

SWITCHING POWER SUPPLIES RSP3 SERIES

Overviews

Reliance switching power supplies are widely used in automation, electrical, transportation, machinery, communication industry and etc.

Features:

- > Wide range of input voltage(88VAC-264VAC)
- > High power, high conversion efficiency, low temperature rise, no external filter or electrolytic capacitor required, with power factor correction(PFC)
- > Output voltage 5V, 10V, 12V, 15V, 24V, 48V, 110V, 220V. Wide application field
- > Built-in overcurrent protection, output with overvoltage, undervoltage, sustainable disconnection, etc.
- > High accuracy of output voltage, and adjustable potentiometer
- > High stability, long service life and complete certificates
- > Small size, light weight, and easy installation
- > High energy saving and low no-load power consumption
- > Air convection cooling

Model Implication

RSP3 □ - □□□ - □□□
 ① ② ③ ④ ⑤

①RSP:	Reliance Switching Power Supplies			
②Products series:	3. The third generation			
③Output loop no. :	1. Single loop output	2. Two loops output	3. Three loops output	
④Total output power:	25: 25W	50: 50W	75: 75W.....	n: nW
⑤Output main loop voltage:	5: 5V	12: 12V	24: 24V.....	n: nV





25W/Single Pole Output

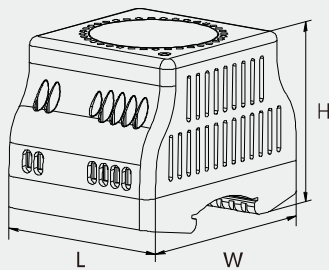
Technical Data

Input voltage	88~264VAC 120~370VDC
Input current	1A/220VAC
Input frequency	50/60Hz
Inrush current(25°C)	30A/220VAC
Start up time	500ms, 100ms/220VAC
Hold up time	10ms
Overload protection	Overpower Protection
Short-circuit protection	Self-recovery
Overvoltage protection	Recoverable
Operating temperature	-25°C~+60°C, Ambient temperature
Operating humidity	5~95%RH, No condensation
Storage temperature	-40°C~+85°C, Ambient temperature
Safety specification	EN60950-1
Insulation resistance	I/P-O/P:500VDC >100MΩ 25°C/70%RH
Withstand voltage	I/P-O/P:2KVAC
EMC anti-interference	EN61000-4-2,3,4,5,6,8,11 EN55024 EN61204-3

Specification

Type	Output	Voltage Stability	Load Stability	Ripple Factor	Efficiency	Order no.
RSP31-25-5	5V/5A	≤1%	±2%	≤2%	76%	723100
RSP31-25-9	9V/2.7A	≤1%	±1%	≤1%	77%	723101
RSP31-25-10	10V/2.5A	≤1%	±1%	≤1%	77%	723102
RSP31-25-12	12V/2A	≤1%	±1%	≤1%	78%	723103
RSP31-25-15	15V/1.5A	≤1%	±1%	≤1%	78%	723104
RSP31-25-24	24V/1A	≤1%	±1%	≤1%	78%	723105
RSP31-25-36	36V/0.7A	≤1%	±1%	≤1%	79%	723106
RSP31-25-48	48V/0.5A	≤1%	±1%	≤1%	79%	723107

Overall Dimension



62(H)*87(W)*64(L)mm



35W/Single Pole Output

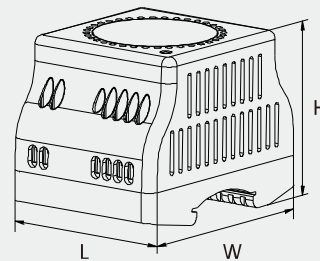
Technical Data

Input voltage	88~264VAC 120~370VDC
Input current	1A/220VAC
Input frequency	50/60Hz
Inrush current(25°C)	30A/220VAC
Start up time	500ms, 100ms/220VAC
Hold up time	10ms
Overload protection	Overpower Protection
Short-circuit protection	Self-recovery
Overvoltage protection	Recoverable
Operating temperature	-25°C~+60°C, Ambient temperature
Operating humidity	5~95%RH, No condensation
Storage temperature	-40°C~+85°C, Ambient temperature
Safety specification	EN60950-1
Insulation resistance	I/P-O/P:500VDC >100MΩ 25°C/70%RH
Withstand voltage	I/P-O/P:2KVAC
EMC anti-interference	EN61000-4-2,3,4,5,6,8,11 EN55024 EN61204-3

Specification

Type	Output	Voltage Stability	Load Stability	Ripple Factor	Efficiency	Order no.
RSP31-35-5	5V/7A	≤1%	±2%	≤2%	77%	723110
RSP31-35-9	9V/3.8A	≤1%	±1%	≤1%	77%	723111
RSP31-35-10	10V/3.5A	≤1%	±1%	≤1%	77%	723112
RSP31-35-12	12V/3A	≤1%	±1%	≤1%	78%	723113
RSP31-35-15	15V/2.3A	≤1%	±1%	≤1%	78%	723114
RSP31-35-24	24V/1.5A	≤1%	±1%	≤1%	79%	723115
RSP31-35-36	36V/1A	≤1%	±1%	≤1%	79%	723116
RSP31-35-48	48V/0.7A	≤1%	±1%	≤1%	79%	723117

Overall Dimension



62(H)*87(W)*64(L)mm



50W/Single Pole Output

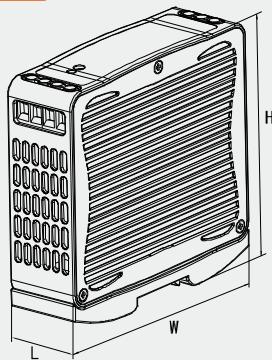
Technical data

Input voltage	88~264VAC 120~370VDC
Input current	2A/220VAC
Input frequency	50/60Hz
Inrush current(25°C)	30A/220VAC
Start up time	500ms, 100ms/220VAC
Hold up time	10ms
Overload protection	Overpower Protection
Short-circuit protection	Self-recovery
Overvoltage protection	Recoverable
Operating temperature	-25°C~+60°C, Ambient temperature
Operating humidity	5~95%RH, No condensation
Storage temperature	-40°C~+85°C, Ambient temperature
Safety specification	EN60950-1
Insulation resistance	I/P-O/P,I/P-FG, O/P-FG:500VDC >100MΩ 25°C/70%RH
Withstand voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:1KVAC
EMC anti-interference	EN61000-4-2,3,4,5,6,8,11 EN55024 EN61204-3

Specification

Type	Output	Voltage Stability	Load Stability	Ripple Factor	Efficiency	Order no.
RSP31-50-5	5V/10A	≤2%	±2%	≤2%	83%	723120
RSP31-50-12	12V/4A	≤1%	±1%	≤1%	83%	723122
RSP31-50-15	15V/3.3A	≤1%	±1%	≤1%	84%	723123
RSP31-50-24	24V/2A	≤1%	±1%	≤1%	85%	723124
RSP31-50-48	48V/1A	≤1%	±1%	≤1%	85%	723127

Overall Dimension



109(H)*128(W)*38(L)mm



75W/Single Pole Output

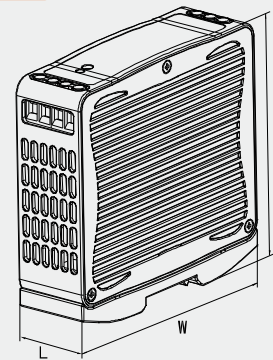
Technical data

Input voltage	88~264VAC 120~370VDC
Input current	2A/220VAC
Input frequency	50/60Hz
Inrush current(25°C)	30A/220VAC
Start up time	500ms, 100ms/220VAC
Hold up time	10ms
Overload protection	Overpower Protection
Short-circuit protection	Self-recovery
Overvoltage protection	Recoverable
Operating temperature	-25°C~+60°C, Ambient temperature
Operating humidity	5~95%RH, No condensation
Storage temperature	-40°C~+85°C, Ambient temperature
Safety specification	EN60950-1
Insulation resistance	I/P-O/P,I/P-FG, O/P-FG:500VDC >100MΩ 25°C/70%RH
Withstand voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:1KVAC
EMC anti-interference	EN61000-4-2,3,4,5,6,8,11 EN55024 EN61204-3

Specification

Type	Output	Voltage Stability	Load Stability	Ripple Factor	Efficiency	Order no.
RSP31-75-12	12V/6A	≤1%	±1%	≤1%	84%	723132
RSP31-75-15	15V/5A	≤1%	±1%	≤1%	84%	723133
RSP31-75-24	24V/3A	≤1%	±1%	≤1%	85%	723134
RSP31-75-48	48V/1.5A	≤1%	±1%	≤1%	86%	723137

Overall Dimension



109(H)*128(W)*38(L)mm



100W/Single Pole Output

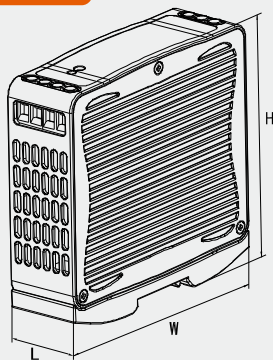
Technical data

Input voltage	88~264VAC 120~370VDC
Input current	2.5A/220VAC
Input frequency	50/60Hz
Inrush current(25°C)	30A/220VAC
Start up time	500ms, 100ms/220VAC
Hold up time	10ms
Overload protection	Overpower Protection
Short-circuit protection	Self-recovery
Overvoltage protection	Recoverable
Operating temperature	-25°C~+60°C, Ambient temperature
Operating humidity	5~95%RH, No condensation
Storage temperature	-40°C~+85°C, Ambient temperature
Safety specification	EN60950-1
Insulation resistance	I/P-O/P,I/P-FG, O/P-FG:500VDC >100MΩ 25°C/70%RH
Withstand voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:1KVAC
EMC anti-interference	EN61000-4-2,3,4,5,6,8,11 EN55024 EN61204-3

Specification

Type	Output	Voltage Stability	Load Stability	Ripple Factor	Efficiency	Order no.
RSP31-100-12	12V/8A	≤1%	±1%	≤1%	85%	723142
RSP31-100-15	15V/6A	≤1%	±1%	≤1%	85%	723143
RSP31-100-24	24V/4A	≤1%	±1%	≤1%	86%	723144
RSP31-100-48	48V/2A	≤1%	±1%	≤1%	86%	723147

Overall Dimension



109(H)*128(W)*38(L)mm



120W/Single Pole Output

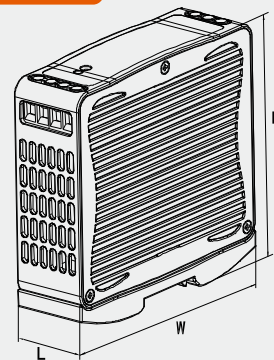
Technical data

Input voltage	88~264VAC 120~370VDC
Input current	3A/220VAC
Input frequency	50/60Hz
Inrush current(25°C)	30A/220VAC
Start up time	500ms, 100ms/220VAC
Hold up time	10ms
Overload protection	Overpower Protection
Short-circuit protection	Self-recovery
Overvoltage protection	Recoverable
Operating temperature	-25°C~+60°C, Ambient temperature
Operating humidity	5~95%RH, No condensation
Storage temperature	-40°C~+85°C, Ambient temperature
Safety specification	EN60950-1
Insulation resistance	I/P-O/P,I/P-FG, O/P-FG:500VDC >100MΩ 25°C/70%RH
Withstand voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:1KVAC
EMC anti-interference	EN61000-4-2,3,4,5,6,8,11 EN55024 EN61204-3

Specification

Type	Output	Voltage Stability	Load Stability	Ripple Factor	Efficiency	Order no.
RSP31-120-12	12V/10A	≤2%	±2%	≤1%	85%	723152
RSP31-120-15	15V/8A	≤1%	±1%	≤1%	86%	723153
RSP31-120-24	24V/5A	≤1%	±1%	≤1%	86%	723154
RSP31-120-48	48V/2.5A	≤1%	±1%	≤1%	87%	723157

Overall Dimension



109(H)*128(W)*38(L)mm



150W/Single Pole Output

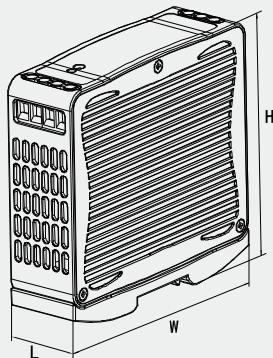
Technical data

Input voltage	176~264VAC 200~370VDC
Input current	3A/220VAC
Input frequency	50/60Hz
Inrush current(25°C)	30A/220VAC
Start up time	500ms, 100ms/220VAC
Hold up time	10ms
Overload protection	Overpower Protection
Short-circuit protection	Self-recovery
Overvoltage protection	Recoverable
Operating temperature	-25°C~+60°C, Ambient temperature
Operating humidity	5~95%RH, No condensation
Storage temperature	-10°C~+85°C, Ambient temperature
Safety specification	EN60950-1
Insulation resistance	I/P-O/P,I/P-FG, O/P-FG:500VDC >100MΩ 25°C/70%RH
Withstand voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:1KVAC
EMC anti-interference	EN61000-4-2,3,4,5,6,8,11 EN55024 EN61204-3

Specification

Type	Output	Voltage Stability	Load Stability	Ripple Factor	Efficiency	Order no.
RSP31-150-12	12V/12.5A	≤2%	±2%	≤2%	86%	723162
RSP31-150-15	15V/10A	≤1%	±1%	≤1%	86%	723163
RSP31-150-24	24V/6A	≤1%	±1%	≤1%	87%	723164
RSP31-150-48	48V/3A	≤1%	±1%	≤1%	87%	723167

Overall Dimension



109(H)*128(W)*38(L)mm



200W/Single Pole Output(PFC)

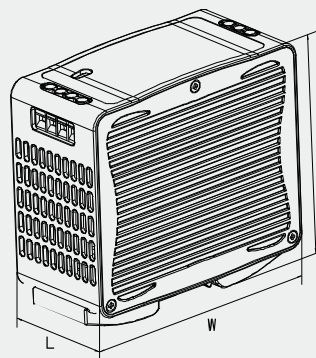
Technical data

Input voltage	88~264VAC 120~370VDC
Input current	4A/220VAC
Input frequency	50/60Hz
Inrush current(25°C)	30A/220VAC
Start up time	500ms, 100ms/220VAC
Hold up time	10ms
Overload protection	Overpower Protection
Short-circuit protection	Self-recovery
Overvoltage protection	Recovery after reboot
Operating temperature	-25°C~+60°C, Ambient temperature
Operating humidity	5~95%RH, No condensation
Storage temperature	-40°C~+85°C, Ambient temperature
Safety specification	EN60950-1
Insulation resistance	I/P-O/P,I/P-FG, O/P-FG:500VDC >100MΩ 25°C/70%RH
Withstand voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:1KVAC
EMC anti-interference	EN61000-4-2,3,4,5,6,8,11 EN55024 EN61204-3

Specification

Type	Output	Voltage Stability	Load Stability	Ripple Factor	Efficiency	Order no.
RSP31-200-24	24V/8A	≤1%	±1%	≤1%	91%	723174
RSP31-200-48	48V/4.1A	≤1%	±1%	≤1%	92%	723177

Overall Dimension



109(H)*128(W)*60(L)mm



250W/Single Pole Output(PFC)

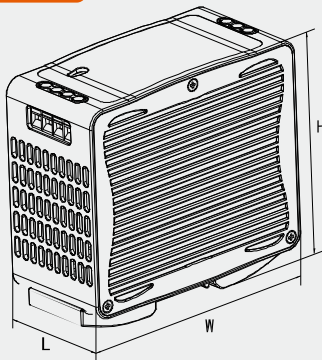
Technical data

Input voltage	88~264VAC 120~370VDC
Input current	4A/220VAC
Input frequency	50/60Hz
Inrush current(25°C)	30A/220VAC
Start up time	
Hold up time	10ms
Overload protection	Overpower Protection
Short-circuit protection	Self-recovery
Overvoltage protection	Recovery after reboot
Operating temperature	-25°C~+60°C, Ambient temperature
Operating humidity	5~95%RH, No condensation
Storage temperature	-40°C~+85°C, Ambient temperature
Safety specification	EN60950-1
Insulation resistance	I/P-O/P, I/P-PG, O/P-FG:500VDC >100MΩ 25°C/70%RH
Withstand voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:1KVAC
EMC anti-interference	EN61000-4-2,3,4,5,6,8,11 EN55024 EN61204-3

Specification

Type	Output	Voltage Stability	Load Stability	Ripple Factor	Efficiency	Order no.
RSP31-250-24	24V/10A	≤1%	±1%	≤1%	92%	723184
RSP31-250-48	48V/5A	≤1%	±1%	≤1%	92%	723187

Overall Dimension



109(H)*128(W)*60(L)mm



500W/Single Pole Output(PFC)

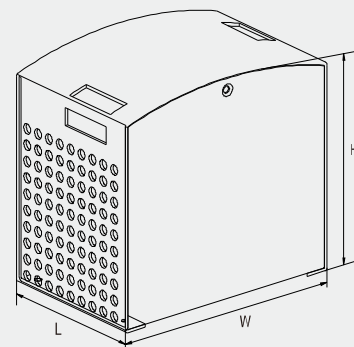
Technical data

Input voltage	88~264VAC 127~370VDC
Input current	6A/220VAC
Input frequency	50/60Hz
Inrush current(25°C)	30A/220VAC
Start up time	
Hold up time	10ms
Overload protection	Overpower Protection
Short-circuit protection	Self-recovery
Overvoltage protection	Recovery after reboot
Operating temperature	-25°C~+60°C, Ambient temperature
Operating humidity	5~95%RH, No condensation
Storage temperature	-40°C~+85°C, Ambient temperature
Safety specification	EN60950-1
Insulation resistance	I/P-O/P, I/P-PG, O/P-FG:500VDC >100MΩ 25°C/70%RH
Withstand voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:1KVAC
EMC anti-interference	EN61000-4-2,3,4,5,6,8,11 EN55024 EN61204-3

Specification

Type	Output	Voltage Stability	Load Stability	Ripple Factor	Efficiency	Order no.
RSP31-500-24	24V/20A	≤1%	±1%	≤1%	93%	723224
RSP31-500-48	48V/10A	≤1%	±1%	≤1%	93%	723227

Overall Dimension



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