350 | 103.2 | 12144 | 118 |
| IEV-08 24 LED | 24LED/350 | 103.2 | 14020 | 136 |
| IEV-08 28 LED* | 28 LED/350 | 120.4 | 14168 | 118 |
| IEV-08 32 LED | 32 LED/350 | 138.9 | 18273 | 132 |
| IEV-08 36 LED* | 36 LED/350 | 159.5 | 17867 | 112 |
| IEV-08 40 LED* | 40 LED/350 | 178.7 | 19960 | 112 |
| IEV-08 40 LED | 40 LED/350 | 178.7 | 22860 | 128 |

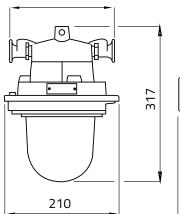
^{*} Range of products with CRI>80

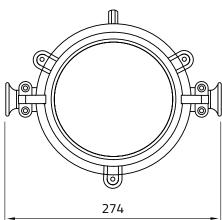


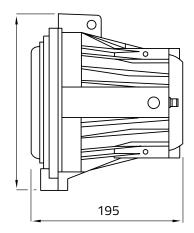
AV-02C

Explosion-proof product with a precise assignation: areas with dangers of explosions from Group 2 zone I and II.

General Information AV-02C







Technical features

- Rated voltage: 230V/50Hz.
- Active power: 55W.
- Initial luminous flux: 6798 lm.
- Ingress degree of protection: IP54.

- Ambient temperature range: -20°C ÷ + 40°C.
- Electrical LED parameters: 35V, I LED =1400mA.
- Protection type Ex II 2G Ex db e IIC T6 Gb.

Description and performances

- The product AV-02C is composed of a luminaire and a driver box type CAEx-02 LED.
- Painted pressure cast aluminium alloys housing and globe frame.
- Thermo-resistant glass globe for lamp safety.
- Cable insertions with rubber gasket sealing, for wire diameters of Φ 11- Φ 14 mm.
- Suspended stationary mounting and monophasic individually connection.
- Maximum wire cross-section: 2.5 mm².

- Number of terminals: 3+2 PE and 4 on the terminals compartment from the driver box CAEx-02 (F, N, L, PE).
- Explosion-proof protection II 2G Ex de IIC T4 Gb, (d) flameproof enclosures of the optical compartment, (e) increased safety of the terminal box. Lighting of environments with danger of explosion group II zone1 and 2.
- Certificate: AV-02C LED: INSEMEX-0EC ATEX.16.0305X, Protection type: II 2G Ex db e IIC T6 Gb, CAEX-02 LED: INSEMEX-0EC.ATEX.16.0304X
- Colour: yellow.

Light sources

■ COB LED module, CRI≥70, cool-white 5000K, with lifetime L70B50 over 35.000h at Ta=25° C.

- Low Voltage Directive.
- Electromagnetic Compatibility Directive.
- RoHS Directive, WEEE Directive.
- Directive 94/9/CE











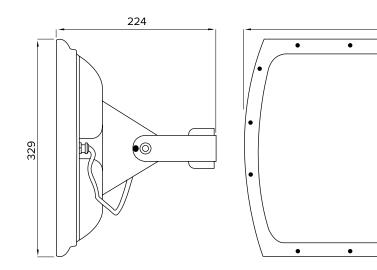
| Product Name | Variant | Active Power | Luminaire luminous | Luminaire efficacy |
|--------------|-------------|--------------|--------------------|--------------------|
| | [L x I x h] | [W] | flux net [Lm] | [lm/W] |
| AV-02C LED | | 55 | 6798 | 124 |



ARIA-02

ARIA-02 is part of a larger array of products, all of them meant to function in large spaces with high ceilings. This product has great optical parameters and a high degree of protection.

General Information ARIA-02



Technical features

- Rated voltage: 230V/50Hz.
- Active power: 103W, 174W, 229W.
- Initial luminous flux: 12500 lm ÷ 24841 lm.
- Ingress degree of protection: IP65

Mechanical impact resistance: IK08

561

- Ambient temperature range:-40°C- ÷ +50°C and -40°C ÷ +40°C for the variants cu ARIA-02 25 LED.
- Relative humidity: 80% at the temperature of +20°C.

Description and performances

- Aluminium body.
- Diffuser from transparent secured glass or on request from opal PMMA.
- The optical system contains the power LED's with optics that ensures a wide light distribution.
- Function of the optical system there could be obtained luminous distributions type: projector: 20°, 36°, 54°, 70° or large high bay: 120°

LED driver.

- Mounting system with tilting facility for easy orientation of the luminous flux with index with 20° step.
- Driver (electronic driver) included in the product and manufactured according to the specific standards.
- Colour: grey.

Light sources

- Power LEDs: cool-white 5700K, CRI=70, or neutral-white 4000K CRI=80 or CRI=70 which ensures a long lifetime L70B50, of over 50.000 hours at Ta=25°C.
- It is equivalent with projectors with high pressure sodium lamps HST, HSE 150W; 250W; high pressure metal halide lamps HIE 150W, 250W; HIT 150W, 250W high pressure mercury lamps HME 250W, 400W.

- Low Voltage Directive.
- Electromagnetic Compatibility Directive.
- RoHS Directive, WEEE Directive.









| Product Name | Variant [L x I x h] | Active Power [W] | Luminaire luminous flux net [Lm] | Luminaire efficacy [lm/W] |
|-------------------|------------------------|---------------------|-------------------------------------|------------------------------|
| ARIA-02 HTA 70CRI | 12 LED 5700K | 103 | 12500 | 121 |
| ARIA-02 HTA 70CRI | 12 LED 5700K | 103 | 11875 | 115 |
| ARIA-02 HTA 70CRI | 20 LED 5700K | 174 | 19174 | 110 |
| ARIA-02 HTA 80CRI | 20 LED 4000K | 174 | 18174 | 104 |
| ARIA-02 HTA 70CRI | 25 LED 5700K 70GR | 229.9 | 22841 | 99 |
| ARIA-02 HTA 70CRI | 25 LED 5700K | 229.9 | 24339 | 106 |
| ARIA-02 HTA 80CRI | 25 LED 5700K | 229.9 | 23082 | 100 |

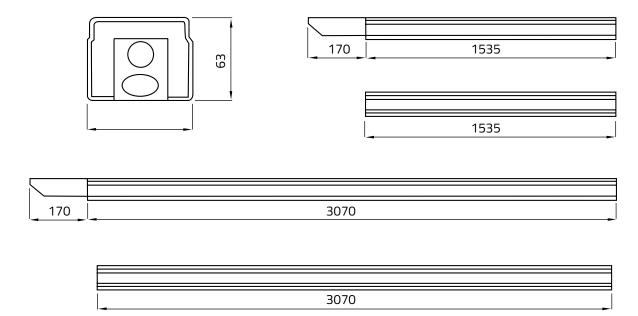


LINETA NOVA

Professional product meant to be used in commercial, industrial and storage spaces.

Fitting up to eight meters (modular or in a row) with a variable flux,
from narrow to very broad, can meet all user requirements.

General Information LINETA NOVA



Technical features

- Rated voltage: 230V/50Hz.
- Active power: 30W ÷ 70W.
- Initial luminous flux: 3534 ÷ 8184 lm.
- Ingress degree of protection: IP40.
- Ambient temperature range: -5°C ÷ + 35°C, 0°C ÷ + 35°C
- for the variants with emergency lighting kit EM1H.
- Relative humidity: till 80% at the temperature of + 20°C.
- The luminaire is manufactured according to the requirements of the standards: SR EN 60598-1, SR EN 60598-2-1.

Description and performances

- Symmetric light distribution: 30°, 60°.
- Asymmetric light distribution 25°.
- Rapid wiring for continuous line mounting and for mains power supply.
- On request the luminaire could be equipped with emergency lighting kit for 1 hour (1H) or 3hours (3H).
- Accumulators: Ni-Cd that ensure autonomy in emergency mode of 1 hour.
- The charging time of the accumulators: 20h.
- On the emergency mode the LEDs are powered from accumulators and ensure a reduced lighting that is needed for room evacuation.
- Note: The options could be combined function of the client request.

Light sources

- Medium power LEDs, colour temperature neutralwhite 4000K, CRI>80 lifetime L70B50>50,000 hours at Ta=25°C.
- The LED system included in the product could replace or is equivalent with fluorescent lamps T8 Ø26mm, T5 Ø16mm.

- Low Voltage Directive.
- Electromagnetic Compatibility Directive.
- RoHS Directive, WEEE Directive.









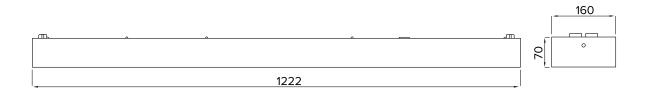
| Product Name | Variant [L x I x h] | Active Power [W] | Luminaire luminous flux net [Lm] | Luminaire efficacy [lm/W] |
|---------------|------------------------|---------------------|-------------------------------------|------------------------------|
| LINETA-04 MAP | 1RX5BX33LED | 30 | 3534 | 120 |
| LINETA-04 MAP | 1RX5BX33LED | 35 | 4464 | 130 |
| LINETA-04 MAP | 1RX5BX33LED | 43 | 5394 | 128 |
| LINETA-04 MAP | 1RX5BX33LED | 52 | 6324 | 124 |
| LINETA-04 MAP | 1RX5BX33LED | 56 | 6324 | 115 |
| LINETA-04 MAP | 1RX5BX33LED | 61 | 7254 | 121 |
| LINETA-04 MAP | 1RX5BX33LED DALI | 61 | 6510 | 109 |
| LINETA-04 MAP | 1RX5BX33LED | 70 | 8184 | 119 |
| LINETA-04 MAP | ORB | - | - | - |



LINDA

A simple product, very affordable, with no protection degree nor special design, LINDA is mostly meant for locker room hallways or technical common areas.

General Information LINDA



Technical features

- Rated voltage: 230V/50Hz.
- Active power: 18.4 W.
- Initial luminous flux: 2143 lm.

Description and performances

- Steel sheet body white painted with powder.
- PMMA opal diffuser with high luminous transmission (PMO) for a uniform light distribution.
- For the variant visible (A): distance piece from plastic material for fastening.
- For the variant SB (suspended with clips): Elastic clips from spring-stainless sheet for fast installation.
- On request the product could be equipped with emergency lighting kit for 1 hour (1H) or 3 hours (3H).
- Driver (electronic driver) included in the product and manufactured according to the specific standards.

- Ingress degree of protection: IP20.
- Ambient temperature range: 0°C ÷ +35°C.
- Relative humidity: till 80% at the temperature of + 20°C.

Light sources

- Medium power LEDs, colour temperature neutralwhite 4000K, CRI=80, lifetime L80B10 50,000 hours at Ta=25°C.
- On request the product could be equipped with LEDs with colour temperature cool-white day-light 6500K or warm-white 3000K.
- The LED system included in the product could replace or is equivalent with fluorescent lamp T8 Ø26mm, T5 Ø16mm.

Compliance with the European Directives

- Low Voltage Directive.
- Electromagnetic Compatibility Directive.
- RoHS Directive, WEEE Directive.





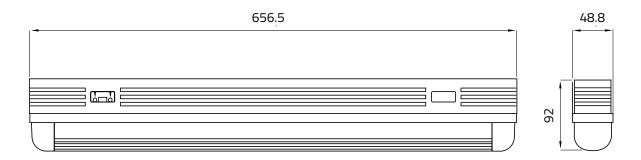
| Product Name | Variant | Active Power | Luminaire luminous | Luminaire efficacy |
|--------------|----------------------|--------------|--------------------|--------------------|
| | [L x I x h] | [W] | flux net [Lm] | [lm/W] |
| LINDA LED NG | 1Rx4B-14 PMO A 4000K | 18.4 | 2143 | 116 |



AB-02 ANDA LED

A product meant for narrow spaces with a high level of dust and humidity. Simplicity and commercial accessibility.

General Information AB-02 ANDA LED



Technical features

- Rated voltage: 230V/50Hz.
- Active power: 12.6W.
- Initial luminous flux: 1314 lm.

Description and performances

- Bathroom lighting (only in volume 3), for toilets lighting in hotels, hostels etc.
- Housing made of polycarbonate where the driversupport rail is clicked.
- Transparent polycarbonate diffuser with longitudinal striae.
- Driver (electronic driver) included in the product and manufactured according to the specific standards.
- Compliance with the European Directives
- Low Voltage Directive.
- Electromagnetic Compatibility Directive.
- RoHS Directive, WEEE Directive.

- Ingress degree of protection: IP44.
- Ambient temperature range: -5°C ÷ +35°C.
- Relative humidity: till 80% at the temperature of + 20°C.

Light sources

- Medium power LEDs, colour temperature neutralwhite 4000K, CRI=85, lifetime L80B10 over 50,000 hours at Ta=25°C.
- On request the product could be equipped with LEDs with colour temperature cool-white day-light 6500K or warm-white 3000K.
- The LED system included in the product could replace or is equivalent with fluorescent lamp T8 18W Ø26mm, T5 14W Ø16mm







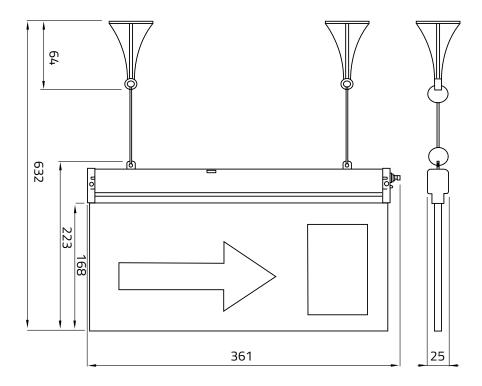
| Product Name | Variant [L x I x h] | Active Power [W] | Luminaire luminous flux net [Lm] | Luminaire efficacy [Im/W] |
|--------------|------------------------|------------------|-------------------------------------|------------------------------|
| AB-02-LED NG | 1Rx2B-14 LED PMO 6500K | 12.6 | 1314 | 103 |



CISA-04 LED

Exit efficiency and fast evacuations make the difference between safety and discomfort.

General Information CISA-04 LED



Technical features

- Housing, side lids and fastening supports from polycarbonate, display board from PMMA.
- Rated voltage: 230V/50Hz.
- Active power: 2W.
- Ingress degree of protection: IP 40.

- Ambient temperature range: -5°C...+ 35°C.
- Relative humidity: till 80% at the temperature of + 20°C.
- The luminaire is manufactured according to the requirements of the standards SR EN 60598-1, SR EN 60598-2-2, SR EN 62031.

Description and performances

- Housing, side lids and fastening supports from polycarbonate, display board from PMMA.
- The electronic circuit charges the batteries and also ensures the switching into the emergency functioning state of the luminaire.
- Accumulators: 3.6V/600 mAh sealed, for 1.5 hours autonomy, or respectively 3,6V/1000mA for 3 hours autonomy.
- Function of the accumulator's type there is ensured autonomy in emergency mode for 1.5 hours respectively 3 hours.
- Accumulators recharging time: 24 hours.
- The luminaire is equipped with a LED that signals the fact that the battery is recharging, and with a test button to verify the accumulator's charging state.

Light sources

LED strip.

Compliance with the European Directives

- Low Voltage Directive.
- Electromagnetic Compatibility Directive.
- RoHS Directive, WEEE Directive.

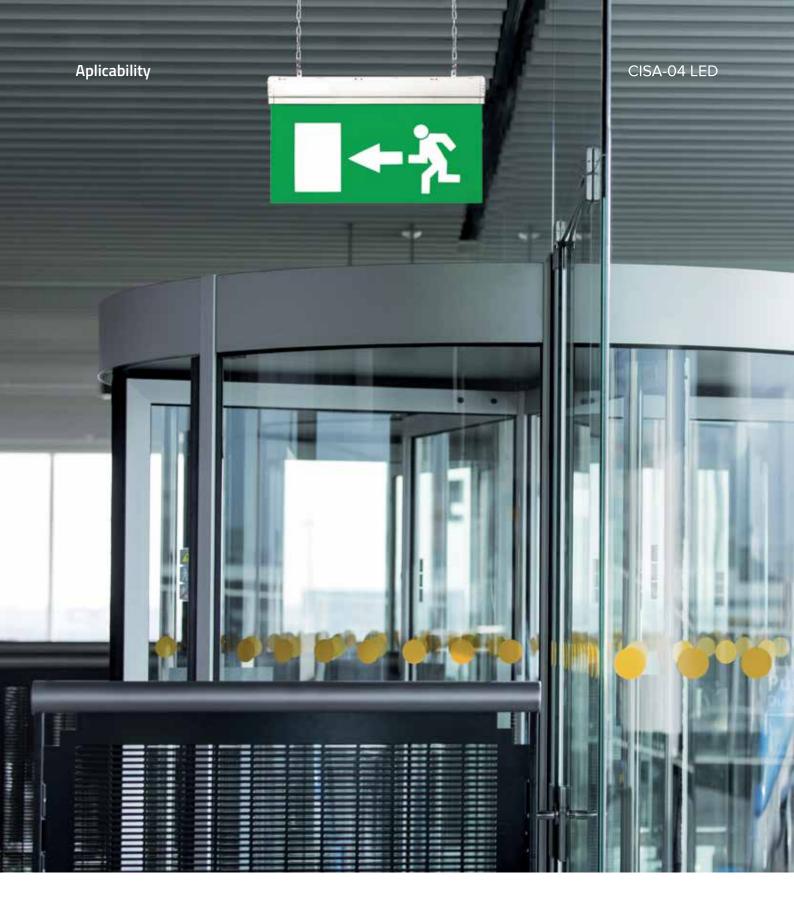








47 www.elbalighting.com



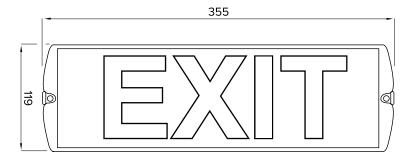
| Product Name | Variant [L x I x h] | Active Power [W] | Acumulator | Autonomy [hours] |
|--------------|------------------------|---------------------|----------------------|------------------|
| CISA-04 LED | 1.5h | 2 | Ni-Cd 3.6V/ 600 mAh | 1.5 |
| CISA-04 LED | 3h | 2 | Ni-Cd 3.6V/ 1000 mAh | 3 |

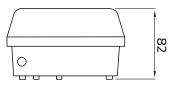


CISA-MARTE

Technical and industrial spaces also need a rapid evacuation in case of any dangers. Markings with CISA-MARTE, a product with a special degree of protection, can aid in revealing access ways.

General Information CISA-MARTE





Technical features

- Rated voltage: 230V/50Hz/24V/50Hz.
- Active power: 2W.
- Ingress degree of protection: IP 65.

- Mechanical impact resistance: IK02.
- Glow wire test: 960°C.
- Ambient temperature range: 0°C ÷ +35°C

background, in different variants.

inclusive on normally flammable surfaces.

with adhesive foil, written with white on green

Mounting system on wall or vertical surfaces. Through

its construction the luminaire could be mounted

The products that will have the purpose of signalling

the hydrants (fire plugs), and will be marked with the

"H" pictogram, must have compulsory the permanent

functioning variant (the IC variant - continuous lighting).

Driver included in the product and manufactured ac-

Description and performances

- Housing, reflector and diffuser made of polycarbonate.
- The electronic circuit ensures both the battery charging and the switching in the luminaire's emergency functioning mode.
- Accumulators: sealed Ni-Cd 3.6V / 600mAh, 3.6V / 1200mAh
- Function of the accumulator there is ensured a functioning autonomy in emergency mode of 1.5 hours, respectively 3 hours.
- Time of battery recharging: 24 hours.
- The luminaire is equipped with a LED signalling the fact that the battery is charging.
- The inscription on the emergency luminaire is made

Compliance with the European Directives

Low Voltage Directive.

Colour: white.

Electromagnetic Compatibility Directive.

cording to the specific standards.

RoHS Directive, WEEE Directive.

Light sources

LED module, colour temperature cool-white 6500K, CRI≥70, with long lifetime L70B50 50.000 hours at Ta=25°C.







51



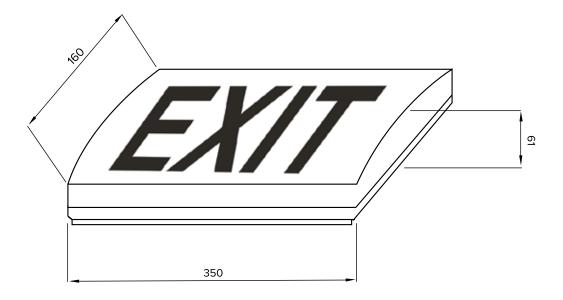
| Product Name | Variant [L x I x h] | Active Power [W] | Acumulator | Autonomy [hours] |
|--------------------------------|------------------------|---------------------|----------------------|------------------|
| CISA MARTE M LED | 1.5h | 2 | Ni-Cd 3.6V/ 600 mAh | 1.5 |
| CISA MARTE M LED | 3h | 2 | Ni-Cd 3.6V/ 1200 mAh | 3 |
| CISA MARTE M LED | IC 1.5h | 2 | Ni-Cd 3.6V/ 600 mAh | 1.5 |
| CISA MARTE M LED | IC 3h | 2 | Ni-Cd 3.6V/ 1200 mAh | 3 |
| CISA MARTE M LED 24Vac/50Hz | 1.5h | 2 | Ni-Cd 3.6V/ 600 mAh | 1.5 |
| CISA MARTE M LED 24Vac/50Hz | 3h | 2 | Ni-Cd 3.6V/ 1200 mAh | 3 |



CISA-02M

A product meant to highlight emergency exits, versatile and easy to incorporate in more complex safety lighting systems.

General Information CISA-02M



Technical features

- Rated voltage: 230V/50Hz/24V/50Hz.
- Active power: 2W.
- Ingress degree of protection: IP42.
- Mechanical impact resistance: IK02.

- Glow-wire test: 960°C.
- Ambient temperature range: 0°C ÷ +35°C.
- Relative humidity: till 80% at the temperature of + 20°C.

Description and performances

- Housing, reflector and diffuser made of polycarbonate.
- The electronic circuit ensures both the battery charging and the switching of the luminaire to emergency mode.
- Accumulators: sealed Ni-Cd 3.6V / 600mAh;
 3.6V/1200mAh.
- It is ensured a functioning autonomy in emergency mode of 1.5 hours / 3 hours.
- Recharging time: 24 hours.
- The luminaire is equipped with a LED signalling the fact that the battery is charging.
- Inscription label made with adhesive foil, written with white on green background, in different variants.

Light sources

 LED module, colour temperature cool-white 6500K, CRI≥70, with long lifetime L70B50 50.000 hours at Ta=25°C

- Mounting system for on surface mounting on vertical surfaces (wall). Through its construction the luminaire could be mounted inclusive on normally flammable surfaces.
- The products that will have the purpose of signalling the hydrants (fire plugs), and will be marked with the "H" pictogram, must have compulsory the permanent functioning variant (the IC variant – continuous lighting).
- Driver included in the product and manufactured according to the specific standards.
- Colour: white.

Compliance with the European Directives

- Low Voltage Directive.
- Electromagnetic Compatibility Directive.
- RoHS Directive, WEEE Directive.









| Product Name | Variant [L x I x h] | Active Power [W] | Acumulator | Autonomy [hours] |
|---------------|------------------------|---------------------|----------------------|------------------|
| CISA-02-M LED | 1.5h | 2 | Ni-Cd 3.6V/ 600 mAh | 1.5 |
| CISA-02-M LED | 3h | 2 | Ni-Cd 3.6V/ 1200 mAh | 3 |
| CISA-02-M LED | IC 1.5h | 2 | Ni-Cd 3.6V/ 600 mAh | 1.5 |
| CISA-02-M LED | IC 3h | 2 | Ni-Cd 3.6V/ 1200 mAh | 3 |

WE SUPPORT INNOVATION, PROMOTE SAFETY, IMPROVE QUALITY

As a key company in the lighting industry, ELBA's activities are driven by well established values and principles. Innovation fuels our activities. Respect-based relationships with our partners and employees is our policy.



