

Mounting Instruction AluLED IP20 and IP66/IP67

Technical Details

Current supply: 24V DC
 Radiating angle: 120°
 Ambient temperature ta: -30 to +85 °C
 Storage temperature: -40 to +85 °C
 Degree of Protection: IP20 or IP66/IP67
 Max. Current Load: 3 A
 Luminous Flux Degradation: L70/B20 >50,000 hours at tp/tc = 50 °C
 CE Requirements: IEC/TR 62778
 Photobiological Safety: In accordance with the IEC 62471:2006 standard "Photobiological safety of lamps and lamp systems", AluLED modules belong to risk category 1. Classification was undertaken in accordance with IEC/TR 62778 at a distance of 20 cm.

Safety Instructions

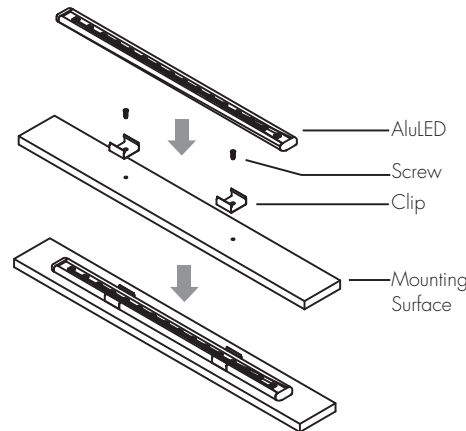
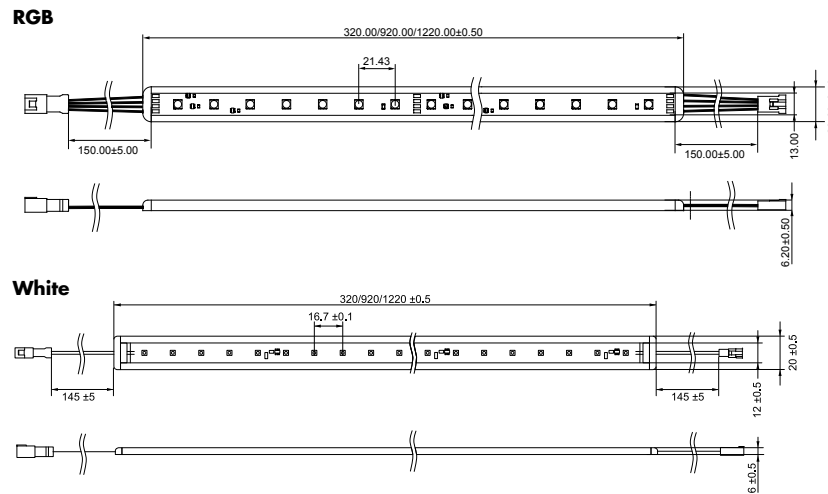
- AluLED products may only be installed and commissioned by authorised and qualified staff.
- Please read these instructions carefully prior to installing and commissioning the system since this is the only way to ensure safe and proper system operation. You are recommended to keep these instructions in a safe place for possible future reference.
- Any work undertaken on a device must only be performed after disconnection from the mains.
- Relevant safety and accident prevention measures must be observed.
- Products must never be improperly opened since electrical voltage poses a risk to life. Repairs must only be performed by the manufacturer.
- Connecting feeder/supply lines to external voltage, e.g. 230 V mains voltage, can destroy individual system components.

Mounting

Vossloh-Schwabe's AluLED IP20 modules are designed for contour and objekt lighting in protected indoor areas. Vossloh-Schwabe's AluLED IP66/IP67 modules are designed for indoor and protected outdoor applications. Typical application areas are:

- contour, building and path lighting in protected outdoor areas,
- lighting for bathrooms and wet rooms, and
- lighting for refrigerated counters.

1. Screw the mounting clips firmly to the substrate.
2. Click module into the mounting clips.



Mounting clips (brackets) are used to attach AluLED modules to a solid, load-bearing substrate. The mounting clips must be attached to the substrate using screws. The space left between the mounting clips must ensure the module neither bends nor bows. Once properly mounted, the AluLED module must be firmly enclosed by the mounting clips. The module can be installed any way up, but vertical wall mounting could lead to the module slipping out of the clips.

Sufficient clearance must be left to other neighbouring objects to allow for the longitudinal thermal expansion of the module. Care must equally be taken to ensure any collecting water (e.g. rain) can drain. To prevent corrosion, contact with base metals, aggressive fluids and gases must be avoided. Operation in environments that are chemically enriched with (aggressive) chemical substances can impair functionality and can even result in total module failure. Detailed information as well as examples of hazardous environments and chemical substances can be found

in the document "Chemical Incompatibilities Affecting LEDs", published by Vossloh-Schwabe Deutschland GmbH (www.vossloh-schwabe.com).

Installation Instructions

1. When using several modules, the connector of a feed-out line must be attached to the connector of the following module's feed-in line.
2. The final feed-out line must be protected against humidity and water ingress with a connector.
3. Connect control gear's feed-in line to the control gear unit (24 V constant current driver with a constant output voltage of 24 V ±0.5 V).
4. Check the polarity of the control gear's feed-in line (red + / black -).
5. Attach the control gear's feed-in line to the connector of the (first) AluLED module's feed-in line.
6. Calculate the total power uptake of the connected AluLED modules and compare the value with the data supplied for the connected control gear. Should the control gear's permissible total power uptake be exceeded, the equipment needs to be replaced with an adequately rated control gear unit.
7. Connect the control gear to the power supply in accordance with the installation instructions.

Each AluLED module is fitted with a pre-assembled feed-in line with a connecting terminal as well as with a feed-out line with a connector for looping the supply voltage through to the next AluLED module. Should this not be necessary, the spare connector must be protected against the ingress of humidity. Alternatively, the connecting terminal can be removed and the exposed connecting wires sealed using shrink caps that are internally coated with adhesive (Ref. No.: 543430 (transparent) or 543431 (black)). If only one such shrink cap is used to seal both connecting wires, care must be taken to ensure the wires are of differing lengths to prevent the internal metal conductors from touching one another.

The connecting terminals and connectors of the pre-assembled connecting leads prevent any reversal of polarity. Only the polarity of the control gear's requisite feed-in line (Ref. No.: 543426) can be reversed when connecting it to the control gear. Prior to commissioning, care must be taken to ensure the polarity of the control gear's feed-in line is correct. The red cable is "+" and the black cable is "-".

A 24 V constant current driver with a constant output voltage (24 V ± 0.5 V) must be used for control gear purposes. To ensure safe operation this 24 V constant current driver should also be fitted with protection against overvoltages, short-circuiting and overheating.

The maximum 3 A current load on the voltage supply line, the control gear's feed-in line and the extension lead must not be exceeded. The resulting maximum number of AluLED modules that can be connected is additionally dependent on the maximum output current of the 24 V constant current driver with a constant output voltage as well as the voltage drop caused by the AluLED modules and their leads.

Further Information

If the distance between the control gear and the (first) AluLED module is too great to be bridged using the feed-in lines of the control gear and the AluLED module, a VS extension lead (Ref. No.: 543427) must be used to close the gap. Should an extension lead additionally be used to connect AluLED modules that are farther away, the unavoidable electrical resistance of the extension lead will cause a more pronounced voltage drop, which in turn can impair the functionality of the AluLED modules. AluLED modules are designed for operation with a constant voltage of 24 V ± 0.5 V.



Vossloh-Schwabe Deutschland GmbH

Hohe Steinert 8 · D-58509 Lüdenscheid · Germany
 Phone +49 (0)2351/1010 · Fax +49 (0)2351/101217
www.vossloh-schwabe.com