

Maxi 8000 AC/DC - 400V (Wye net - with neutral)

AC input voltage systems - 120/208V (max 7500W)
 220/380V
 230/400V
 240/415

Maxi 8000 AC/DC - 230V (Delta net - no neutral)

AC input voltage systems - 120/208V
 230V (Norway)

ComPact family summary

MIL-STD-810G, MIL-STD-461G, MIL-STD-1275D
 Power Factor Correction (PFC)
 RS-485 bus
 Active load sharing
 Battery temperature compensated charging
 RoHS compliant
 IP67

Description

Maxi 8000 AC/DC provides power output of up to 8400W. The input current is power factor corrected and designed for optimum utilization of weak power sources such as portable generators. The efficiency is very high due to soft switching technology. The RS-485 bus can be used for control, monitoring and setup. Detailed status and statistics can be retrieved. The bus is also used for interconnecting multiple units in a redundant or parallel system. ComPact can be configured to charge different battery technologies such as Li-Ion, LiPo, lithium iron phosphate and lead-acid. ComPact can be software configured according to customer specification. The firmware is user upgradeable for future battery technologies and facilities. ComPact is protected from overvoltage, overcurrent, short circuit, reversed polarity and over temperature.

Part No.	NSN	Description
P600200	-	Maxi 8000 AC/DC - 400V, Dark Green
P600210	-	Maxi 8000 AC/DC - 230V, Dark Green



Maxi 8000 AC/DC - 400V

Functions

Over temperature	The unit is protected from over temperature by derating the output current. It shuts down if the temperature continues to rise. The unit automatically starts up again when the temperature drops.
Input circuit breakers	The input circuit breaker is for failure protection and is also used as an ON/OFF switch.
Input voltage	When the input voltage is below the safe operating range, the converter is shut off. When the voltage returns, the converter is turned on again.
Connectors	AC input: 400V: Bayonet, 5 pin, with neutral, Allied Electronics Corporation MG 02R 18-11P PMC-A 101E SQG or equivalent 230V: Bayonet, 4 pin, no neutral, Allied Electronics Corporation MG 02R 22-22P PMC-A 101E RT or equivalent DC output: Copper bars with 10.5mm holes suitable for 10mm and 3/8" bolts. Communication/NTC: 2 pieces, Binder 09-0416-30-05
Grounding	M5 threaded hole on mounting plate, right side
Acoustic noise	At ambient temperatures below 45°C the acoustic noise is 50 dBA.
Frequency range	45-430 Hz
Cooling	Forced air by temperature controlled fan

Patented

Maxi 8000 AC/DC

Specifications

Electrical

AC Input		
Model	400V	230V
Input voltage range	Min: 99/171V Max: 276/478V	Min: 99V Max: 276V
Neutral wire	Required	Not used
Power Factor - load: $\geq 50\%$, Vin: 50/60 Hz	Typical 0.99	
Input current -Load: 8400 W -Vin: 208 VAC, 50/60 Hz	≤ 26 A	
Total Harmonic Distortion -Load: 28 VDC, 240 A -Vin: 115/230 VAC, 50/60 Hz $\leq 10\%$	$\leq 6\%$	
Efficiency -Load: 28 VDC, 240 A -Vin: 208 VAC	$\geq 89\%$	
DC Output		
Default output voltage	28.0 VDC	
Adjustable output voltage	5-34 VDC	
Overvoltage protection (OVP)	36.5 V	
Default output power limit	8400 W	
Adjustable output power limit	513-8400 W	
Default output current limit	300 A	
Adjustable output current limit	15-300 A	
Short circuit current	\leq setting of current limiter +3 A	
Load sharing	≤ 6 A deviation	
Output voltage ripple and noise -Bandwidth: 20MHz	≤ 100 mVp-p	
Load regulation	Typical: 100 mV	
Line regulation	Negligible	
Safety	CE marked	

EMC (fully qualified unless stated)

Electromagnetic Interference

MIL-STD-461G:
CE102, RE101, RE102, RS103, CS101, CS114, CS115 and CS116

Electrical systems in vehicles

MIL-STD-1275E:
Imported voltage surge 40 V and 100 V and ripple 14 V

Electrostatic discharge

EN 61000-4-2
ESD

Environmental (fully qualified unless stated)

High temperature

Operational

MIL-STD-810G: Method 501.5, Procedure II, 249 A / 7500 W: +60 °C
Automatic derating to 249 A/7500 W when ComPact is above 60 °C
(approximately 20 °C ambient at 7500 W load)

Storage

MIL-STD-810G: Method 501.5, Procedure I, +71 °C

Low temperature

Operational

MIL-STD-810G: Method 502.5, Procedure II, -40 °C

Storage

MIL-STD-810G: Method 502.5, Procedure I, -51 °C

Temperature shock

MIL-STD-810G: Method 503.5, -51-+71 °C, non-operational

Humidity

MIL-STD-810G: Method 507.5, Procedure II, operational

Vibration

MIL-STD-810G: Method 514.6C Table 514.6C-VI. Composite wheeled vehicle vibration exposures figure 514.6C-3

MIL-STD-810G: Method 514.6D, Category 20, Ground Vehicles, Wheeled/Tracked/Trailer, Procedure I

Shock

MIL-STD-810G: Method 516.6, Procedure I, functional Shock, 40 g, 11 ms

Fungus

MIL-HDBK-454: Analysis of the degree of inertness to fungus growth of the components

Salt Fog

MIL-STD 810G: Method 509.5, 24 h spray, 24 h dry, 2 times

Altitude

Operational

MIL-STD-810G: Method 500.6, Procedure II, 4572 m (15000 ft) at 57.2 kPa

Storage

MIL-STD-810G: Method 500.6, Procedure I, 12192 m (40000 ft) at 18.8 kPa

Encapsulation (designed to meet)

IP67: Immersion in 1 m water for 30 minutes .

Mechanical

Enclosure	Die cast and machined aluminum.
Surface finish	Paint finish. Surface finish consistent with die casting.
Width	326 mm, 12.8 in (including mounting flange)
Depth	550 mm, 21.6 in
Height	236 mm, 9.3 in
Weight	40.5 kg, 89.1 lbs

Patented