LENKER LED CONTROL

DIMMERS - DIM 30A 12-24V (134,7X110X48,2MM)

New DIMMER 30A offers the most steady and flexible control for luminous intensity. Under the scope of installation technicians, light fixtures manufacturers and architects who seek a quality regulation of luminous flux with LED technology. DIMMER 30A modules incorporate BAM / PWM technology in all their version models. Higher efficiency than 95% and 100% compatible with PCBs, LED strips and linear monochromatic 12-24 Vcc LED modules.

On account off its exclusive design in miniscule size, it is possible to use them in any electrical system.

The modules are designed to enable intensity regulation of LED systems that work on constant current. For proper functioning and according to customer's needs, the module requires protected constant current input of 12-24 Vcc.

The modules are presented in 2 functioning modes: masters or slaves. All models are possible to customize and have 3 years guarantee.

In compliance with:

EN62384:2007/A1:2010 - EN61547:2013 - EN61347-1:2009/A1:2013

APPLICATION

PRODUCT DESCRIPTION

- Output in constant voltage 12-24V
- Max. current Iin/Iout = 30A
- Up to 720W of power
- High efficiency > 96%
- Easy to install
- Digitally regulated PWM/BAM 500-2KHz
- Life-time exceeds 30.000 hrs.
- 3 years guarantee
- Reverse polarity protection
- Remote regulation or over device regulation

(by standard up and down switches)

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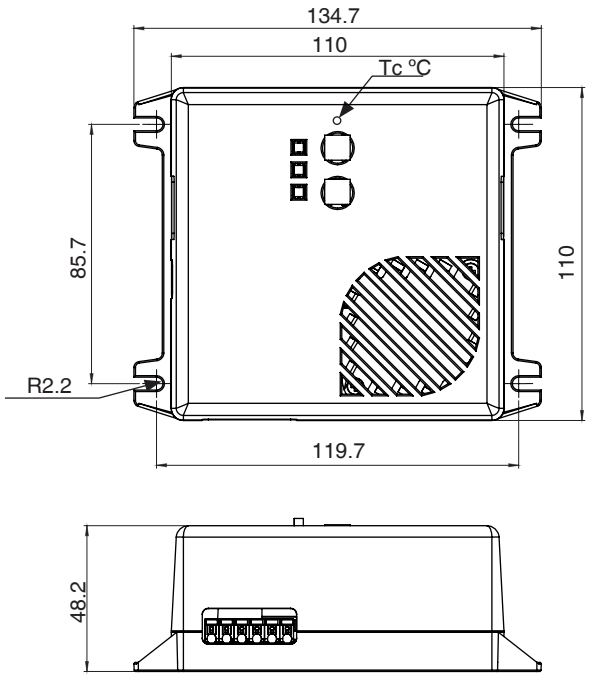
TECHNICAL DATA

- SELV voltage
- Regulation range 0,1-100%
- Controlled by internal or external buttons
- Max. 100 metres for external buttons (wire<0,5mm2)
- Operating temperature between -20°C and 55° C
- 8 BITS resolution
- 1 CH - monochromatic regulation
- Refresh frequencies 500Hz o 2KHz
- Memory from lastest setting value
- Standard Tc 75°C
- LED mode indicator
- 2 modes: Master o Slave
- 20 metres max. between Master and Slave
- Weight 200 gr
- MOQ 10 pcs (individual packaging)
- Possibility to integrate with LOGO Custom

DIMENSIONS



(*) Measured in mm.

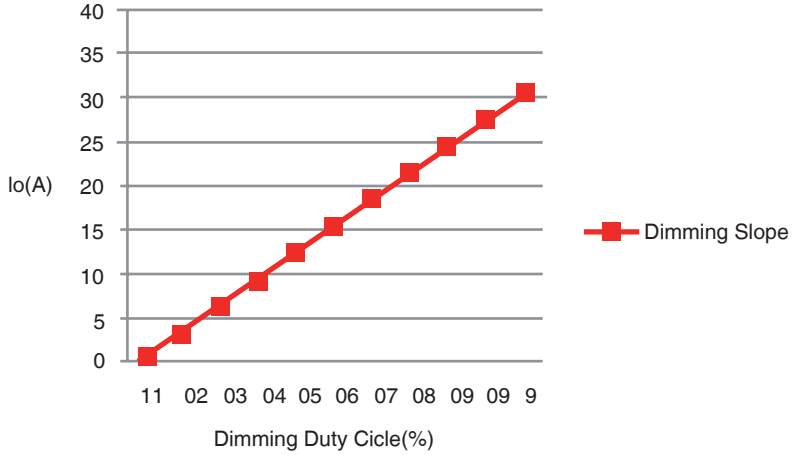
(*) Max. cable length 0,5/1,5 mm2.

SPECIFIC TECHNICAL DATA

SPECIFIC TECHNICAL DATA

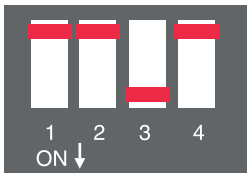
CODE	INPUT VOLTAGE **(V)**	VOLTAGE **(V)**	CURRENT **(A)**	MAX POWER **(W)**	REGULATION MODE	DIMENSIONS **(mm)**	FRECUENCY **(Hz)**
31.40.DIM30	10-25	12	0-30	360	MASTER	134,7X110X48,2	500
31.40.DIM30	10-25	12	0-30	360	MASTER	134,7X110X48,2	2
31.40.DIM30	10-25	12	0-30	360	SLAVE	134,7X110X48,2	N/A
31.40.DIM30	10-25	24	0-30	720	MASTER	134,7X110X48,2	500
31.40.DIM30	10-25	24	0-30	720	MASTER	134,7X110X48,2	2
31.40.DIM30	10-25	24	0-30	720	SLAVE	134,7X110X48,2	N/A

(*) Operating temperature between -20°C and +40°C

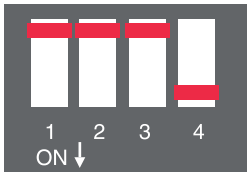


OPERATING MODE SELECTION

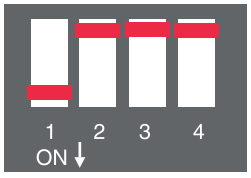
DIMMER 30A has two operating modes: MASTER or SLAVE. When the dimmer is set on MASTER mode, the dimmer itself generates the dimming sign and its setting are controlled by the device. On the other hand, on SALVE mode the control signal provides from another DIMMER 30A device in MASTER mode or from an external PWM generator. For SLAVE setting, light regulation is voided at the device and controlled externally.



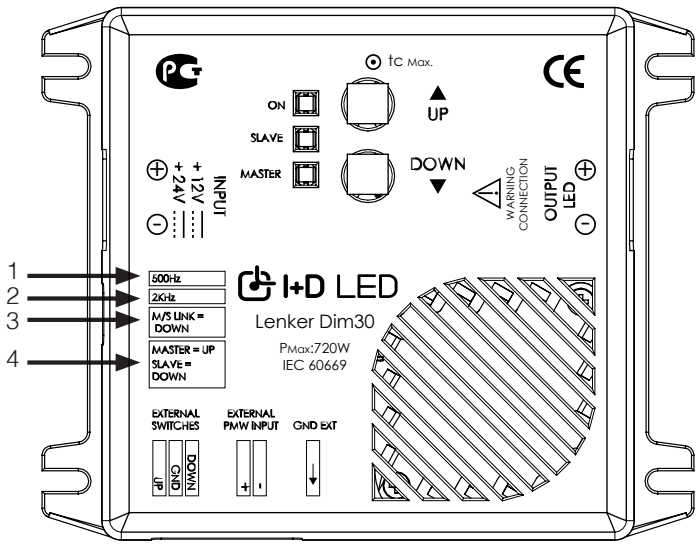
MASTER 2KHz



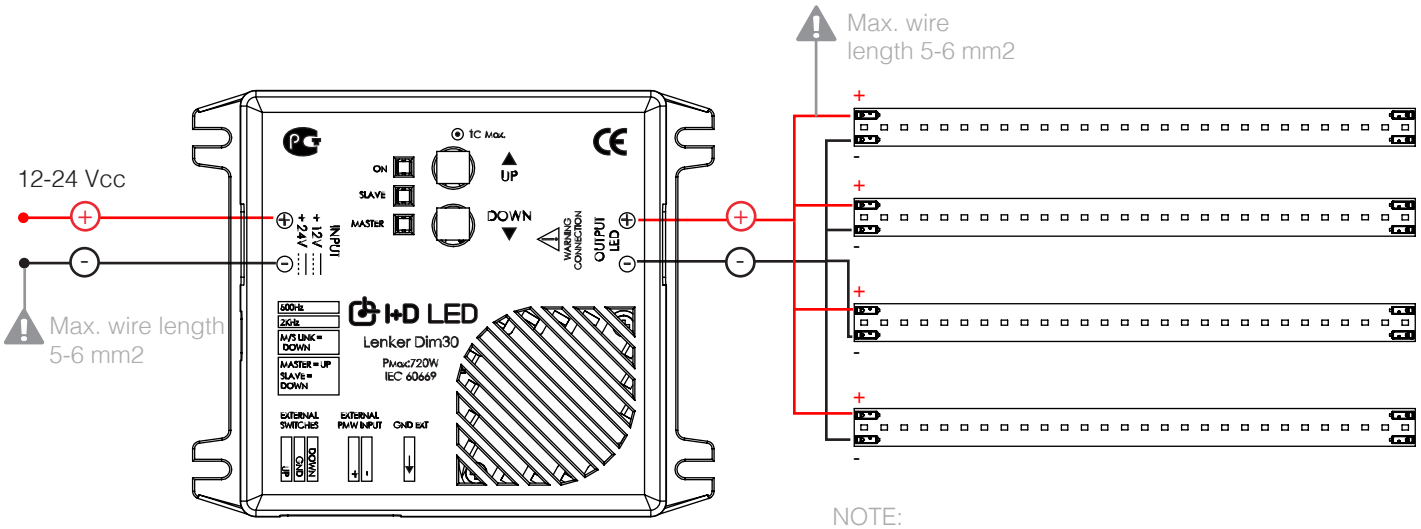
MASTER 500Hz



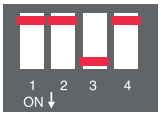
SLAVE



MASTER TYPE

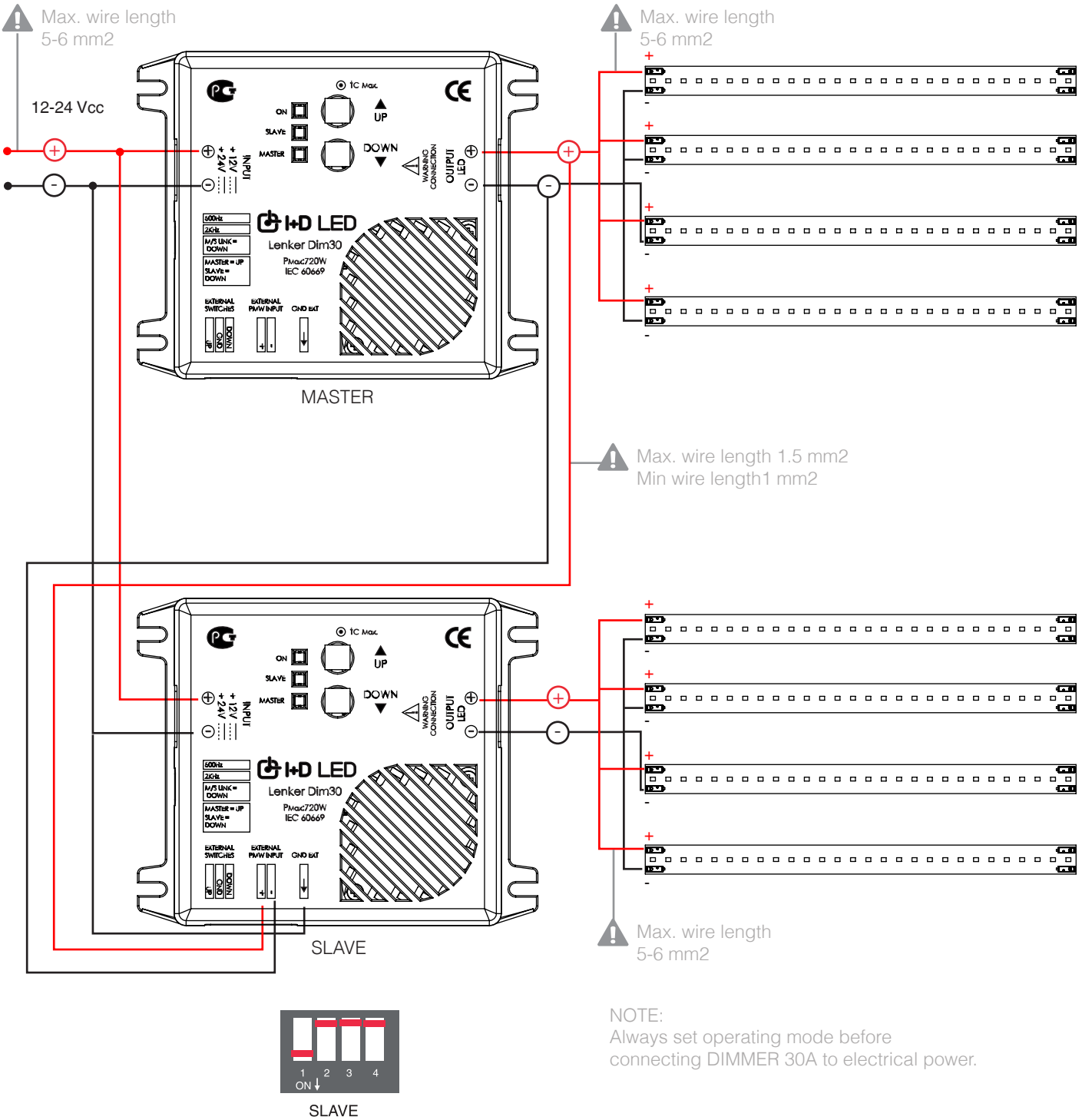


NOTE:
Always set operating mode before connecting
DIMMER 30A to electrical power.



MASTER 2KHz

SLAVE MODE



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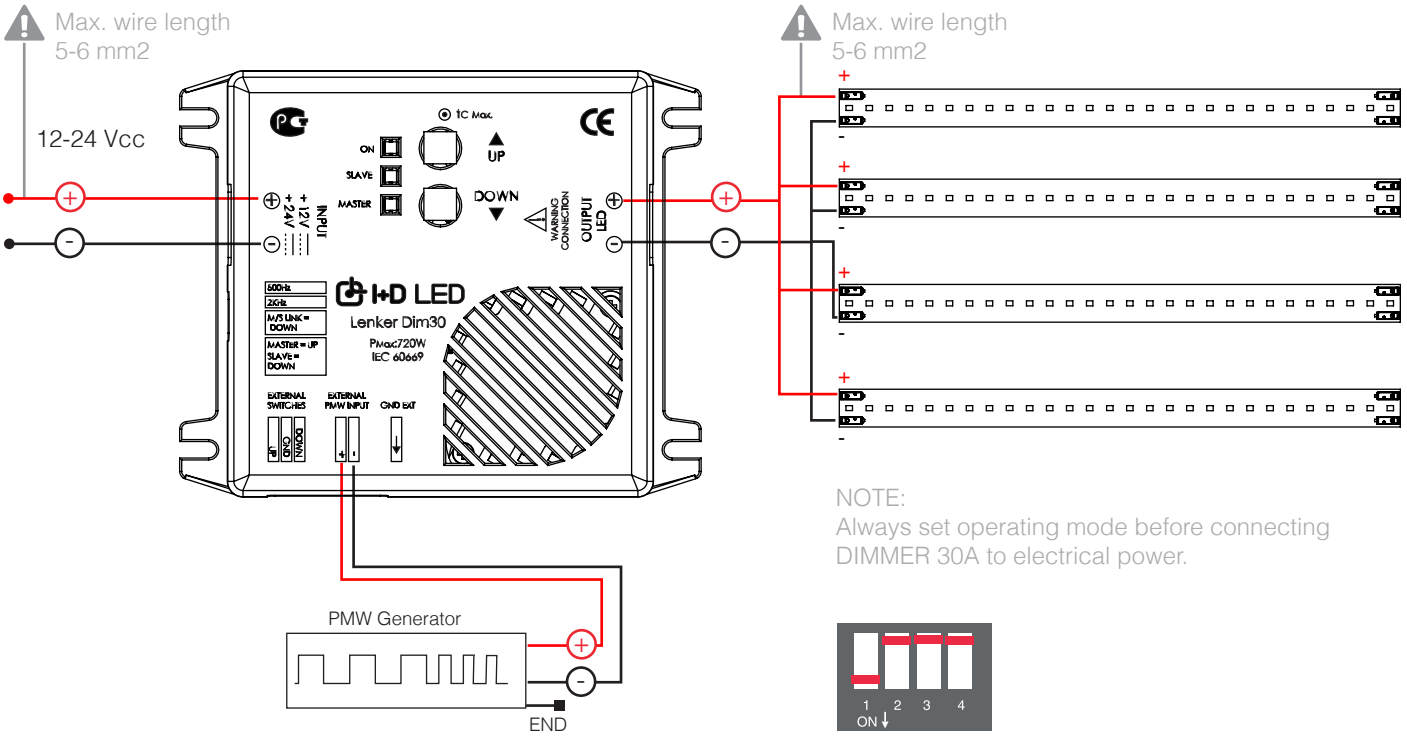
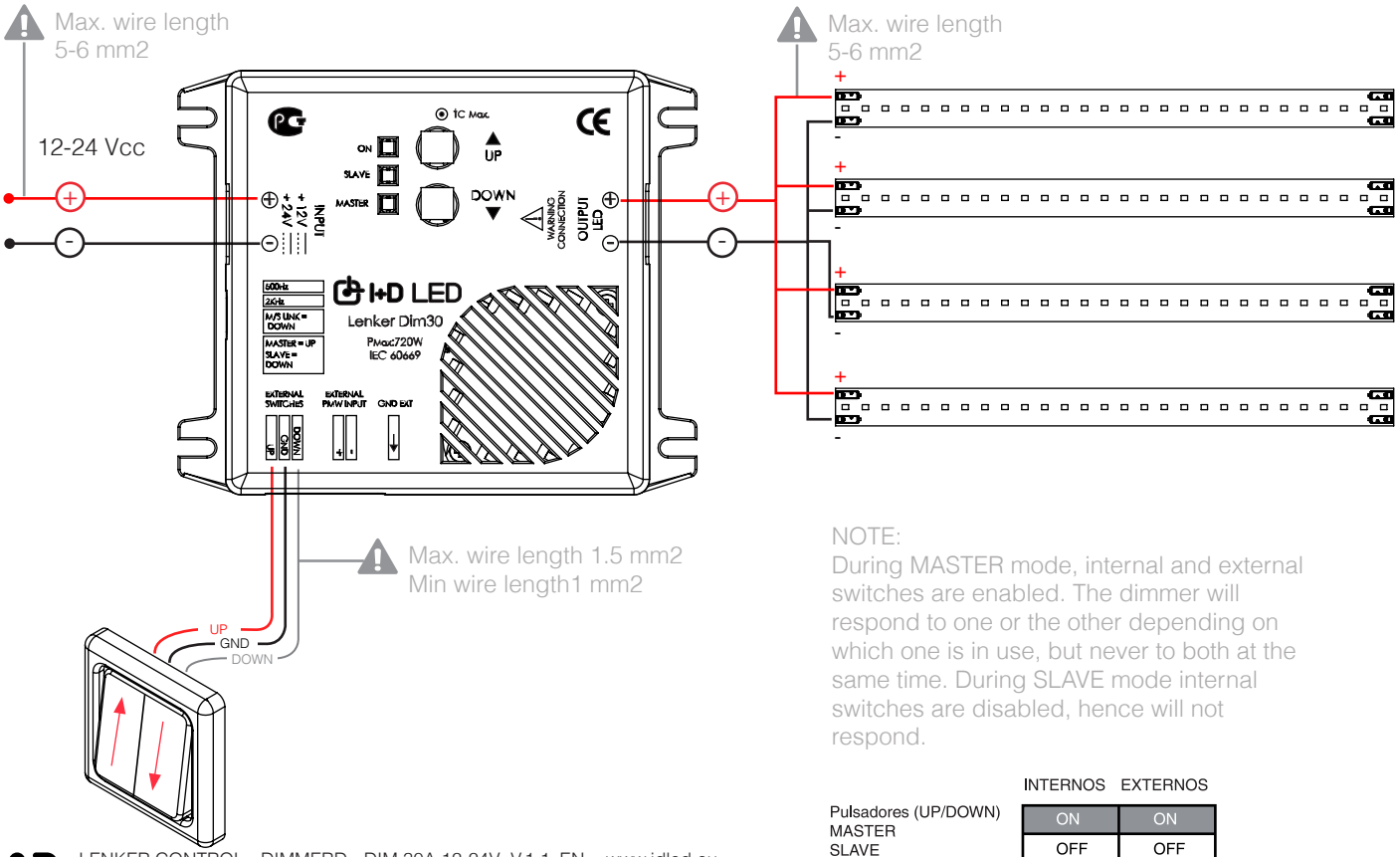
SLAVE TYPE (EXTERNAL CONTROL)



NOTE:
Always set operating mode before connecting DIMMER 30A to electrical power.

SLAVE

EXTERNAL PUSH BUTTONS (CONNECTION)



NOTE:
During MASTER mode, internal and external switches are enabled. The dimmer will respond to one or the other depending on which one is in use, but never to both at the same time. During SLAVE mode internal switches are disabled, hence will not respond.

	INTERNOS	EXTERNOS
Pulsadores (UP/DOWN)	ON	ON
MASTER		
SLAVE	OFF	OFF

SECURITY AND INSTALLATION INFORMATION

ELECTRICAL POWER

LENKER LED CONTROL DIMMER 30A 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) connected in parallel. LENKER LED CONTROL DIMMER 30A has 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. Family LENKER LED CONTROL require specific driver protection against short-circuit currents, temperature raise and overloads.

ISOLATION

LENKER LED CONTROL DIMMER 30A functions with SELV voltage, does not require active isolation of the component as long as maximum reference (50v) 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

LENKER LED CONTROL DIMMER 30A 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. LENKER LED CONTROL DIMMER 30A 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.

DIMMERS 30A are delivered with 4 fastening pre-made holes for M3 screws and can be introduced inside a standard light switches box (with no active parts) or equivalent. Maximum torque for fixing recommended 0,5 Nm to avoid mechanical stress, compression stress or superficial voltage stress over the PBC's electronic components. All DIMMERS' PCBs have mounting holes imprinted for placing reference of DIN screws. It is recommended to use flat head DIN screws. Ideal wire for this connection type during installation is multipolar flexible wire of 5-6 mm^2 with a strip wire of 6MM. Note: regarding total power and current, it is recommended to split the charge between two wires of 15A each and 2,5mm2 length in the terminals.

TEMPERATURE

LENKER LED CONTROL DIMMER 30A life-time depends to a great extent on operating temperature. Under no circumstance temperature should exceed the maximum permissible (Tc=75°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 °C, and at a maximum humidity level of 65%.

SWITCHED ON

After the process of switching on and selecting the Master mode or Slave mode in either of its two frequencies (500Hz and 2kHz), the DIMMER LENKER 30A turns on and gradually reaches the maximum current value that remains indefinitely until its value is modified to through the Up and Down buttons.

If a shutdown occurs after a period of operation, when the DIMMER LENKER 30A starts up again, it will deliver the last current value that it had set just before the shutdown occurred.

FREQUENCY CHANGE

During the operation of the dimmer in a certain mode, the operating frequency can be changed from 500Hz to 2KHz and vice versa, without having to turn off the device. After changing the frequency, the DIMMER LENKER 30A will gradually reach the new selected frequency value.

MODE CHANGE

DO NOT change the operating mode from Master to Slave while the DIMMER LENKER 30A is running. This operation must be configured with the device turned off and, once done, turn it on again. If the dimmer is configured while it is running, the buttons will work in reverse.

DO NOT change the operating mode from Slave to Master while the DIMMER LENKER 30A is running. This operation must be configured with the device turned off and, once done, turn it on again. For safety reasons it is not possible to configure this mode while the dimmer is running and the LEDs connected to the output will remain off.

In the event of any combination not specified here in the switch, the DIMMER LENKER 30A will not work and will keep the last configuration considered correct.