

MS-15/25/35

SMALL VOLUME SWITCH POWER SUPPLY

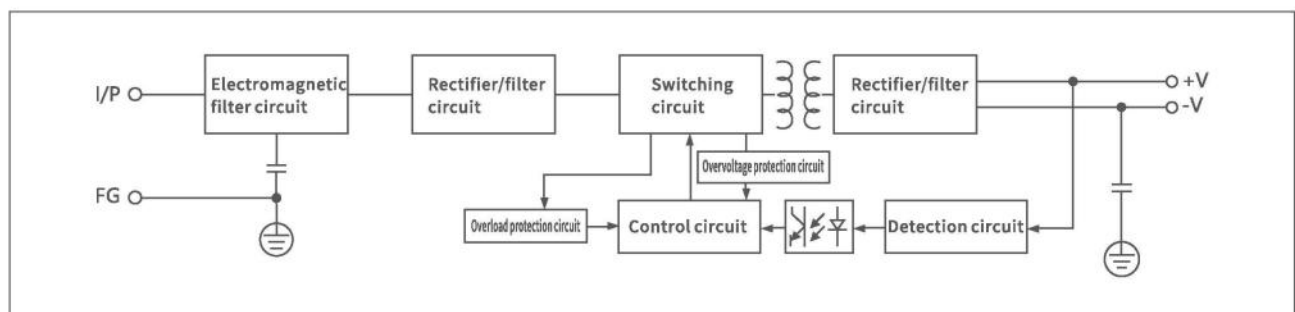


Product overview

The MS-15, 25, 35 series are 15, 25, 35W single group output closed type power supplies that use 85 to 264VAC full range AC input. The entire series provides 5V, 12V, 15V, 24V, 36V and 48V output.

In addition to the efficiency of up to 88%, the design of the metal mesh housing enhances the heat dissipation ability, allowing the MS-15, 25, 35 to operate in the temperature range of -10 °C to +50 °C without a fan. Making it easy for the terminal system to meet international energy requirements. The MS-15, 25, 35 have complete protection functions and resistance to 3G vibration; It complies with TUV EN60950-1, EN60335-1, EN61558-1/-2-16, UL60950-1 and GB4943 international safety regulations. The MS-15, 25, 35 series provide a cost-effective solution for various industrial applications.

Principle diagram



Technical parameter

Type	Technical indicators					
Output	DC voltage	5V	12V	24V	36V	48V
	Rated current	3A	1.25A	0.63A	0.42A	0.31A
	Rated power	15W	15W	15.12W	15.12W	14.88W
	Ripple and noise ①	<50mV	<120mV	<150mV	<240mV	<240mV
	Voltage regulation range	±10%				
	Voltage accuracy	±2.0%	±1.0%			
	Linear adjustment rate	<±0.5%				
	Load adjustment rate	<±1.5%	<±0.5%	<±0.5%	<±0.5%	<±0.5%
Input	Voltage range/frequency	85-264VAC 47Hz~63Hz (120VDC~370VDC)				
	Efficiency (typical) ②	>78%	>82%	>84%	>84%	>84%
	Operating current	<0.3A 110VAC <0.15A 220VAC				
	Impulse current	110VAC 18A 220VAC 36A				
	Start up time	200ms、50ms、20ms: 220VAC				
	Leakage current	≤1mA 240VAC				
Protection characteristics	Overload protection	≥ 105% - 150% Type: constant current output+VO reduced to undervoltage point Cut off output reset: power on again				
	Short circuit protection	+VO drops to undervoltage point to close output				
Environment	Operating temperature、humidity	-10°C~+50°C; 20%~90RH				
	Storage temperature、humidity	-20°C~+85°C; 10%~95RH				
Security	Withstand voltage	Input - output : 1.5KVAC input - case : 1.5KVAC output - case: 0.5KVAC duration :1 minute				
	Leakage current	Input - output 1.5KVAC < 5mA				
	Isolation resistor	Input - output and input - shell, output - shell: 500 VDC / 100 mΩ				
Other	Size	87*60*37mm(L*W*H)				
	Net weight/gross weight	150g/175g				
Remarks	<p>①Ripple and noise measurement method: use a 12 twisted pair, and connect 0.1uF and 47uF capacitors in parallel at the terminal, and measure at 20MHz bandwidth.</p> <p>② The efficiency is tested at the input voltage of 230VAC, rated load and ambient temperature of 25 °C.</p> <p>Precision: including setting error, linear adjustment rate and load adjustment rate.</p> <p>Test method of linear regulation: test from low voltage to high voltage under rated load.</p> <p>Load adjustment rate test method: from 0% to 100% of rated load.</p> <p>The starting time is measured under the cold start state. Fast and frequent startup and shutdown may increase the starting time. When the operating altitude is higher than 2000 meters, the operating</p>					

Technical parameter

Type	Technical indicators					
Output	DC voltage	5V	12V	24V	36V	48V
	Rated current	5A	2.1A	1.1A	0.7A	0.52A
	Rated power	25W	25.2W	26.4W	25.2W	24.96W
	Ripple and noise ①	<50mV	<120mV	<150mV	<240mV	<240mV
	Voltage regulation range	±10%				
	Voltage accuracy	±2.0%	±1.0%			
	Linear adjustment rate	<±0.5%				
	Load adjustment rate	<±1.5%	<±0.5%	<±0.5%	<±0.5%	<±0.5%
Input	Voltage range/frequency	85-264VAC 47Hz~63Hz (120VDC~370VDC)				
	Efficiency (typical) ②	>78	>82%	>84%	>84%	>84%
	Operating current	<0.5A 110VAC <0.25A 220VAC				
	Impulse current	110VAC 18A 220VAC 36A				
	Start up time	200ms、50ms、20ms: 220VAC				
	Leakage current	≤1mA 240VAC				
Protection characteristics	Overload protection	≥ 105% - 150% Type: constant current output+VO reduced to undervoltage point Cut off output reset: power on again				
	Short circuit protection	+VO drops to undervoltage point to close output				
Environment	Operating temperature、humidity	-10°C~+50°C; 20%~90RH				
	Storage temperature、humidity	-20°C~+85°C; 10%~95RH				
Security	Withstand voltage	Input - output : 1.5KVAC input - case : 1.5KVAC output - case: 0.5KVAC duration :1 minute				
	Leakage current	Input - output 1.5KVAC < 6mA				
	Isolation resistor	Input - output and input - shell, output - shell: 500 VDC / 100 mΩ				
Other	Size	87*60*37mm(L*W*H)				
	Net weight/gross weight	150g/175g				
Remarks	<p>①Ripple and noise measurement method: use a 12 twisted pair, and connect 0.1uF and 47uF capacitors in parallel at the terminal, and measure at 20MHz bandwidth.</p> <p>② The efficiency is tested at the input voltage of 230VAC, rated load and ambient temperature of 25 °C.</p> <p>Precision: including setting error, linear adjustment rate and load adjustment rate.</p> <p>Test method of linear regulation: test from low voltage to high voltage under rated load.</p> <p>Load adjustment rate test method: from 0% to 100% of rated load.</p> <p>The starting time is measured under the cold start state. Fast and frequent startup and shutdown may increase the starting time. When the operating altitude is higher than 2000 meters, the operating</p>					

Technical parameter

Type	Technical indicators					
Output	DC voltage	5V	12V	24V	36V	48V
	Rated current	6A	2.9A	1.5A	1A	0.73A
	Rated power	30W	34.8W	36W	36W	35W
	Ripple and noise ①	<50mV	<120mV	<150mV	<240mV	<240mV
	Voltage regulation range	±10%				
	Voltage accuracy	±2.0%	±1.0%			
	Linear adjustment rate	<±0.5%				
	Load adjustment rate	<±1.5%	<±0.5%	<±0.5%	<±0.5%	<±0.5%
Input	Voltage range/frequency	85-264VAC 47Hz~63Hz (120VDC~370VDC)				
	Efficiency (typical) ②	>78	>82%	>84%	>84%	>84%
	Operating current	<0.8A 110VAC <0.35A 220VAC				
	Impulse current	110VAC 18A 220VAC 36A				
	Start up time	200ms、50ms、20ms: 220VAC				
	Leakage current	≤1mA 240VAC				
Protection characteristics	Overload protection	≥ 105% - 150% Type: constant current output+VO reduced to undervoltage point Cut off output reset: power on again				
	Short circuit protection	+VO drops to undervoltage point to close output				
Environment	Operating temperature、humidity	-10°C~+50°C; 20%~90RH				
	Storage temperature、humidity	-20°C~+85°C; 10%~95RH				
Security	Withstand voltage	Input - output : 1.5KVAC input - case : 1.5KVAC output - case: 0.5KVAC duration :1 minute				
	Leakage current	Input - output 1.5KVAC < 5mA				
	Isolation resistor	Input - output and input - shell, output - shell: 500 VDC / 100 mΩ				
Other	Size	87*60*37mm(L*W*H)				
	Net weight/gross weight	150g/175g				
Remarks	<p>①Ripple and noise measurement method: use a 12 twisted pair, and connect 0.1uF and 47uF capacitors in parallel at the terminal, and measure at 20MHz bandwidth.</p> <p>② The efficiency is tested at the input voltage of 230VAC, rated load and ambient temperature of 25 °C. Precision: including setting error, linear adjustment rate and load adjustment rate.</p> <p>Test method of linear regulation: test from low voltage to high voltage under rated load.</p> <p>Load adjustment rate test method: from 0% to 100% of rated load.</p> <p>The starting time is measured under the cold start state. Fast and frequent startup and shutdown may increase the starting time. When the operating altitude is higher than 2000 meters, the operating ambient temperature needs to be reduced by 5 °C/1000 meters.</p>					