

# ELECTRONIC PRODUCTS

E01-E02

## RSP SERIES AC/DC SWITCHING POWER SUPPLIES

### Switching Power Supply

- >high power density, low temperature rise, high efficiency, no need for an external filter and electrolytic capacitor
- >digital display, high stability, long service life
- >built-in over current protection, over voltage, under voltage and short-circuit protection
- >small size, flexible installation

### Relay And Optocoupler

- >optocoupler transmission with small signal loss, high switching frequency, no contact jitter, no worn switch, vibration resistance
- >optocoupler product without mechanical component, with long service life, insulated, highly voltage resistance
- >relay load with large switching current, optional multiple contact forms

### Signal Isolator And Transmitter

- >enclosed structure, strong vibration resistance, high flame retardant grade
- >unique circuit shielding technology, good anti-jamming ability
- >low power consumption, low temperature drift, short response time



### General information

RSP Switching power suppliers from Chengdu Reliance are widely used in process automation industry, electric power industry, transportation industry, machinery industry, communication industry and so on.

### Features

- Wide input voltage ( 85VAC ~ 264VAC ), wide application field.
- High power density, low temperature rise, high efficiency and no need for an external filter and electrolytic capacitor.
- Input is set with EMI filter, which has the strong ability to suppress interferences.
- highly stable output voltage, potentiometer adjustment available
- digital display, improving products' competitiveness
- high stability, long service life, authoritative certification
- compact structure design, small size, light weight, saving installation space and transportation cost
- flexible installation
- high energy saving and low no-load ratio

### Model Implication

RSP □□-□□□-□□□  
① ② ③ ④ ⑤

①RSP represents Reliance Switching Power

- |                                  |                          |                          |                              |
|----------------------------------|--------------------------|--------------------------|------------------------------|
| ②Product series No:              | 1. the first generation  | 2. the second generation | 3. the third generation      |
| ③Power output circuit No:        | 1. single circuit output | 2. two circuit output    | 3. three circuit output      |
| ④The total output power          | 25 for 25W               | 50 for 50W               | 75 for 75W.....<br>n for nW  |
| ⑤Voltage of output main circuit: | 5 for 5V                 | 12 for 12V               | 24 for 24V .....<br>n for nV |



15W/Single output

## Technical Data

Input voltage	100~240VAC	120~370VDC
Input frequency	50/60Hz	
Inrush current(25°C)	40A/220VAC	
Hold up time	13ms	
Overload protection	Over current protection	
Short-circuit protection	Auto recovery	
Over voltage protection	Auto recovery	
Operating temperature	-20°C~+55°C, ambient temperature	
Operating humidity	5~95%RH, no condensation	
Storage temperature	-20°C~+85°C, ambient temperature	
Vibration test	2G , 10~500Hz , 3 axes	
Cooling method	natural heat dissipation , no cooling fan	

## Specifications

Model	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Ordering No.
RSP21-15-9	9V/1.6A	≤1%	±1%	≤1%	70%	763701
RSP21-15-10	10V/1.5A	≤1%	±1%	≤1%	74%	763705
RSP21-15-12	12V/1.2A	≤1%	±1%	≤1%	72%	763702
RSP21-15-15	15V/1A	≤1%	±1%	≤1%	72%	763703
RSP21-15-24	24V/0.6A	≤1%	±1%	≤1%	74%	763704



25W/Single output

## Technical Data

Input voltage	100~240VAC	120~370VDC
Input frequency	50/60Hz	
Inrush current(25°C)	40A/220VAC	
Hold up time	13ms	
Overload protection	Over current protection	
Short-circuit protection	Auto recovery	
Over voltage protection	Auto recovery	
Operating temperature	-20°C~+55°C, ambient temperature	
Operating humidity	5~95%RH, no condensation	
Storage temperature	-20°C~+85°C, ambient temperature	
Vibration test	2G , 10~500Hz , 3 axes	
Cooling method	natural heat dissipation, no cooling fan	

## Specifications

Model	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Ordering No.
RSP21-25-5	5V/5A	≤2%	±2%	≤2%	77%	763710
RSP21-25-9	9V/2.5A	≤1%	±1%	≤1%	77%	763711
RSP21-25-10	10V/2.5A	≤1%	±1%	≤1%	78%	763716
RSP21-25-12	12V/2A	≤1%	±1%	≤1%	77%	763712
RSP21-25-15	15V/1.6A	≤1%	±1%	≤1%	77%	763713
RSP21-25-24	24V/1A	≤1%	±1%	≤1%	77%	763714
RSP21-25-48	48V/0.5A	≤1%	±1%	≤1%	78%	763715



50W/ Single output

## Technical Data

Input voltage	176~264VAC	240~380VDC
Input frequency	50/60Hz	
Inrush current(25°C)	40A/220VAC	
Hold up time	15ms	
Overload protection	Over current protection	
Short-circuit protection	Auto recovery	
Over voltage protection	Auto recovery	
Operating temperature	-20°C~+55°C, ambient temperature	
Operating humidity	5~95%RH, no condensation	
Storage temperature	-20°C~+85°C, ambient temperature	
Vibration test	2G , 10~500Hz , 3 axes	
Cooling method	natural heat dissipation, no cooling fan	

## Specifications

Model	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Ordering No.
RSP21-50-5	5V/10A	≤2%	±2%	≤2%	76%	763741
RSP21-50-12	12V/4A	≤1%	±1%	≤1%	76%	763742
RSP21-50-24	24V/2A	≤1%	±1%	≤1%	76%	763743
RSP21-50-48	48V/1A	≤1%	±1%	≤1%	76%	763744



60W/Single output

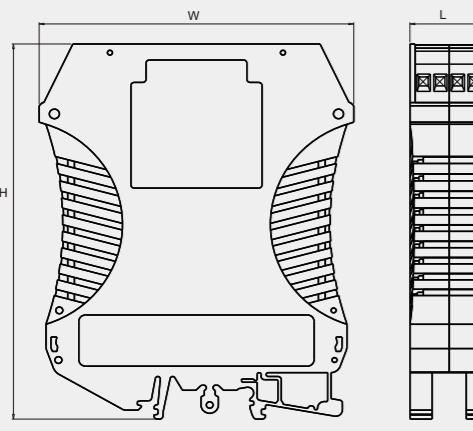
## Technical Data

Input voltage	176~264VAC	240~380VDC
Input frequency	50/60Hz	
Inrush current(25°C)	40A/220VAC	
Hold up time	15ms	
Overload protection	Over current protection	
Short-circuit protection	Auto recovery	
Over voltage protection	Auto recovery	
Operating temperature	-20°C~+55°C, ambient temperature	
Operating humidity	5~95%RH, no condensation	
Storage temperature	-20°C~+85°C, ambient temperature	
Vibration test	2G , 10~500Hz , 3 axes	
Cooling method	natural heat dissipation, no cooling fan	

## Specifications

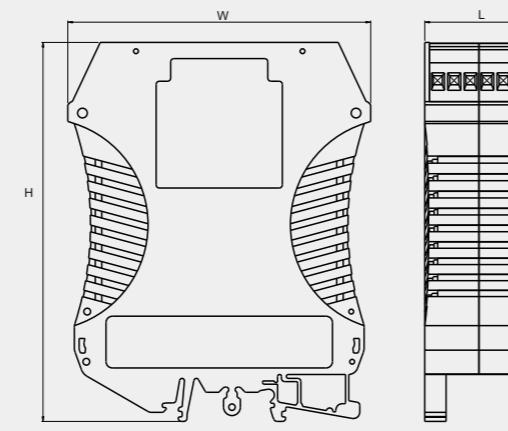
Model	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Ordering No.
RSP21-60-5	5V/12A	≤2%	±2%	≤2%	76%	763751
RSP21-60-12	12V/5A	≤1%	±1%	≤1%	76%	763752
RSP21-60-15	15V/4A	≤1%	±1%	≤1%	77%	763755
RSP21-60-24	24V/2.5A	≤1%	±1%	≤1%	77%	763753
RSP21-60-48	48V/1.2A	≤1%	±1%	≤1%	77%	763754

## Overall Dimension

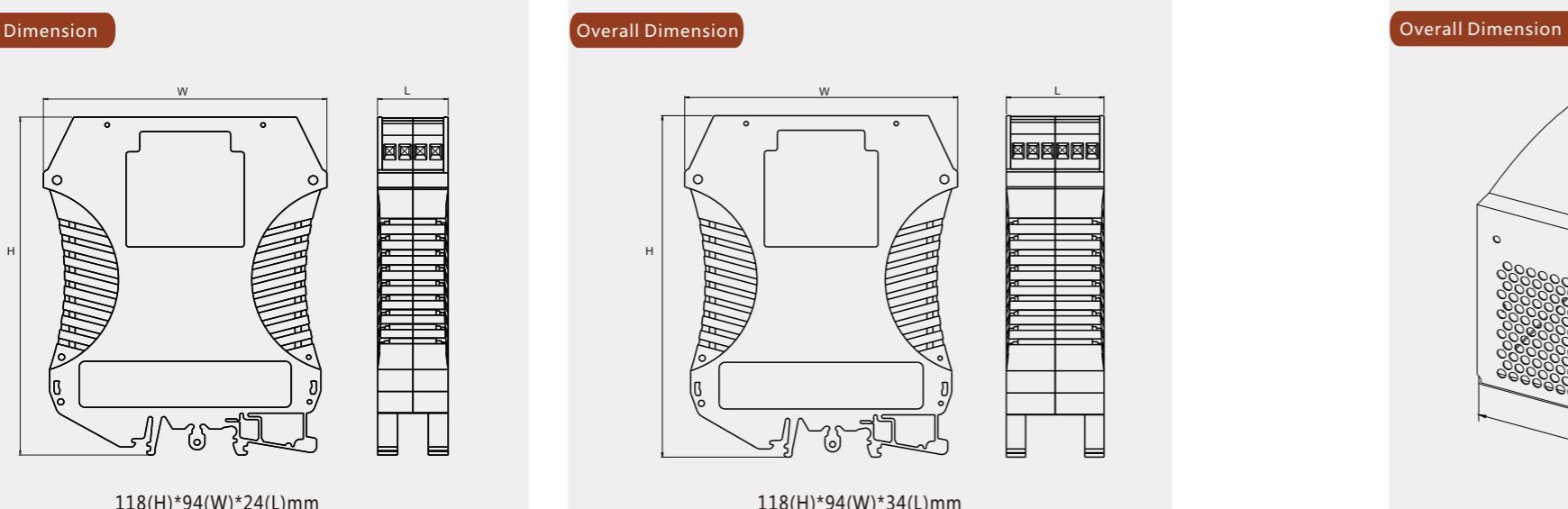


118(H)\*94(W)\*24(L)mm

## Overall Dimension

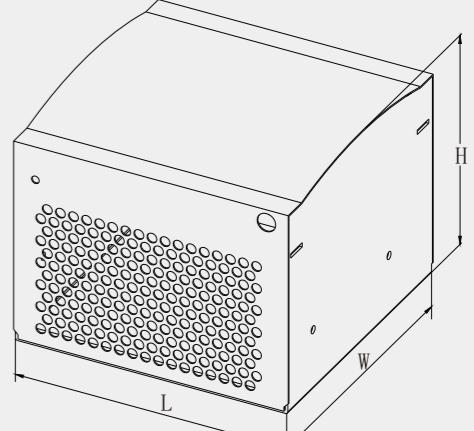


118(H)\*94(W)\*34(L)mm



99(H)\*125(W)\*55(L)mm

## Overall Dimension



99(H)\*125(W)\*55(L)mm



75W/Single output

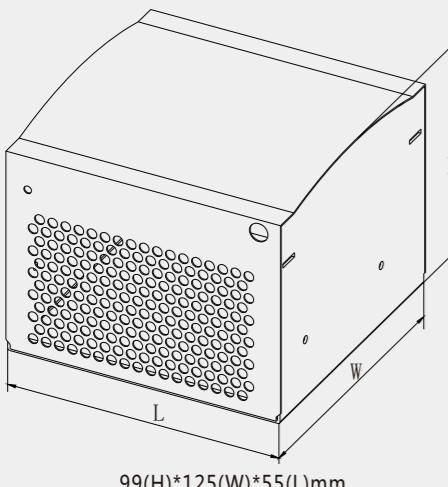
## Technical Data

Input voltage	176~264VAC 240~380VDC
Input frequency	50/60Hz
Inrush current(25°C)	40A/220VAC
Hold up time	15ms
Overload protection	Over current protection
Short-circuit protection	Auto recovery
Over voltage protection	Auto recovery
Operating temperature	-20°C~+55°C, ambient temperature
Operating humidity	5~95%RH, no condensation
Storage temperature	-20°C~+85°C, ambient temperature
Vibration test	2G , 10~500Hz , 3 axes
Cooling method	natural heat dissipation , no cooling fan

## Specifications

Model	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Ordering No.
RSP21-75-12	12V/6A	≤1%	±1%	≤1%	77%	763854
RSP21-75-15	15V/5A	≤1%	±1%	≤1%	78%	763855
RSP21-75-24	24V/3A	≤1%	±1%	≤1%	78%	763853
RSP21-75-48	48V/1.5A	≤1%	±1%	≤1%	78%	763852

## Overall Dimension



99(H)\*125(W)\*55(L)mm



100W/Single output

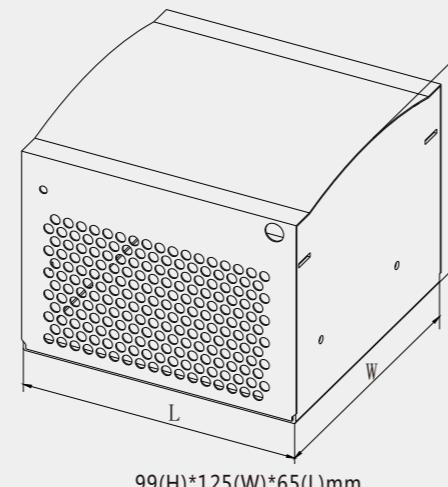
## Technical Data

Input voltage	176~264VAC 240~380VDC
Input frequency	50/60Hz
Inrush current(25°C)	40A/220VAC
Hold up time	10ms
Overload protection	Over current protection
Short-circuit protection	Auto recovery
Over voltage protection	Auto recovery
Operating temperature	-20°C~+55°C, ambient temperature
Operating humidity	5~95%RH, no condensation
Storage temperature	-20°C~+85°C, ambient temperature
Vibration test	2G , 10~500Hz , 3 axes
Cooling method	natural heat dissipation , no cooling fan

## Specifications

Model	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Ordering No.
RSP21-100-12	12V/8A	≤1%	±1%	≤1%	77%	763763
RSP21-100-15	15V/6A	≤1%	±1%	≤1%	78%	763764
RSP21-100-24	24V/4A	≤1%	±1%	≤1%	78%	763765
RSP21-100-48	48V/2A	≤1%	±1%	≤1%	78%	763766

## Overall Dimension



99(H)\*125(W)\*65(L)mm



120W/Single output

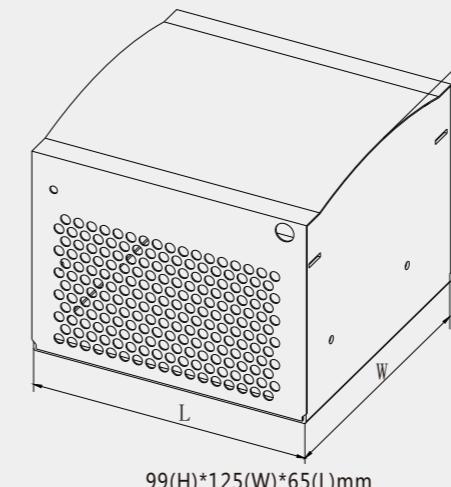
## Technical Data

Input voltage	176~264VAC 240~380VDC
Input frequency	50/60Hz
Inrush current(25°C)	40A/220VAC
Hold up time	10ms
Overload protection	Over current protection
Short-circuit protection	Auto recovery
Over voltage protection	None Auto recovery
Operating temperature	-20°C~+55°C, ambient temperature
Operating humidity	5~95%RH, no condensation
Storage temperature	-20°C~+85°C, ambient temperature
Vibration test	2G , 10~500Hz , 3 axes
Cooling method	natural heat dissipation , no cooling fan

## Specifications

Model	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Ordering No.
RSP21-120-12	12V/10A	≤1%	±1%	≤1%	80%	763811
RSP21-120-15	15V/8A	≤1%	±1%	≤1%	80%	763812
RSP21-120-24	24V/5A	≤1%	±1%	≤1%	80%	763813
RSP21-120-48	48V/2.5A	≤1%	±1%	≤1%	80%	763814

## Overall Dimension



99(H)\*125(W)\*65(L)mm



150W/Single output

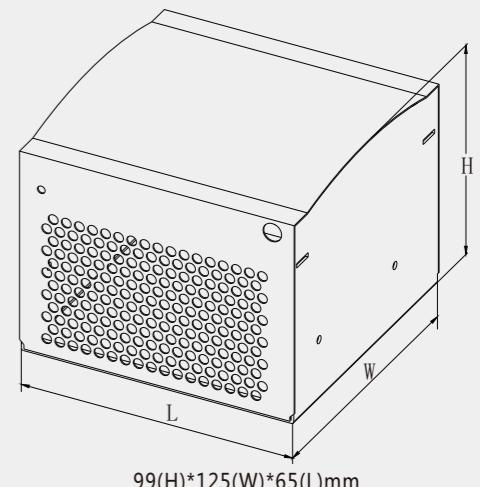
## Technical Data

Input voltage	176~264VAC 240~380VDC
Input frequency	50/60Hz
Inrush current(25°C)	40A/220VAC
Hold up time	10ms
Overload protection	Over current protection
Short-circuit protection	Auto recovery
Over voltage protection	None Auto recovery
Operating temperature	-20°C~+55°C, ambient temperature
Operating humidity	5~95%RH, no condensation
Storage temperature	-20°C~+85°C, ambient temperature
Vibration test	2G , 10~500Hz , 3 axes
Cooling method	natural heat dissipation , no cooling fan

## Specifications

Model	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Ordering No.
RSP21-150-24	24V/6A	≤1%	±1%	≤1%	80%	763823
RSP21-150-36	36V/4A	≤1%	±1%	≤1%	80%	763824
RSP21-150-48	48V/3A	≤1%	±1%	≤1%	80%	763825

## Overall Dimension



99(H)\*125(W)\*65(L)mm



200W/Single output

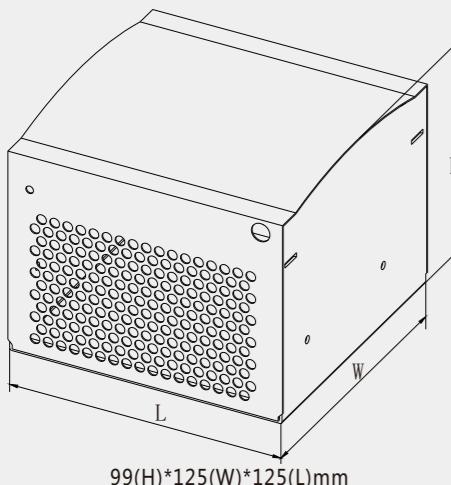
## Technical Data

Input voltage	176~264VAC	240~380VDC
Input frequency	50/60Hz	
Inrush current(25°C)	40A/220VAC	
Hold up time	10ms	
Overload protection	Over current protection	
Short-circuit protection	Auto recovery	
Over voltage protection	None Auto recovery	
Operating temperature	-20°C~+55°C, ambient temperature	
Operating humidity	5~95%RH, no condensation	
Storage temperature	-20°C~+85°C, ambient temperature	
Vibration test	2G , 10~500Hz , 3 axes	
Cooling method	natural heat dissipation , no cooling fan	

## Specifications

Model	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Ordering No.
RSP21-200-12	12V/15A	≤1%	±1%	≤1%	80%	763831
RSP21-200-15	15V/13A	≤1%	±1%	≤1%	80%	763832
RSP21-200-24	24V/8A	≤1%	±1%	≤1%	80%	763833
RSP21-200-36	36V/5.5A	≤1%	±1%	≤1%	80%	763834

## Overall Dimension



250W/Single output

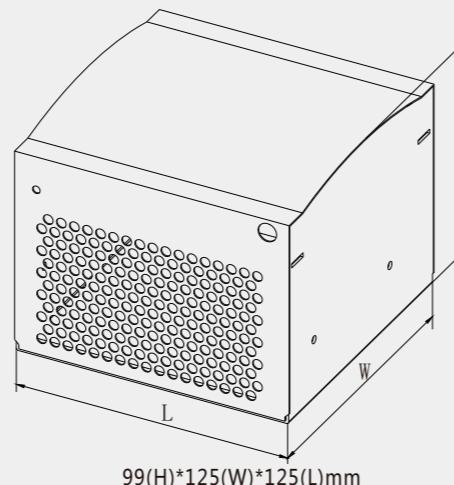
## Technical Data

Input voltage	176~264VAC	240~380VDC
Input frequency	50/60Hz	
Inrush current(25°C)	40A/220VAC	
Hold up time	10ms	
Overload protection	Over current protection	
Short-circuit protection	Auto recovery	
Over voltage protection	None Auto recovery	
Operating temperature	-20°C~+55°C, ambient temperature	
Operating humidity	5~95%RH, no condensation	
Storage temperature	-20°C~+85°C, ambient temperature	
Vibration test	2G , 10~500Hz , 3 axes	
Cooling method	natural heat dissipation , no cooling fan	

## Specifications

Model	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Ordering No.
RSP21-250-24	24V/10A	≤1%	±1%	≤1%	82%	763843
RSP21-250-36	36V/7A	≤1%	±1%	≤1%	82%	763844
RSP21-250-48	48V/5A	≤1%	±1%	≤1%	82%	763845

## Overall Dimension



500W/Single output

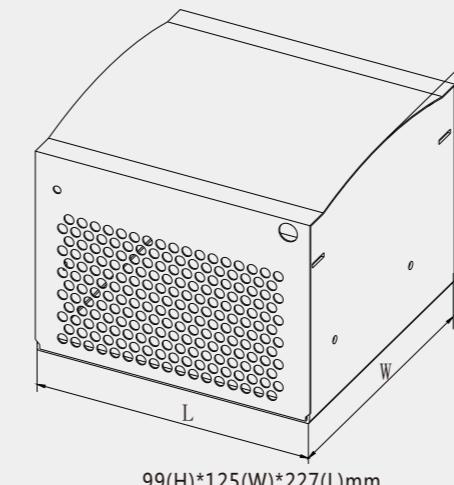
## Technical Data

Input voltage	176~264VAC	240~380VDC
Input frequency	50/60Hz	
Inrush current(25°C)	40A/220VAC	
Hold up time	10ms	
Overload protection	Over current protection	
Short-circuit protection	Auto recovery	
Over voltage protection	None Auto recovery	
Operating temperature	-20°C~+55°C, ambient temperature	
Operating humidity	5~95%RH, no condensation	
Storage temperature	-20°C~+85°C, ambient temperature	
Vibration test	2G , 10~500Hz , 3 axes	
Cooling method	natural heat dissipation , no cooling fan	

## Specifications

Model	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Ordering No.
RSP21-500-24	24V/20A	≤1%	±1%	≤1%	82%	773529
RSP21-500-48	48V/10A	≤1%	±1%	≤1%	82%	773528

## Overall Dimension



250W/PFC Single output

## Technical Data

Input voltage	100~240VAC	120~380VDC
Input frequency	50/60Hz	
Inrush current(25°C)	40A/220VAC	
Hold up time	10ms	
Overload protection	Over current protection	
Short-circuit protection	None Auto recovery	
Over voltage protection	None Auto recovery	
Operating temperature	-20°C~+55°C, ambient temperature	
Operating humidity	5~95%RH, no condensation	
Storage temperature	-20°C~+85°C, ambient temperature	
Vibration test	2G , 10~500Hz , 3 axes	
Cooling method	cooling fan	

## Specifications

Model	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Ordering No.
RSP31-250-12	12V/20A	≤1%	±1%	≤1%	85%	723182
RSP31-250-24	24V/10A	≤1%	±1%	≤1%	86%	723184
RSP31-250-48	48V/5A	≤1%	±1%	≤1%	86%	723187

## Overall Dimension

