DATASHEET

ACULED® DMX Power Supply

350 mA

E001671

PSU-ACL01-350 DMX 220V

Product Overview

In stage and theater technology, the serial and digital type of transmission according to DMX-512 has been established as the most important transmission standard.

Excelitas therefore offers the ACULED® DMX Power Supply product line. The version PSU-ACL01 350 DMX 220 V provides 350 mA of output current and is ready for connection of 4-channel LED assemblies. It therefore ideally fits multi-color ACULED applications. The power supply is equipped with integrated DMX interface and hence is used in professional light control of LEDs, especially ACULED family products.

The main application of the device is color mixing of RGYB- or RBGW-LEDs, but any kind of ACULED-DYO combination can also be operated easily.

Features and Benefits

- Electronic power supply for POWER LEDs with 350 mA output current
- 4-channel device with DMX interface

Applications

- Mixture of up to four different LED channels
- Stage engineering and building services engineering

Technical support

- For technical support, please contact us at: elcos.sales@excelitas.com.

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Revision History

This table provides a summary of the document revisions.

Date	Revision	Description
February 2008	Initial release of document to customers	

Product Description

The ACULED DMX Power Supply PSU-ACL01 350 DMX 220V provides 350 mA of output current and is ready for connection of 4-channel LED assemblies. The device is designed to be used for Power LEDs like the ACULED.

The automatic color change in color mixing applications is controlled via an integrated device with corresponding options. The device has four channels that can be activated separately by the DMX 512 protocol. The start address can be adjusted by coding switches that are easily accessible. With a maximum total output power of 30 W per channel, a constant current 350 mA is available per channel. Thus up to twelve ACULEDs can be operated with four different channels.

If a DMX signal is not available, the control of the LEDs can also be carried out by four external potentiometers or by means of the integrated device. Several color cycles with different speed are feasible. A master / slave function allows synchronous operation of several devices. The integrated LED display signals the presence of DMX reception. This is a considerable facilitation for installation.

The LED outputs are short-circuit-proof. By means of additional temperature measuring input, the temperature of the PCB of the LED can be controlled.

The 4-channel-device is a perfect solution for ACULED VHL™ / DYO™ applications in lighting technology where LEDs have to be operated from 0-100% output power.

Dimensions

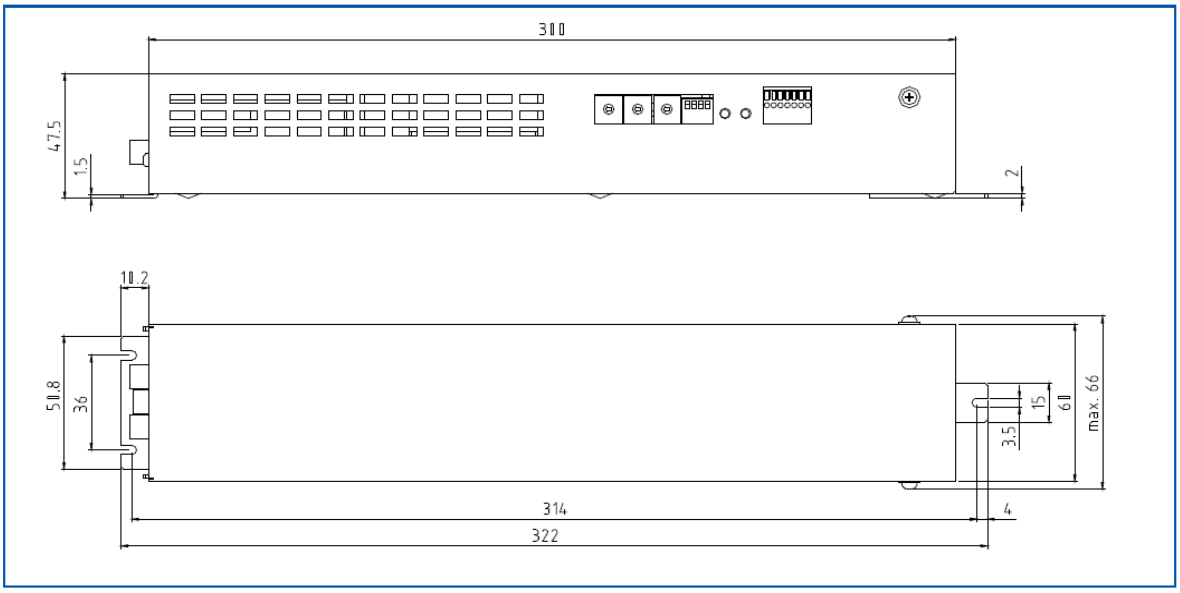

Figure 1
Dimensions of the DMX power supply

Schematic Diagram

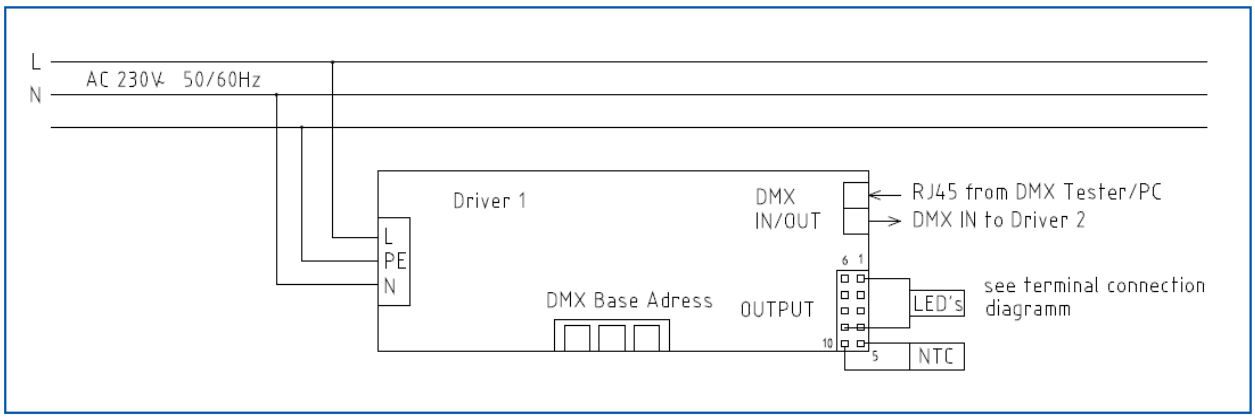

Figure 2
Schematic diagram of the DMX power supply

Terminal Connection Diagram of LEDs

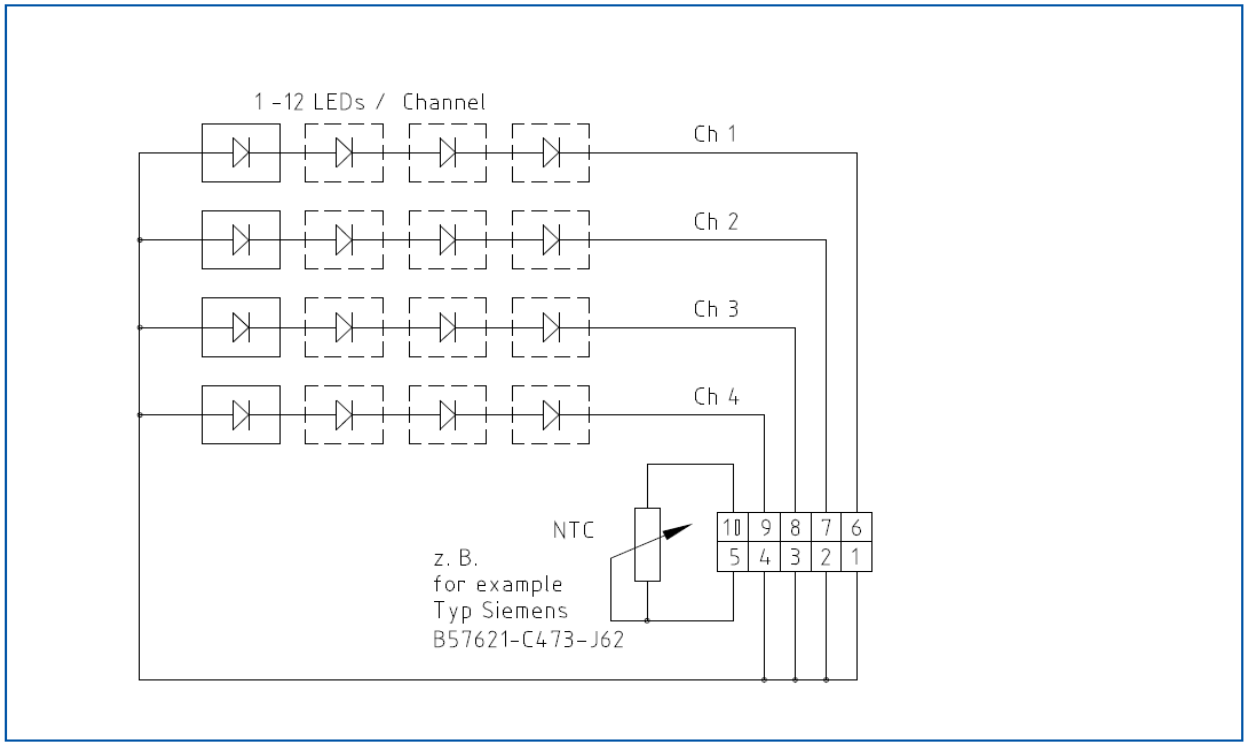

Figure 3
Terminal connection diagram of LEDs

Technical Data

Parameter	Symbol
Nominal voltage	230 V AC, ± 10% 50 / 60 Hz
Power factor Pf (with 12 connected LEDs / channel)	> 0.9
Inrush current	< 5 A at 0.5 ms
Power range per channel	max. 15 W
Output current	350 mA ± 10%
Protection class	I
Operating temperature range *	-10 °C to +40 °C
Storage temperature	-20 °C to +85 °C
Housing temperature Tc	max. +85 °C
Dimming range (PWM)	0...100%
Control interface	DMX 512 or conventionally via potentiometer
Connections Mains input LED output DMX input / output Dimmer inputs potentiometer	 3-pole wire clamp (Wieland GST 18) 10-pole wire clamp (Molex Micro-Fit 3.0) type of plug: RJ 45 pressure clamp
Switch for addressing of control inputs	Coding switch / pre-adjustment via DIP switch
Standards compliancy	EN 55015 / EN 61547 / EN 61347-2-2 / EN 6100-3-2
Housing material	Top part BL 1,0 ALMg3 Bottom part BL 1,5 ALMg3
Dimensions (LxWxH) / mm:	310 x 60 x 45

* Depending on the installation location, sufficient cooling should be provided. The Tc point must not be exceeded!

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