ComPact 2000 DC/AC

ComPact 2000 DC-AC Inverter, 2000 VA, 120/230V AC, 60/50Hz **Power Supplies and UPS**



NSN: 6130-25-162-7531

Summary

- Input: 16-34 VDC
- Output: 120/230 VAC pure sine, 60/50 Hz, 2000 VA
- RS-485 bus (CAN bus available with future firmware upgrade)
- Stand alone or mounted in 19" rack
- Relay alarm outputs
- RoHS compliant
- IP67
- Order number: P600430



Description

The ComPact 2000 DC/AC Inverter offers pure sine output at very high efficiency and can operate stand alone or be mounted in 19" rack system. The RS-485/CAN bus can be used for control, monitoring and setup (CAN bus available with future firmware upgrade). Detailed status and statistics can be retrieved. The bus is available on the signal connectors. The signal connectors also provide alarm relay outputs. The ComPact 2000 DC/AC can be software configured according to customer specification. The firmware is user upgradeable. The ComPact 2000 DC/AC is protected from overvoltage, overcurrent, short circuit, reversed input polarity and over temperature.

Functions

Over Temperature	The unit is protected from over temperature by shutting down. The unit automatically starts up again when the temperature drops.	
Alarms	Status signals are fed to separate potential free outputs, and are indicated in separate LEDs for: Power OK Unit alarm Overload	
Display	The display can be toggled between output voltage, output current and alarm/error codes.	
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	DC input: Positive: Bayonet, Allied Electronics Corporation MGR 02R 20-2P SQF 36 123 LT 101E RT Negative: Bayonet, Allied Electronics Corporation MGR 02R 20-2P SQF 36 126 LT 101E RT AC output: Bayonet, Allied Electronics Corporation MG 02R 16-10S PMC-C-AG 101E NS2 or equivalent REL 1/REL 2: 09-0412-30-04 Control: 09-0408-30-03 REM/COM 1/2: 2 pieces. Binder 09-0416-30-05	
Grounding	Available in the front and back	
Acoustic Noise	At ambient temperatures below 45°C the acoustic noise is 45 dBA.	
Cooling	Forced air by temperature controlled fan	

Electrical Specifications

DC input voltage range	16-34 VDC	
DC input current –Load: 2000 W @ PF > 0.95	Vin: 20 VDC Vin: 34 VDC	≤ 115 A ≤ 68 A
Efficiency —Input: 28 VDC	Vout: 120 VAC Vout: 230 VAC	≥ 88 % ≥ 90 %
Default output voltage	230 VAC, 50 Hz	
Adjustable output volta	200-240 VAC, 50 Hz 100-120 VAC , 60 Hz	
Maximum continuous ou DC input ≥ 20V, AC outp DC input ≥ 18V, AC outpu DC input ≥ 16V, AC outpu DC input ≥ 16V, AC outpu	2000W 1800W 1600W 1600W	
Frequency	50/60 Hz ±0.1 Hz	
Overload	105-115 %, 120 sec 115-150 %, 10 sec Shut down, re-power to recover	
Short circuit current	≤ selected current limit +70 % Shut down, re-power to recover	
Total Harmonic Distortion - 2000W @ PF > 0.95	115 VAC, 60 Hz 230 VAC, 50 Hz	≤ 3 % ≤ 3 %
Output voltage ripple an - Bandwidth: 20MHz	≤2 Vp-p	
Load regulation	±3 %	
Line regulation	Negligible	
Safety	CE marked	

EMC

Electromagnetic Interference

The power supply meets the requirements of MIL-STD-461G: CE102, RE101, RE102, RS103, CS101, CS114, CS115, CS116, CS118

Electrical systems in vehicles

The power supply meets the requirements of MIL-STD-1275E.

Electrostatic discharge

The power supply meets the requirements of EN 61000-4-2 for ESD.

Environmental Specifications

High temperature

Operational

MIL-STD-810G: Method 501.5, Procedure II, +50°C

Operation at higher ambient will result in reduced power output

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 500.5, Procedure II, 4572 m (15000 ft) at 57.2 kPa

Storage

MIL-STD-810G: Method 500.5, Procedure I, 12192 m (40000 ft) at 18.8 kPa $\,$

Encapsulation

The power supply is designed to meet the requirements of IP67 and has been tested by immersion in 1 m water for 30 minutes.

Weight and Dimensions

 Width
 220 mm

 Depth in rack
 390 mm

 Depth total
 420 mm

 Height
 132 mm (3U)

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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



