



DCCL60 DC/DC CONVERTER

SERIES DCCL60

The DCCL60 Series rugged, industrial quality DC/DC converter uses a field proven technology to generate 60W output power.

It is a mature design with a track record in numerous applications.

Cooling is by conduction via baseplate. Additional cooling is achieved by natural convection through the cooling slots.

Heavy ruggedizing and conformal coating are available for operation in extreme environments.

Full electronic protection, low component count, large design headroom and the exclusive use of components with established reliability contribute to a high MTBF.

It is manufactured at our plant under strict quality control.

Customized versions are also available.

APPLICATIONS

- Marine / Automotive / RV
- Electric Utilities and Substations
- Telecom Power Plants
- Manufacturing Locations
- Steel Mills
- Military Applications (COTS)
- Industrial Controls
- OEM Applications
- Solar / Alternative Power Systems
- Fuel Cells

FEATURES

- Field-proven converter topology
- Custom inputs available upon request
- Designed to meet EN60950 safety
- Overload protection
- Inrush current limiting
- Convection / conduction cooled
no fan
- Single output
- Custom outputs available
- Designed for heavy industrial and
other harsh environment applications



High
frequency
technology



Light weight,
compact size



Full electronic
protection



Conduction
Cooling
(no Fan)



Optional
Extended
temperature
range

SPECIFICATIONS

Input Voltage	24V, 36V, 48V, 110V or 125Vdc as standard $\pm 15\%$ Other inputs are available on request
Input Protection	Inrush current limiting Varistor Reverse polarity protection Internal safety fuse Lower voltage than the specified minimum input will not damage the unit
Isolation	1500VDC input to chassis, 1500VDC input to output, 500VDC output to chassis Or according to requirements
Switching Frequency	47kHz +/- 2kHz
Output Voltage	12V/5A, 24V/2.5A, 48V/1.25A, 125V/0.5A are standard. Other voltages on request
Redundancy Diode	Not installed
Load/Line Regulation	Better than $\pm 5\%$ combined from 10% load to full load
Dynamic Response	Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time
Output Ripple Noise	Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHz BW)
Efficiency	Output voltage dependent Typically 80% at full load
Output Overload Protection	Current limiting with short circuit protection (hiccup mode)
Output Overvoltage Protection	Double regulator loop Transzorb clamp on output
Standards	Designed to meet corresponding UL and CSA standards, EN 60950, EN 62368-1 and CE
EMI	EN 55032 Class B

Operating Temperature	0°C to 50°C for full specification Extended rating depends on available conduction and convection.
Humidity	5 - 95% non-condensing
Temperature Drift	0.03% per °C over operating temperature range
Cooling	Conduction to customer heat-sink or chassis and natural convection
Environmental Protection	Basic ruggedizing Heavy ruggedizing and conformal coating as option
Shock/Vibration	IEC 61373 Cat 1 A&B
Dimensions	FZ: 114 x 48 x 127 mm including terminal block and flanges. Mounting holes are clear
Weight	0.45 Kg
Connections	Barrier type terminal block with 3/8" spacing for input/output
MTBF	180,000 hours at 45°C Demonstrated MTBF is significantly higher
Indicators	None
Control Input	None
Alarm output	None
RoHS Compliance	Fully compliant
Warranty	2 years

