



#### **OVERVIEW**

DP60-24 is an economical 60W DIN rail power supply that conforms to German industrial standards. It is suitable for installation on TS-35/7.5, or TS-35/15 rails, using 90VAC to 264VAC input, and complies with EN61000-3-2 Standard on Harmonic Current Specifications Specified by the European Union.

DP60-24 adopts a metal shell design to improve heat dissipation consumption. The working efficiency is as high as 89%, and the product can work in an ambient temperature of -40 degrees to 70 degrees under the condition of air circulation. It has a constant current mode overload protection function, suitable for a variety of inductive or capacitive load applications, complete protection functions, and compliance with relevant certifications for industrial control equipment, making it a very competitive power supply solution for industrial applications.

#### **FEATURE**

- Meet EMC Standard
- 100% full load aging test
- Power Input: AC90-264V
- Wide operation temperature range: -40°C-70°C
- High efficiency, long life time and high reliability
- Support production for short circuit/over current/over voltage





#### **APPLICATION**

- Industrial Control System
- Semiconductor fabrication equipment
- Factory automation
- Electro-mechanical apparatus

#### **TECHNICAL SPECIFICATION**

Model	DP60-24
Output	
Group of Output	1
DC Voltage	24VDC
Output Voltage Factory	24.00-24.2VDC (Vin: 220VAC / Load: 0A)
Setting	
Output Rated Current	2.5A
Output Current Range	0-2.5A
Rated Output Power	60W
Total Peak Output Power	90W (sustainable time 10S/220VAC)
Peak Output Current	3.75A (sustainable time 10S/220VAC)
Ripple Noise	Peak-to-peak value ≤100mV. (Measurement method: The terminal should
	be connected in parallel with 0.1uF and 47uF capacitors, and the
	measurement should be performed at a bandwidth of 20MHz)





Output Voltage Range	22.5-28VDC
Stabilized Voltage Precision	±1% (@ 90-264VAC input, 100% load)
Line Regulation	±0.5% (@ 90-264VAC input, 100% load)
Load Regulation	±1% (@90-264VAC input, 0-100% load)
Output Start Time	<1S @ nominal input (100% load )
Output Hold Time	>20ms @ 115VAC, >115ms @230VAC (100% load )
Voltage Overshoot	≤5.0%
Input	
Input Voltage Range	90-264VAC
Input Rated Voltage	100-240VAC
Range	
Frequency Range	47Hz-63Hz
Rated Frequency	50Hz/60Hz
Starting Voltage	90VAC
Efficiency	>85.0% @115VAC, >89.0% @ 230VAC
Input Current	<1.40A @115VAC, <0.80A @ 230VAC
Start Inrush Current	<20A @115VAC, <20A@ 230VAC
Power Factor	PF>0.6 (at full load)
Protection	
Output Over Power	78-97W Swing machine (Testing method: Increase the output current until





	enabling the protection. Protection mode: Swing machine, Self-recovery
	after over-power released.)
Output Over Voltage	30-36V Swing machine (Short circuit the Pin1-2 of U8, swing machine.
	Output recovery to normal after removing the short circuit) Note: Do not
	use external voltage.
Output Over Current	3-3.75A Swing machine (Testing method: Increase the output current until
	enabling the protection. Protection mode: Swing machine, Self-recovery
	after over-current released.)
Output Short Circuit	Use a copper wire with a sufficient cross-sectional area and a length of
	15cm±5cm to directly short-circuit at the power output port, which can be
	short-circuited for a long time, and can be automatically restored after the
	short-circuit is eliminated.
<b>Operation Environment</b>	
Operation TEMP /	-40°C-70°C, 20%-95%RH No condensing
Humidity	
Storage TEMP /	-40°C-85°C, 10%-95%RH No condensing
Humidity	
Temperature Coefficient	±0.03%/°C (0-50°C)
Vibration	Frequency range 10-500Hz, acceleration 2G, each sweep cycle 10min. 6
	sweep cycles along the X, Y, and Z axes
Impact	Acceleration 20G, duration 11ms, 3 shocks along X, Y, and Z axis each





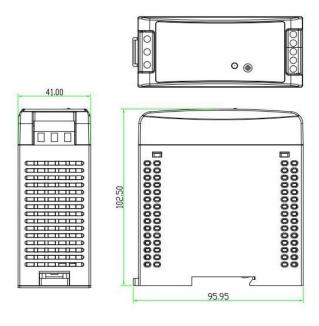
Altitude	2000m	
Safety and Electromagnetic Compatibility Standard		
Security Standard	GB4943/EN62368-1 ■Reference ■Certification	
Dielectric Strength	Input—Output: 3KVAC/10mA, InputCase:1.5KVAC/10mA	
	OutputCase: 0.5KVDC/10mA, Time for each testing is 1min.	
Ground Test	Test conditions: 32A/2 minutes, Ground impedance: <0.1 ohms.	
leakage Current	Input to ground ≤3.5mA, Input to output ≤0.25mA (Input 264VAC,	
	Frequency 63Hz)	
Insulation Resistance	Input-Output: 10M ohms	
Conducted Disturbance	EN55022, EN55024, FCC PART 15 Class B	
Radiated Interference	EN55022, EN55024, FCC PART 15 Class B	
Harmaonic Current	EN61000-3-2 Class D	
Conducted Disturbance	EN61000-4-6 Level 3	
Radiation Harassment	EN61000-4-3 Level 3 Class B	
Power Frequency	EN61000-4-8 Level 3	
Harassment		
Static Harassment	EN61000-4-2 Level 4 Class B	
fast Burst	EN61000-4-4 Level 4 Class B	
Lightning Strike (Surge)	EN61000-4-5 Level 4 Class B	
interrupted Fall	EN61000-4-11	
Others		

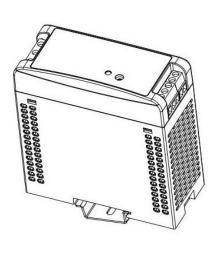




Dimension	93*41*102.5mm
Warranty	5 years

#### **DIMENSION**







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