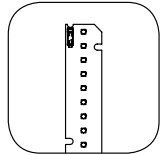


MERAKI LED MODULES

MERAKI RGB RIGID LINEAR CV 24 V 282-702 (70-282X24MM)



MERAKI family introduces the new RGB 282-702 24V modules. They are designed to be feed at constant voltage of 24V. Module's colour reproduction consistency and LEDs distance in a relation of 80 LED/m makes it an outstanding architectural lighting product for direct and indirect lighting as pubs, restaurants, or areas where environmental colours play a central role. High final performance with linear small-sized fixtures, light homogeneity and short distance to diffuser. Great length flexibility, with a minimum of 70mm for unthinkable corners. Module's dimensions are ZHAGA format compatible and a fitting partner for transforming monochromatic linear luminaires to RGB.



In compliance with:

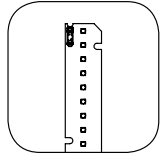
IEC 62031 / IEC 62471 / IEC 62717

APPLICATION

PRODUCT DESCRIPTION



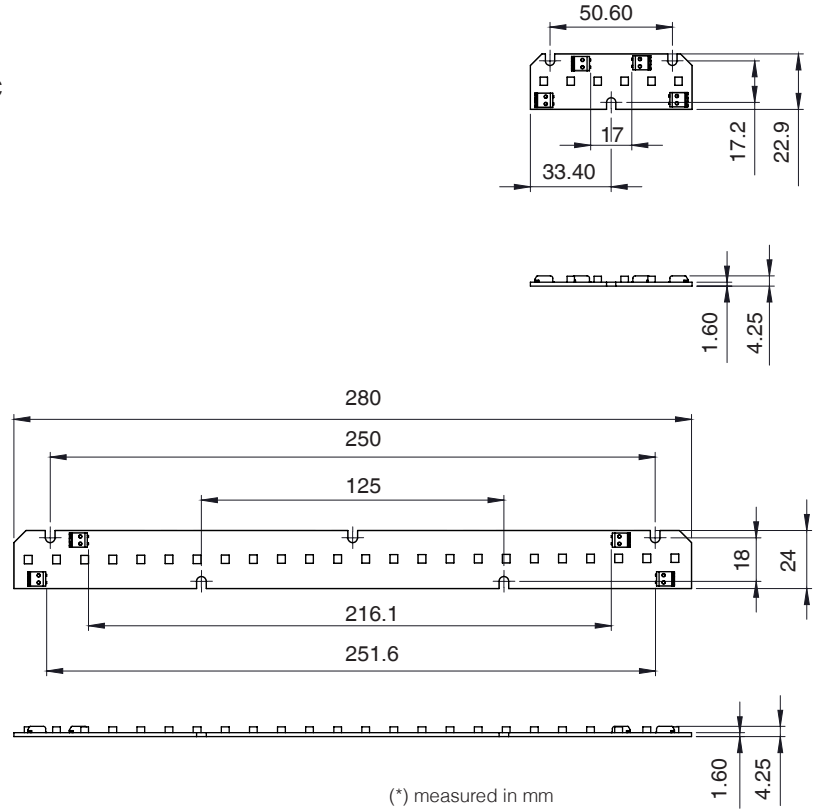
- Efficiency > 110lm/W
- Push-In connector type
- Easy installation
- ZHAGA compatible
- High colour homogeneity
- Compact design 24mm wide
- Minimum length 70mm
- SELV voltage – 24V



TECHNICAL DATA

- SELV voltage
- Available with 80 LED/m
- Operating temperature between -20°C and +45°C
- EN 61471:2008 group 1
- Standard Tc 75°C
- Viewing LED angle 120°
- Weight 60 g
- MOQ 44 units
- Packaging box weight (approx.) 2640 gr
- PWM dimmable

DIMENSIONS



SPECIFIC TECHNICAL DATA

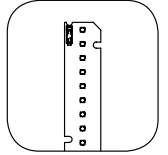
SPECIFIC TECHNICAL DATA

CODE	QTY LED	RATED CURRENT mA	VOLTAGE Min (V)	VOLTAGE Typ(V)	VOLTAGE Max(V)	NOMINAL POWER (W)	COLOR	TOTAL FLUX (lm)	SPE-CTRUM
31.13.282.24C. RGB	24	240	24	24	24	5,76	RED	62,4	620-630
							GREEN	126,5	510-525
							BLUE	31,68	455-470
31.13.702.24C. RGB	6	60	24	24	24	1,56	RED	T:220,6	620-630
							GREEN	15,6	510-525
							BLUE	31,63	455-470
								7,92	
								T:55.145	

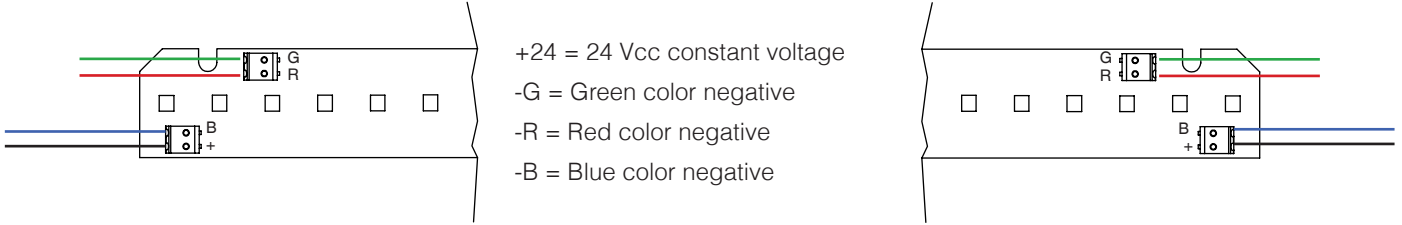
Note: Tolerance range for flux measurements of 8%.


It is required to keep Tc < 65°C.

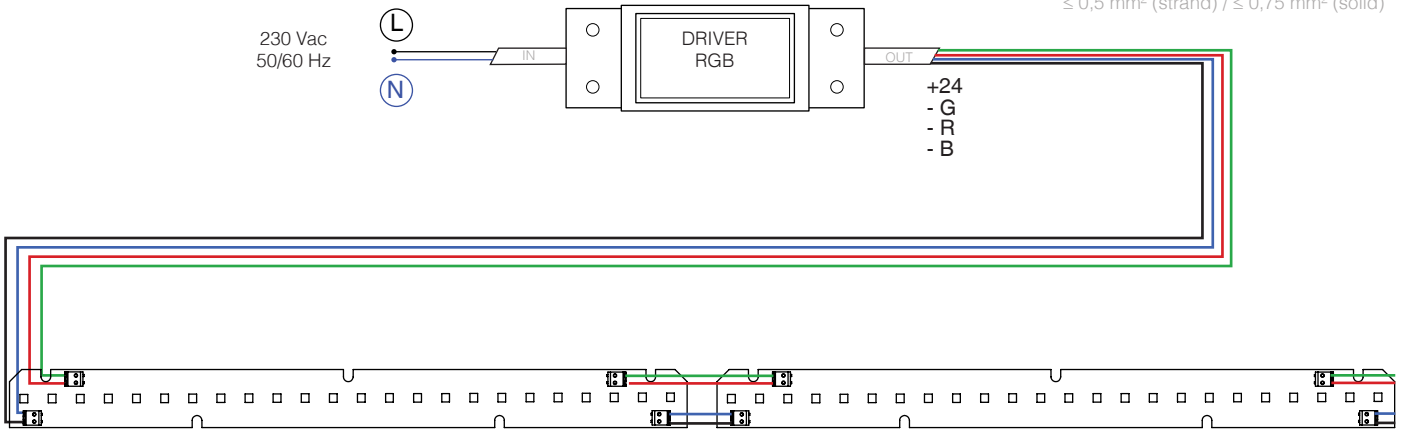
For PCB supply including high adhesion thermal tape, please add the letter "C" behind the product code. Example: 31.13.702.24C.RGBC.

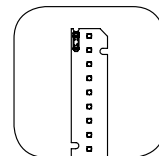


DRIVER + MODULE CONNECTION EXAMPLE



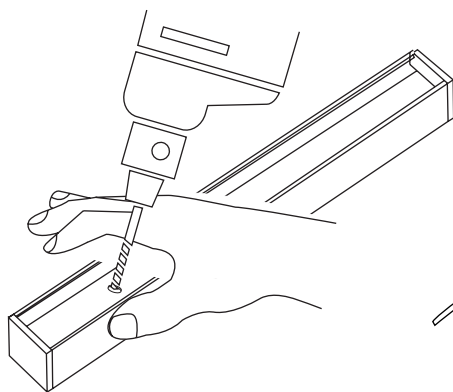
 Recommendation over PCB wire connection:
 $\leq 0,5 \text{ mm}^2$ (strand) / $\leq 0,75 \text{ mm}^2$ (solid)





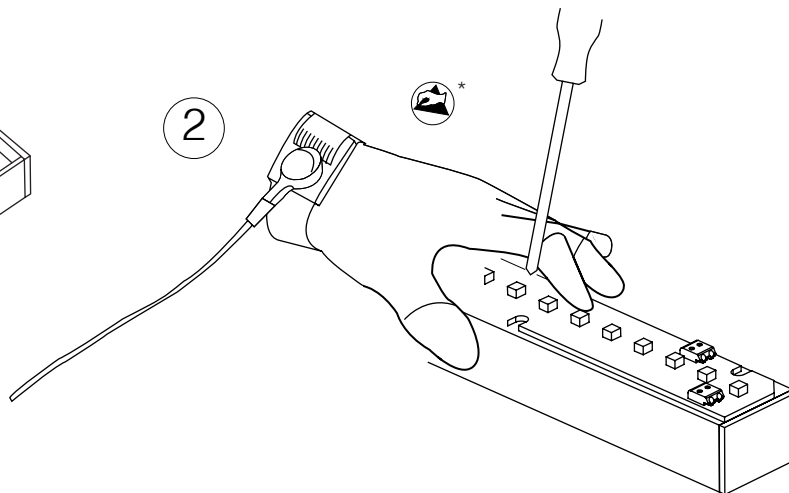
INSTALLATION AND CONNECTION EXAMPLE

1



For eventual attachment of the fixture (with no use of double sided adhesive tape) drill a hole in the profile.

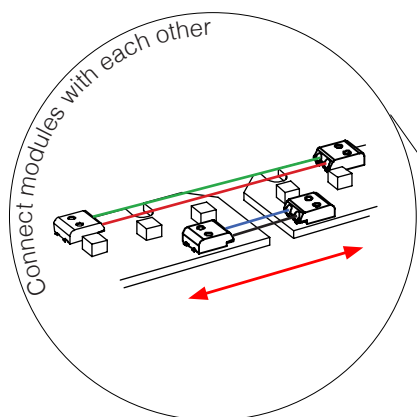
2



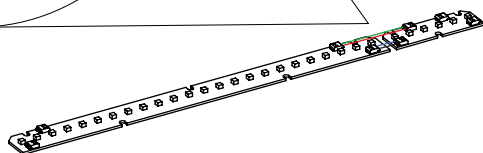
Place the PCB and apply pressure. Fix the screws to the fixture base. Accessory: M3 screws.

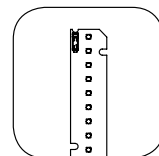
(*) ESD protection to earth connection.

3



Max. no. of PCBs:
Depends on driver type
 $V_f \text{ total PCBs} \leq V_{out} \text{ Driver}$





SECURITY AND INSTALLATION INFORMATION



ELECTRICAL POWER

MERAKI RGB 282-702 24V must be feed at constant current; the energy source power must be in accordance with the quantity of connected modules for proper functioning of the module (or group of modules). Family MERAKI have polarity, for this reason rated current, nominal power and polarity must be taken into account. If that is not the case, the module might be irreversibly damaged. MERAKI LED MODULES require specific driver protection against short-circuit currents, temperature raise and overloads.



ISOLATION

MERAKI RGB 282-702 24V functions with SELV voltage, does not require active isolation of the component as long as maximum reference SELV voltage is not exceeded. In other case, it will be mandatory earth connection on all conductive components of the fixture or light engine when the number of modules in the series exceeds SELV voltage. The driver must be in compliance with CE, UL or valid analogous regulation.



ESD – STATIC ELECTRICITY INFORMATION

MERAKI RGB 282-702 24V contains electronic components which are very sensible to static electricity. In this respect is it highly recommendable to always manipulate the items with appropriate ESD protection, and take adequate measures for safety matters. If you need further information please refer to our webpage www.idled.eu.



MOUNTING AND INSTALLATION

I+D LED S.L. is not responsible for the installation of the product. MERAKI RGB 282-702 24V must be perfectly placed (and/or stick) on the lighting device, profile or base for a proper connection between modules and power source, respecting its nominal values.

If any type of chemical substance is used during the assembly of the luminaire or light engine, it must not have any type of curing by means of gas condensation; as these chemical substances may damage the LEDs and electronic components.

MERAKI RGB 282-702 24V modules are designed to be incorporated inside linear light fixtures, capable to dispel the heat generated by the module. PCB must be introduced carefully inside the system or luminary. Always avoid mechanical stress, compression stress or superficial voltage stress over the electronic components of the PCB.

The module will be delivered with 3-5 pre-made holes of $D=4,5$ mm, according to dimensions drawing (ZHAGA L2W6). Maximum torque for fixing recommended 0,4-0,5 Nm to avoid mechanical stress. Ideal wire for this connection type is multipolar strand wire of 0,2-0,75mm². Do not attach more than 3m in series.



TEMPERATURE

MERAKI RGB 282-702 24V life-time depends to a great extent on operating temperature. Under no circumstance temperature should exceed the maximum permissible ($T_c=75^{\circ}\text{C}$) limit here indicated. Exposure to higher temperatures might affect its long term proper functioning. Room temperature must be measured under worst-case conditions to ensure life-time and keep product's guarantee. Store modules between -20°C and $+80^{\circ}\text{C}$, and at a maximum humidity level of 65%.