

DC/DC Converters with Wide Input Range for Industrial Applications Standard Stock Models



F2: 200W; F1: 150W; F0: 100W

Features

- Field-proven converter topology
- Wide input range: 20-60Vdc or 65-160Vdc
- Custom inputs available upon request
- EMI: EN55022 Class B for most models
- Designed to meet EN60950 safety
- Double regulator overvoltage protection
- Overload protection
- Inrush current limiting
- Convection/conduction cooled - no fan
- Single output. Custom outputs available
- Designed for heavy industrial and other harsh environment applications

GCW Series Key

Model	DC - Input	Output V/A	Power
GCW 100-12 FT	20-60V	12V/8A	100W
GCW 100-24 FT	20-60V	24V/4	100W
GCW 100-48 FT	20-60V	48V/2	100W
GCW 150-12 FT	20-60V	12V/12	150W
GCW 150-24 FT	20-60V	24V/6	150W
GCW 150-48 FT	20-60V	48V/3	150W
GCW 200-12 FT	20-60V	12V/16A	200W
GCW 200-24 FT	20-60V	24V/8A	200W
GCW 200-48 FT	20-60V	48V/4A	200W
GCW 100-110/12 FT	65-160V	12V/8	100W
GCW 100-110/24 FT	65-160V	24V/4	100W
GCW 100-110/48 FT	65-160V	48V/2	100W
GCW 150-110/12 FT	65-160V	12V/12	150W
GCW 150-110/24 FT	65-160V	24V/6	150W
GCW 150-110/48 FT	65-160V	48V/3	150W
GCW 200-110/12FT	65-160V	12V/16A	200W
GCW 200-110/24FT	65-160V	24V/8A	200W
GCW 200-110/48FT	65-160V	48V/4A	200W

Input:

Input Voltages	20...60Vdc and 65...160Vdc
Input Protection	Reverse polarity protection by crossbar diode on 20-60V input and series diode on 65-160V input; inrush current limiting; thermal fuse; varistor
Isolation	Input to chassis/output: 1500Vdc; Output to chassis: 500Vdc
EMI	EN 55022 Class A as a minimum

Output:

Output Power	100W (GCW 100), 150W (GCW 150), 200W (GCW200)
Output Voltage	12V, 24V or 48Vdc are standard. Other voltages available upon request
Line Regulation	0.5%
Load Regulation	Maximum $\pm 1\%$ from no load to full load
Over-voltage Protection	Double regulator loop
Over-load protection	Rectangular current limiting with hiccup type short circuit protection.
Output Ripple/Noise	High frequency ripple is better than 30mVrms or 200mVpp (20 MHz BW).
Operating Temperature Range	0°C to +50°C for full specifications with convection/conduction cooling. Extended temperature ranges available
Temperature Drift	0.03% per °C over operating temperature range
Efficiency	Minimum 80% at full load
MTBF	150,000 hours at 45°C
Input/Output Connection	Screw-type terminal block, 3/8" spacing
Mechanicals 100W	Enclosed F0 package: 3.4" x 6.1" x 1.9". Weight: 1.2 lbs; PCB Size: 3" x 5". Component height: 1.5"
Mechanicals 150W	Enclosed F1 package: 7.8" x 4.4" x 2.0". Weight 1.64 lb; PCB Size: 100mm x 160mm; Component height: 1.5"
Mechanicals: 200W	Enclosed F2 package: 10" x 4.425" x 2.25". Weight 2.5 lb PCB Size: 100mm x 220mm; Component height: 1.75"
Warranty	Twelve months subject to application within good engineering

Enhancements to these general specifications and customizing can be accommodated upon request.
Designed to meet common approval requirements. Specifications subject to change.