

# kreon installation manual

## technics & dimensions

electrical connection of current driven LEDs  
calculating total power of LED-driver system

$$\begin{aligned} P_{\text{tot}} &= n \times P_{\text{led}} \\ P_{\text{driver}} &\geq P_{\text{tot}} \\ I_{\text{led}} &= I_{\text{driver}} \end{aligned}$$

$n$  = number of LEDs  
 $P_{\text{driver}}$  = power of driver (Watt)  
 $P_{\text{led}}$  = power of LED (Watt)  
 $P_{\text{total}}$  = total power of all LEDs (Watt)

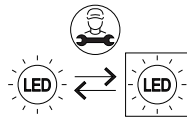
$I_{\text{led}}$  = LED current (mA)  
 $I_{\text{driver}}$  = Driver current (mA)

ALWAYS CHECK PRODUCT MANUAL!!

## 1. light source/gear information

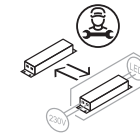
### light source containing product

The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.



### gear containing product

the gear contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person



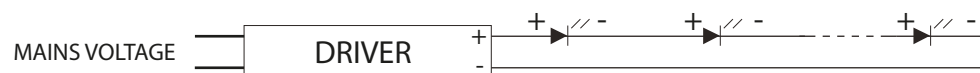
Please make sure the main voltage is disconnected before proceeding! ⚡

## 2. installation

in case of connecting 1 LED



in case of connecting multiple LEDs



### IMPORTANT NOTE (in both cases)

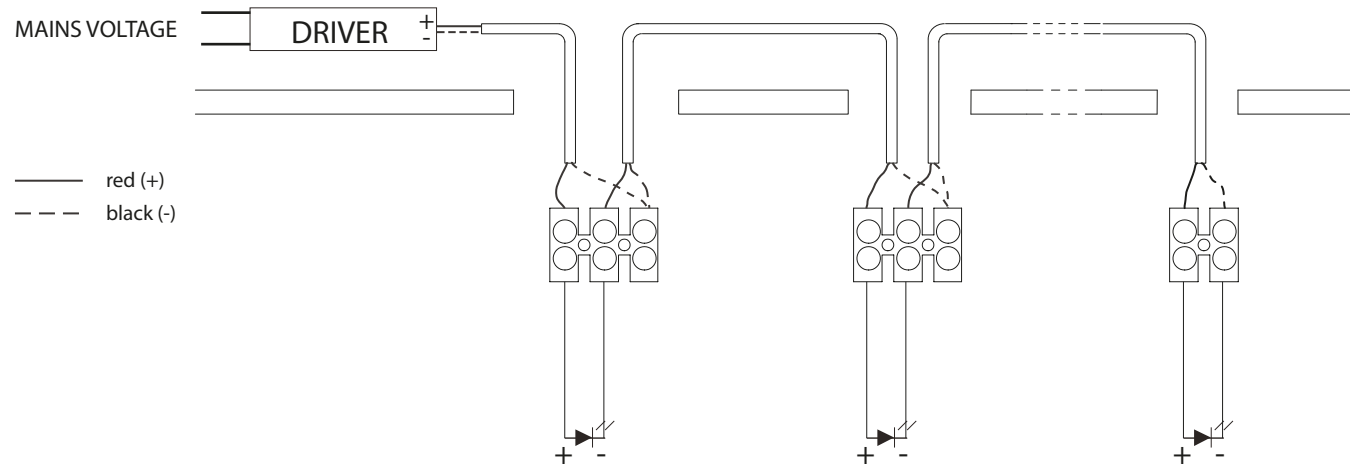
- mind the polarity of the LED! (\*)
  - + = red
  - = black
- make sure the driver hasn't been powered for at least 1 min. prior to connecting the LED string
- check your driver: if the driver is switchable, make sure you set the right current (same current as LED).
- the use of a too high current will damage the LEDs

(\*) in case the wires of LED are not red and black, check the product manual for more information!

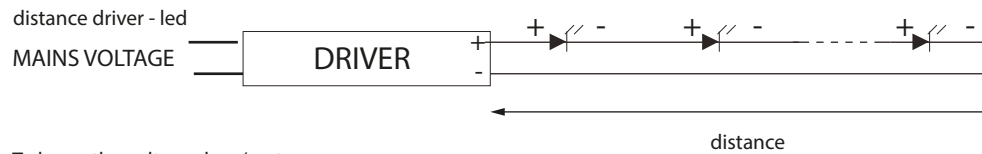
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## 3. installation

example of connecting multiple LEDs



## 4. installation



To know the voltage drop/meter:

- determine led current, wire thickness and length of wiring
- length of wiring is the total length of all the wires going from/to the driver
- note: recommended distance (according to most suppliers) from driver to last LED is 5m  
lengths above 5m may induce RFI

		Ledcurrent		
		350mA	500mA	700mA
Wire thickness	0,5mm <sup>2</sup>	0,012V	0,0175V	0,025V
	0,75mm <sup>2</sup>	0,0081V	0,012V	0,016V
	1mm <sup>2</sup>	0,0061V	0,0088V	0,012V
	1,5mm <sup>2</sup>	0,004V	0,0058V	0,0081V
	2,5mm <sup>2</sup>	0,0025V	0,0035V	0,005V

(\*) length of wire = distance x2