

SIRIO LAMPS
BC / BF / BL
Lighting Series

ENGLISH

24 VDC

Installation Manual



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**Sirio "BC"****Sirio "BF"****Sirio "BL"**

1. Product Description

The lamps **SIRIO** series have the head completely in anodized aluminum with IP67 protection degree in order to withstand the most demanding industrial applications.

Proposed in two versions: 3 and 6 LEDs, they exploit LED technology with high luminous efficiency. **SIRIOs**, therefore, offer maximum luminous efficiency for the most demanding local industrial lighting needs. Flicker-free and dimmable thanks to the brand-new touch switch, the **SIRIO** are compact LED lamps ideal for workplaces and manual machine tools such as manual and semi-automatic cutters, parallel lathes, drills, brushing machines. Thanks to the 3 arm possibilities, it guarantees a very precise adjustment of the head position.

- Structure made entirely of anodized aluminum
- Maintenance-free thanks to high efficiency LED technology
- Light source 3 or 6 power LED
- Light color 5,000 K
- 24 Vdc power supply via M12-A 3P connector
- Dimmable with touch system
- Optic 40° concentration lens
- External plug-in power supply available for 100 - 240 Vac power supply

2. Safety instructions

SIRIO Lighting Series has been designed and manufactured on the basis of state-of-the-art techniques.

It is made of well-selected, high-quality materials. It is carefully tested throughout the production process, from the raw material through to packaging, following a detailed production schedule so as to guarantee that the product is safe and reliable.

Material damages, as well as bodily injuries, may nevertheless still occur while using it.



- This manual is part of the equipment and must always be kept with it.
- Please make sure that ALL instructions/information in this manual are carefully read through
- Strict compliance with the instructions provided in this manual and on the lighting, equipment is required for its correct use
- Installation and use of the product is recommended only provided it is in perfect conditions, and the

user is well-acquainted with all safety instructions

- CCEA, the manufacturer, waives any responsibility in case of product tampering or improper use

2.1 Proper use of product

This lighting equipment is fit for being installed inside machine tools, even in a wet environment.

2.2 Product Safety

Electrical Risks

The improper and incorrect use of the equipment may cause body injuries and material damages.

- All electrical connection procedures must be carried out by a licensed electrician
- Switch off power supply before any installation, maintenance or reparation procedures.
- Please ensure that the power supply rated tension and frequency meets the requirements shown on the product label. Please respect cable polarity.
- Maintenance and reparations must only be carried out by qualified electricians.

Risk of explosion

The risk of the explosion might occur upon installing and using this product for applications with a

high risk of explosion. It might cause severe body injuries.

- **Do not** install and use this product in hazardous environments (high risk of explosion).

Installation and safety

- Handle the lamp with care and avoid having it drop or being hit even it is still packed, which might cause body injuries, as well as material damages.
- Ensure the original fixing accessories are used, as available from the manufacturer.
- Set up the fixing accessories properly.
- The equipment must be correctly fastened using the proper screws according to the application, place and surface where the product is being mounted.
- Ensure that the fastenings are regularly checked.

Danger of dazzling glare due to a white light source

Avoid staring directly at the light source, as it may cause a temporary reduction of vision. Irritation, aches, damages, or accidents may as well occur.

- Avoid staring directly at the light source.
- The device must be adjusted so as to avoid having the light

flow directed towards the eyes.

Danger caused by inappropriate spare parts.

Using inappropriate spare parts may cause bodily injuries and material damages.

- **Do not** use spare parts that have not been approved by the manufacturer.

Damage caused by presence of laser beams

Use of the **SIRIO Series** Led lighting equipment is **not** allowed when a high-power laser is operating, since it may damage the Led source.

Danger due to high temperatures

Installing and using the equipment in all the environments where the existing temperature remarkably exceeds the foreseen operating temperature will considerably reduce Led lifetime while damaging as well the built-in electronic components.

- **Do not** use this Device in environments where the operating temperature of the device is exceeded.
- Operating temperature - 4°/113°F (-20 / +45 °C)
- Avoid direct solar radiation.

Danger due to repairs

Having the product disassembled or repaired without any appropriate technical /electrical

knowledge may cause damages to persons and objects.

- **Do not** try to repair or disassemble the equipment. Please apply to qualified technicians for any issues.
- Any product tampering or modifications not having been approved by the manufacturer will null and void the warranty.

2.3 Damage risk levels



DANGER

Dangers where noncompliance may **immediately** severe injuries and eventually lead to death.



WARNING

Dangers where failure to satisfy requirements **may** lead to severe injuries or even to death.



ATTENTION

Dangers where failure to satisfy requirements **may** lead to injuries.

NOTICE

Dangers where failure to satisfy requirements **may** cause damages to objects.

3. Available versions

Please refer to the table hereunder listing all the lighting equipment, for you to identify the model you need and its main features, for you to have the lighting equipment correctly and efficiently installed and used.

Note: The product code is found on the brand name label stuck on the product's backside.

- Find out the product code printed on the brand name label and see if you find it on the table hereunder;
- Compare the codes and see if you can identify the same model on the table hereunder;
- The code printed on the brand name label shows the device's week and year of production.

SIRIO BC						
Model	Optics		Power	Power Usage	E Connection	Dimmer Weight
SR0321BC1	lens	40 °	6 W	24 Vdc	CABLE 9 ft (2,8 m) + M12	1.87 lb (0,85 kg)
SR0321BC3	lens	40 °	6 W	24 Vdc	CABLE 9 ft (2,8 m) + M12	1.87 lb (0,85 kg)
SR0621BC1	lens	40 °	12 W	24 Vdc	CABLE 9 ft (2,8 m) + M12	• 1.94 lb (0,88 kg)
SR0621BC4	lens	40 °	12 W	24 Vdc	CABLE 9 ft (2,8 m) + M12	• 1.94 lb (0,88 kg)

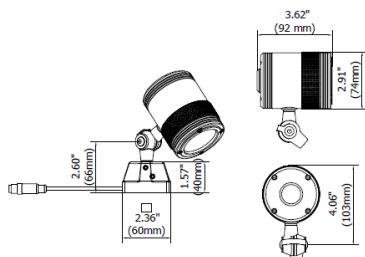
SIRIO BF						
Model	Optics		Power	Power Usage	E Connection	Dimmer Weight
SR0321BF1	lens	40 °	6 W	24 Vdc	CABLE 7.2 ft (2,2 m) + M12	3.97 lb (1,8 kg)
SR0321BF3	lens	40 °	6 W	24 Vdc	CABLE 7.2 ft (2,2 m) + M12	3.97 lb (1,8 kg)
SR0621BF1	lens	40 °	12 W	24 Vdc	CABLE 7.2 ft (2,2 m) + M12	• 3.64 lb (1,65 kg)
SR0621BF5	lens	40 °	12 W	24 Vdc	CABLE 7.2 ft (2,2 m) + M12	• 3.64 lb (1,65 kg)

SIRIO BL						
Model	Optics		Power	Power Usage	E Connection	Dimmer Weight
SR0321BL1	lens	40 °	6 W	24 Vdc	CABLE 6.5 ft (2 m) + M12	3.97 lb (1,8 kg)
SR0321BL3	lens	40 °	6 W	24 Vdc	CABLE 6.5 ft (2 m) + M12	3.97 lb (1,8 kg)
SR0621BL1	lens	40 °	12 W	24 Vdc	CABLE 6.5 ft (2 m) + M12	• 3.97 lb (1,8 kg)
SR0621BL3	lens	40 °	12 W	24 Vdc	CABLE 6.5 ft (2 m) + M12	• 3.97 lb (1,8 kg)

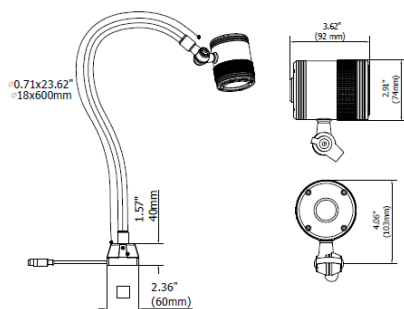
4. Guide to installation

4.1 Product sizes and accessories

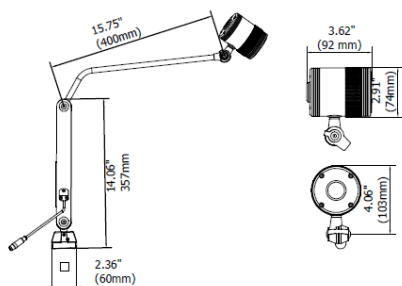
Sirio BC



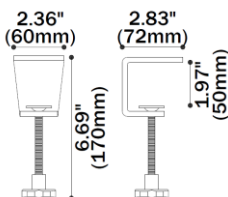
Sirio BF



Sirio BL



4.2 Mounting accessories



cod. **CLAMP04**

Robust, versatile vibration-resistant metal clamp made of black powder-coated stainless steel. Quick assembly on workbenches, manual machine tools, drilling machines etc.

4.3 Installation



ATTENTION

The lamp fall-down may cause damage to persons and objects

- When mounting the lamp ensure that the original fastenings are used, which you may purchase from the supplier.
- Have the fastening accessories correctly mounted.
- **Version with flex arm: do not bend the flexible tube and avoid small bending radii.**



WARNING

Switch off the power supply before proceeding to installation.

Correct installation using M5 screws

The lamp base has 4 fixing holes for screws up to M5. Provide the fixing holes on the dedicated surface following the indications of the fixing distances shown in the figure. Use screws of adequate size and material depending on the application.



□ 1.77in (45mm)
n.4-Ø0.22" (5,5mm)

Installation with metal clamp CLAMP04

Fix the clamp to the base of the lamp using the supplied M5 screws. Then fix the lamp on the support surface by adjusting the thickness with the appropriate handwheel knob

NOTICE

Damaged or broken lamp.

- When mounting the lamp ensure to never completely loosen the M5 screws in order to avoid the lamp fall- down.

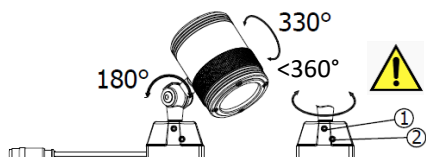
NOTE: The fastening parts for this lamp are available as accessories. Please For further details, visit our website:

www.ccealights.com



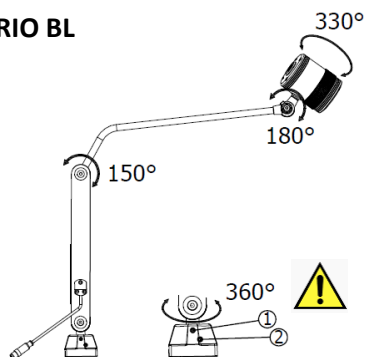
Lamp adjustments

SIRIO BC



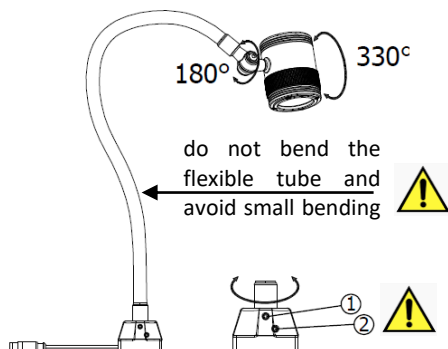
- ① Unscrew to allow rotation.
Warning! Do not turn the spot several times on itself so as not to damage the cable.
- ② Do not unscrew and do not remove.

SIRIO BL



- ① Unscrew to allow rotation.
- ② Do not unscrew and do not remove.

SIRIO BF



- ① Unscrew to allow rotation.
Warning! Do not turn the lamp several times on itself so as not to damage the cable.
- ② Do not unscrew and do not remove.

5. Plug-in

NOTICE

Material damages caused by liquid leakage

- Use a connector securing the same degree of protection as the lamp, if not greater.
- Ensure that the power cord is correctly plugged into the female connector.



Standard version: M12 3P Male connector A Coding (on the lamp)

PIN	Connection
1	DC + (24VDC)
3	DC – (0VDC)
4	Not connected

5.1 Low voltage plug-in with M12 connector

NOTICE

Wrong wiring may cause damages to the lamp

- All electrical connections have to be carried out by qualified electricians.
- Please respect the polarity of connectors
- Always use the power cord supplied with the lamp.
- Ensure that the supply voltage range to the lamp is closely respected in order to avoid damaging the Led drivers. Voltage range 22 ÷ 30 VDC.

5.2 100-230Vac plug-in with external AC/DC converter

NOTICE

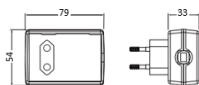
Wrong wiring may cause damages to the lamp

- All electrical connections have to be carried out by qualified electricians.
- Please respect the polarity of connectors
- Always use the power cord supplied with the lamp.

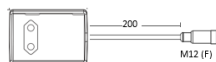
For connection to the mains voltage, use the AC / DC converter, Cod. SR.230.18W (to be ordered separately)



Make the connection using the M12 connectors, male on the lamp, female on the driver. Respect the polarities.



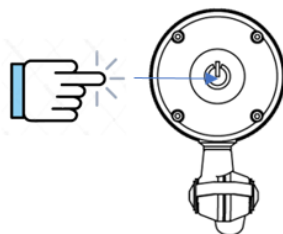
cod. SR.230.18W
AC/DC Converter
Vin: 100 – 240 Vac
Vout: 24 Vdc
P: 18 W
L cable and connector: 0,2 m
Europlug



with M12-A 3P (F) connector
pin 1 +24 Vdc
pin 3 0 Vdc
pin 4 not connected

6. Dimmer switch

- Some version is equipped with an independent dimmer on/off touch system.



The touch dimming system allows for the regulation of the lamp's luminous intensity from the maximum value to a 30% minimum and vice versa.

Operations:

- POWER ON: quick touch
- POWER OFF: quick touch
- DIMMER: touch the sensor to start the adjustment and keep contact until the desired light intensity is reached. To reverse the direction of the adjustment, stop touching the sensor for a while and start touching again.
- When led light flash, luminous intensity is at the maximum or minimum level

On power-up, the sensor keeps a record of the last adjustment status.

7. Troubleshooting

In case the lamp doesn't turn on:

- Check that the lamp is properly wired to the supply voltage.
- Check that polarity wiring has been carried out correctly.

Please contact CCEA'S USA Technical support service in case the lamp is defective

CCEA Technical Support Service
Phone: +39 0444 572083

ccea@ccealights.com
www.ccealights.com

8. Replacing the Led light source

The outstanding lifetime of the LED light source, over 60.000 hours, makes it unnecessary to replace the PCB LED if the lamp is properly installed and used following the instructions in this manual. Please contact CCEA's Technical Support service - or your Reseller – in case the replacement of the PCB LED is needed for any defects not covered by the warranty.

9. Product maintenance and cleaning



WARNING

Switch off the power supply before any installation, maintenance, or repair procedures.

This product is maintenance-free.

- Lamp cleaning is to be carried out only after it has been switched off and surfaces have cooled.
- Carefully rinse the lamp surface with a mild cleanser and then wipe off using a soft cloth in order to avoid scoring

NOTICE

All material damages caused by liquid leakage may damage the lamp.

- In case the lamp is working in environments where lubricants or coolers are present, all cleaning operations should be carried out at the end of the working cycle.

10. Repairs

NOTICE

All material damages caused by poorly executed repairs may damage the lamp

- All repairs must be carried out by the manufacturer or by qualified technicians.
- Only use spare parts having been approved by the manufacturer.

- Any unauthorized repairs or attempts to repair the product;
- Equipment operation under environmental conditions other than those specified in the user manual;
- Liquid leakages inside the lamp;
- Failure to follow the safety precautions related to transport and to shipping the product back for repair (please make sure to have it shipped back in its original case).

11. Warranty

Terms of warranty

CCEA ensures that any control procedures or repairs – to be carried out exclusively at/by CCEA Technical service dept. or by any CCEA'S official dealer – are covered throughout the entire product's lifetime. In view of the above, take care to preserve the product label and case, to be submitted if any repair operations are needed.

All repair and spare parts costs will be notified after the defects have been examining.

The warranty does not cover:

- Any transport, packaging, or shipping costs;
- Any damages or deterioration caused by:
 - Installation and/or operation carried out following different ways;

Period of warranty

The warranty period covers 24 months, starting from delivery date. CCEA guarantees that the products have no manufacturing defects or malfunctioning.

12. Product disposal

All the electrical and electronic equipment (WEEE) have to be managed with a selective waste sorting and cannot be disposed of as municipal waste, as provided for in Directive 2012/19/UE.

In view of the above this equipment, all its components, subsystems and the consumables which are an integral part of the product have to be conveyed to the local collection facilities for them to be disposed of in accordance with the current legislation.

Please apply to the council offices of your place of residence in order

to know where the collection facilities are located.



13. Technical data

NOTE: Please refer to the data printed on the label stuck on the lamp.

Power supply	24 VDC
Power input	6 – 12 W
IEC Class	III (24 Vdc)
Degree of protection	IP67
Light color temperature	5000K
CRI	80
Operating temperature	-4 F° / 113° F (-20 / +45 °C)
For any further information please refer to the table at page 7	

14. Symbol keys

	CE Conformity marking
	Protection class III device
IP67	Degree of protection IP67
	Resistant against water and some coolant, emulsion, oil

15. Dedaration of Conformity

C.C.E.A. SRL, via Piave, 2 - 36077 Altavilla Vicentina (VI), Italy – VAT and Tax number 02374040240 hereby declares that the light equipment named “SIRIO BC/BF/BL” series – to which the present Declaration of Conformity is related - was manufactured by CCEA SRL in accordance with the following Directives: 2014/35/UE on Low Voltage Equipment Safety and the Directive of Electromagnetic Compatibility 89/336/CEE (EMC) 2014/30/UE. The unit complies in particular with the following regulations:

- **Directives:** **Machinery Directive 2006/42/EC**
 Low Voltage Directive 2014/35/EU
 EMC Directive 2014/30/EU



- **Harmonized Standards**

- CEI EN 60598-1 “Lighting equipment. Part 1: General instructions and tests”
- CEI EN 60598-2-4 “Lighting equipment part 2: particular requirements – part 4 Portable general-purpose luminaries”.
- CEI EN 62031 “LED modules for general lighting. Safety specifications”.
- CEI EN 62384 “DC or AC supplied electronic control gear for LED modules. Performance requirements”.

This is a standard product manufactured following a detailed production schedule ensuring that inspections and destructive tests were carried out, for a safe, functional and sustainable product to be delivered.

C.C.E.A. SRL disclaims any responsibility resulting from tampering and/or wrong use of the device.

Date: _____
Week of production: _____
Product code: _____



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