

DR-15/30/45/60

DIN RAIL TYPE SWITCH POWER SUPPLY

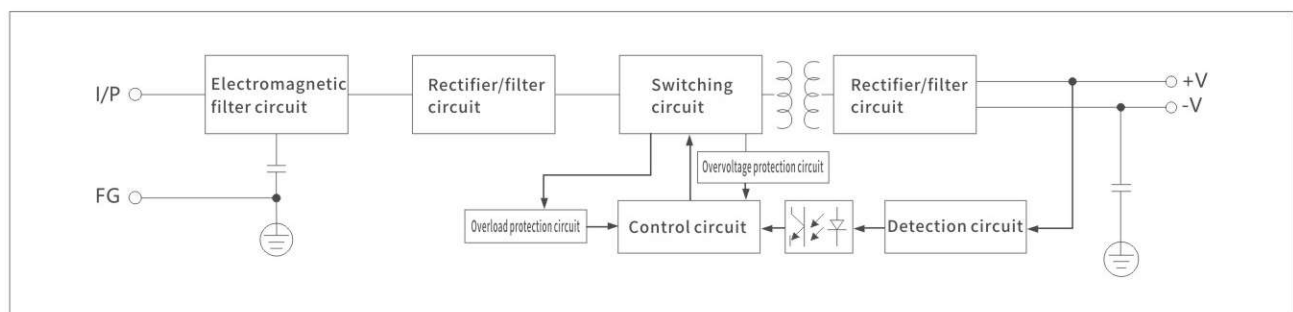


Product overview

The DR-30, 45, 60 series are 30, 45, 60 W 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 an efficiency of up to 88%, the design of the environmentally friendly flame-retardant housing enhances the heat dissipation capability, allowing the DR-30, 45, 60 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 DR-30, 45, 60 have complete protection functions; It complies with TUV EN60950-1, EN60335-1, EN61558-1/-2-16, UL60950-1 and GB4943 international safety regulations. The DR-30, 45, 60 series provide a cost-effective solution for various industrial applications.

Principle diagram



Technical parameter

Type		Technical indicators		
Output	DC voltage	5V	12V	24V
	Rated current	2.4A	1.25A	0.63A
	Rated power	12W	15W	15.2W
	Ripple and noise ^①	< 80mV	< 120mV	< 150mV
	Voltage accuracy	±2%	±1%	
	Voltage regulation range	±10%		
	Load adjustment rate	±1%		
	Linear adjustment rate	±1%		
Input	Voltage range / frequency	85-264VAC 47Hz~63Hz (120VDC~370VDC)		
	Efficiency (typical) ^②	77%	84%	85%
	Working current	< 1A 110VAC < 0.5A 220VAC		
	Shock Current	110VAC 15A 220VAC 30A		
	Start,Rise,Hold time	100ms, 30ms, 21ms: 110VAC/100ms, 30ms, 100ms: 220VAC		
Protection	Overload protection	105%-150% Type:production mode:burp modde automatic recovery after the abnormal condition is lifted		
	Short circuit protection	VO The output abnormal condition will be restored automatically after it is removed after the power is restarted		
Environmental	Working temp. and humidity	-10℃ ~+50℃ ; 20%~90RH		
	Storage temp.and humidity	-20℃ ~+85℃ ; 10%~95RH		
Safety	Pressure Resistance	O/P-I/P,I/P-O/P:3KVAC		
	Isolation Resistance	I/P-O/P, O/P-Shell,O/P-Shell: 500VDC/100MΩ		
Other	size	25*93*56mm		
	Net weight / gross weight	100/105g		

DR-30/45/60 SERIES

DIN RAIL TYPE SWITCH POWER SUPPLY



Technical parameter

Type	Technical indicators				
Output	DC voltage	5V	12V	15V	24V
	Ripple and noise ①	<80mV	<120mV	<120mV	<150mV
	Voltage regulation range	±10%			
	Voltage accuracy	±2%	±1.0%		
	Linear adjustment rate	<±1%			
Input	Start up time	100ms、30ms、21ms：110VAC/100ms、30ms、100ms：220VAC			
	Voltage range/frequency	85-264VAC 47Hz~63Hz (120VDC~370VDC)			
	Efficiency (typical) ②	>78%	>81%	>83%	>84%
	Impulse current	110VAC 15A 220VAC 30A			
Protection characteristics	Overload protection	≥ 105% - 150% type: protection mode: hiccup mode automatic recovery after abnormal conditions are removed			
	Short circuit protection	+VO drops to the undervoltage point, closes, and automatically recovers after the abnormal output condition is removed			
Environment	Operating temperature、humidity	-10°C~-+50°C；20%~90RH			
	Storage temperature、humidity	-20°C~-+85°C；10%~95RH			
Security	Withstand voltage	Input output 3KVAC for 1 minute			
	Isolation resistor	Input - output and input - shell, output - shell: 500 VDC / 100 mΩ			
Other	Size	78*93*56mm(L*W*H)			
	Net weight/gross weight	270g/290g			
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.				

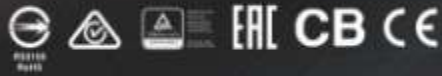
Type	DR-30			
DC voltage	5V	12V	15V	24V
Rated current	3A	2.5A	2A	1.25A
Rated power	15W	30W	30W	30W
Load adjustment rate	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
Operating current	<0.8A 110VAC	<0.4A 220VAC		

Type	DR-45			
DC voltage	5V	12V	15V	24V
Rated current	5A	3.5A	2.8A	2A
Rated power	25W	42W	42W	48W
Load adjustment rate	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
Operating current	<1A 110VAC	<0.5A 220VAC		

Type	DR-60			
DC voltage	5V	12V	15V	24V
Rated current	6.5A	4.5A	4A	2.5A
Rated power	32.5W	54W	60W	60W
Load adjustment rate	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
Operating current	<1.2A 110VAC	<0.8A 220VAC		

DR-75/120/240/480

DIN RAIL TYPE SWITCH POWER SUPPLY

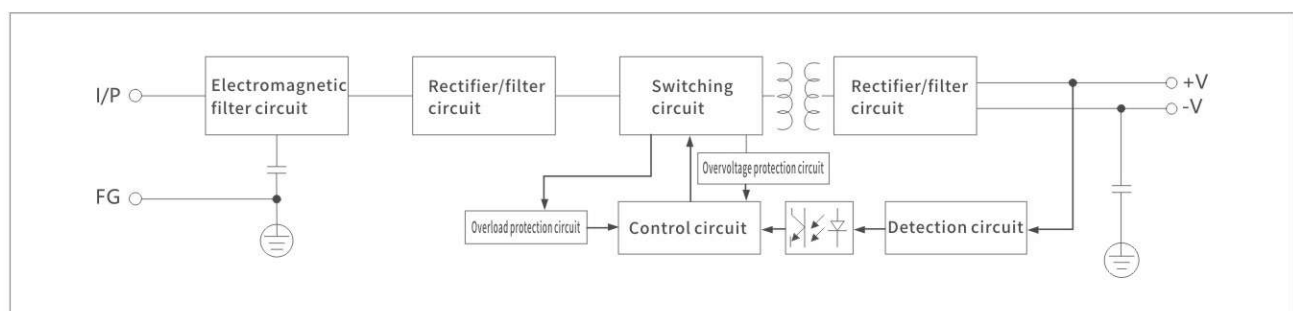


Product overview

The DR-75, 120, 240, 480 series are 75, 120, 240, 480W single group output enclosed 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 91.5%, the design of the metal mesh enclosure enhances the heat dissipation capability, allowing the DRP-75, 120, 240, 480 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 DRP-75, 120, 240, 480 have complete protection functions; It complies with TUV EN60950-1, EN60335-1, EN61558-1/-2-16, UL60950-1 and GB4943 international safety regulations. The DRP-75, 120, 240, 480 series provide a cost-effective solution for various industrial applications.

Principle diagram



DR-75/120 SERIES

DIN RAIL TYPE SWITCH POWER SUPPLY



Technical parameter

Type		Technical indicators		
Output	DC voltage	12V	24V	48V
	Ripple and noise ①	<120mV	<150mV	<240mV
	Voltage regulation range	±10%		
	Voltage accuracy	±2%	±1.0%	
	Linear adjustment rate	±0.5%		
	Load adjustment rate	±1%		
Input	Voltage range/frequency	85-264VAC 47Hz~63Hz (120VDC~370VDC)		
	Impulse current	110VAC 20A 220VAC 40A		
	Leakage current	≤1mA 240VAC		
Protection characteristics	Overload protection	≥ 105% - 150% type: protection mode: hiccup mode automatic recovery after abnormal conditions are removed		
	Short circuit protection	+VO drops to the undervoltage point, closes, and automatically recovers after the abnormal output condition is removed		
Environment	Operating temperature、humidity	-10℃~+50℃； 20%~90RH		
	Storage temperature、humidity	-20℃~+85℃； 10%~95RH		
Security	Withstand voltage	Input - output : 1.5KVAC input - case : 1.5KVAC output - case: 0.5KVAC duration :1 minute		
	Isolation resistor	Input - output and input - shell, output - shell: 500 VDC / 100 mΩ		
Other	Size	65.5*100*125.2mm(L*W*H)		
	Net weight/gross weight	600g/650g		
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.			

Type	DR-75		
DC voltage	12V	24V	48V
Rated current	6.3A	3.1A	1.5A
Rated power	76W	76W	76W
Start up time	1800ms, 60ms, 12ms : 110VAC/100ms, 60ms, 60ms : 220VAC		
Efficiency (typical) ②	>86%	>86%	>86%
Operating current	<1.2A 110VAC <0.8A 220VAC		

Type	DR-120		
DC voltage	12V	24V	48V
Rated current	10A	5A	2.5A
Rated power	120W	120W	120W
Start up time	500ms, 70ms, 32ms : 110VAC/500ms, 70ms, 36ms : 220VAC		
Efficiency (typical) ②	>86%	>88%	>90%
Operating current	<2.6A 110VAC <1.6A 220VAC		

DR-240/480 SERIES

DIN RAIL TYPE SWITCH POWER SUPPLY



Technical parameter

Type	Technical indicators		
Output	DC voltage	24V	48V
	Ripple and noise ①	<120mV	<240mV
	Voltage accuracy	±1%	±1%
	Voltage regulation range	±10%	
	Load adjustment rate	±1%	
	Linear adjustment rate	±0.5%	
Input	Efficiency (typical) ②	>84%	>86%
	Impulse current	110VAC 18A 220VAC 50A	
	Leakage current	<1.5mA/240VAC	
Protection characteristics	Overload protection	≥ 105% - 150% type: protection mode: hiccup mode automatic recovery after abnormal conditions are removed	
	Overvoltage protection	When the output voltage is greater than 135%, the shutdown output will automatically recover after the abnormal condition is removed	
	Short circuit protection	+VO drops to the undervoltage point and the output is closed After the abnormal condition is removed, the power supply restarts and the automatic recovery is resumed	
	Over temperature protection	>85° turn off output after the temperature drops, the power supply is restarted and restored	
Environment	Operating temperature、humidity	-10℃~+50℃； 20%~90RH	
	Storage temperature、humidity	-20℃~+85℃； 10%~95RH	
Security	Withstand voltage	Input - output : 1.5KVAC input - case : 1.5KVAC output - case: 0.5KVAC duration :1 minute	
	Isolation resistor	Input - output and input - shell, output - shell: 500 VDC / 100 mΩ	
Other	Size	125.5*100*125.2mm(L*W*H)	
	Net weight/gross weight	1200g/1230g	
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℃. 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℃/1000 meters.		

Type	DR-240	
DC voltage	24V	48V
Rated current	10A	5A
Rated power	240W	240W
Start up time	85-264VAC 47Hz~63Hz (120VDC~370VDC)	
Efficiency (typical) ②	2000ms、30ms、20ms : 220VAC/1200ms、30ms、10ms : 115VAC	
Operating current	<4A 110VAC <2.5A 220VAC	

Type	DR-480	
DC voltage	24V	48V
Rated current	20A	10A
Rated power	480W	480W
Start up time	180-264VAC 47Hz~63Hz (120VDC~370VDC)	
Efficiency (typical) ②	3000ms、100ms、22ms : 110VAC/1500ms、1000ms、28ms : 220VAC	
Operating current	<7.5A 110VAC <4.5A 220VAC	