

BackLED L Basic G15

LED modules for light advertising and backlighting



Areas of application

- Signage and illuminated advertising
- Backlighting of single and double-sided light boxes (backlighting)
- Permanent outdoor use in enclosed light boxes

Product benefits

- Excellent module efficacy
- Very long lifetime
- 5 year guarantee
- Easy to install

Product features

- Connected with flexible cables
- Type of protection (modules): IP66
- Color rendering index $R_a > 80$
- Special robust encapsulation
- CE marked and UL listed



Product family datasheet

Technical data

Electrical data

| Product description | Nominal voltage | Nominal wattage | Nominal wattage per LED module | Reverse Voltage | Input voltage range |
|---------------------|-----------------|-----------------|--------------------------------|-----------------|---------------------|
| BA-L-BC -865 | 12.0 V | 45.0 W | 1.25 W | 13 V | 12...13 V |
| BA-L-BC -840 | 12.0 V | 45.00 W | | 13 V | 12...13 V |

Photometrical data

| Product description | Color temperature | Color rendering index Ra | Light color (designation) | Light color LED | Luminous flux per module chain | Luminous flux per LED module |
|---------------------|-------------------|--------------------------|---------------------------|-----------------|--------------------------------|------------------------------|
| BA-L-BC -865 | 6500 K | >80 | Cold White | White | 4650 lm | 129 lm |
| BA-L-BC -840 | 4000 K | > 80 | Daylight | White | | |

| Product description | Luminous efficacy | Standard deviation of color matching |
|---------------------|-------------------|--------------------------------------|
| BA-L-BC -865 | 103 lm/W | ≤3 sdc _m |
| BA-L-BC -840 | | |

Light technical data

| Product description | Beam angle |
|---------------------|------------|
| BA-L-BC -865 | 120 ° |
| BA-L-BC -840 | 120 ° |

LED module information

| Product description | Number of LEDs per module | Number of LED modules per chain | Minimum operable number of LED modules |
|---------------------|---------------------------|---------------------------------|--|
| BA-L-BC -865 | 3 | 36 | 1 |
| BA-L-BC -840 | 3 | 36 | |

Product family datasheet

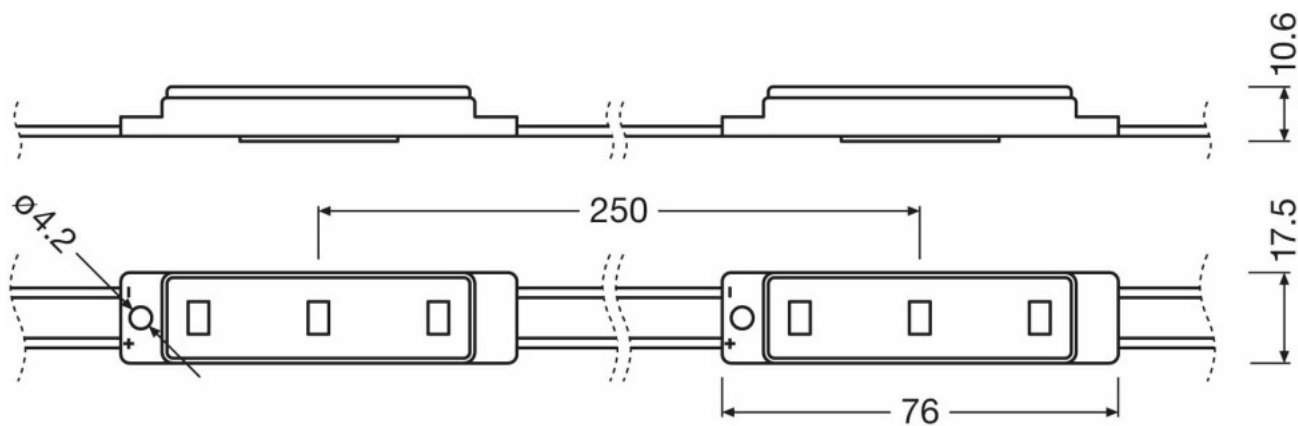
Dimensions & weight

| Product description | Length | Width | Height | Product weight |
|---------------------|-----------------------|---------|---------|------------------------|
| BA-L-BC -865 | 9000 mm ¹⁾ | 17.5 mm | 10.0 mm | 760.00 g ²⁾ |
| BA-L-BC -840 | 9000 mm ¹⁾ | 17.5 mm | 10.0 mm | 760.00 g ²⁾ |

¹⁾ Maximum LED pitch 250 mm

²⁾ Per chain

Product line drawing



BA-L-BC -865

Temperatures & operating conditions

| Product description | Temperature range in operation |
|---------------------|--------------------------------|
| BA-L-BC -865 | -25...70 °C ¹⁾ |
| BA-L-BC -840 | -25...70 °C ¹⁾ |

¹⁾ At the T_c point

Product family datasheet

Lifespan

| Product description | Lifespan |
|---------------------|-----------------------|
| BA-L-BC -865 | 50000 h ¹⁾ |
| BA-L-BC -840 | 50000 h ¹⁾ |

¹⁾ L70/B50 at Tc max. 70 °C

Capabilities

| Product description | Dimmable | Dimming range |
|---------------------|----------|---------------|
| BA-L-BC -865 | Yes | 5...100 % |
| BA-L-BC -840 | Yes | 5...100 % |

Certificates & standards

| Product description | Energy consumption | Energy efficiency class | Type of protection |
|---------------------|--------------------|-------------------------|--------------------|
| BA-L-BC -865 | 2 kWh/1000h | A++ | IP66 |
| BA-L-BC -840 | 2 kWh/1000h | A++ | IP66 |

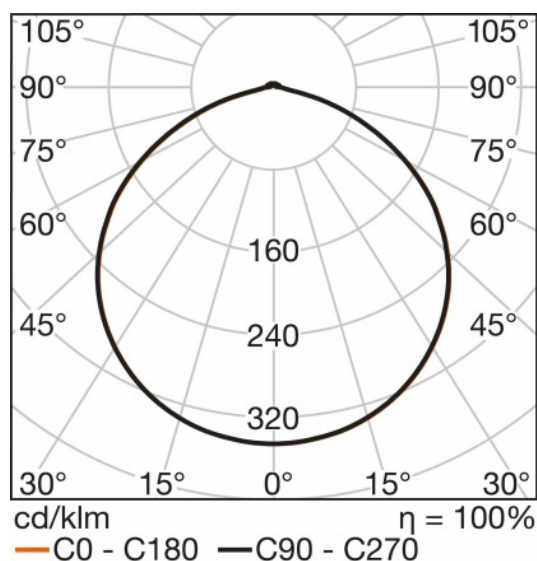
| Product description | Standards |
|---------------------|---|
| BA-L-BC -865 | Acc. to EC 61347-2-13/Acc. to EN 55015/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 61347-2-13/Acc. to EN 62384 |
| BA-L-BC -840 | Acc. to EC 61347-2-13/Acc. to EN 55015/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 61347-2-13/Acc. to EN 62384 |

Logistical data

| Product description | Temperature range at storage |
|---------------------|------------------------------|
| BA-L-BC -865 | -25...85 °C |
| BA-L-BC -840 | -25...85 °C |

Product family datasheet

Light Distribution



BA-L-BC -865

Equipment / Accessories

- BackLED mounting profile
- Several types of OPTOTRONIC 12 V power supplies available

Application advice

For more detailed application information and graphics please see product datasheet.

Additional product information

- Installation of LED modules (with power supplies) needs to be made under consideration of all valid regulations and norms.
- Installation by qualified electrician only.
- Please see the relevant application guides and instructions sheets for more detailed safety and mounting information. Additional information is available on request.
- Complies with IEC/EN 61547
- Complies with IEC/EN 61000-3-2
- Complies with EN 55015, CISPR 15
- Complies with IEC/EN 61347-1
- Complies with IEC/EN 61347-2-13
- Parallel connection is mandatory for safe electrical operation. Serial connection of LED modules is strongly discouraged. Unbalanced voltage drop in serial connection can cause hazardous overload and damage the LED module.
- Electrical contact is achieved with the contact cables or the terminals of the module. Please refer to the technical data for maximum number of LED modules that can be operated on one control gear.

Product family datasheet









In order to operate OSRAM LED modules safely, it is absolutely necessary to operate them with an electronically stabilized power supply that protects against short circuits, overload and overheating.

- In case other power supplies than OSRAM OPTOTRONIC are used, compliance to the necessary operating parameters (voltage, current, power) has to be ensured.
- Pay attention to polarity! Wrong polarity can cause destruction or malfunction of the module.
- Conducting paths on the circuit board must not be damaged or destroyed during installation.
- The LED module itself and all its components must not be stressed mechanically.
- Operation in or under water is prohibited.
- To avoid mechanical damage, the LED modules have to be attached securely to the intended mounting surface. It is recommended to avoid heavy vibration.
- In case that the LED module is equipped with a pre-mounted double-sided adhesive tape, OSRAM assumes no liability and provides no guarantee for a permanent adherence of the modules to the surface. OSRAM recommends fixation of the modules by means of suitable screws.
- Complies with IEC 61347-1 cl. 18.3, cl. 18.4, IEC 60695-2-10, IEC 60695-11-5, IEC 60695-11-10 (classification V-0)
- All the technical parameters apply to the entire module. In view of the complex manufacturing process for light emitting diodes, the specified typical values for the technical LED parameters are merely statistical values that do not necessarily correspond to the actual technical parameters of an individual product; individual products may vary from the typical values.
- To ensure uniform illumination, a reflective matt white surface is generally recommended for all internal frame walls and back panels of light boxes.
- LED modules are dimmable by means of PWM (pulse width modulation). It is recommended using the following OSRAM control gears: OPTOTRONIC OT DIM, OT DALI DIM or OPTOTRONIC 24 V power supplies with integrated 1...10 V dimming interface.
- The module may cause noises during dimming. If a dimming operation is required, it is recommended to check the dimming operation for noises before final installation.

Sales and Technical Support

Sales and Technical Support www.osram.com

Download Data

| File | |
|---|---|
|  | Brochures Technical application guide - IP codes in accordance with IEC 60529 (GB) |
|  | Brochures Technical Application Guide BackLED PlusBasic G15 and BoxLED Plus G15 (GB) |
|  | Brochures Impressive backlighting for signage and presentation (GB) |
|  | Declarations of conformity EC-DoC BackLED L Basic G15 |
|  | Declarations of conformity Manufacturer-DoC BackLED L Basic G15 |
|  | Installation guide G10533409 UI BackLED L M XS Basic G15 |
|  | CAD data 3-dim BA-L-BC 8XX G15 |
|  | CAD data 3-dim BA-L-BC 8XX G15 IGS |

Product family datasheet



CAD data PDF
BackLED L Basic G15 CAD PDF



Eulumdat
BackLED L Basic 865 G15 Eulumdat



IES data
BackLED L Basic 865 G15 IES

Logistical Data

| Product code | Product description | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Volume | Gross weight |
|---------------|---------------------|------------------------------|--------------------------------------|-----------------------|--------------|
| 4052899231931 | BA-L-BC -865 | Shipping carton box 5 | 566 mm x 320 mm x 202 mm | 36.61 dm ³ | 5952.00 g |
| 4052899231917 | BA-L-BC -840 | Shipping carton box 5 | 566 mm x 320 mm x 202 mm | 36.61 dm ³ | 5952.00 g |

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

References / Links

For Guarantee see

▶ www.osram.com/guarantee

Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.