

# Switch Mode Power Supply

## S8JC-Z / S8JC-ZS

**S8JC-ZS, newly released Power Supply with CE marking, additional models for economical Power Supply, S8JC-Z series.**

**S8JC-Z/S8JC-ZS is our best standard power supply for**

- material cost reduction
- export machines, required safety standard
- time saving for installation by DIN-rail mounting



### Model Number Structure

#### Model Number Legend

**Note:** Not all combinations are possible. Refer to *List of Models in Ordering Information* on page 2.

S8JC-Z       -

1    2    3    4    5    6

**1. Conformed standards**

None: no standard  
S: CE (EN50178)

**2. Power Ratings**

015: 15 W  
035: 35 W  
050: 50 W  
100: 100 W  
150: 150 W  
350: 350 W

**3. Output Voltage**

05: 5 V  
12: 12 V  
24: 24 V  
48: 48 V

**4. Configuration**

C: Covered

**5. Configuration/mounting**

None: Bottom-mounting  
D: DIN Rail-mounting

**6. Input Voltage**

None/AC2: 200 to 240 VAC

### Line-up & Feature

#### S8JC-Z series (15/35/50/100/150/350-W models)

Voltage	Power ratings					
	15 W	35 W	50 W	100 W	150 W	350 W
5 V	●	●	●	●	●	
12 V	●	●	●	●	●	
24 V	●	●	●	●	●	●
48 V	New	New	New	New	New	

**For More application !**

- More Output Voltage Specifications from 5 V to 48 V
- Various power rating range from 15 W to 350 W

#### S8JC-ZS series (15/35/50/100/150-W models)

Voltage	Power ratings				
	15 W	35 W	50 W	100 W	150 W
24 V	New	New	New	New	New

**For More reliability !**

- Conformed to CE marking
- Expanded operating temperature: -20°C to +70°C
- Improved Dielectric strength

# S8JC-Z

## Ordering Information

### List of Models in S8JC-Z Series

**Note:** For details on normal stock models, contact your nearest OMRON representative.

Conformed standard	Configuration		Input voltage	Power ratings	Output voltage	Output current	Model
None	Covered Power Supplies	Bottom-mounting	200 to 240 VAC	15 W	5 VDC	3.0 A	S8JC-Z01505C
					12 VDC	1.3 A	S8JC-Z01512C
					24 VDC	0.7 A	S8JC-Z01524C
					48 VDC	0.35 A	S8JC-Z01548C
				35 W	5 VDC	7.0 A	S8JC-Z03505C
					12 VDC	3.0 A	S8JC-Z03512C
					24 VDC	1.5 A	S8JC-Z03524C
					48 VDC	0.75 A	S8JC-Z03548C
				50 W	5 VDC	10.0 A	S8JC-Z05005C
					12 VDC	4.2 A	S8JC-Z05012C
					24 VDC	2.1 A	S8JC-Z05024C
					48 VDC	1.1 A	S8JC-Z05048C
		100 W		5 VDC	20.0 A	S8JC-Z10005C	
				12 VDC	8.5 A	S8JC-Z10012C	
				24 VDC	4.5 A	S8JC-Z10024C	
				48 VDC	2.3 A	S8JC-Z10048C	
		150 W		5 VDC	30.0 A	S8JC-Z15005C	
				12 VDC	12.5 A	S8JC-Z15012C	
				24 VDC	6.5 A	S8JC-Z15024C	
				48 VDC	3.3 A	S8JC-Z15048C	
		350 W		24 VDC	14.6 A	S8JC-Z35024C	
		DIN Rail-mounting		Bottom-mounting	200 to 240 VAC	15 W	5 VDC
	12 VDC		1.3 A				S8JC-Z01512CD
	24 VDC		0.7 A				S8JC-Z01524CD
	48 VDC		0.35 A				S8JC-Z01548CD
	35 W		5 VDC			7.0 A	S8JC-Z03505CD
			12 VDC			3.0 A	S8JC-Z03512CD
			24 VDC			1.5 A	S8JC-Z03524CD
			48 VDC			0.75 A	S8JC-Z03548CD
	50 W		5 VDC			10.0 A	S8JC-Z05005CD
			12 VDC			4.2 A	S8JC-Z05012CD
			24 VDC			2.1 A	S8JC-Z05024CD
			48 VDC			1.1 A	S8JC-Z05048CD
	100 W		5 VDC	20.0 A		S8JC-Z10005CD	
			12 VDC	8.5 A		S8JC-Z10012CD	
			24 VDC	4.5 A		S8JC-Z10024CD	
			48 VDC	2.3 A		S8JC-Z10048CD	
	150 W		5 VDC	30.0 A		S8JC-Z15005CD	
			12 VDC	12.5 A		S8JC-Z15012CD	
			24 VDC	6.5 A		S8JC-Z15024CD	
			48 VDC	3.3 A		S8JC-Z15048CD	
	350 W		24 VDC	14.6 A		S8JC-Z35024CD	

## List of Models in S8JC-ZS Series

**Note:** For details on normal stock models, contact your nearest OMRON representative.

Conformed standard	Configuration		Input voltage	Power ratings	Output voltage	Output current	Model
CE (EN50178)	Covered Power Supplies	Bottom-mounting	200 to 240 VAC	15 W	24 VDC	0.7 A	S8JC-ZS01524C-AC2
				35 W	24 VDC	1.5 A	S8JC-ZS03524C-AC2
				50 W	24 VDC	2.1 A	S8JC-ZS05024C-AC2
				100 W	24 VDC	4.5 A	S8JC-ZS10024C-AC2
		150 W		24 VDC	6.5 A	S8JC-ZS15024C-AC2	
		15 W		24 VDC	0.7 A	S8JC-ZS01524CD-AC2	
	DIN Rail-mounting	35 W		24 VDC	1.5 A	S8JC-ZS03524CD-AC2	
		50 W		24 VDC	2.1 A	S8JC-ZS05024CD-AC2	
		100 W		24 VDC	4.5 A	S8JC-ZS10024CD-AC2	
		150 W		24 VDC	6.5 A	S8JC-ZS15024CD-AC2	

# S8JC-Z

## Ratings, Characteristics, and Functions

### 15-/35-W Models

Item	Power ratings Series name	15 W					35 W					
		S8JC-Z					S8JC-ZS	S8JC-Z				S8JC-ZS
Certification		---					CE(EN50178)	---				CE(EN50178)
Output	Output voltage (VDC)	5 V	12 V	24 V	48 V	24 V	5 V	12 V	24 V	48 V	24 V	
	Output current	3.0 A	1.3 A	0.7 A	0.35 A	0.7 A	7.0 A	3.0 A	1.5 A	0.75 A	1.5 A	
	Voltage adjustment range (typical)	-10% to 10%					-10% to 10%					
	Ripple (typical)	100 mV			200 mV	50 mV	100 mV	150 mV		200 mV	50 mV	
	Startup time (typical)	300 ms					300 ms					
	Hold time (typical)	50 ms					30 ms					40 ms
Efficiency (typical)		74%	80%	86%	81%		75%	82%	84%	88%	83%	
Input	Voltage	200 to 240 VAC (185 to 264 VAC)					200 to 240 VAC (185 to 264 VAC)					
	Frequency 50/60 Hz (47 to 63 Hz)	50/60 Hz (47 to 64 Hz)					50/60 Hz (47 to 64 Hz)					
	Current (typical)	0.22 A					0.5 A					
	Leakage current	1 mA max.					1 mA max.					
	Inrush current (for a cold start at 25°C) (typical)	40 A					40 A					
Additional functions	Overload protection	105% of rated load current, voltage drop, intermittent, automatic reset					105% of rated load current, voltage drop, intermittent, automatic reset					
	Overvoltage protection	Yes					Yes					
	Parallel operation	No					No					
	Series operation	No					No					
Other	Ambient operating temperature *Refer to the derating curve in Engineering Data		S8JC-Z: *-10°C to 60°C S8JC-ZS: *-20°C to 70°C					S8JC-Z: *-10°C to 60°C S8JC-ZS: *-20°C to 70°C				
	Dielectric strength (detection current: 20 mA)	Between all inputs and outputs	S8JC-Z: 1.5 kVAC for 1 min. S8JC-ZS: 3 kVAC for 1 min.					S8JC-Z: 1.5 kVAC for 1 min. S8JC-ZS: 3 kVAC for 1 min.				
		Between all inputs and PE terminals	S8JC-Z: 1.5 kVAC for 1 min. S8JC-ZS: 2 kVAC for 1 min.					S8JC-Z: 1.5 kVAC for 1 min. S8JC-ZS: 2 kVAC for 1 min.				
		Between all outputs and PE terminals	S8JC-Z: 0.5 kVAC for 1 min. S8JC-ZS: 1 kVAC for 1 min.					S8JC-Z: 0.5 kVAC for 1 min. S8JC-ZS: 1 kVAC for 1 min.				
	Vibration resistance		10 to 55 Hz, 0.26-mm single amplitude for 2h each in X, Y, and Z directions					10 to 55 Hz, 0.26-mm single amplitude for 2h each in X, Y, and Z directions				
	MTBF		135,000 hrs					135,000 hrs				
	Warranty		1 year			2 years		1 year			2 years	
	Output indicator		Yes (Color: Green)					Yes (Color: Green)				
	Dimensions (W×H×D)	Bottom-mounting model	36×97×80 mm					38×98×129 mm				
		DIN Rail-mounting model (See note 3.)	46×97×105 mm					46×98×154 mm				
Weight (typical)	Bottom-mounting model	190 g					280 g					
	DIN Rail-mounting model	360 g					450 g					

- Note:** 1. Unless otherwise specified, all parameters are measured with a 230-VAC input, at the rated load, and at an ambient temperature of 25°C.  
 2. Ripple and noise are measured at a bandwidth of 20 MHz.  
 3. Refer to the dimensional diagrams for details on DIN Rail-mounting Models (excluding terminal blocks and DIN Rail products).

## 50-/100-W Models

Item		Power ratings Series name	50 W					100 W				
			S8JC-Z			S8JC-ZS		S8JC-Z			S8JC-ZS	
Certification			---				CE(EN50178)	---				CE(EN50178)
Output	Output voltage (VDC)		5 V	12 V	24 V	48 V	24 V	5 V	12 V	24 V	48 V	24 V
	Output current		10.0 A	4.2 A	2.1 A	1.1 A	2.1 A	20 A	8.5 A	4.5 A	2.3 A	4.5 A
	Voltage adjustment range (typical)		-10% to 10%					-10% to 10%				
	Ripple (typical)		150 mV		100 mV	200 mV	50 mV	130 mV	120 mV	100 mV	200 mV	150 mV
	Startup time (typical)		300 ms					300 ms		700 ms	600 ms	300 ms
	Hold time (typical)		50 ms				30 ms	50 ms				
Efficiency (typical)			76%	83%	84%	86%	84%	78%	85%	86%	87%	87%
Input	Voltage		200 to 240 VAC (185 to 264 VAC)				200 to 240 VAC (185 to 264 VAC)					
	Frequency 50/60 Hz (47 to 63 Hz)		50/60 Hz (47 to 64 Hz)					50/60 Hz (47 to 64 Hz)				
	Current (typical)		0.65 A	0.6 A				1.4 A				
	Leakage current		1 mA max.					1 mA max.				
	Inrush current (for a cold start at 25°C) (typical)		40 A					40 A				
Additional functions	Overload protection		105% of rated load current, voltage drop, intermittent, automatic reset					105% of rated load current, voltage drop, intermittent, automatic reset				
	Overvoltage protection		Yes					Yes				
	Parallel operation		No					No				
	Series operation		No					No				
Other	Ambient operating temperature *Refer to the derating curve in Engineering Data		S8JC-Z: *-10°C to 60°C S8JC-ZS: *-20°C to 70°C					S8JC-Z: *-10°C to 60°C S8JC-ZS: *-20°C to 70°C				
	Dielectric strength (detection current: 20 mA)	Between all inputs and outputs	S8JC-Z: 1.5 kVAC for 1 min. S8JC-ZS: 3 kVAC for 1 min.					S8JC-Z: 1.5 kVAC for 1 min. S8JC-ZS: 3 kVAC for 1 min.				
		Between all inputs and PE terminals	S8JC-Z: 1.5 kVAC for 1 min. S8JC-ZS: 2 kVAC for 1 min.					S8JC-Z: 1.5 kVAC for 1 min. S8JC-ZS: 2 kVAC for 1 min.				
		Between all outputs and PE terminals	S8JC-Z: 0.5 kVAC for 1 min. S8JC-ZS: 1 kVAC for 1 min.					S8JC-Z: 0.5 kVAC for 1 min. S8JC-ZS: 1 kVAC for 1 min.				
	Vibration resistance		10 to 55 Hz, 0.26-mm single amplitude for 2h each in X, Y, and Z directions					10 to 55 Hz, 0.26-mm single amplitude for 2h each in X, Y, and Z directions				
	MTBF		135,000 hrs					135,000 hrs				
	Warranty		1 year			2 years		1 year			2 years	
	Output indicator		Yes (Color: Green)					Yes (Color: Green)				
	Dimensions (W×H×D)	Bottom-mounting model	38×98×129 mm					50×98×159 mm	38×98×159 mm			
		DIN Rail-mounting model (See note 3.)	46×98×154 mm					52×98×185 mm	46×98×185 mm			
Weight (typical)	Bottom-mounting model	280 g					430 g	370 g	350 g	370 g	350 g	
	DIN Rail-mounting model	450 g					600 g	540 g	520 g	540 g	520 g	

**Note: 1.** Unless otherwise specified, all parameters are measured with a 230-VAC input, at the rated load, and at an ambient temperature of 25°C.

**2.** Ripple and noise are measured at a bandwidth of 20 MHz.

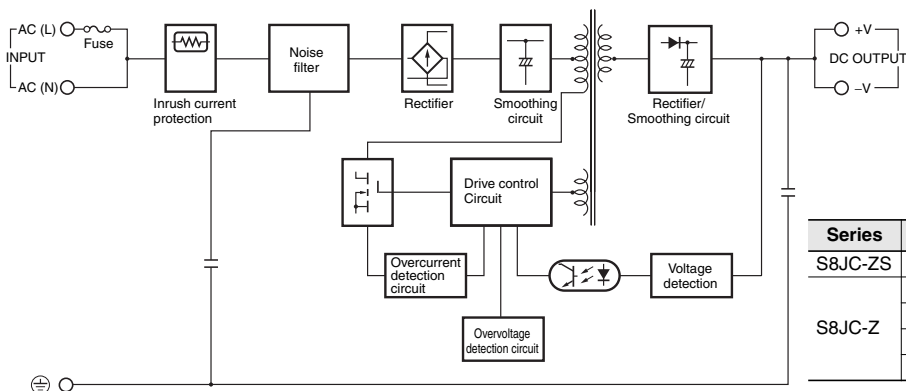
**3.** Refer to the dimensional diagrams for details on DIN Rail-mounting Models (excluding terminal blocks and DIN Rail products).

## 150-/350-W Models

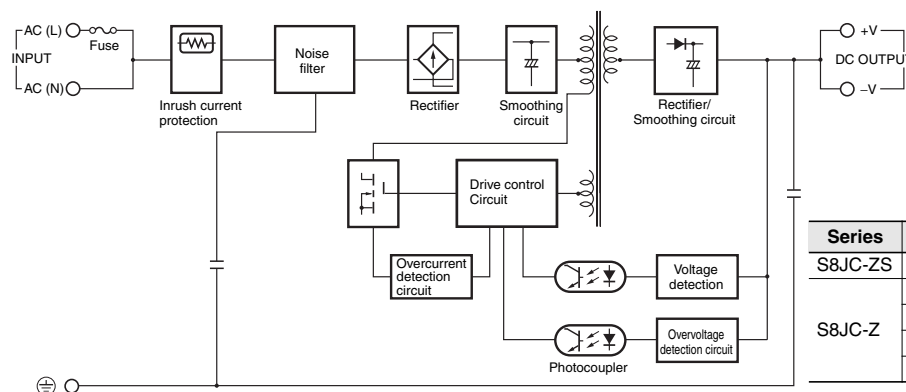
Item	Power ratings Series name	150 W					350 W	
		S8JC-Z				S8JC-ZS	S8JC-Z	
Certification		---					CE(EN50178)	---
Output	Output voltage (VDC)	5 V	12 V	24 V	48 V	24 V	24 V	
	Output current	30 A	12.5 A	6.5 A	3.3 A	6.5 A	14.6 A	
	Voltage adjustment range (typical)	-10% to 10%					-10% to 10%	
	Ripple (typical)	140 mV	180 mV	150 mV	300 mV	200 mV	200 mV	
	Startup time (typical)	300 ms			750 ms	300 ms	300 ms	
	Hold time (typical)	50 ms				60 ms	30 ms	
Efficiency (typical)		79%	85%	88%	86%	87%	84%	
Input	Voltage	200 to 240 VAC (185 to 264 VAC)					200 to 240 VAC (185 to 264 VAC)	
	Frequency 50/60 Hz (47 to 63 Hz)	50/60 Hz (47 to 64 Hz)					50/60 Hz (47 to 64 Hz)	
	Current (typical)	2.0 A					4.2 A	
	Leakage current	1 mA max.					1 mA max.	
	Inrush current (for a cold start at 25°C) (typical)	40 A					40 A	
Additional functions	Overload protection	105% of rated load current, voltage drop, intermittent, automatic reset					105% of rated load current, voltage drop, intermittent, automatic reset	
	Overvoltage protection	Yes					Yes	
	Parallel operation	No					No	
	Series operation	No					No	
Other	Ambient operating temperature *Refer to the derating curve in Engineering Data		S8JC-Z: *-10°C to 60°C S8JC-ZS: *-20°C to 70°C				-10°C to 60°C	
	Dielectric strength (detection current: 20 mA)	Between all inputs and outputs	S8JC-Z: 1.5 kVAC for 1 min. S8JC-ZS: 3 kVAC for 1 min.				1.5 kVAC for 1 min.	
		Between all inputs and PE terminals	S8JC-Z: 1.5 kVAC for 1 min. S8JC-ZS: 2 kVAC for 1 min.				1.5 kVAC for 1 min.	
		Between all outputs and PE terminals	S8JC-Z: 0.5 kVAC for 1 min. S8JC-ZS: 1 kVAC for 1 min.				0.5 kVAC for 1 min.	
	Vibration resistance		10 to 55 Hz, 0.26-mm single amplitude for 2h each in X, Y, and Z directions				10 to 55 Hz, 0.26-mm single amplitude for 2h each in X, Y, and Z directions	
	MTBF		135,000 hrs				135,000 hrs	
	Warranty		1 year			2 years		1 year
	Output indicator		Yes (Color: Green)				Yes (Color: Green)	
	Dimensions (W×H×D)	Bottom-mounting model	43×98×199 mm	50×98×159 mm			50×115×195 mm	
		DIN Rail-mounting model (See note 3.)	46×98×225 mm	52×98×185 mm			52×115×221 mm	
Weight (typical)	Bottom-mounting model	580 g	530 g	450 g		750 g		
	DIN Rail-mounting model	750 g	700 g	620 g		920 g		

- Note:**
1. Unless otherwise specified, all parameters are measured with a 230-VAC input, at the rated load, and at an ambient temperature of 25°C.
  2. Ripple and noise are measured at a bandwidth of 20 MHz.
  3. Refer to the dimensional diagrams for details on DIN Rail-mounting Models (excluding terminal blocks and DIN Rail products).

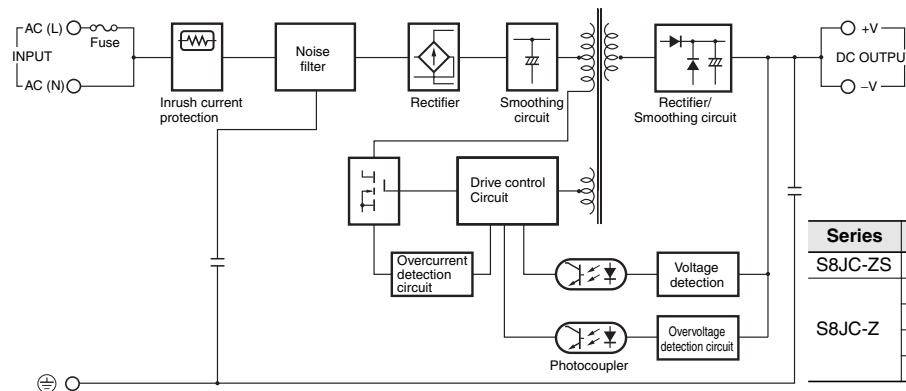
# Block Diagrams



Series	Voltage	15 W	35 W	50 W	100 W	150 W	350 W
S8JC-ZS	24 V	●					
	24 V	●	●	●	●	●	
S8JC-Z	12 V	●	●	●	●	●	
	5 V	●	●	●	●		
	48 V	●	●	●			



Series	Voltage	15 W	35 W	50 W	100 W	150 W	350 W
S8JC-ZS	24 V		●	●	●	●	
	24 V						
S8JC-Z	12 V						
	5 V						
	48 V				●	●	

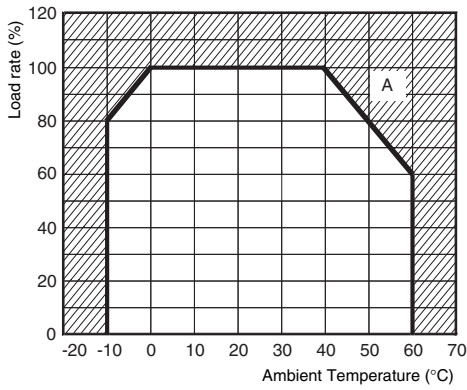


Series	Voltage	15 W	35 W	50 W	100 W	150 W	350 W
S8JC-ZS	24 V						
	24 V						●
S8JC-Z	12 V						
	5 V					●	
	48 V						

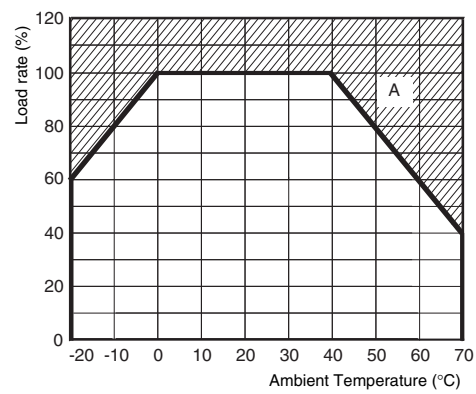
# S8JC-Z

## Engineering Data

### Derating Curves for S8JC-Z



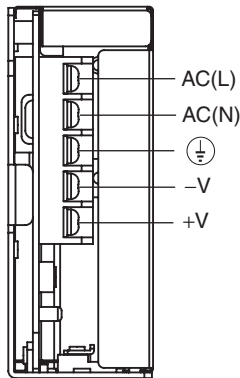
### Derating Curves for S8JC-ZS



- Note:**
1. Internal parts may occasionally deteriorate or be damaged. Do not use the Power Supply in areas outside the derating curve (i.e., the area shown by shading "A" in the above graph).
  2. If there is a derating problem, use forced air-cooling.

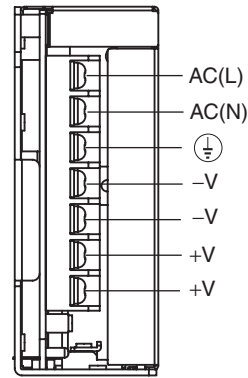
## Terminal Arrangement

### 15-/35-/50-W Models



**Note:** The S8JC-Z05024C is shown above.

### 100-/150-/350-W Models

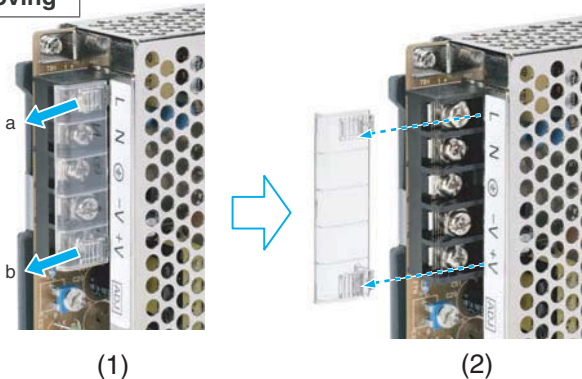


- Note:**
1. The S8JC-Z10024C is shown above.
  2. The rated current for output terminals is 25 A per terminal. Be sure to use multiple terminals simultaneously for current that exceeds the terminal rating. When applying a current of 25 A or more, use at least two terminals each for the positive and negative wires.

## Terminal Cover Fitting

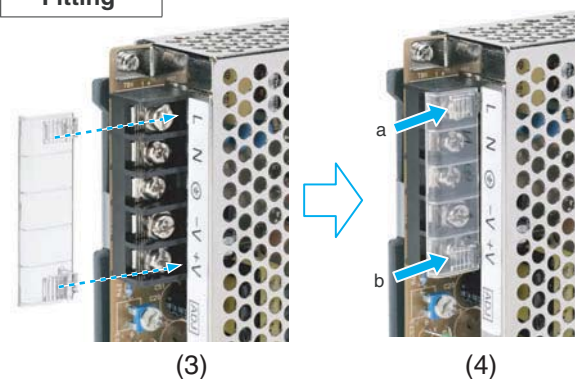
### S8JC-ZS□□□□C Models

#### Removing



### S8JC-ZS□□□□C Models

#### Fitting



- In (1) case, please push scratched parts (a, b) on the cover following the arrow "←"  
 In (2) case, please remove the cover following the arrow "←·····"  
 In (3) case, please remove the cover following the arrow "·····→"  
 In (4) case, please push scratched parts (a, b) on the cover following the arrow "→"

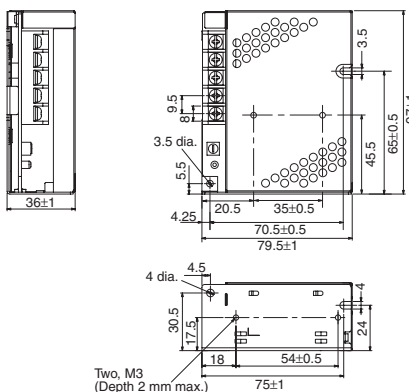


# Dimensions

## Bottom-mounting Models

S8JC-Z015□□C (15 W)

S8JC-ZS01524C (15 W)



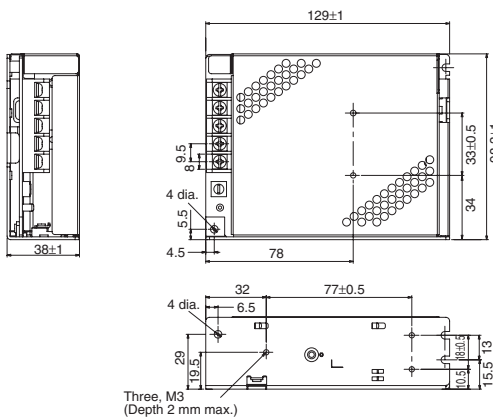
### Panel mounting holes dimensions

	Surface screw mounting
Side Mounting	
Bottom Mounting	

**Note:** The screws must not protrude more than 2 mm inside the Power Supply when screw holes provided on the chassis are used. If the dimensions are not correct, the Power Supply may be damaged.

S8JC-Z035□□C (35 W)  
S8JC-Z050□□C (50 W)

S8JC-ZS03524C (35 W)  
S8JC-ZS05024C (50 W)

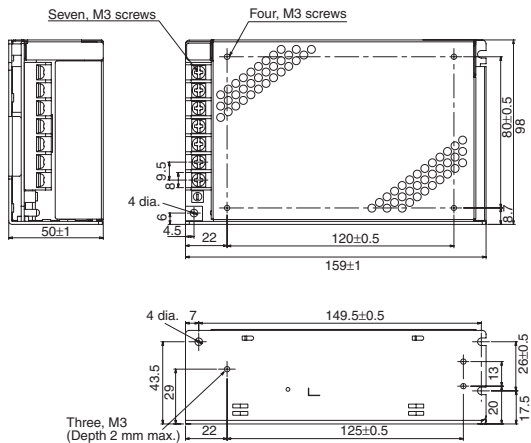


### Panel mounting holes dimensions

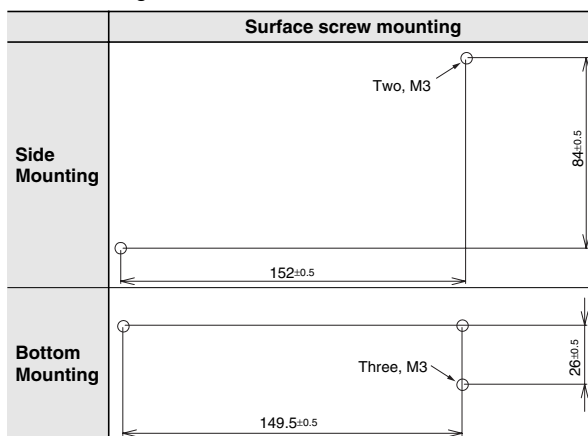
	Surface screw mounting
Side Mounting	
Bottom Mounting	

# S8JC-Z

## S8JC-Z10005C (100 W)

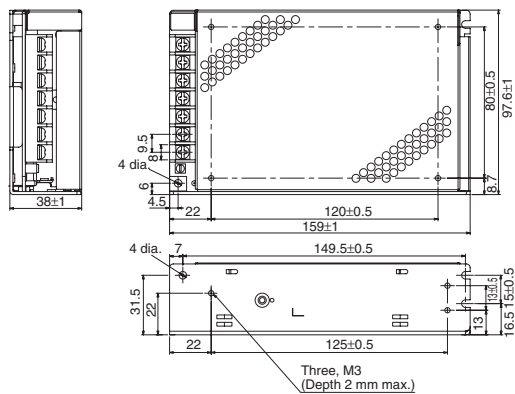


### Panel mounting holes dimensions

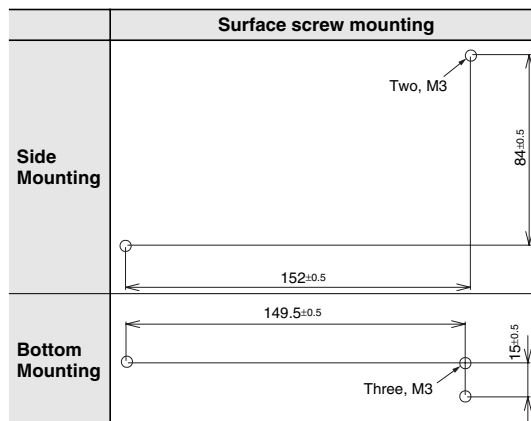


## S8JC-Z10012C (100 W) S8JC-Z10024C (100 W) S8JC-Z10048C (100 W)

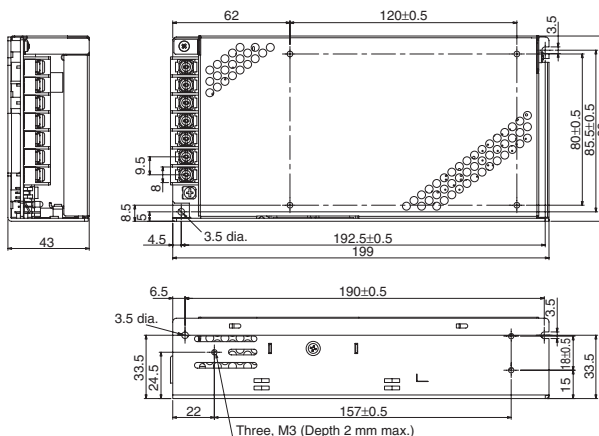
## S8JC-ZS10024C (100 W)



### Panel mounting holes dimensions



S8JC-Z15005C (150 W)

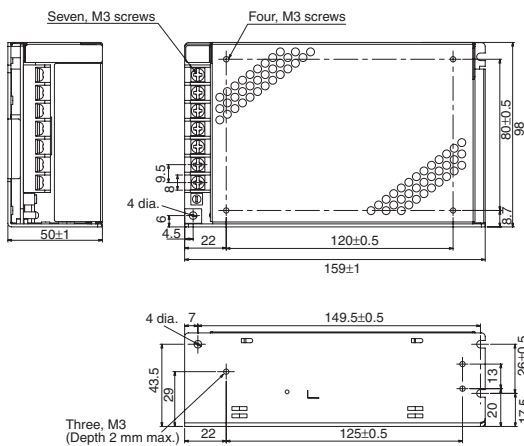


Panel mounting holes dimensions

	Surface screw mounting
Side Mounting	
Bottom Mounting	

S8JC-Z15012C (150 W)  
S8JC-Z15024C (150 W)  
S8JC-Z15048C (150 W)

S8JC-ZS15024C (150 W)

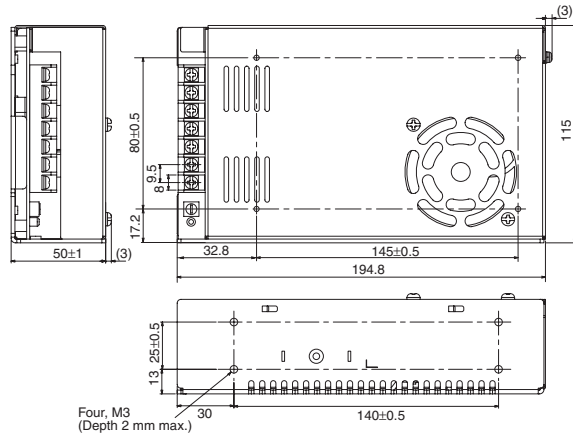


Panel mounting holes dimensions

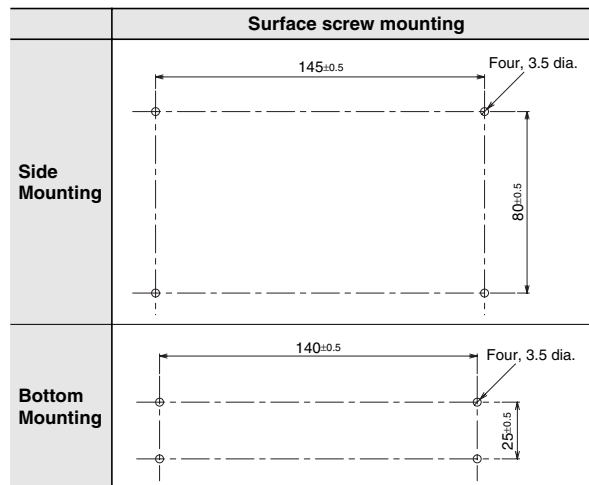
	Surface screw mounting
Side Mounting	
Bottom Mounting	

# S8JC-Z

## S8JC-Z35024C (350 W)



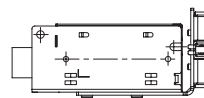
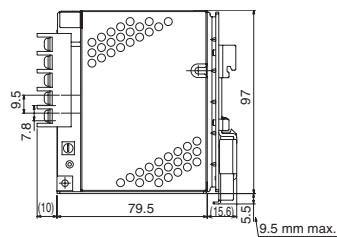
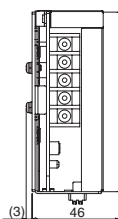
### Panel mounting holes dimensions



DIN Rail-mounting Models

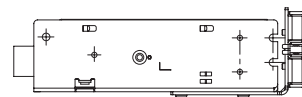
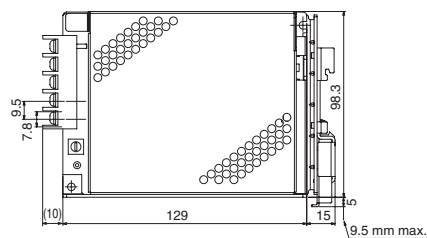
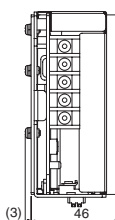
S8JC-Z015□□CD (15 W)

S8JC-ZS01524CD (15 W)

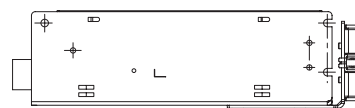
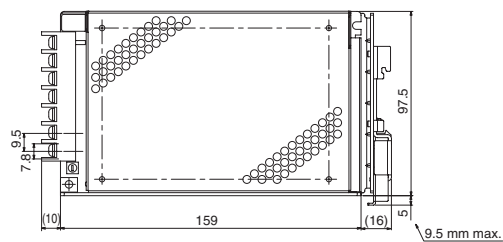
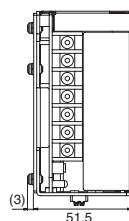


S8JC-Z035□□CD (35 W)

S8JC-Z050□□CD (50 W)  
S8JC-ZS03524CD (35 W)  
S8JC-ZS05024CD (50 W)

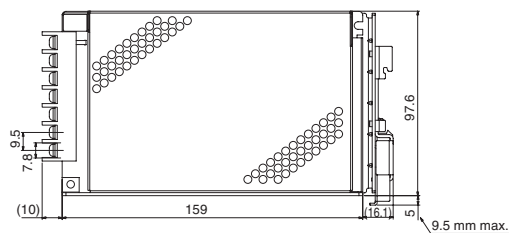
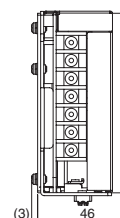


S8JC-Z10005CD (100 W)



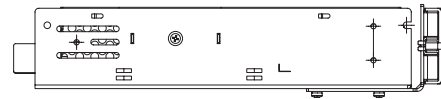
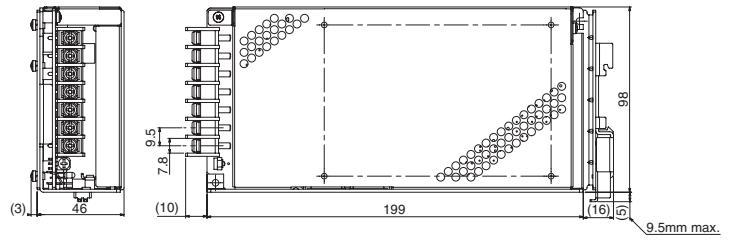
S8JC-Z10012CD (100 W)  
S8JC-Z10024CD (100 W)  
S8JC-Z10048CD (100 W)

S8JC-ZS10024CD (100 W)



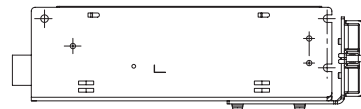
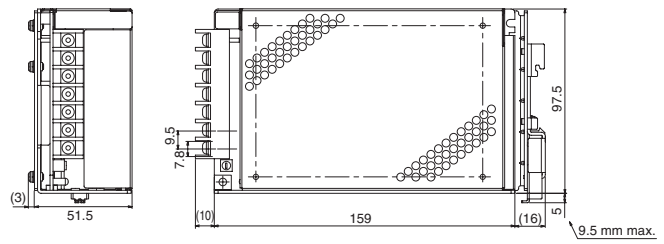
# S8JC-Z

**S8JC-Z15005CD (150 W)**



**S8JC-Z15012CD (150 W)**  
**S8JC-Z15024CD (150 W)**  
**S8JC-Z15048CD (150 W)**

**S8JC-ZS15024CD (150 W)**



**S8JC-Z35024CD (350 W)**

