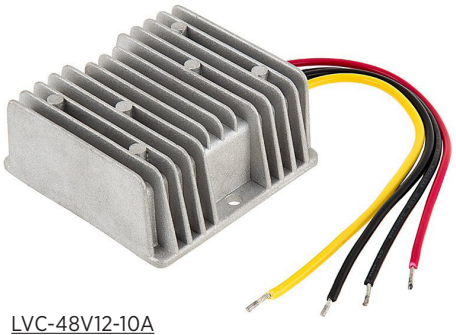
LVC Series

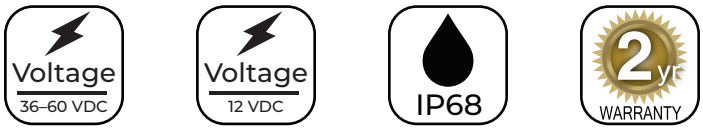
DC/DC Voltage Converter Specifications

Project_____

Date_____Type_____



LVC-48V12-10A



Available Models[1]

- ☐ LVC-48V12-10A
- ☐ LVC-48V12-20A

Part Number Breakdown

Example: LVC-48V12-10A

Series	Typical Input Voltage	Output Voltage	Output Current
LVC [Low-Voltage Converter]	**48V** [48 VDC]	**12** [12 VDC]	**10A** [10 amps]
			20A [20 amps]

Overview

This DC-to-DC voltage converter allows you to use 12V lights with a 36V or 48 VDC system (36-60V). It is available with either 10A or 20A output current. The waterproof converter has a durable die-cast aluminum housing with 7″ wire leads. Surface mount the converter with screw holes on both sides. Use this power reducer for commercial, industrial, or military vehicles, forklifts, tow tractors, golf carts, and more.

Features

- Steps down power from 36-60 VDC to 12 VDC
- Die-cast aluminum housing with mounting holes
- Rated for 10 or 20 amps
- IP68 waterproof

Certifications and Compliances

- CE compliant

CE

Warranty

- 2-year warranty

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[1]Contact customer service if interested in other options.

Rev V2.0 Date: 03/12/2025

Specifications are subject to change without notice.

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Specifications

Model	LVC-48V12-10A	LVC-48V12-20A
OUTPUT		
Output Voltage (±1.5%)	12 VDC	
Output Power (max)	120W	240W
Output Current (TYP)	10A	20A
Ripple and Noise[1] (TYP)	120mVp-p	
Line Regulation	±0.2%	
Load Regulation	±0.2%	
Transient Response	500µs (25% step load change)	
Switching Frequency (TYP)	50kHz (100% load, input voltage range)	
Temperature Coefficient	±0.03%/°C	
INPUT		
Input Voltage	36-60 VDC	
Efficiency (TYP)	95%	
Surge	500VDC (100 ms max. 48 VDC input)	
PROTECTIONS		
Output Overvoltage	115-140%Vo	
Overcurrent	110-130% nominal output current	
Short Circuit	Continuous	
Overtemperature	Auto Shutdown 80°C Tc	Auto Shutdown 110°C Tc
Integrated PCB Fuse	20A	40A
ENVIRONMENTAL		
IP Rating	IP68	
Environmental Rating	Waterproof	
Case Operating Temperature[2]	-40 to 75 °C (-40 to 167 °F)	
Storage Temperature	-55 to 125 °C (-67 to 257 °F)	
Humidity	95% RH, non-condensing	
MECHANICAL		
Connection Type	Pigtail (I/O)	
Housing Material	Die-cast Aluminum	
Cooling Type	Free Air Convection	

Notes:
1. Ripple and noise are measured at 20MHz BW with 10µF capacitor and 1µF capacitor across outputs
2. If case temperature exceeds 65°C see Derating Curve for necessary load reduction.

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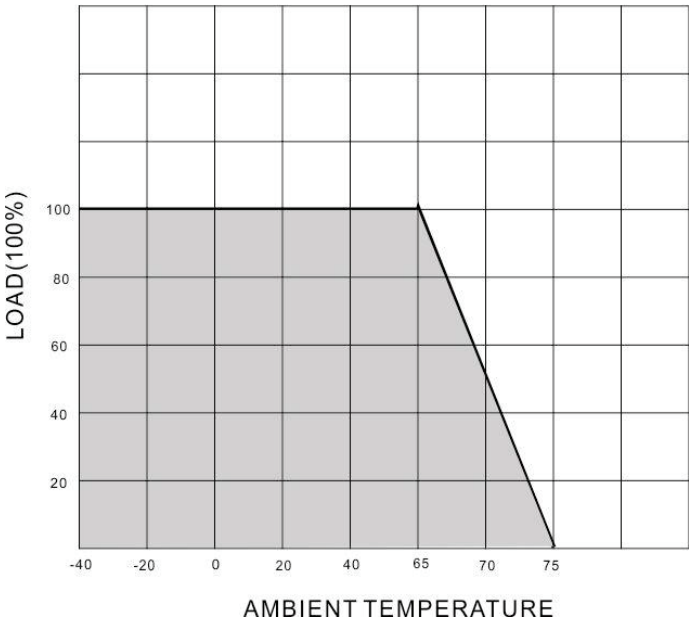
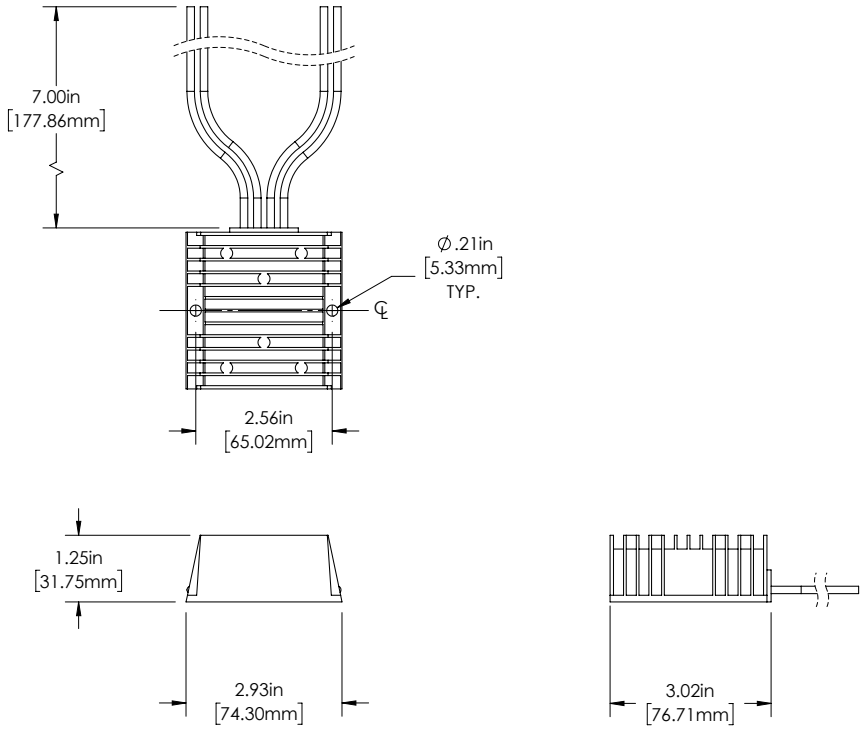
Derating Curve



Dimensional Drawings



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