

# WDR-60/75

DIN RAIL TYPE SWITCH  
POWER SUPPLY

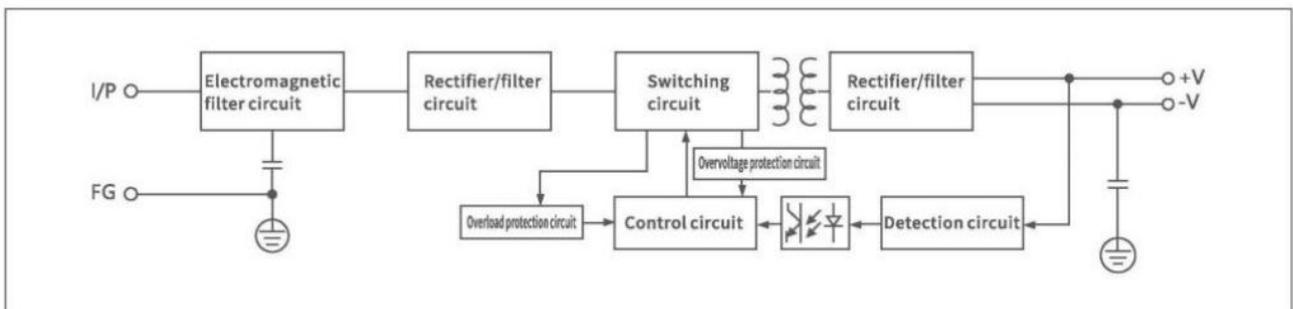


## Product Overview

The WDR-65, 75 series is a 60W, 75W single group output enclosed power supply with a full range of AC inputs from 200 to 500 VAC. The entire series provides 12V, 15V, 24V, 36V and 48V output.

In addition to the efficiency of up to 90%, the design of the metal mesh enclosure enhances the heat dissipation capability, allowing the WDR-60, 75 to operate in the temperature range of  $-30^{\circ}\text{C}$  —  $+80^{\circ}\text{C}$  without a fan. Making it easy for the terminal system to meet international energy requirements. WDR-60, 75 has complete protection functions; It complies with TUV EN60950-1, EN60335-1, EN61558-1/-2-16, UL60950-1, and GB4943 international safety regulations. The WDR-60, 75 series provides a cost-effective solution for various industrial applications.

## Principle diagram



# WDR-60 SERIES

DIN RAIL TYPE SWITCH POWER SUPPLY



## Technical parameter

Type	Technical indicators			
Output	DC voltage	12V	24V	48V
	Rated current	5A	2.5A	1.25A
	Rated power	60W	60W	60W
	Ripple and noise ①	<120MV	<200MV	<200MV
	Voltage accuracy	±1.5%	±1%	±1%
	Output voltage regulation range	±10%		
	Load adjustment rate	±1%		
	Linear adjustment rate	±0.5%		
Input	Voltage range	200~500VAC 47Hz~63Hz (282.8~707VDC)		
	Efficiency (typical)②	>86%	>88%	>90%
	Working current	0.4A 400VAC 0.7A 230VAC		
	Impulse current	Cold start 50A/400VAC 30A/230VAC		
	Start, rise, hold time	1000ms、70ms、20ms : 400VAC/2000ms、70ms、10ms : 230VAC		
Protection characteristics	Overload protection	105%-150% Type: Protected mode: hiccup mode Automatically recovers after the abnormal condition is removed		
	Short circuit protection	+VO drops to the undervoltage point. the output is off. After the abnormal condition is lifted,the POWER restarts AND automatically recovers		
Environment	Working temperature, humidity	-30°C~+80°C; 20%~90RH		
	Storage temperature, humidity	-40°C~+85°C; 10%~95RH		
Security	Withstand voltage	Input output: 3kVAC input ground: 1.5kVAC output ground: 0.5kVAC for 1 minute		
	Leakage current	<2mA/500VAC		
	Isolation resistance	Input output, input shell, output shell: 500VDC / 100MΩ		
Other	Size	32*125*97mm(L*W*H)		
	Net weight	330g		
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>			

# WDR-75 SERIES

DIN RAIL TYPE SWITCH POWER SUPPLY



## Technical parameter

Type	Technical indicators			
Output	DC voltage	12V	24V	48V
	Rated current	6.25A	3.13A	1.56A
	Rated power	75W	75W	75W
	Ripple and noise ①	<120MV	<200MV	<200MV
	Voltage accuracy	±1.5%	±1%	±1%
	Output voltage regulation range	±10%		
	Load adjustment rate	±1%		
	Linear adjustment rate	±0.5%		
Input	Voltage range	200~500VAC 47Hz~63Hz (282.8~707VDC)		
	Efficiency (typical)②	>86%	>88%	>90%
	Working current	0.4A 400VAC 0.7A 230VAC		
	Impulse current	Cold start 50A/400VAC 30A/230VAC		
	Start, rise, hold time	1000ms, 70ms, 20ms : 400VAC/2000ms, 70ms, 10ms : 230VAC		
Protection characteristics	Overload protection	105%-150% Type: Protected mode: hiccup mode Automatically recovers after the abnormal condition is removed		
	Short circuit protection	+VO drops to the undervoltage point. the output is off. After the abnormal condition is lifted, the POWER restarts AND automatically recovers		
Environment	Working temperature, humidity	-30°C~+80°C; 20%~90RH		
	Storage temperature, humidity	-40°C~+85°C; 10%~95RH		
Security	Withstand voltage	Input output: 3kVAC input ground: 1.5kVAC output ground: 0.5kVAC for 1 minute		
	Leakage current	<2mA/500VAC		
	Isolation resistance	Input output, input shell, output shell: 500VDC / 100MΩ		
Other	Size	32*125*97mm(L*W*H)		
	Net weight	330g		
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>			

# WDR-120

## DIN RAIL TYPE SWITCH POWER SUPPLY

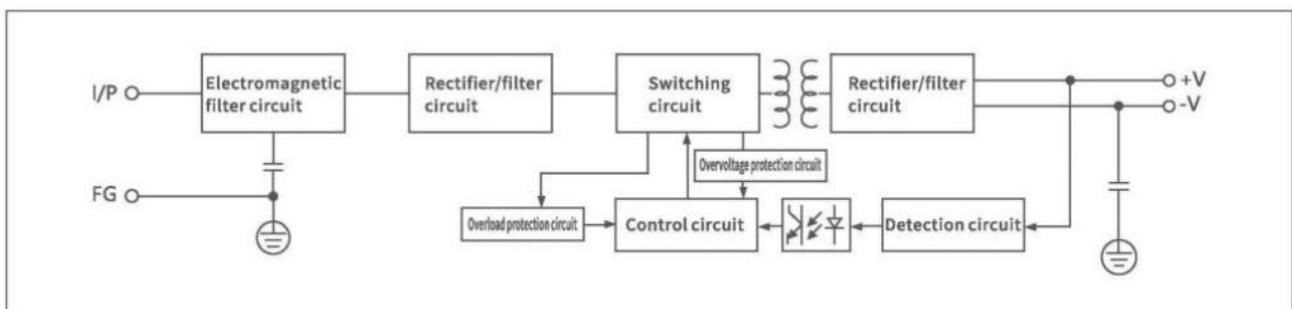


### Product overview

The WDR-120 series is a 120W single group output enclosed power supply with a full range of AC inputs from 200~500VAC. The entire series provides 12V, 15V, 24V, 36V and 48V output.

In addition to the efficiency of up to 90%, the design of the metal mesh enclosure enhances the heat dissipation capability, allowing the WDR-120 to operate in the temperature range of  $-30^{\circ}\text{C}\sim+80^{\circ}\text{C}$  without a fan. Making it easy for the terminal system to meet international energy requirements. WDR-120 has complete protection functions; It complies with TUV EN60950-1, EN60335-1, EN61558-1/-2-16, UL60950-1, and GB4943 international safety regulations. The WDR-120 series provides a cost-effective solution for various industrial applications.

### Principle diagram



# WDR-120 SERIES

DIN RAIL TYPE SWITCH POWER SUPPLY



## Technical parameter

Type	Technical indicators			
Output	DC voltage	12V	24V	48V
	Rated current	10A	5A	2.5A
	Rated power	120W	120W	120W
	Ripple and noise ①	<120MV	<150MV	<200MV
	Voltage accuracy	±2%	±1%	±1%
	Output voltage regulation range	±10%		
	Load adjustment rate	±1%		
	Linear adjustment rate	±0.5%		
Input	Voltage range	200~500VAC 47Hz~63Hz (282.8~707VDC)		
	Efficiency (typical)②	>86%	>88%	>89%
	Working current	0.7A 400VAC 1.2A 220VAC		
	Impulse current	400VAC 50A 220VAC 30A		
	Start, rise, hold time	2000ms、70ms、50ms : 400VAC/2000ms、70ms、10ms : 220VAC		
Protection characteristics	Overload protection	105%- 135% type: protection mode: automatic recovery after removing the abnormal condition of constant current mode		
	Overvoltage protection	When the output voltage is more than 135%, the output will be turned off it will recover automatically after the abnormal conditions are removed		
Environment	Working temperature and humidity	-30°C~+80°C 20%~90RH		
	Storage temperature and humidity	-40°C~+85°C; 10%~95RH		
Security	Withstand voltage	Input output: 3kVAC input ground: 1.5kVAC output ground: 0.5kVAC for 1 minute		
	Leakage current	<1mA/240VAC		
	Isolation resistance	Input output, input shell, output shell: 500VDC / 100MΩ		
Other	Size	40*125.2*113.5mm(L*W*H)		
	Net weight/gross weight	650g/750g		
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>			

# WDR-240

DIN RAIL TYPE SWITCH  
POWER SUPPLY

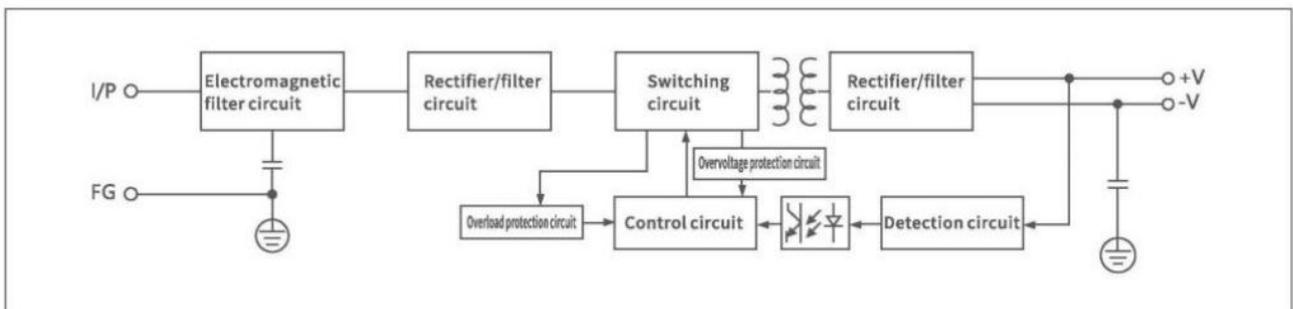


## Product Overview

The WDR-240, 480 series is a 240W, 480W single group output enclosed power supply with a full range of AC inputs from 200~500VAC. The entire series provides 12V, 15V, 24V, 36V and 48V output.

In addition to the efficiency of up to 90%, the design of the metal mesh enclosure enhances the heat dissipation capability, allowing the WDR-240 to operate in the temperature range of  $-30^{\circ}\text{C}$ — $+80^{\circ}\text{C}$ , without a fan. Making it easy for the terminal system to meet international energy requirements. WDR-240, 480 has complete protection functions; it complies with TUV EN60950-1, EN60335-1, EN61558-1/-2-16, UL60950-1, and GB4943 international safety regulations. The WDR-240 series provides a cost-effective solution for various industrial applications.

## Principle diagram



**Technical parameter**

Type	Technical indicators			
Output	DC voltage	12V	24V	48V
	Rated current	20A	10A	5A
	Rated power	240W	240W	240W
	Ripple and noise ①	<120MV	<150MV	<200MV
	Voltage accuracy	±2%	±1%	±1%
	Output voltage regulation range	±10%		
	Load adjustment rate	±1%		
	Linear adjustment rate	±0.5%		
Input	Voltage range	200-500VAC 47Hz~63Hz (282.8~707VDC)		
	Efficiency (typical)②	>86%	>88%	>89%
	Working current	1A 400VAC 2A 230VAC		
	Impulse current	Cold start 50A		
	Start, rise, hold time	800ms, 150ms/400VAC 1500ms, 150ms/230VAC		
Protection characteristics	Overload protection	105%-150% Type: Protected mode: hiccup mode Automatically recovers after the abnormal condition is removed		
	Overvoltage protection	When the output voltage is more than 135%, the output will be turned off. After the abnormal condition is removed, the output automatically recovers		
	Short circuit protection	+VO drops to the undervoltage point. the output is off. After the abnormal condition is lifted, the power restarts and automatically recovers		
	Overtemperature protection	The output is off when the temperature is > 85°. After the temperature drops, the power supply restarts and recovers		
Environment	Working temperature, humidity	-30°C~+80°C; 20%~90RH		
	Storage temperature, humidity	-40°C~+85°C; 10%~95RH		
Security	Withstand voltage	Input Output:3KVAC input ground:1.5KVAC output ground:0.5KVAC for 1 minute		
	Leakage current	<3.5mA/500VAC		
	Isolation resistance	Input output, input shell, output shell: 500VDC/100MΩ		
Other	Size	63*109*125.2mm(L*W*H)		
	Net weight	660g		
Remarks	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. 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. Test method of linear regulation: test from low voltage to high voltage under rated load. Load adjustment rate test method: from 0% to 100% of rated load. 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.			

# WDR-480 SERIES

DIN RAIL TYPE SWITCH POWER SUPPLY



## Technical parameter

Type	Technical indicators		
Output	DC voltage	24V	48V
	Rated current	20A	10A
	Rated power	480W	480W
	Ripple and noise ①	<240MV	<240MV
	Voltage accuracy	±1%	±1%
	Output voltage regulation range	±10%	
	Load adjustment rate	±1%	
	Linear adjustment rate	±0.5%	
Input	Voltage range	200~500VAC 47Hz~63Hz (282.8~707VDC)	
	Efficiency (typical)②	>88%	>89%
	Working current	1A 400VAC 2A 230VAC	
	Impulse current	Cold start 50A	
	Start, rise, hold time	800ms, 150ms/400VAC 1500ms, 150ms/230VAC	
Protection characteristics	Overload protection	105%-150% Type: Protected mode: hiccup mode Automatically recovers after the abnormal condition is removed	
	Overvoltage protection	When the output voltage is more than 135%, the output will be turned off. After the abnormal condition is removed, the output automatically recovers	
	Short circuit protection	+VO drops to the undervoltage point. the output is off. After the abnormal condition is lifted, the power restarts and automatically recovers	
	Overtemperature protection	The output is off when the temperature is > 85°. After the temperature drops, the power supply restarts and recovers	
Environment	Working temperature, humidity	-30°C~+80°C; 20%~90RH	
	Storage temperature, humidity	-40°C~+85°C; 10%~95RH	
Security	Withstand voltage	Input Output:3KVAC input ground:1.5KVAC output ground:0.5KVAC for 1 minute	
	Leakage current	<3.5mA/500VAC	
	Isolation resistance	Input output, input shell, output shell: 500VDC/100MΩ	
Other	Size	85.5*125.2*128.5mm (L*W*H)	
	Net weight	1000g/1100g	
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>		