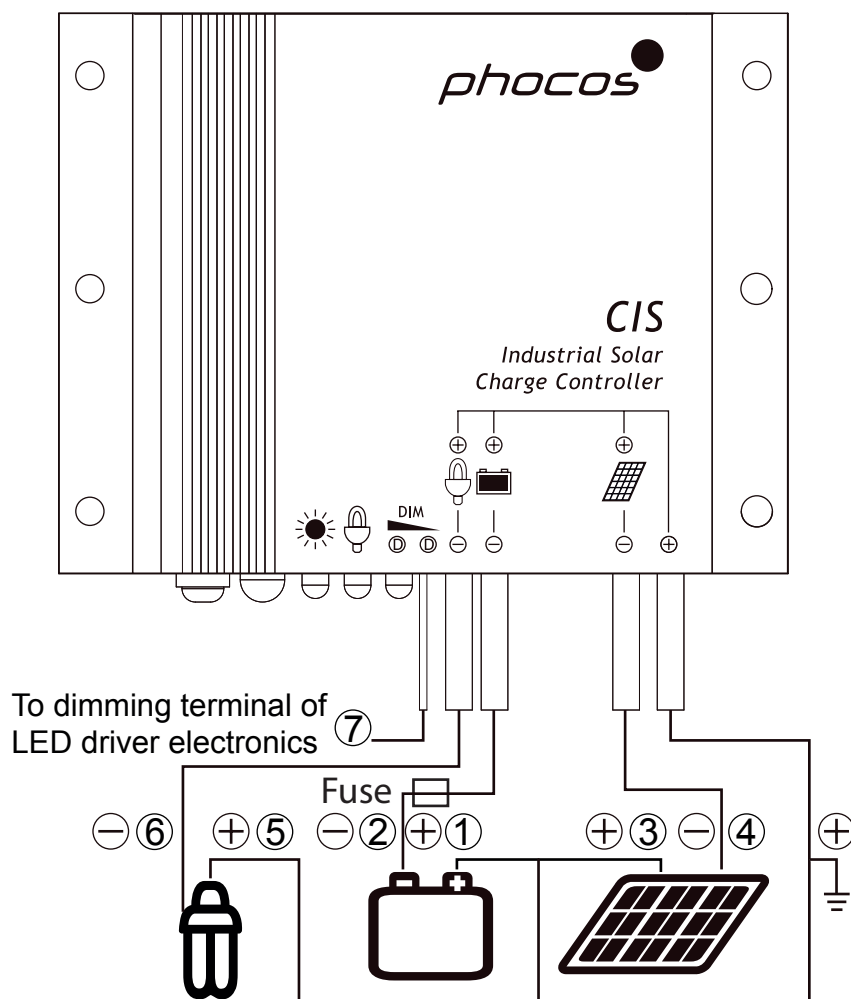


# Quick start CIS charge controller (positive grounded)

Installation recommendations valid for both versions (CIS Dimming and CIS Dual Load):

## 1. Detailed installation wiring



**IMPORTANT:** Connect wires in the order indicated 1 2 3 4 5 6 7 to avoid installation faults!

**VERY IMPORTANT:** When disconnecting the charge controller, the reverse order (7 6 5 4 3 2 1) must be observed or permanent damage to the controller may result!

Step	Function	Cable marker	Wire size (cross section)	Color
1 2	Positive battery wire Negative battery wire	COMMON* + BATTERY -	2.5 mm <sup>2</sup> (AWG 13) 2.5 mm <sup>2</sup> (AWG 13)	Red Black
3 4	Positive panel wire Negative panel wire	COMMON* + SOLAR -	2.5 mm <sup>2</sup> (AWG 13) 2.5 mm <sup>2</sup> (AWG 13)	Red Blue
5 6	Positive load wire Negative load wire	COMMON* + LOAD -	2.5 mm <sup>2</sup> (AWG 13) 2.5 mm <sup>2</sup> (AWG 13)	Red Green
7 <b>DIM</b>	Dimming signal wire	--	0.6 mm <sup>2</sup> (AWG 19)	Black

\* **Note 1:** The COMMON + is consists of one single conductor exiting from the charge controller:  
This conductor is used to connect to multiple external system components like PV panel, battery and load. Please use a high quality connector rated for this purpose.

**Note 2:** Previous versions of the CIS controller presented all wires in black color.

From the charge controller: this conductor is connected to multiple devices like PV panel, battery and load. Please use a high quality connector for these interconnections.

## Quick start CIS charge controller (follow up)

2. Please always observe the connection sequence of the wires whenever installing (1 2 3 4 5 6 7) or removing (7 6 5 4 3 2 1) this charge controller from a PV circuit.
3. When performing any maintenance or substitution of the battery in a given circuit where this charge controller is in use, make sure that FIRST the connection to the PV panel and to the charge controller is opened (interrupt the electric circuit) for safety reasons and also for protecting the controller. Not observing this procedure may permanently damage the charge controller.
4. This charge controller has been designed to meet all the IP68 requirements and fulfills those in its entirety.
5. We do not recommend mounting the charge controller so that it will be exposed to direct sun light. This will unnecessarily heat up the controller and also produce accelerated and (undesired) aging for which Phocos cannot take responsibility. Symptoms of excessive exposure to direct sunlight are: Brittleness of the wires insulating material and bleaching of the black color anodized charge controller housing finishing.