



# APS-72-24

# Datasheet

Aiming to create better and safer working environments and life experiences through the products we deliver.



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## 72W DIN-Rail Switching Power Supply

### APS-72-24

is an environment friendly power supply for standard DIN-rail mounting with feature of cost-effective and energy efficient. The products offer a high level of stability and immunity to noise, it also has an extremely compact design for space saving and are ideal for applications such as industrial control equipment machinery and all kinds of applications in harsh environment. With good EMC performance, the products compliant with international standards for EMC and safety specifications meet UL61010 and EN62368.



EN62368-1

CB Report



### Features & Benefits

- Wide input voltage range: 85 ~ 264 VAC /120 ~ 370 VDC
- Accepts AC or DC input (dual-use of same terminal)
- Operating temperature: -40 °C to +70 °C
- High I/O isolation test voltage up to 4000 VAC
- Industrial product technology design
- Low ripple & noise
- Output short circuit, over-current, over-voltage protection
- DIN rail TS-35/7.5/15 mountable
- Suitable for small chassis and narrow space installation
- Safety according to UL61010, EN62368



### Ordering Information

Part No.	Output power (W)	Nominal Output Voltage & Current (Vo/Io)	Output Voltage Adjustable Range ADJ*	Efficiency @230VAC (Typ.)	Max. Capacitive Load	Certification
APS-72-24	72	24 V/3 A	24 V-28 V	89%	1500 µF	UL/EN/IEC

\* The actual adjustment may exceed the listed values, care shall be taken to ensure the output voltage and power within the maximum value that listed above.



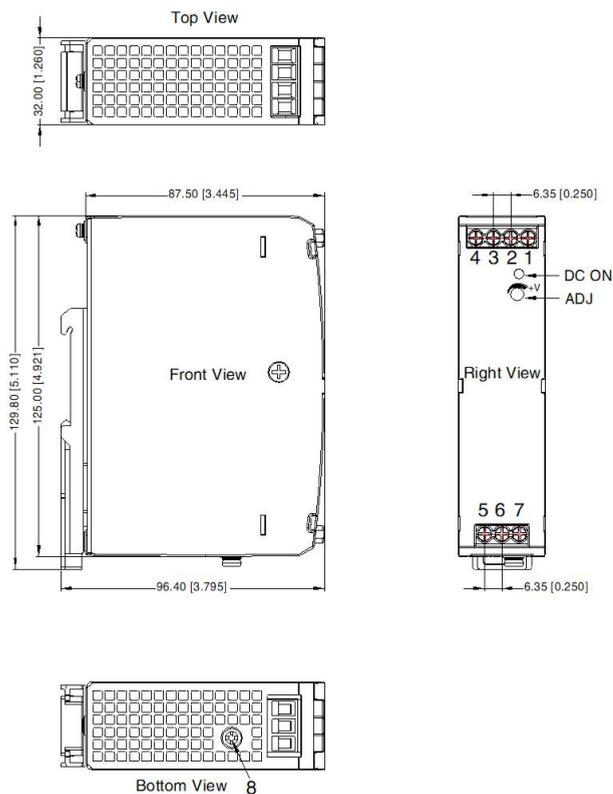
## Specifications

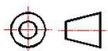
Input Specifications					
Item	Operating condition		Min.	Typ.	Max.
Input Voltage Range	AC input		90 V	-	264 V
	DC input		120 V	-	370 V
Input Frequency			47 Hz	-	63 Hz
Input Current	115 VAC		-	-	2 A
	230 VAC		-	-	1 A
Inrush Current	115 VAC		-	25 A	--
	230 VAC		-	45 A	--
Leakage Current	240 VAC		<0.5 mA		
Hot Plug			Unavailable		
Output Specifications					
Item	Operating condition		Min.	Typ.	Max.
Output Voltage Accuracy	Full load range		-	±1.0%	
Line Regulation	Rated load		-	±0.5%	
Load Regulation	0% - 100% load		-	±1.0%	
Output Ripple & Noise	20MHz bandwidth (peak-to-peak value)	24 V	-	-	120 mV
Temperature Coefficient				±0.03%/°C	
Minimum Load			0%	-	-
Short Circuit Protection	Recovery time < 3s after the short circuit disappear.		Constant current, continuous, self-recovery		
Over-voltage Protection	24V		≤33V (Output voltage turn off, re-power on for recover)		
Over-current Protection	Normal temperature		105% - 150% I <sub>o</sub> , constant current mode, automatic recover after fault condition is removed		
	Low temperature, high temperature		≥105%I <sub>o</sub> , constant current mode, automatic recover after fault condition is removed		
Over-temperature			Output voltage turn off, re-power on for recover after the temperature drops.		
Hold-up Time	115 VAC		12ms	-	-
	230 VAC		60ms	-	-

## Specifications

General Specifications						
Item		Operating condition		Min.	Typ.	Max.
Isolation	Input - Ground	Electric strength test for 1min., leakage current <10mA		2000 VAC	-	-
	Input - output			4000 VAC	-	-
	Output - Ground			500 VAC	-	-
Insulation Resistance	Input - Ground	@ 500 VDC		50 MΩ	-	-
	Input - output			50 MΩ	-	-
	Output - Ground			50 MΩ	-	-
Operating Temperature				-30 °C	-	+70 °C
Storage Temperature				-40 °C	-	+85 °C
Operating Humidity		Non-condensing		20%RH	-	90%RH
Storage Humidity				10%RH	-	95%RH
Switching Frequency				--	65 kHz	--
Power Derating	Operating temperature derating	-30 °C to -10 °C	2.0%/°C	--	--	
		+45 °C to +70 °C	2.0%/°C	--	--	
	Input voltage derating	90 VAC ~ 100 VAC	2.0%/VAC	--	--	
Safety Standard				IS13252 (Part1) safety approved & EN62368-1 (Report) Design refer to UL61010-1		
Safety Class				CLASS I		
MTBF		MIL-HDBK-217F@25°C		> 300,000 h		
Mechanical Specifications						
Case Material		Metal (AL1100, SGCC)				
Package Dimensions		32.00 mm x 125.00 mm x 87.50 mm				
Weight		350 g (Typ.)				
Cooling method		Free air convection				
Electromagnetic Compatibility (EMC)						
Emissions	CE	CISPR32/EN55032	CLASS B			
	RE	CISPR32/EN55032	CLASS B			
	THD	IEC/EN 61000-3-2	CLASS A			
Immunity	ESD	IEC/EN 61000-4-2	Contact ±6KV/ Air ±8KV	Perf. Criteria A		
	RS	IEC/EN 61000-4-3	10V/m	perf. Criteria A		
	EFT	IEC/EN 61000-4-4	±2KV	perf. Criteria A		
	Surge	IEC/EN 61000-4-5	line to line ±2KV/line to ground ±4KV	perf. Criteria A		
	CS	IEC/EN 61000-4-6	10Vr.m.s	perf. Criteria A		
	Voltage dips, short interruptions and voltage variations immunity	IEC/EN 61000-4-11	0%, 70%	perf. Criteria B		

## Installation dimensions



THIRD ANGLE PROJECTION 

Pin-Out	
Pin	Mark
1	-Vo
2	-Vo
3	+Vo
4	+Vo
5	AC(N)
6	AC(L)
7	

7、8 any position must be connected to the earth ()

Note:  
 Unit: mm[inch]  
 ADJ: Output adjustable resistor  
 Wire range: 26-10 AWG  
 Tightening torque: Max 0.4 N·m  
 Mounting rail: TS35, rail needs to connect safety ground  
 General tolerances:  $\pm 1.00[\pm 0.039]$