

# NDR-75/120

DIN RAIL TYPE SWITCH

POWER SUPPLY



EMC CB CE

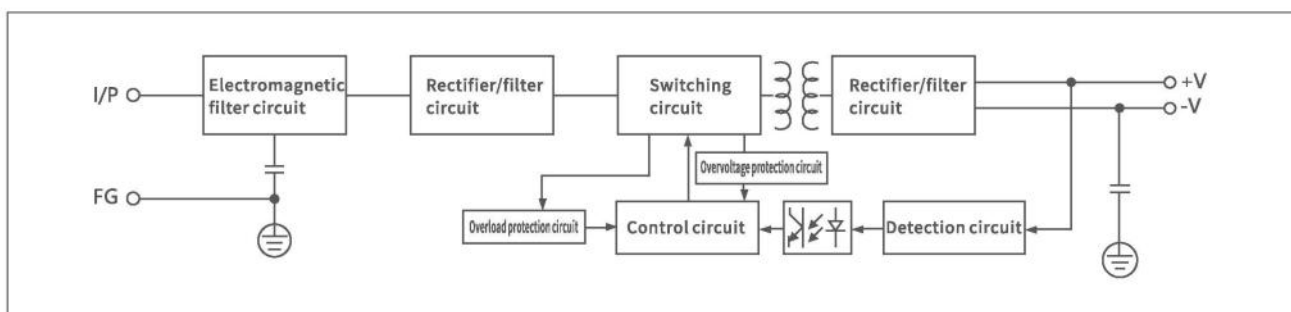


## Product overview

The NDR-75、120 series is a 75、120W single group output enclosed power supply with a full range of AC inputs from 190 to 240VAC. 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 NDR-75、120 to operate in the temperature range of  $-10^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$  without a fan. Making it easy for the terminal system to meet international energy requirements. NDR-75、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 NDR-75、120 series provides a cost-effective solution for various industrial applications.

## Principle diagram



# NDR-75 SERIES

DIN RAIL TYPE SWITCH POWER SUPPLY



## Technical parameter

Type		Technical indicators		
Output	DC voltage	12V	24V	48V
	Rated current	6.3A	3.2A	1.6A
	Rated power	75.6W	76.8W	76.8W
	Ripple and noise ①	<120MV	<120MV	<150MV
	Voltage accuracy	±2%	±1%	±1%
	Output voltage regulation range	±10%		
	Load adjustment rate	±1%		
	Linear adjustment rate	±0.5%		
Input	Voltage range	190-240VAC 47hz-63hz (127vdc-370vdc: DC input can be realized by connecting AC / L +, AC / N (-))		
	Efficiency (typical) ②	>86%	>88%	>89%
	Working current	<1.45A 110VAC <0.9A 220VAC		
	Impulse current	110VAC 20A, 220VAC 35A		
	Start rise, hold time	500ms、70ms、32ms : 110VAC/500ms、70ms、36ms : 220VAC		
Protection characteristics	Overload protection	105% - 150% 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		
	Short circuit protection	+VOWhen the abnormal condition of output is released, it will recover automatically		
Environment	Working temperature and humidity	-10°C~+50°C; 20%~90RH		
	Storage temperature and humidity	-20°C~+85°C; 10%~95RH		
Safety/EMC	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 / 100M Ω		
Other	size	40*125*113mm(L*W*H)		
	Net weight / gross weight	707g/750g		
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.			

# NDR-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	<120MV	<150MV
	Voltage accuracy	±2%	±1%	±1%
	Voltage regulation range	±10%		
	Load adjustment rate	±1%		
	Linear adjustment rate	±0.5%		
Input	Voltage range	190-240VAC 47Hz~63Hz (120VDC~370VDC: By connection AC/L(+), AC/N(-)enables DC input)		
	Efficiency (typical) ②	>86%	>88%	>89%
	Operating current	<2.25A 110VAC <1.3A 220VAC		
	Impulse current	110VAC 20A, 220VAC 35A		
	Start up time	500ms、70ms、32ms : 110VAC/500ms、70ms、36ms : 220VAC		
	Leakage current	<1mA 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		
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	40*125*113mm(L*W*H)		
	Net weight/gross weight	707g/750g		
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.			



# NDR-240

DIN RAIL TYPE SWITCH

POWER SUPPLY



EMC CB CE

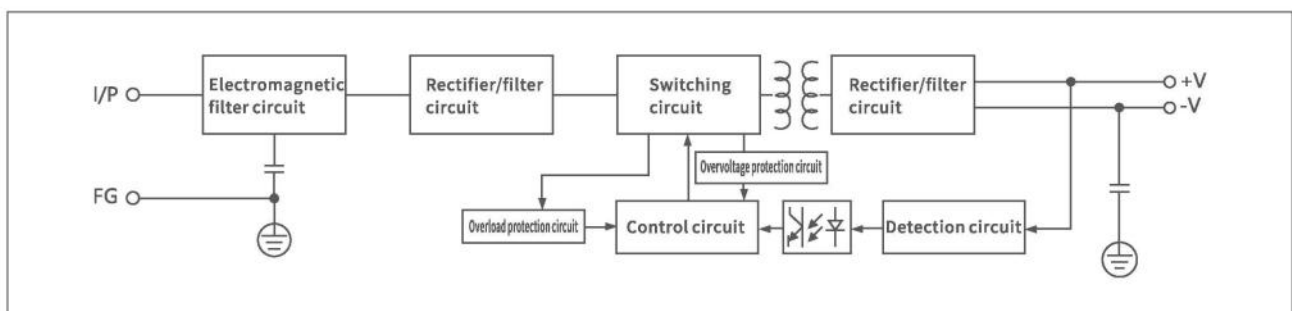


## Product overview

The NDR -240 series is a 240W single group output closed type power supply that uses 200 to 240VAC 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 NDR -240 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. NDR -240 has complete protection functions; It complies with TUV EN60950-1、EN60335-1、EN61558-1/-2-16、UL60950-1 and GB4943 international safety regulations. The NDR -240 series provides a cost-effective solution for various industrial applications.

## Principle diagram



# NDR-240 SERIES

DIN RAIL TYPE SWITCH POWER SUPPLY



## Technical parameter

Type		Technical indicators	
Output	DC voltage	24V	48V
	Rated current	10A	5A
	Rated power	240W	240W
	Ripple and noise ①	<150MV	<150MV
	Voltage accuracy	±1%	±1%
	Voltage regulation range	±10%	
	Load adjustment rate	±1%	
	Linear adjustment rate	±0.5%	
Input	Voltage range	200-240VAC47Hz~63Hz (120VDC~370VDC: By connection AC/L(+), AC/N(-)enables DC input)	
	Efficiency (typical) ②	>86%	>90%
	Power factor	PF>0.98/115VAC, PF>0.95 /230VAC	
	Operating current	<2.25A 110VAC <1.3A 220VAC	
	Impulse current	110VAC 20A, 220VAC 35A	
	Start up time	3000ms、100ms、22ms : 110VAC/1500ms、100ms、28ms: 220VAC	
	Leakage current	<1mA 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 the output and recover after the power is restarted after the temperature drops	
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	63*125*113mm(L*W*H)	
	Net weight/gross weight	1000g/1100g	
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.		

# NDR-480

DIN RAIL TYPE SWITCH

POWER SUPPLY



EMC CB CE

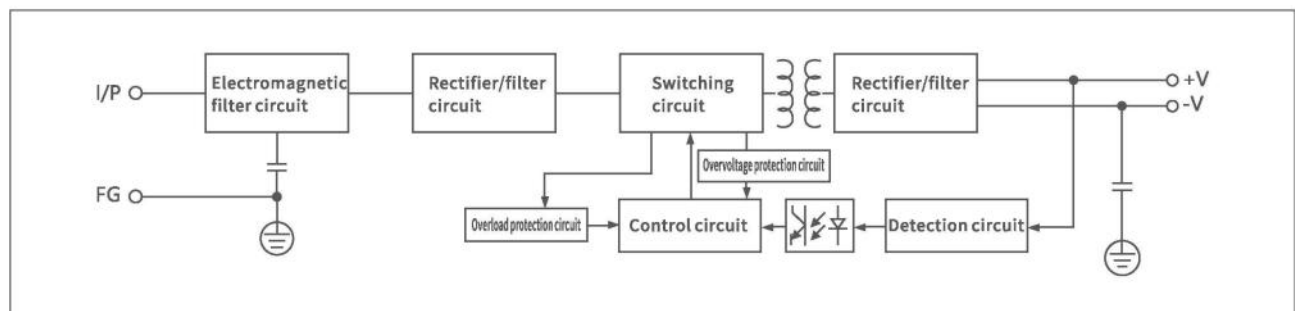


## Product overview

The NDR-480 series is a 480W single group output closed type power supply that uses 200 to 240VAC 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 NDR-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. NDR-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 NDR-480 series provides a cost-effective solution for various industrial applications.

## Principle diagram





# NDR-480 SERIES

DIN RAIL TYPE SWITCH POWER SUPPLY



## Technical parameter

Type		Technical indicators		
Output	DC voltage	12V	24V	48V
	Rated current	40A	20A	10A
	Rated power	480W	480W	480W
	Ripple and noise ①	<120MV	<120MV	<150MV
	Voltage accuracy	±2%	±1%	±1%
	Voltage regulation range	±10%		
	Load adjustment rate	±1%		
	Linear adjustment rate	±0.5%		
Input	Voltage range	200-240VAC 47hz-63hz (120vdc-370vdc: DC input can be realized by connecting AC / L +, AC / N (-))		
	Efficiency (typical) ②	>86%	>88%	>89%
	Working current	<2.25A 110VAC   <1.3A 220VAC		
	Impulse current	110VAC 20A,   220VAC 35A		
	Start up time	500ms、70ms、32ms：110VAC/500ms、70ms、36ms：220VAC		
	Leakage current	<1mA 240VAC		
Protection characteristics	Overload protection	105% - 150% 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		
	Short circuit protection	+VO When the abnormal condition of output is released, it will recover automatically		
Environment	Operating temperature、humidity	-10℃～+50℃；20%～90RH		
	Storage temperature、humidity	-20℃～+85℃；10%～95RH		
Security	Withstand voltage	Input output: 3kVac input ground: 1.5kVac output ground: 0.5kvac for 1 minute		
	Isolation resistance	Input output, input shell, output shell: 500VDC / 100M Ω		
Other	size	85*125*128.5mm(L*W*H)		
	Net weight / gross weight	1300/1500g		
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.			