

Military Power Distribution System PC-MG43

15000W Single Output Convection Cooled AC-DC Power Distribution System

Main Features:

- Output Over Current Protections with Red LED Indication; Over Temperature Protection.
- Output Voltage OK with Green LED Indication. Turned Off by Over Voltage Protection.
- AC Over Voltage / Under Voltage Protection with Red LED Indication.
- 3-Phase AC Input R / S / T Phase OK with Green LED Indication.
- Combat Status Switch: Turn ON to disable AC OVP & UVP.
- Sustains High Level of Shocks and Vibration.
- AC Input On / Off Switch.
- Input Transient Surge Protection.
- Environmental : MIL-STD-810G.
- EMC : MIL-STD-461G.
- All PCBs Coating.
- MTBF \geq 100k hours.



Typical Applications:

- Missile Launching System
- Electronic Warfare (EW)
- Military (Airborne, ground-fix, shipboard)
- Ruggedized, Telecom, Industrial

Main Specification:

- Input Voltage: 3 Φ AC 220V \pm 10%、47~63Hz with LED indication.
- Output Voltage: DC 300V \pm 15% with LED indication; 15000W max.
- Operating Ambient Temperature : -40 $^{\circ}$ C~ +70 $^{\circ}$ C
- Input Surge Withstand : 3KV、40uS
- Surface Chromate Treatment: Finish No : 7.3.1 of MIL-STD-171E

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Electrical Specification:

1. Input Characteristics		
Voltage Range	3Φ AC 220V ±10%、47~63Hz	
Efficiency (%)	≥90%	
Inrush Current	300A Max	
2. Output Characteristics		
Default DC Voltage	300VDC	
Voltage Regulation Range	DC 300V ±15%	
Rated Power (W)	15000W	
3. Insulation		
Insulation voltage (@ 2 sec)	I/P to chassis : DC500V、10mA O/P to chassis : DC500V、10mA	
4. Environmental		
A. Temperature Cycle Test	-40°C~ +70°C (operation)	
High Temperature Test	Per MIL-STD-810-501.5	
Low Temperature Test	Per MIL-STD-810-502.5	
B. Vibration Test	Per MIL-STD-810-514.6	
5. Protection		
Input Surge Withstand	3KV、40uS	
Input	R / S / T Phase OK with Green LED Indication for each. Turn off while Phase Loss for each.	
	Combat Status Switch: Turn Off to enable AC OVP & UVP.	
	AC Over Voltage Protection (AC OVP) Enable Range (Red LED Indication On)	250VAC±3%
	AC Under Voltage Protection (AC UVP) Enable Range	185VAC±3%
	Combat Status Switch: Turn ON to disable AC OVP & UVP.	
	AC OVP Disable Range (Red LED Indication Off)	>250VAC±3%, <270VAC±5%
	AC UVP Disable Range	<185VAC±3%,>120VAC±5%
Output	*Voltage OK Range: 255VDC~345VDC with Green LED Indication. Turned Off by Over Voltage Protection. *Over Current Protection: with Red LED Indication. *Over Temperature Protection.	

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Electrical Specification:

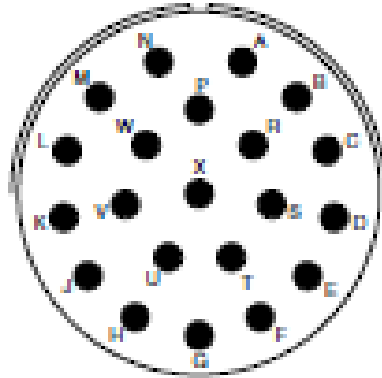
6. EMC Standard:	
EMI(MIL-STD-461G)	CE102, RE102
EMS(MIL-STD-461G)	CS101, CS114, CS115, CS116, CS118, RS103
7. Mechanism	
Operation Panel	Hight : 280mm Chassis: Natural trivalent chromate surface treatment. Panel: matte (#36) gray PU topcoat. Chinese font : 6*6mm , depth 0.5mm , Filled with black paint. With grounding copper stud (M6) tapping lock.
Body	Chromate treatment Aluminum alloy With grounded copper pillar
LED Indicator Light	All equipped Lamp Holder & Light Bulb. 3-phase AC Input 'R' 、 'S' 、 'T' : Green color. AC OVP : Red color. 300VDC OK : Green color. 300VDC Over Current Protection : Red color.
Toggle Switch	*AC Input On / Off Switch. *Combat Status Switch. *Combat Status Switch Cover. *Reset.

Warning: If the input voltage is above 255VAC (inclusive), the power supply unit may be burned out.

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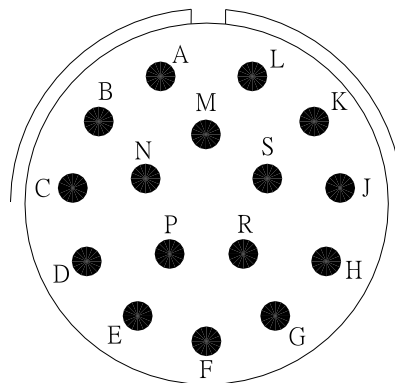
Connector Definition:

3-Phase AC INPUT Connector J1 (21Pin) : Plug (MS3474W22-21P)



Pin	Description
A、B、C、D、E、F、G	3Φ AC 220V (A) R
H、J、K、L、M、N、P	3Φ AC 220V (B) S
R、S、T、U、V、W、X	3Φ AC 220V (C) T

300VDC OUTPUT Connector J2 (16Pin) : Socket (MS3474W20-16S)



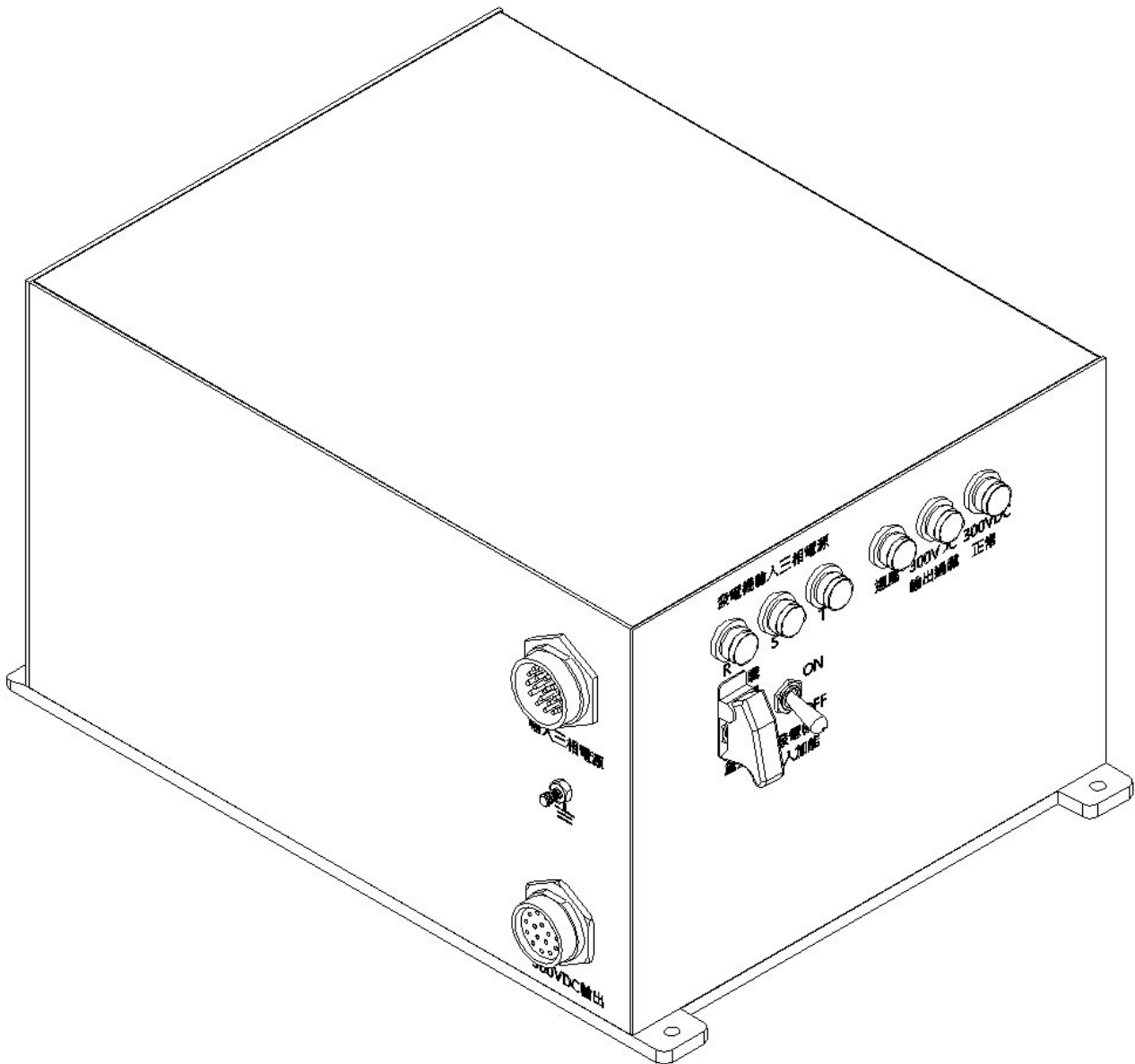
Pin	Description
A、B、C、D、E、F、G	DC 300V
J、K、L、M、N、P、R	RTN_DC 300V
S	Chassis Ground (NO CONNECTION)
H	NO CONNECTION

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Physical Dimension:

Size (L*W*H) : 420(±5) mm*300(±1.5)mm*230(±1) mm

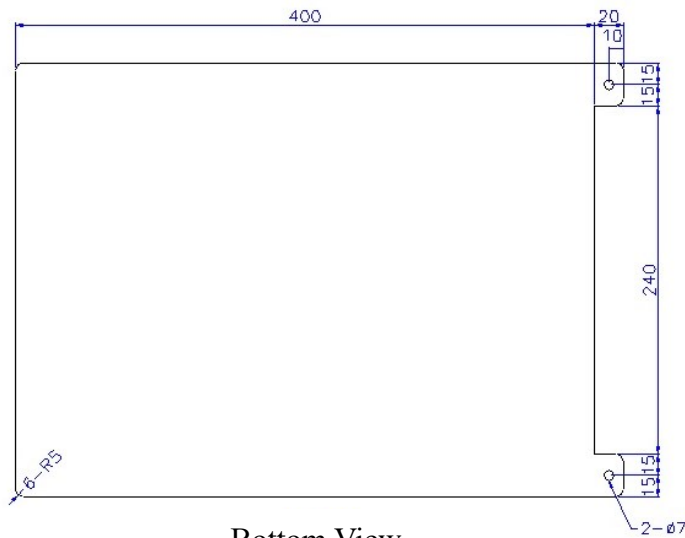
Weigh : <40Kg



Outline

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Physical Dimension:



Bottom View

