

ELECTRONIC PRODUCTS

Power supplies

- > High power density, low temperature rise, high efficiency, no need for an extra filter or electrolytic capacitor.
- > High stability, long service life.
- > Built-in over-current protection, outputs with over-voltage, undervoltage and sustainable short-circuit protection.
- > Small size, flexible installation.

Relays and optocouplers

- > Optocoupler transmission with small signal loss, high switching frequency, no contact jitter, no worn switch, or vibration resistance.
- > Optocoupler product without mechanical component, with long service life, insulated, highly voltage resistance.
- > Relays with high switching current at the load side and a wide range of contact forms to choose from.
- > Wide range of relays.

Isolators and transmitters

- > 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.



RSP2 SERIES SWITCHING POWER SUPPLIES

RSP2 series of Power Supply



Overview

RSP switching power supplies from Chengdu Reliance are widely used in process automation industry, electric power industry, transportation industry, machinery industry, communication industry and so on. Features are as below.

- > Universal wide range of input voltage (88VAC~264VAC)
- > High power density, low temperature rise, high efficiency, no need for an extra filter or electrolytic capacitor.
- > Built-in over-current protection, output protection include over-voltage, sustainable disconnection.
- > High accuracy of output voltage and adjustable potentiometer.
- > High stability, long service life and complete certificates.
- > Small size and light weight
- > Easy to install
- > High energy-saving and low no-load power consumption

Model Implication

RSP 2 □ - □□□ - □□□
① ② ③ ④ ⑤

①RSP:	switching power supplies			
②Product series No:	the second generation			
③Power output circuit No:	single circuit output	two circuit output	three circuit output	
④The output power:	25=25W	50=50W	75=75W	n = n W
⑤Voltage of output main circuit:	5=5V	12=12V	24=24V	n = n V



5W/Single output

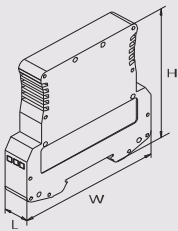
Parameters

Input voltage	88~264VAC 120~370VDC
Alternating current	0.5A/220VAC
Input frequency	50/60Hz
Surge current (25°C)	20A/220VAC
Hold on time	10ms
Overload protection	Overpower protection
Short-voltage protection	Automatic recovery
Over-voltage protection	No
Operating temperature	-25°C~+60°C, ambient temperature
Operating humidity	5~95%RH, no condensation
Storage temperature	-40°C~+85°C, ambient temperature
Cooling method	Natural heat dissipation, no cooling fan
Start-up, rising time	500ms, 100ms/220VAC
Safe code	EN60950-1
Withstand voltage	I/P-O/P:2KVAC
Insulating resistance	I/P-O/P: 500VDC >100MΩ
Electromagnetic compatibility immunity	EN61000-4-2,3,4,5,6,8,11 EN55024, EN61204-3

Specification

Type	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Order No.
RSP21-5-5	5V/1A	±1%	±1%	±2%	72%	763800
RSP21-5-12	12V/0.5A	±1%	±1%	±1%	73%	763801
RSP21-5-15	15V/0.4A	±1%	±1%	±1%	74%	763802
RSP21-5-24	24V/0.25A	±1%	±1%	±1%	75%	763803

Dimension



86(H)*90(W)*15.8(L)mm



15W/Single output

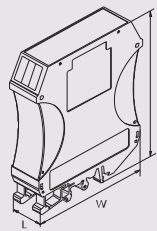
Parameters

Input voltage	88~264VAC 120~370VDC
Alternating current	1A/220VAC
Input frequency	50/60Hz
Surge current (25°C)	20A/220VAC
Hold on time	13ms
Overload protection	Overpower protection
Short-voltage protection	Automatic recovery
Over-voltage protection	Resumable
Operating temperature	-25°C~+60°C, ambient temperature
Operating humidity	5~95%RH, no condensation
Storage temperature	-40°C~+85°C, ambient temperature
Cooling method	Natural heat dissipation, no cooling fan
Start-up, rising time	500ms, 100ms/220VAC
Safe code	EN60950-1
Withstand voltage	I/P-O/P:2KVAC
Insulating resistance	I/P-O/P: 500VDC >100MΩ
Electromagnetic compatibility immunity	EN61000-4-2,3,4,5,6,8,11 EN55024, EN61204-3

Specification

Type	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Order No.
RSP21-15-5	5V/3A	±1%	±2%	±2%	75%	763700
RSP21-15-9	9V/1.6A	±1%	±1%	±1%	76%	763701
RSP21-15-10	10V/1.5A	±1%	±1%	±1%	77%	763705
RSP21-15-12	12V/1.2A	±1%	±1%	±1%	78%	763702
RSP21-15-15	15V/1A	±1%	±1%	±1%	79%	763703
RSP21-15-24	24V/0.6A	±1%	±1%	±1%	80%	763704

Dimension



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



25W/Single output

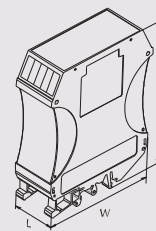
Parameters

Input voltage	88~264VAC 120~370VDC
Alternating current	1A/220VAC
Input frequency	50/60Hz
Surge current(25°C)	30A/220VAC
Hold on time	13ms
Overload protection	Overpower protection
Short-voltage protection	Automatic recovery
Over-voltage protection	Resumable
Operating temperature	-25°C~+60°C, ambient temperature
Operating humidity	5~95%RH, no condensation
Storage temperature	-40°C~+85°C, ambient temperature
Cooling method	Natural heat dissipation, no cooling fan
Start-up, rising time	500ms, 100ms/220VAC
Safe code	EN60950-1
Withstand voltage	I/P-O/P:2KVAC
Insulating resistance	I/P-O/P: 500VDC >100MΩ
Electromagnetic compatibility immunity	EN61000-4-2,3,4,5,6,8,11 EN55024, EN61204-3

Specification

Type	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Order No.
RSP21-25-5	5V/5A	±2%	±2%	±2%	80%	763710
RSP21-25-9	9V/2.5A	±1%	±1%	±1%	81%	763711
RSP21-25-10	10V/2.5A	±1%	±1%	±1%	82%	763716
RSP21-25-12	12V/2A	±1%	±1%	±1%	82%	763712
RSP21-25-15	15V/1.6A	±1%	±1%	±1%	82%	763713
RSP21-25-24	24V/1A	±1%	±1%	±1%	83%	763714
RSP21-25-48	48V/0.5A	±1%	±1%	±1%	83%	763715

Dimension



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



50W/Single output

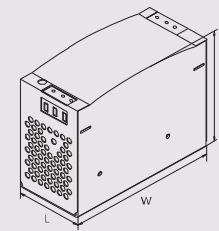
Parameters

Input voltage	176~264VAC 240~370VDC
Alternating current	2A/220VAC
Input frequency	50/60Hz
Surge current(25°C)	40A/220VAC
Hold on time	15ms
Overload protection	Overpower protection
Short-voltage protection	Automatic recovery
Over-voltage protection	Resumable
Operating temperature	-25°C~+60°C, ambient temperature
Operating humidity	5~95%RH, no condensation
Storage temperature	-40°C~+85°C, ambient temperature
Cooling method	Natural heat dissipation, no cooling fan
Start-up, rising time	500ms, 100ms/220VAC
Safe code	EN60950-1
Withstand voltage	I/P-O/P:2KVAC I/P-FG:2KVAC O/P-FG:1KVAC
Insulating resistance	I/P-O/P, I/P-FG, O/P-FG: 500VDC >100MΩ
Electromagnetic compatibility immunity	EN61000-4-2,3,4,5,6,8,11 EN55024, EN61204-3

Specification

Type	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Order No.
RSP21-50-5	5V/10A	±2%	±2%	±2%	83%	763741
RSP21-50-12	12V/4A	±1%	±1%	±1%	84%	763742
RSP21-50-24	24V/2A	±1%	±1%	±1%	85%	763743
RSP21-50-48	48V/1A	±1%	±1%	±1%	85%	763744

Dimension





60W/Single output

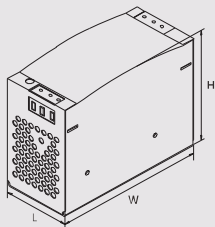
Parameters

Input voltage	176~264VAC 240~370VDC
Alternating current	2A/220VAC
Input frequency	50/60Hz
Surge current (25°C)	40A 220VAC
Hold on time	10ms
Overload protection	Overpower protection
Short-voltage protection	Automatic recovery
Over-voltage protection	Resumable
Operating temperature	-25°C~+60°C ambient temperature
Operating humidity	5~95%RH, no condensation
Storage temperature	-40°C~+85°C ambient temperature
Cooling method	Natural heat dissipation, no cooling fan
Start-up, rising time	500ms, 100ms/220VAC
Safe code	EN60950-1
Withstand voltage	I/P-O/P:2KVAC I/P-FG:2KVAC O/P-FG:1KVAC
Insulating resistance	I/P-O/P, I/P-FG, O/P-FG: 500VDC >100MΩ
Electromagnetic compatibility immunity	EN61000-4-2,3,4,5,6,8,11 EN55024, EN61204-3

Specification

Type	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Order No.
RSP21-60-5	5V/12A	±2%	±2%	≤2%	84%	763751
RSP21-60-12	12V/5A	±1%	±1%	≤1%	84%	763752
RSP21-60-15	15V/4A	±1%	±1%	≤1%	85%	763755
RSP21-60-24	24V/2.5A	±1%	±1%	≤1%	85%	763753
RSP21-60-48	48V/1.2A	±1%	±1%	≤1%	86%	763754

Dimension



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



75W/Single output

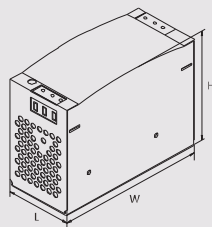
Parameters

Input voltage	176~264VAC 240~370VDC
Alternating current	2A/220VAC
Input frequency	50/60Hz
Surge current (25°C)	20A 220VAC
Hold on time	13ms
Overload protection	Overpower protection
Short-voltage protection	Automatic recovery
Over-voltage protection	Resumable
Operating temperature	-25°C~+60°C ambient temperature
Operating humidity	5~95%RH, no condensation
Storage temperature	-40°C~+85°C ambient temperature
Cooling method	Natural heat dissipation, no cooling fan
Start-up, rising time	500ms, 100ms/220VAC
Safe code	EN60950-1
Withstand voltage	I/P-O/P:2KVAC I/P-FG:2KVAC O/P-FG:1KVAC
Insulating resistance	I/P-O/P, I/P-FG, O/P-FG: 500VDC >100MΩ
Electromagnetic compatibility immunity	EN61000-4-2,3,4,5,6,8,11 EN55024, EN61204-3

Specification

Type	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Order No.
RSP21-75-12	12V/6A	±1%	±1%	≤1%	83%	763854
RSP21-75-15	15V/5A	±1%	±1%	≤1%	84%	763855
RSP21-75-24	24V/3A	±1%	±1%	≤1%	86%	763853
RSP21-75-48	48V/1.5A	±1%	±1%	≤1%	86%	763852

Dimension



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



100W/Single output

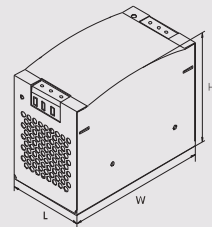
Parameters

Input voltage	176~264VAC 240~370VDC
Alternating current	3A/220VAC
Input frequency	50/60Hz
Surge current (25°C)	40A 220VAC
Hold on time	10ms
Overload protection	Overpower protection
Short-voltage protection	Automatic recovery
Over-voltage protection	Resumable
Operating temperature	-25°C~+60°C ambient temperature
Operating humidity	5~95%RH, no condensation
Storage temperature	-40°C~+85°C ambient temperature
Cooling method	Natural heat dissipation, no cooling fan
Start-up, rising time	1000ms, 100ms/220VAC
Safe code	EN60950-1
Withstand voltage	I/P-O/P:2KVAC I/P-FG:2KVAC O/P-FG:1KVAC
Insulating resistance	I/P-O/P, I/P-FG, O/P-FG: 500VDC >100MΩ
Electromagnetic compatibility immunity	EN61000-4-2,3,4,5,6,8,11 EN55024, EN61204-3

Specification

Type	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Order No.
RSP21-100-12	12V/8A	±1%	±1%	≤1%	84%	763763
RSP21-100-15	15V/6A	±1%	±1%	≤1%	85%	763764
RSP21-100-24	24V/4A	±1%	±1%	≤1%	86%	763765
RSP21-100-48	48V/2A	±1%	±1%	≤1%	86%	763766

Dimension



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



120W/Single output

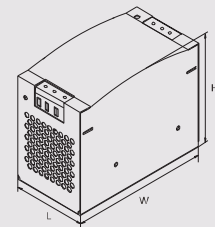
Parameters

Input voltage	176~264VAC 240~370VDC
Alternating current	3A/220VAC
Input frequency	50/60Hz
Surge current (25°C)	40A/220VAC
Hold on time	10ms
Overload protection	Overpower protection
Short-voltage protection	Automatic recovery
Over-voltage protection	Non-resumable
Operating temperature	-25°C~+60°C, ambient temperature
Operating humidity	5~95%RH, no condensation
Storage temperature	-40°C~+85°C ambient temperature
Cooling method	Natural heat dissipation, no cooling fan
Start-up, rising time	1000ms, 100ms/220VAC
Safe code	EN60950-1
Withstand voltage	I/P-O/P:2KVAC I/P-FG:2KVAC O/P-FG:1KVAC
Insulating resistance	I/P-O/P, I/P-FG, O/P-FG: 500VDC >100MΩ
Electromagnetic compatibility immunity	EN61000-4-2,3,4,5,6,8,11 EN55024, EN61204-3

Specification

Type	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Order No.
RSP21-120-12	12V/10A	±1%	±1%	≤1%	85%	763811
RSP21-120-15	15V/8A	±1%	±1%	≤1%	85%	763812
RSP21-120-24	24V/5A	±1%	±1%	≤1%	86%	763813
RSP21-120-48	48V/2.5A	±1%	±1%	≤1%	86%	763814

Dimension



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



150W/Single output

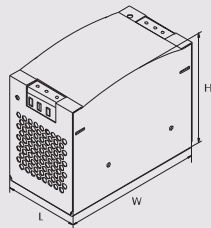
Parameters

Input voltage	176~264VAC 240~370VDC
Alternating current	3A/220VAC
Input frequency	50/60Hz
Surge current (25°C)	40A 220VAC
Hold on time	10ms
Overload protection	Overpower protection
Short-voltage protection	Automatic recovery
Over-voltage protection	Non-resumable
Operating temperature	-25°C~+60°C, ambient temperature
Operating humidity	5~95%RH, no condensation
Storage temperature	-40°C~+85°C ambient temperature
Cooling method	Natural heat dissipation, no cooling fan
Start-up, rising time	1000ms, 100ms/220VAC
Safe code	EN60950-1
Withstand voltage	I/P-O/P:2KVAC I/P-FG:2KVAC O/P-FG:1KVAC
Insulating resistance	I/P-O/P, I/P-FG, O/P-FG: 500VDC >100MΩ
Electromagnetic compatibility immunity	EN61000-4-2,3,4,5,6,8,11 EN55024, EN61204-3

Specification

Type	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Order No.
RSP21-150-24	24V/6A	±1%	±1%	≤1%	86%	763823
RSP21-150-36	36V/4A	±1%	±1%	≤1%	86%	763824
RSP21-150-48	48V/3A	±1%	±1%	≤1%	86%	763825

Dimension



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



200W/Single output (with PFC)

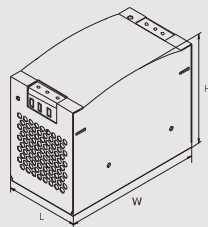
Parameters

Input voltage	90~264VAC 127~370VDC
Alternating current	4A/220VAC
Input frequency	50/60Hz
Surge current (25°C)	35A 220VAC
Hold on time	20ms
Overload protection	Overpower protection
Short-voltage protection	Automatic recovery
Over-voltage protection	Non-resumable
Operating temperature	-25°C~+60°C, ambient temperature
Operating humidity	5~95%RH, no condensation
Storage temperature	-40°C~+85°C ambient temperature
Cooling method	Natural heat dissipation, no cooling fan
Start-up, rising time	1500ms, 100ms/220VAC
Safe code	EN60950-1
Withstand voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC
Insulating resistance	I/P-O/P, I/P-FG, O/P-FG: 500VDC >100MΩ
Electromagnetic compatibility immunity	EN61000-4-2,3,4,5,6,8,11 EN55024, EN61204-3

Specification

Type	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Order No.
RSP21-200-24	24V/8A	±1%	±1%	≤1%	88%	763833
RSP21-200-48	36V/5.5A	±1%	±1%	≤1%	90%	763835

Dimension



113.5(H)*125.2(W)*63(L)mm



250W/Single output (with PFC)

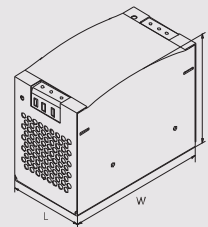
Parameters

Input voltage	90~264VAC 127~370VDC
Alternating current	4A/220VAC
Input frequency	50/60Hz
Surge current (25°C)	35A 220VAC
Hold on time	20ms
Overload protection	Overpower protection
Short-voltage protection	Automatic recovery
Over-voltage protection	Non-resumable
Operating temperature	-25°C~+60°C ambient temperature
Operating humidity	5~95%RH, no condensation
Storage temperature	-40°C~+85°C ambient temperature
Cooling method	Natural heat dissipation, no cooling fan
Start-up, rising time	1500ms, 100ms/220VAC
Safe code	EN60950-1
Withstand voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5 KVAC
Insulating resistance	I/P-O/P, I/P-FG, O/P-FG: 500VDC >100MΩ
Electromagnetic compatibility immunity	EN61000-4-2,3,4,5,6,8,11 EN55024, EN61204-3

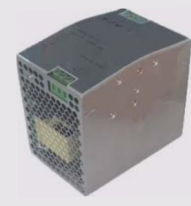
Specification

Type	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Order No.
RSP21-250-24	24V/10A	±1%	±1%	≤1%	88%	763843
RSP21-250-48	48V/5A	±1%	±1%	≤1%	89%	763845

Dimension



113.5(H)*125.2(W)*63(L)mm



500W/Single output (with PFC)

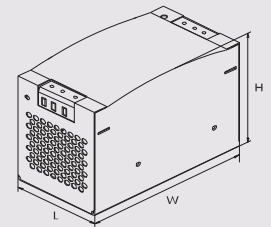
Parameters

Input voltage	90~264VAC 127~370VDC
Alternating current	5A/220VAC
Input frequency	50/60Hz
Surge current (25°C)	35A/220VAC
Hold on time	10ms
Overload protection	Overpower protection
Short-voltage protection	Automatic recovery
Over-voltage protection	Non-resumable
Operating temperature	-25°C~+60°C, ambient temperature
Operating humidity	5~95%RH, no condensation
Storage temperature	-40°C~+85°C ambient temperature
Cooling method	Natural heat dissipation, no cooling fan
Start-up, rising time	1500ms, 100ms/220VAC
Safe code	EN60950-1
Withstand voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC
Insulating resistance	I/P-O/P, I/P-FG, O/P-FG: 500VDC >100MΩ
Electromagnetic compatibility immunity	EN61000-4-2,3,4,5,6,8,11 EN55024, EN61204-3

Specification

Type	Output	Voltage stability	Load stability	Ripple coefficient	Efficiency	Order No.
RSP21-500-24	24V/20A	±1%	±1%	≤1%	92%	773529
RSP21-500-48F5	48V/9.5A	±1%	±1%	≤1%	92%	773578

Dimension



128.5(H)*125.2(W)*85.5(L)mm