PAPER LED PPL 48





LED module to incorporate



<u>IP</u> 33
 Ref. 546101000430
 3000°K
 3350 lm

 Ref. 546101000431
 4000°K
 3500 lm

- 41W
- 48 PCB

• Input: 12 VDC. 4 located inputs.

- Voltage insulation: 500V
- Electrical class: class III
- Dimming: 0 10V, PUSH
- Colour: 3000°K o 4000°K
- Maximum ta value: ta 40°C
- Maximum tc value: tc 85°C
- CRI>80
- LED aperture: 120°

• Temperature dissipation: Always install the Paper LED on a heat dissipating surface. Recommended on metal surfaces.

- Storage temperature: 10°C 50°C
- Risk group: IEC 62471 RG1
- Store in a dry, covered place.
- No mercury, UV or IR.
- \bullet Use power supply / driver by MBTS 12VDC output.

• Power supplies should be compliant with all applicable European directives

• Size: 234 mm x 495 mm







INSTRUCTIONS FOR USE

• The Paper LED must be cut or fold always by the black line. (Fig.1)

• Avoid cutting, scraping, boring or bending out of the black line, as it can damage the circuit of both leds. Therefore they will lose their connections and will not work. (Fig.2)

• As with all electronics, the Paper Led sheet is susceptible to damage from shock.

•If possible, avoid situations that leads to the creation of static electricity.

• Do not apply Paper LED on a curved surface with a diameter less than 50 mm.





INSTALLATION INSTRUCTIONS

• As mentioned before, the Paper LED has an adhesive backside for easy fixing. Therefore the surface has to be clean and smooth.

• If the surface is irregular you can use mechanical fasteners and secure their fixation. You must use the punched holes. (Fig 3) (Already fitted on the Paper Led). The Paper LED will be damaged If making the holes on a different location, then the connections will stop working.

• We recommend to apply nylon washers.







CONNECTION INSTRUCTIONS

• Connect the Paper LED by one of the four connectors 12VDC to a driver. The Driver must be disconnected from the network.

• If you cut the Paper Led and it has no connector, you must solder the power cord on the connection points. The positive wire must be soldered at the positive point, and the negative wire at the negative point. (Fig 4)

• The drivers must be approved and accepted by the EEC regulations for electrical voltage. If a driver has not these features, then the warranty is automatically voided.

• Before installing be sure that the electricity is switched off.







You must place the appropriate section according to consumption.

(Fig 4)



Weld in the point of connection

RECOMMENDED DRIVERS

| w | ELT | TCI | TRIDONIC |
|-------|----------------------|-------------------|-----------------|
| 10 | | | 0010 K001 12 V |
| 12 | 9907102 FAV 12/12-B | | |
| 15 | 9907103 FAV 15/12-B | | |
| 20 | 9907104 FAV 20/12-B | | |
| 25 | | EFV 12V20 122,320 | |
| 30 | 9907105 FAV 30/12-B | | |
| 36/35 | 9907106 FAV 36/12-B | | LCU 035/12 E020 |
| 50 | 9907107 FAV 50/12-B | VST 12V50 122,756 | |
| 60 | | | LCU 060/12 E020 |
| 70 | | VST 12V70 122,758 | |
| 75 | 9907108 FAV 75/12-B | | |
| 100 | 9907149 FAV 100/12-B | | LCU 100/12 E020 |
| 150 | | | LCU 150/12 E020 |
| 200 | 9907151 FAV 200/12-B | | |



¿HOW TO CONNECT THE PAPER LED?



A piece of Paper LED with connector



A piece of Paper LED without connector



Weld in the point of connection

More than one Sheet of Paper LED with connector

• Connect more than one sheet of Paper LED through one of the four 12VDC connectors. Never use more than one connector per sheet. You can choose any of the connectors. Below You will find some examples of connection.







Cuts of Paper LED with connector

• Connect more than one cutted Paper LED by one of the four 12VDC connectors, never use more than one connector per cut. You can choose any of the connectors. Below you will find some examples of connection.

MEDIUM AND LARGE CUTS OF PAPER LED



Paper LED longitudinal connections

• Connecting several Strips of Paper LED composed by 1 strip of triangles. You can connect one or more strips between each other until the length of 2,5 m. Over this length the intensity of light will decrease. For longer sizes You need an additional driver. (See the drawing of the two connection options).



• Connecting several strips of Paper LED composed by 2 strips of triangles. You can connect multiple strips each up to 1.5m. Longer than this measure the light will lose intensity.





COMPLIES WITH:

EN 62031:2008 + A1:2013 EN 62471:2008 DIRECTIVE (2006/95/EC)—LVD





PAPER LED Is part of the Material center Materfad and has been chosen in several exhibitions as innovative material.

«What's next?»: Material that will shape the future.



«Smart Flexibility»: Melbourne. Advanced Materials and Technologies



SAFETY:

— The LED module should be installed on a clean, flat assembly surface to ensure that acceptable operating temperatures are not exceeded.

— Device sensitive to electrostatic discharges (ESD). Handle with care in order to avoid such discharges.

— The LED module should be installed by a qualified technician.

— This product should only be used for lighting purposes. Incorporate use model in lamps.

— Active parts should not be accessible to consumers.

— Store in a dry, covered place.



