

DCP-CC-700MA-R1

700mA Constant Current Transformer - 90-305V AC Input - 0-10V Dimmable - Fanless

Product ID: 270739

Please see last page for supporting documentation for this product(certificates, CAD files & drawings, IES files, wiring diagrams, etc).



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-CC-700MA-R1 Power Converter

Unit Type: Constant Current Transformer

Dimensions: 7.7" x 2.42" x 1.52"

Weight: 1.85 lbs

Input Voltage: 90-305V AC, 127-431V DC

Input Frequency Range: 47-63Hz

Input Current: 0.88A @ 115V AC, 0.45A @ 230V AC, 0.38A @ 277V AC

Output Constant Current Region: 64V ~ 129V

Output Control Signal: 0-10V

Output Current Rating: 700mA

Output Power Rating: 90.3W

Current Ripple: 8.0% Maximum @ Rated Current

Current Tolerance: $\pm 5\%$

Set Up Time: 500ms @ 115V AC, 230V AC

Power Factor: PF0.98/115V AC, PF0.96/230V AC, PF0.94/277V AC @ Full Load

THD: THD< 20% (@ Load60%/115V AC,230V AC; @ Load75%/277V AC)

Efficiency: 91.5%

Inrush Current: Cold Start 60A (twidth=410 s Measured at 50% Ipeak) at 230V AC; Per NEMA 410

Maximum # of PSUs on 16A Circuit Breaker: 4 Units (Circuit Breaker of Type B), 8 Units (Circuit Breaker of Type C) at 230V AC

Leakage Current: <0.75mA/277V AC

Features

IP67 Rated Waterproof

Overload, Short Circuit, Over Voltage Protection

Suitable for 80W LED Assembly

Dimmable Power Supply

Short Circuit Protection: Hiccup Mode, Recovers Automatically After Fault Condition is Removed

Over Voltage Protection: 150-170V; Shut Down o/p Voltage with Auto-recovery or Re-power on to Recovery

Over Temperature Protection: Shut Down o/p Voltage, Re-power on to Recover

Working Temperature: Tcase= -40 ~ +80°C

Maximum Case Temperature: Tcase= +80°C

Work Humidity: 10 ~ 95% RH Non-condensing

Storage Temperature: -40 ~ +80°C

Storage Humidity: 10 ~ 95% RH

Temperature Coefficient: ±0.03%/°C (0 ~ 50°C)

Vibration: 10 ~ 500Hz, 5G 12min./1cycle, Period for 72min. Each Along X, Y, Z Axes

Withstand Voltage: I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC

Isolation Resistance: I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500V DC / 25°C/ 70% RH

EMC Emission: Compliance to EN55015, EN61000-3-2 Class C (@ Load50%); EN61000-3-3, GB17743 and GB17625.1, EAC TPTC 02

EMC Immunity: Compliance to EN61000 - 4-2, 3, 4, 5, 6, 8, 11, EN61547, Heavy Industry Level (Surge Immunity Line-Earth 4KV, Line-Line 2KV), EAC TPTC 020

MBTF: 861.8K hrs min. Telcordia SR-332 (Bellcore); 309.7K hrs min. MIL-HDBK-217F (25°C)

Materials: Metal

Mounting: Surface

Input Connection: AC/L (Brown), AC/N (Blue), FG (Green/Yellow)

Output Connection: +V (Brown), -V (Blue); DIM + (Gray), DIM - (Black)

Special Orders - Special Requirements

Contact us for special requirements

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The Larson Electronics DCP-CC-700MA-R1 Constant Current Transformer is suitable for 0-10V dimming with LED lighting systems. This converter is designed to be hardwired into home, boat or vehicle electrical supplies where the voltage is typically within the 90-305V AC range, allowing users to use standard AC power to operate 80-watt LED assemblies that require 0-10V dimming. Compatible with surface mounting installations, this AC to DC transformer is protected by a metal housing.

The DCP-CC-700MA-R1 dimmable power converter provides a safe and effective way for users to tap into and utilize common 90 to 305 Volt AC power sources and convert this current with a 0-10V control signal. This unit can be operated with input current ranging from 90 to 305V AC and will output 90.3 watts (maximum) at 700mA. This power converter features a waterproof design, making it suitable for indoor or outdoor use and includes integral short circuit and overload protection that will shut down the unit in case of faults and overloads in order to protect the unit and connected equipment from damage.

Suitable for 80-watt LED assemblies, the unit is protected by a metal housing. This IP67 rated current transformer is ideal 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 shut down when an over current or over voltage condition is encountered and recovers when manually turned back on.

Wiring: Input connections include: AC/L (brown), AC/N (blue) and FG (green/yellow). Operators are provided the following output connections: +V (brown), -V (blue), DIM+ (gray) and DIM- (black). This dimmable power supply is a constant current level adjustable through the dimmable output cables with 1-10V DC or 10V PWM signal or resistance.

Mounting: The DCP-CC-700MA-R1 is compatible with surface mounting installations via four slots at the back of the unit. Measuring 7.7" x 2.42" x 1.52", this unit weighs less than two pounds.

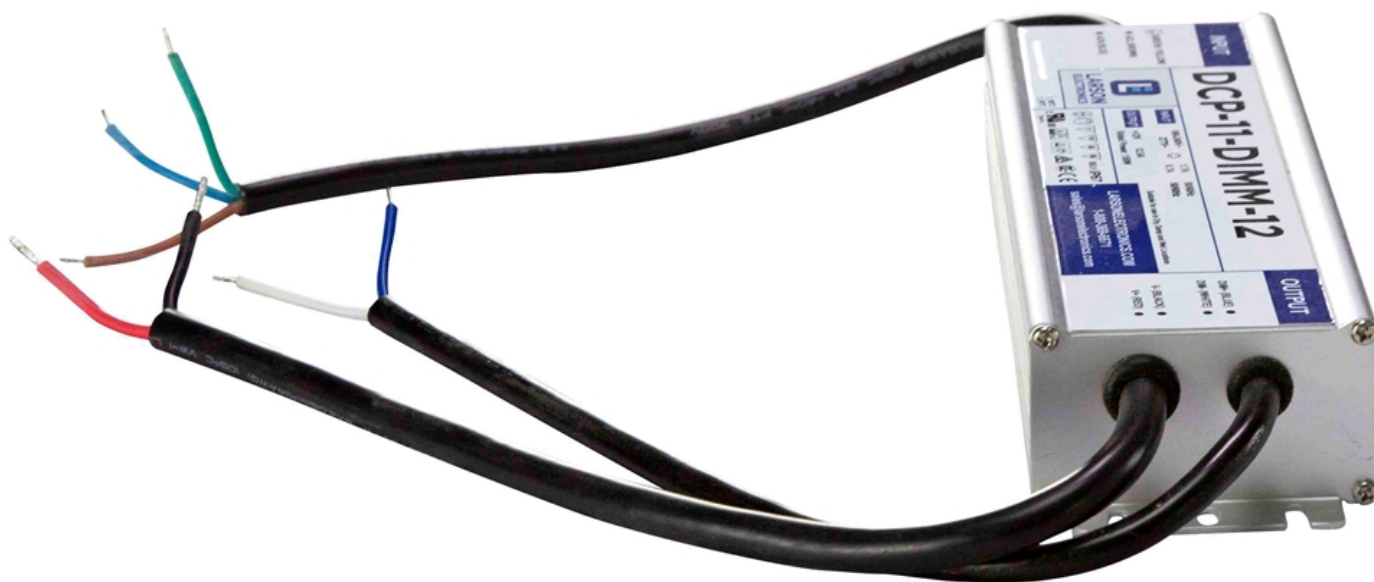
NOTE: In order to obtain the best performance and the longest operational life from these units, it is recommended that you do not exceed 75% of the unit's output amperage. Running these units at 100% of their capacity can create excess heat and lead to shortened converter life.

At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.

Frequently Asked Questions (FAQ)









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Export Control Classification Number (ECCN): EAR99

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