

DCP-24x12-30A-WP

Encapsulated DC to DC Stepdown Transformer - 24V DC to 12V DC - 30 Amps - Flying Leads - Waterproof

Product ID: 150230



Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

DCP-24x12-30A-WP - DC to DC Step-down Transformer

Line In Voltage: 24V
Line Out Voltage: 12V DC @ 30 Amps
Watts: 360
DC Input Connector: 6" Pigtail, Flying Leads
DC Output Connector: 6" Pigtail, Flying Leads
Voltage Accuracy: +/- 1.5%
Output Frequency: 43 KHz
Line-In Regulation: +/- 0.2%
Line-Out Regulation: +/- 0.2%
Temperature Coefficient: +/- 0.03% /°C
Protection: Short Circuit/Overload/ Over Voltage
Operating Temp: -10°C to +60°C
Efficiency: 95%
Dimensions: 3"-L x 3"-W x 1.25"-H
Mounting: (2) Side Located Thru-Holes
Weight: 0.75 Lbs

DCP-24x12-30A-WP Features

IP68 Rated Waterproof
Overload, Short Circuit, Over Voltage Protection
International Lighting Safety Standards Compliant
Suitable For LED Moving Signs
Suitable For Wet or Damp Locations

Special Orders- Requirements

Contact us for special requirements
Toll Free: 1-800-369-6671
Intl: 1-214-616-6180
Fax: 1-903-498-3364
E-mail: sales@larsonelectronics.com

The Larson Electronics DCP-24x12-30A-WP Waterproof DC to DC Step-down Transformer converts 24V DC electrical current to 12V DC at 30 amps max. This converter includes flying leads to hard wire this unit inline. This unit takes 24 volts DC and reduces it to 12 volts DC, allowing users to use 24 volt DC power to operate equipment like our LED light bars and Golights that require low voltage 12 volts DC current.

The DCP-24x12-30A-WP 360 watt power converter provides a safe and effective

way for users to tap into and utilize 24 Volt DC power sources and step down this current to 12 Volts DC for use with equipment that requires 12V DC electrical power. This unit can be operated with input current ranging from 24V and will output 12 Volt DC current to power lights and equipment up to 360 watts and 30 amps at 12V DC. This power converter features an encapsulated IP68 waterproof design, making it suitable for indoor or outdoor use and is wet-damp area approved. This converter includes integral short circuit, over voltage, and overload protection that will shut down the unit or reduce output in case of faults and overloads to protect the unit and connected equipment from damage.

The small size and wide input voltage range of this unit make it ideal for indoor-outdoor operation of Larson Electronics LED light bars, Golights and other equipment that requires 12V DC current in locations where 24 volt DC power is readily available.

This converter is equipped with two 6" wires on the input side and two 6" wires on the output side. All leads are stripped and tinned for equip installation.

Features: The DCP-24x12-30A-WP converter features full range, universal DC input capability and can be operated with 24V. The unit converts this DC power input to 360 watt, 30 Amp 12VDC. IP68 rated, this unit is waterproof, wet and damp area approved and suitable for indoor or outdoor applications. Integrally designed protection includes overload, short circuit, and over voltage safeguards to prevent overheating and unit damage in case of faults or overly heavy current draw. This unit will limit current when an over current condition is encountered and recovers when the condition is removed. This unit will enter hiccup mode under short circuit conditions and recover when the fault is removed.

This transformer is enclosed a cast aluminum housing for heat distribution. All electronic components are encapsulated within the housing. This power converter has a -10°C to +60°C operating temperature range. This unit has a 95% conversion efficiency and is suitable for use with moving LED signs and similar LED equipment. These units have a fixed switching frequency at 43KHz.

NOTE: In order to obtain the best performance and the longest operational life from these units, it is recommended that you do not exceed 75% of the unit's output amperage. To determine if this converter suits your desired application, add together the total wattage of the equipment you intend to use with this unit and divide this total by 12 volts to find the total amperage draw that will be placed upon the converter. For example, if you are using two of our LEDP10W-120E 120 watt LED lights, 120 watts divided by 12 volts is 10 amps. This would mean the DCP-16-DP is well suited as it would run at under 75% capacity to produce the necessary 10 amps. Running these units at 100% of their capacity can create excess heat and lead to shortened converter life.





Material Safety Data Sheet

To Whom It May Concern,

The Larson Electronics LLC DCP industrial line of power supplies are considered “ARTICLES” under 29 CFR 1910-1200, the OSHA Hazard Communication Standard, and do not require a Material Safety Data Sheet (MSDS). This document does not expire.

Articles are specifically exempt from the regulations of this standard. OSHA defines an article as follows:

1910-1200(c) – Article means a manufactured item other than a fluid or particle:

- i. Which is formed to a specific shape or design during manufacture;
- ii. Which has end use function(s) dependent in whole or in part upon its shape or design during end use; and
- iii. Which under normal conditions does not release more than very small quantities.

Regards,

Ray Smith
Larson Electronics, LLC.



Certification

Manufacturer: Larson Electronics LLC
Address: 9419 US-HWY 175
Kemp, Texas 75143

Declare the following equipment conforms to the standard(s) as listed:

Model: DCP Series
Description: Power Supplies

Evaluated Listings:

CE: DIRECTIVE 2014/35/EU - LOW VOLTAGE DIRECTIVE
CE: DIRECTIVE 2014/30/EU - EMC DIRECTIVE
CE: Regulation (EC) No 1907/2006 - REACH REGULATION
CE: DIRECTIVE 2015/863/EU - ROHS DIRECTIVE

The DCP series complies with the essential protection requirements of the European Parliament of the Council Directive for Low Voltage Directive, EMC Directive, REACH Regulation, and RoHS Directive. This certification applies to all specimens manufactured in accordance to the manufacture's drawings.

Signed for and on behalf of: Larson Electronics, LLC
Place of issue: Kemp, TX

Signature: *James Thomas*

Name: James Thomas
Position: Operations Manager



Certification

Manufacturer: Larson Electronics LLC
Address: 9419 US-HWY 175
Kemp, Texas 75143

Declare the following equipment conforms to the standard(s) as listed:

Model: DCP Series
Description: Power Supplies

Evaluated Listings:

CE: DIRECTIVE 2015/863/EU - ROHS DIRECTIVE

This is to certify that products offered by Larson Electronics LLC comply with the Reduction of Hazardous Substances (RoHS) directives. Directive 2002/95/EC became effective on 1 July 2006. It restricts the use of six substances in the manufacture of electrical and electronic equipment. This directive was revised in June 2011 and is now referred to as directive 2011/65/EU. Directive 2015/863/EU amending Annex II to Directive 2011/65/EU announced plans to add four substances from 22 July 2019.

We hereby certify that the equipment specified above conforms to the Directive(s) by containing less of the restricted substances than the stated limits.

Signed for and on behalf of: Larson Electronics, LLC
Place of issue: Kemp, TX

Signature: *James Thomas*

Name: James Thomas
Position: Operations Manager



Certification

Manufacturer: Larson Electronics LLC
Address: 9419 US-HWY 175
Kemp, Texas 75143

Declare the following equipment conforms to the standard(s) as listed:

Model: DCP Series
Description: Power Supplies

Evaluated Listings:

CE: Regulation (EC) No 1907/2006 - REACH REGULATION

This letter establishes the opinion of Larson Electronics LLC regarding the status, under the current European Union ("EU") Regulations on Registration, Evaluation, Authorization, and Restriction of Chemical Substances ("REACH").

REACH does not apply to manufactured products which are referred to as "completed articles". Substances (chemicals) are subject to REACH registration, NOT products.

In addition, Articles are exempt from the REACH requirements if (a) the Article does not contain a substance of very high concern or candidate substance in an amount exceeding 0.1% weight by weight, and (b) if substances present in the Article in excess of 1 ton per year per importer are not expected nor intended to be released.

Based on communication with our raw material suppliers, we conclude that to the best of our knowledge our products requiring REACH compliance do not contain any of the currently listed SVHC in concentrations of 0.1% or above.

Accordingly, we foresee no registration or pre-registration requirement for the products we supply.

Signed for and on behalf of: Larson Electronics, LLC
Place of issue: Kemp, TX

Signature: *James Thomas*

Name: James Thomas
Position: Operations Manager

Frequently Asked Questions (FAQ)