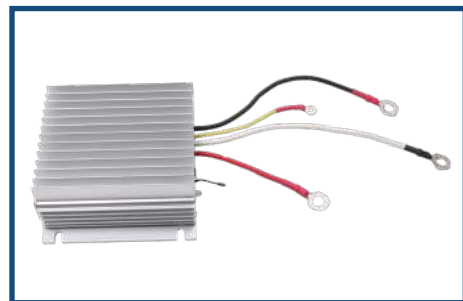




Purkeys DC/DC Converter

The Purkeys DC/DC converter is a buck-boost regulator with adjustable current limiting. It provides a temperature-dependent regulated output voltage and up to 20 A from a battery source or other variable voltage source.

The DC/DC converter can regulate power from the 7-way, dual pole, or reefer charging sources. The converter has adjustable charging current in the case of excessive voltage drop on input sources. Will not interfere with other devices on the aux circuit, such as the ABS system.



Features

Designed to meet SAE J1455
IP67 Rating.....
Warranty: 3 years.....
Input and Output Reverse Polarity Protection.....
Over-Current/Over-temperature Protection
LED Indication
ABS Compatibility
Robust Wiring Connections
Temperature Dependent.....

Benefits

Robust and Long Lasting
Designed for Harsh Weather Conditions
Built to Last
Protects from improper installation
Protects internal components
Intuitive operation/fault detection
Maximized charging while not interfering with ABS or other safety systems
Can safely operate up to 30 A on VIN, VOUT, and GND
Functions in spite of significant temperature changes

Specifications:

Input Operating Voltage Range: 9 – 16 V
Standoff Voltage:..... 24 V
Input Voltage Turn-on Voltage Threshold: 10 V
Input Voltage Turn-off Voltage Threshold (LVD):..... 9 V
Input Voltage Current-derating Threshold: 9.5 V
Output Voltage Range:..... 14.1 – 15.5 V
Rated Charging Current: 20 A
Min Output Voltage Temperature: 14.1 V @ 29°C (or greater)
Max Output Voltage Temperature: 15.5 V @ -14°C (or less)
Operating Temperature Range: -40 to 85°C
Continuous Max Load Operating Temp Range: -40°C to 60°C

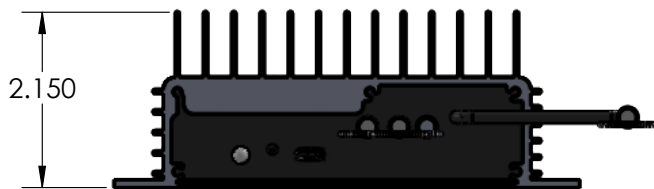
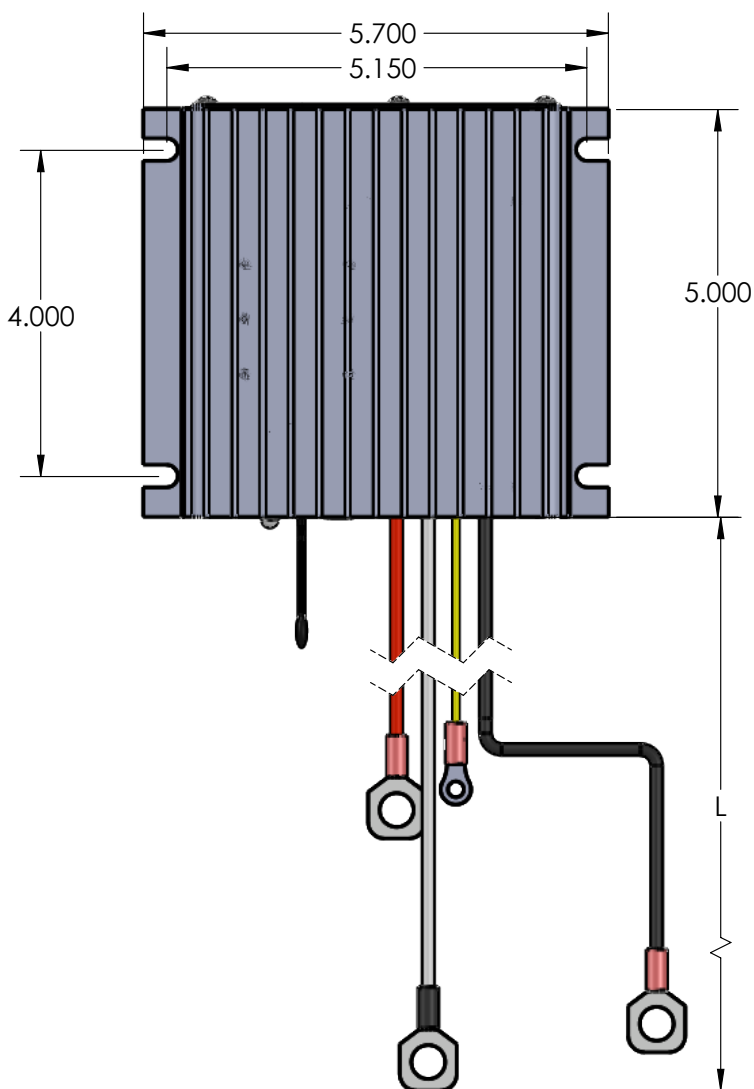
Part Numbers:

Part Number	Description
900-38	Converter, DC/DC 12 V, 20 A



Purkeys DC/DC Converter

Drawings:



NOTE: All drawing measurements are in inches.



Purkeys DC/DC Converter

Wiring/Connections:

Wire Color	Wire Function	Wire Size	Wire Length	Terminal Diameter
Black	Input +	10 AWG	8.5±0.5"	.375"
White	Ground	10 AWG	9.0±0.5"	.375"
Red	Output +	10 AWG	5.0±0.5"	.375"
Yellow	Ignition/Input Sense	14 AWG	4.5±0.5"	#10 (.190)"

LED Indication:

LED Color	LED Action	State/Indication
Green	Slow Blink	Input power present, charging off
Green	Solid	Charging on
Red	Slow Blink	Input under voltage fault
Red	Solid	Input over voltage fault
Orange	Slow Blink	Over temperature fault

