

# ComPact 2400 AC/DC PS

ComPact power supply, 99-276 VAC / 5-30.7 VDC, 80 A  
Power Supplies and UPS



NSN: 6130-25-160-8484

Input: 115/230 VAC, 50/60/400 Hz

Output: 28 VDC, 80 A, 2400 W

OVP: 31.4V (MIL-STD 704F)

Part Number: P600370

## ComPact Family Summary

- PFC
- RS-485 bus
- Active load sharing
- Battery temperature compensated charging
- Stand alone or mounted in 19" rack
- Alarm relay outputs
- RoHS compliant
- IP67



## Description

The input current of ComPact is power factor corrected and designed for optimum utilisation of weak power sources such as portable generators. The efficiency is very high due to soft switching technology. ComPact can operate stand alone or be mounted in 19" rack system.

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. The signal connectors provide several signals in addition to the RS485 bus: alarm relay outputs and input for battery temperature sensor. Temperature compensated charging ensures full battery capacity over the entire temperature range. 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.

## Functions

<b>Over Temperature</b>	The unit is protected from over temperature by derating the output current. It shuts down if the temperature continues to rise.
<b>Input Circuit Breaker</b>	The input circuit breaker is for failure protection and is also used as ON/OFF switch.
<b>Alarms</b>	Status signals are fed to separate potential free outputs, and are indicated in separate LEDs.
<b>Display</b>	The display can be toggled between output voltage, output current and alarm/error codes.
<b>Input Voltage</b>	When the input voltage is below the safe operating range, the converter is shut off.
<b>Connectors</b>	AC input: 97B-3102E-16-10P-PCC-622 Amphenol or similar DC output: 97B-3102E-22-22S-622 Amphenol or similar Alarm 1: Binder 09-0404-30-02 Alarm 2: Binder 09-0412-30-04 NTC/COM: 2 pieces. Binder 09-0416-30-05
<b>Grounding</b>	Available in the front and back
<b>Acoustic Noise</b>	At ambient temperature below 45°C the acoustic noise is 45 dBA.
<b>Frequency</b>	45-430 Hz
<b>Cooling</b>	Forced air by temperature controlled fan

## Electrical Specifications

Input Voltage	99-276 VAC	
Power Factor -Load: ≥ 50%, Vin: 50/60 Hz	Typical: 0.99	
Input Current	Vin: 99 VAC	≤ 28 A
-Load: 2400 W	Vin: 120 VAC	≤ 23 A
-Vin: 50/60 Hz	Vin: 230 VAC	≤ 12 A
Total Harmonic Distortion -Load: 28 VDC, 80 A -Vin: 115/230 VAC, 50/60 Hz	≤ 6%	
Efficiency	Vin: 120 VAC	≥ 88%
-Load: 28 VDC, 80 A	Vin: 230 VAC	≥ 90%
Default Output Voltage	28.0 VDC	
Adjustable Output Voltage	5-30.7 VDC	
Overvoltage Protection (OVP)	31.4 V	
Default Output Current Limit	83 A	
Adjustable Current Limit	5-83 A	
Short Circuit Current	≤ setting of current limiter + 1 A	
Load Sharing	≤ 2 A deviation	
Output Voltage Ripple and Noise -Bandwidth: 20 MHz	≤ 100 mVp-p	
Load Regulation	Typical: 70 mV	
Line Regulation	Negligible	
Safety	CE marked	

The protection features are by default latching and the unit does not restart before the input voltage is cycled.

## Environmental Specifications

<b>High Temperature</b> <u>Operational</u> MIL-STD-810G: Method 501.5, Procedure II, + 60°C <u>Storage</u> MIL-STD-810G: Method 501.5, Procedure I, + 71°C
<b>Low Temperature</b> <u>Operational</u> MIL-STD-810G: Method 502.5, Procedure II, - 40°C <u>Storage</u> MIL-STD-810G: Method 502.5, Procedure I, - 51°C
<b>Temperature Shock</b> MIL-STD-810G: Method 503.5, - 51 to + 71°C, non-operational
<b>Humidity</b> MIL-STD-810G: Method 507.5, Procedure II
<b>Vibration</b> 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
<b>Shock</b> MIL-STD-810G: Method 516.6, Procedure I, functional Shock, 40 g, 11 ms
<b>Fungus</b> MIL-HDBK-454: Analysis of the degree of inertness to fungus growth of the components
<b>Salt Fog</b> MIL-STD-810G: Method 509.5, 24 h spray, 24 h dry, 2 times
<b>Altitude</b> <u>Operational</u> MIL-STD-810G: Method 500.5, Procedure II, 4572 m at 57.2 kPa <u>Storage</u> MIL-STD-810G: Method 500.5, Procedure I, 12192 m at 18.8 kPa
<b>Encapsulation</b> The power supply is designed to meet the requirements of IP67 and has been tested by immersion in 1 m water for 30 minutes.

## EMC

<b>Electromagnetic Interference</b> The power supply meets the requirements of MIL-STD-461G: CE101, CE102, RE101, RE102, RS103, CS101, CS114, CS115, CS116 and CS118.
<b>Electrical Systems in Vehicles</b> The power supply meets the requirements MIL-STD-1275D for: Imported voltage surge 40 V and 100 V and ripple 14 V.
<b>Electrostatic Discharge</b> The power supply meets the requirements of EN 61000-4-2 for ESD.

## Weight and Dimensions

Width	220 mm
Depth in Rack	390 mm
Depth Total	420 mm
Height	88 mm, (2U)
Weight	11.1 kg

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All specifications are subject to change without notice  
The information contained herein is for reference only and does not constitute a warranty of performance

Partnered Supplier



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