

# Zelio Relay Solid state relays

Catalog

February **2016**





# General contents

## Zelio Relay - Solid state relays

*Selection guide* ..... page 2

### ■ General presentation

- Choose slim interfacing solution with SSL relays ..... page 4
- Choose modularity offer with DIN rail mount SSM relays ..... page 5
- Choose complete panel mount solution with SSP relays ..... page 7

### ■ SSL solid state slim relays

- Presentation of the range..... page 8
- Relay and socket description ..... page 8
- References ..... page 9

### ■ SSM solid state modular DIN rail relays

- Presentation of the range..... page 10
- Relay description ..... page 10
- References ..... page 11

### ■ SSP solid state panel mount relays

- Presentation of the range..... page 14
- Relay description ..... page 14
- References ..... page 15
- Heat sinks and accessories ..... page 17

■ **Product reference index** ..... page 18

Type of product	Slim interface SSR	Modular DIN rail SSR		
				
Number of phases	1	1	1 (dual SSR)	
Type of mounting	Plug-in PCB pins with DIN rail mounted socket	DIN rail mounted		
Control input voltage	110...230 V	18...36 V 90...140 V 200...265 V	-	
	5...230 V	4...32 V		
Output load voltage	24...250 V	24...280 V 48...600 V	-	
	1...24 V 1...48 V	1...60 V 1...100 V	-	
Output load current	2 A	6 A for SSM1 (12 mm/0.472 in.) 12 A for SSM1 (18 mm/0.708 in.)	6 A	
	0.1, 3.5 A	6 A for SSM1 (12 mm/0.472 in.) 12 A for SSM1 (18 mm/0.708 in.)	-	
Type of switching	Zero voltage	Yes	Yes	Yes
	Random	Yes	Yes	Yes
	DC	Yes	Yes	-
Cooling	-	Built-in heat sink		
Degree of protection	IP 67 (encapsulation) IP 20 (socket)	IP 20		
LED indication	Yes (on socket)	Yes		
Solid state relay type	<b>SSL (1)</b>	<b>SSM1</b>	<b>SSM2</b>	
Pages	9	11		

(1) SSL relay with SSLZ socket.

Modular DIN rail SSR		Panel mount SSR			
					
1	3	1	3		
DIN rail mounted		DIN rail mounted	Panel mounted	Panel mounted	
90...140 V 90...280 V		90...140 V 90...280 V	90...280 V	18...36 V 90...140 V 180...280 V	
3...32 V 4...32 V		4...32 V	3...32 V 4...32 V	4...32 V	
24...280 V 48...660 V		48...600 V	24...300 V 48...660 V	48...530 V	
-			1...150 V	-	
20, 30 A for SSM1 (22.5 mm/0.886 in.) 45, 55 A for SSM1 (45 mm/1.772 in.)		25 A	10, 25, 50, 75, 90, 125 A	25, 50 A	
-			12, 25, 40 A	-	
Yes		Yes	Yes	Yes	
-		Yes	-	Yes	
-		-	Yes	-	
Built-in heat sink			Option with thermal pad	Option with thermal pad	
IP 20					
Yes			Yes	Yes	
<b>SSM1</b>	<b>SSM3</b>	<b>SSP1</b>	<b>SSP3</b>		
11		15			

## Zelio Relay - Solid state relays

Choose long life and silent operation with Zelio SSRs

### Maintenance free

fully electronic,  
unlimited life span

### High switching frequency

allows precise and quick control

### Silent and reliable switching

no moving parts,  
noiseless switching

### Sustainability in harsh environment

resistance to shock,  
vibration, and  
contamination

The Zelio SSR series offers slim interface (SSL), modular DIN rail (SSM), and panel mount (SSP) solid state relays that provide complete, compact, and innovative solutions for a wide variety of applications with interfacing control and load switching. They are the ideal solution for packaging, plastic molding, textile, and heating furnace applications.

## Choose a slim interfacing solution with SSL relays

### Slim relay-socket solution

- > Complete range of control input and load output configurations for both AC and DC switching applications
- > Compact solution with 6 mm/0.236 in. width, allows customers to choose the combination of relays and associated sockets from the wide range available



SSL slim interface relay mounted on SSLZ socket

SSL relays + SSLZ sockets	
Control input voltage	Load output voltage
≡ 5...230 V	≡ 1...48 V
≡ 5...230 V	~ 24...250 V
~ 110...230 V	≡ 1...48 V
~ 110...230 V	~ 24...250 V

### Enhanced performance in any situation

- > Socket with integrated reverse polarity protection circuit and control input/relay status LED indicator
- > IP 67 protection and fully encapsulated



LED indicator for relay status

### Simplified installation and mounting

- > Locking/unlocking lever for replacing relay from the socket
- > Simple mounting on DIN rail
- > Choice of screw connector and spring terminal connection for sockets



Screw connector



Spring terminal

**SSL/RSL relays + SSLZ/RSLZ sockets → Slim plug-in interface solution**

## Choose modularity with DIN rail mount SSM relays

### Ready to use "Plug and play"

- > Modular design of IP 20 housing and built-in heat sink for optimized operating conditions
- > Easy mounting on standard 35 mm/1.378 in. DIN rail with a secure mounting latch

### Compact design

- > Requires less panel space due to slim width and thus reduces the size of your enclosures
- > Optimized modular design available in various sizes (11, 18, 22.5 and 45 mm width) with load output current of 6, 12, 20, 30, 45, and 55 A

11 mm/0.433 in.



SSM1: 6 A  
single-phase SSR

18 mm/0.709 in.



SSM2: 6 A dual channel,  
single-phase SSR

#### SSM1 relays

Control input voltage	Load output voltage
—4...32 V	—1...48 V —1...100 V
—4...32 V	~24...280 V ~48...600 V
~18...36 V ~90...140 V ~200...265 V	~24...280 V ~48...600 V

#### SSM2 relays

Control input voltage	Load output voltage
—4...32 V	~24...280 V ~48...600 V

22.5 mm/0.886 in.



SSM1: 20 and 30 A  
single-phase SSR

45 mm/1.772 in.



SSM1: 45 and 55 A  
single-phase SSR

#### SSM1 relays

Control input voltage	Load output voltage
—4...32 V	~24...280 V ~48...660 V
—3...32 V	~24...280 V
~90...140 V ~90...280 V	~24...280 V ~48...660 V

90 mm/3.543 in.



SSM3: 25 A  
three-phase SSR

#### SSM3 relays

Control input voltage	Load output voltage
—4...32 V	~48...600 V
~90...140 V	~48...600 V
~180...280 V	~48...600 V

**SSM1 (1-phase)/SSM2 (1-phase dual channel)/SSM3 (3-phase) → Plug & Play solution**

**Choose modularity with DIN rail mount SSM relays (continued)**

**Enhanced modular solution**

- > Wide choice of relays with single-phase and three-phase options and current ratings from 6 A to 55 A
- > Zero voltage switching for resistive loads and random switching for inductive loads
- > UL and cUL approved including the general purpose and motor controller rating standards

**Choose a complete panel mount solution with SSP relays**

**Complete solution**

- > Single-phase and three-phase panel mount solid state relays with a range of heat sinks and accessories to meet application needs from 10 A to 125 A
- > Easy product selection with simplified product nomenclature and direct heat sink selection available in product data sheets
- > Wide choice of heat sinks with thermal resistance ratings of 0.2 °C/W to 2.5 °C/W



SSP1: Single-phase panel mount SSR

SSP1 relays	
Control input voltage	Load output voltage
⋯3.5...32 V	⋯1...150 V
⋯3...32 V	~24...300 V
⋯4...32 V	~48...660 V
~90...280 V	~24...300 V
	~48...660 V



SSP1.S: Single-phase panel mount SSR with smart diagnostic features

SSP1.S relays	
Control input voltage	Load output voltage
⋯3...32 V	~24...300 V
⋯4...32 V	~48...660 V



SSP3: Three-phase panel mount SSR

SSP3 relays	
Control input voltage	Load output voltage
⋯4-32 V	~48-530 V
~18-36 V	~48-530 V
~90-140 V	
~180-280 V	

**Choose a complete panel mount solution with SSP relays**  
(continued)

**Simple, safe, and robust screw terminals**

- > Simple and easy wiring; accepts wires with different kinds of terminations (cable ends, fork lug, ring lug)
- > Safe and fool-proof design with IP 20 protection and integrated enclosure
- > Robust self-aligned screw terminals with proven effectiveness in helping to prevent screw jams

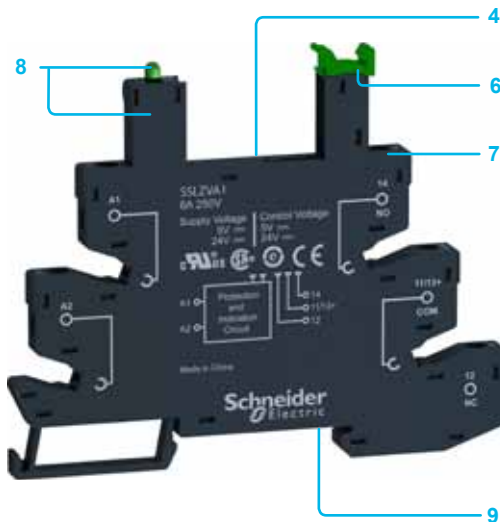
**Innovative SSP1.S with smart diagnostics and test button**

- > Smart diagnostic features with built-in visual indicator and alarm output enables quick response to unexpected results and correct monitoring of SSR operation
- > A test button for easy debugging, testing, and commissioning

**Simplified installation and mounting**

- > Product option with readily available factory-fit thermal pad
- > Heat sink offers panel and DIN rail mounting options





### Presentation of the range

SSL solid state relays offer the advantages of several input and output configurations for both AC and DC switching applications. Their compact size and modular design reduces space and allows easy mounting on the socket.

The plug-in type relays can be mounted directly on a PCB or with a socket on a standard 35 mm/1.378 in. DIN rail. The sockets are available in screw connector and spring terminal types.

SSL relays offer:

- A choice of relays and sockets to suit a range of operating voltages
- Zero voltage switching for resistive load and random switching for inductive load applications
- Simple maintenance as the relays can be held in place/released by locking/unlocking the lever without disconnecting the socket wiring
- Socket with reverse polarity protection circuit and LED indicator for easy identification of control status

### Relay description

#### SSL slim solid state relays

- 1 Relay with 1 N/O contact and any one of the following ratings:
  - 24 V  $\overline{\text{---}}$ , 3.5 A
  - 48 V  $\overline{\text{---}}$ , 100 mA
  - 280 V  $\sim$ , 2 A
- 2 4 flat, reinforced pins (PCB type)
- 3 5 mm/0.197 in. relay width for up to 3.5 A of load current

### Socket description

#### Sockets for SSL slim solid state relays

- 4 5 female contacts for the relay pins
- 5 6.2 mm/0.244 in. socket width
- 6 Lever for locking or releasing the relay from its socket with clip-in marker legend
- 7 Wire connection by screw connectors or spring terminals
- 8 Built-in reverse polarity protection circuit and LED indicator
- 9 Locating slot for mounting on DIN rail

PF123409A



SSL1A12JD

PF123420B



SSLZVA1 + SSL1D03JD

PF526466



RSLZ2

PF526467



RSLZ3

### Relays and sockets for customer assembly

#### SSL single-phase solid state relays (sold in lots of 12)

Switching	Voltage range		Load current range	Reference	Weight
	Control input	Load output			
	V	V	A	kg/lb	
DC switching	~ 3 to 12	~ 1 to 24	3.5	SSL1D03JD	0.004/0.009
		~ 1 to 48	0.1	SSL1D101JD	0.004/0.009
	~ 15 to 30	~ 1 to 24	3.5	SSL1D03BD	0.004/0.009
		~ 1 to 48	0.1	SSL1D101BD	0.004/0.009
	~ 38 to 72	~ 1 to 24	3.5	SSL1D03ND	0.004/0.009
		~ 1 to 48	0.1	SSL1D101ND	0.004/0.009
Zero voltage switching	~ 3 to 12	~ 24 to 280	2	SSL1A12JD	0.004/0.009
	~ 15 to 30	~ 24 to 280	2	SSL1A12BD	0.004/0.009
	~ 38 to 72	~ 24 to 280	2	SSL1A12ND	0.004/0.009
Random switching	~ 3 to 12	~ 24 to 280	2	SSL1A12JDR	0.004/0.009
	~ 15 to 30	~ 24 to 280	2	SSL1A12BDR	0.004/0.009
	~ 38 to 72	~ 24 to 280	2	SSL1A12NDR	0.004/0.009

#### Sockets equipped with LED and protection circuit (sold in lots of 10)

Control voltage (Nominal) V	For use with relays	Socket type			
		Screw connector		Spring terminals	
		Unit reference	Weight kg/lb	Unit reference	Weight kg/lb
~ 5	SSL1D03JD SSL1D101JD SSL1A12JD SSL1A12JDR	SSLZVA1	0.029/0.063	SSLZRA1	0.029/0.063
~ 24	SSL1D03BD SSL1D101BD SSL1A12BD SSL1A12BDR	SSLZVA1	0.029/0.063	SSLZRA1	0.029/0.063
~ 60	SSL1D03ND SSL1D101ND SSL1A12ND SSL1A12NDR	SSLZVA2	0.029/0.063	SSLZRA2	0.029/0.063
~/~ 110	SSL1D03ND SSL1D101ND SSL1A12ND SSL1A12NDR	SSLZVA3	0.029/0.063	SSLZRA3	0.029/0.063
~/~ 230	SSL1D03ND SSL1D101ND SSL1A12ND SSL1A12NDR	SSLZVA4	0.029/0.063	SSLZRA4	0.029/0.063

#### Accessories for sockets

Description	Compatibility	Reference	Weight kg/lb
<b>Clip-in legends</b> (2 sheets of 64 legends)	SSL sockets	RSLZ5	0.001/0.002
<b>Bus jumper</b> (10 x 20-pole jumper)	SSL sockets	RSLZ2	0.003/0.007
<b>Partition plate</b> (10 partition plates)	SSL sockets	RSLZ3	0.001/0.002

### Presentation of the range

SSM solid state relays are compact relays offering greater power density. The modular IP 20 housing design and built-in heat sink offer optimized operating solutions.

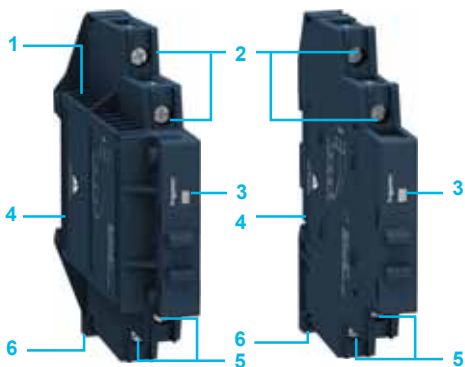
The SSM relay range comprises:

- **SSM1:** Single-phase SSR relays with 6, 12, 20, 30, 45, and 55 A ratings
- **SSM2:** Single-phase dual SSR relays with 6 A rating
- **SSM3:** Three-phase SSR relays with 25 A rating

### Relay description

#### SSM1 relays, 12 mm/0.472 in. (6 A) width and 18 mm/0.709 in. (12 A) width

- 1 Built-in heat sink for heat dissipation
- 2 Control input connection terminals
- 3 Control input voltage LED indicator in green
- 4 Bracket for mounting on 35 mm/1.378 in. DIN rail
- 5 Load output connection terminals
- 6 Mounting latch



#### SSM2 relays, 18 mm/0.709 in. (6 A) width

- 1 Built-in heat sink for heat dissipation
- 2 Load output connection terminals for Channel A
- 3 Separate input voltage LED indicator in green
- 4 Separate control input connection terminals
- 5 Load output connection terminals for Channel B
- 6 Mounting latch
- 7 Bracket for mounting on 35 mm/1.378 in. DIN rail



#### SSM1 relays, 22.5 mm/0.886 in. (20 A, 30 A) width and 45 mm/1.771 in. (45 A, 55 A) width

- 1 Lugs for panel mounting
- 2 Built-in heat sink for heat dissipation
- 3 Control input connection terminals
- 4 Control input voltage LED indicator in green
- 5 Bracket for mounting on 35 mm/1.378 in. DIN rail
- 6 Load output connection terminals



#### SSM3 relays, 90 mm/0.3543 in. (25 A) width

- 1 Lugs for panel mounting
- 2 Built-in heat sink for heat dissipation
- 3 Control input connection terminals
- 4 Control input voltage LED indicator in green
- 5 Bracket for mounting on 35 mm/1.378 in. DIN rail
- 6 Load output connection terminals



PF123426B



SSM1A36BD

PF123427B



SSM1A312BD

### SSM1 single-phase solid state relays (12 and 18 mm)

Switching	Voltage range		Load current range	Reference	Weight			
	Control input	Load output						
	V	V	A		kg/lb			
DC switching	≡ 4...32	≡ 1...60	6	SSM1D26BD	0.050/0.110			
			12	SSM1D212BD	0.090/0.198			
	≡ 1...100	≡ 1...100	6	SSM1D36BD	0.050/0.110			
			12	SSM1D312BD	0.090/0.198			
			Zero voltage switching	≡ 4...32	~ 24...280	6	SSM1A16BD	0.050/0.110
						12	SSM1A112BD	0.090/0.198
~ 48...600	~ 48...600	6		SSM1A36BD	0.050/0.110			
		12		SSM1A312BD	0.090/0.198			
		~ 18...36		~ 24...280	6	SSM1A16B7	0.050/0.110	
					12	SSM1A112B7	0.090/0.198	
~ 48...600	~ 48...600	12	SSM1A312B7	0.090/0.198				
		~ 90...140	~ 24...280	6	SSM1A16F7	0.050/0.110		
				12	SSM1A112F7	0.090/0.198		
~ 48...600	~ 48...600	12	SSM1A312F7	0.090/0.198				
		~ 200...265	~ 24...280	6	SSM1A16P7	0.050/0.110		
				12	SSM1A112P7	0.090/0.198		
~ 48...600	~ 48...600	12	SSM1A312P7	0.090/0.198				
		Random switching	≡ 4...32	~ 24...280	6	SSM1A16BDR	0.050/0.110	
					12	SSM1A112BDR	0.090/0.198	
~ 48...600	~ 48...600		6	SSM1A36BDR	0.050/0.110			
			12	SSM1A312BDR	0.090/0.198			
			~ 18...36	~ 24...280	6	SSM1A16B7R	0.050/0.110	
					12	SSM1A112B7R	0.090/0.198	
~ 48...600	~ 48...600	12	SSM1A312B7R	0.090/0.198				
		~ 90...140	~ 24...280	6	SSM1A16F7R	0.050/0.110		
				12	SSM1A112F7R	0.090/0.198		
~ 48...600	~ 48...600	12	SSM1A312F7R	0.090/0.198				
		~ 200...265	~ 24...280	6	SSM1A16P7R	0.050/0.110		
				12	SSM1A112P7R	0.090/0.198		
~ 48...600	~ 48...600	12	SSM1A312P7R	0.090/0.198				

# Zelio Relay - Solid state relays

## SSM solid state modular relays

PF123420B



SSM2A36BD

### SSM2 single-phase solid state relays, dual channel

Switching	Voltage range		Load current range	Reference	Weight
	Control input	Load output			
	V	V			
Zero voltage switching	≡ 4...32	~ 24...280	6	SSM2A16BD	0.090/0.198
		~ 48...600	6	SSM2A36BD	0.090/0.198
Random switching	≡ 4...32	~ 24...280	6	SSM2A16BDR	0.090/0.198
		~ 48...600	6	SSM2A36BDR	0.090/0.198

PF152200



SSM1A120M7

PF152200



SSM1A445BD

### SSM1 single-phase solid state relays (22.5 and 45 mm)

Switching	Voltage range		Load current range	Reference	Weight
	Control input	Load output			
	V	V			
Zero voltage switching	≡ 4...32	~ 24...280	20	SSM1A120BD	0.280/0.617
			30	SSM1A130BD	0.280/0.617
	≡ 3...32	~ 24...280	45	SSM1A145BD	0.476/1.049
	≡ 4...32	~ 48...660	30	SSM1A430BD	0.280/0.617
			45	SSM1A445BD	0.476/1.049
			55	SSM1A455BD	0.476/1.049
	~ 90...280	~ 24...280	20	SSM1A120M7	0.280/0.617
			30	SSM1A130M7	0.280/0.617
		~ 48...660	30	SSM1A430M7	0.280/0.617
	~ 90...140	~ 24...280	45	SSM1A145F7	0.476/1.049
			45	SSM1A445F7	0.476/1.049
			55	SSM1A455F7	0.476/1.049

PF152212



SSM3A325F7

### SSM3 three-phase solid state relays

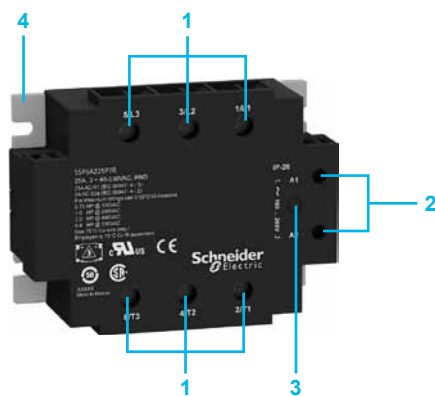
Switching	Voltage range		Load current range	Reference	Weight
	Control input	Load output			
	V	V	A		kg/lb
Zero voltage switching	≡ 4...32	~ 48...600	25	<b>SSM3A325BD</b>	0.740/1.631
	~ 90...140	~ 48...600	25	<b>SSM3A325F7</b>	0.740/1.631
	~ 180...280	~ 48...600	25	<b>SSM3A325P7</b>	0.740/1.631
Random switching	≡ 4...32	~ 48...600	25	<b>SSM3A325BDR</b>	0.740/1.631



SSP1 single-phase panel mount relays



SSP1 single-phase panel mount relays with smart diagnostic feature



SSP3 three-phase panel mount relays

### Presentation of the range

SSP solid state relays are single-phase and three-phase panel mount relays that offer complete solid state control and switching solutions.

- Easy product selection with simplified product nomenclature and direct heat sink selection available in product data sheets.
- Wide choice of heat sinks with thermal resistance ratings of 2.5 °C/W to 0.2 °C/W.

The SSP relay range comprises:

- **SSP1:** Single-phase panel mount solid state relays available with/without embedded thermal pad and smart diagnostic features, extended load output voltage of up to 660 V ~ and load current rating of 10 A to 125 A.
- **SSP3:** Three-phase panel mount solid state relays integrated with R-C snubber circuit, TVS (Transient Voltage Suppression), and load current ratings of 25 A and 50 A.

### Relay description

#### SSP1 single-phase panel mount relays

- 1 Load output connection screw terminals
- 2 Control input connection screw terminals
- 3 Control input voltage LED indicator
- 4 Indication area for product label or markings
- 5 Smart diagnostic auxiliary input and alarm output
- 6 Load output LED indicator
- 7 Test button
- 8 Optional factory-fit thermal pad that is glued on the rear of the product

#### SSP3 three-phase panel mount relays

- 1 Load output connection screw terminals
- 2 Control input connection screw terminals
- 3 Control input voltage LED indicator
- 4 Optional factory-fit thermal pad that is glued on the rear of the product



SSP1D425BD

### SSP1 single-phase solid state relays

#### Relays with embedded thermal pad

Switching	Voltage range		Load current range	Reference	Weight
	Control input	Load output			
	V	V	A		kg/lb
DC switching	≡ 3.5...32	≡ 1...150	12	SSP1D412BDT	0.089/0.196
			25	SSP1D425BDT	0.089/0.196
			40	SSP1D440BDT	0.089/0.196
Zero voltage switching	≡ 3...32	~ 24...300	10	SSP1A110BDT	0.089/0.196
			25	SSP1A125BDT	0.089/0.196
			50	SSP1A150BDT	0.089/0.196
	≡ 4...32	~ 48...660	75	SSP1A175BDT	0.089/0.196
			50	SSP1A450BDT	0.089/0.196
			75	SSP1A475BDT	0.089/0.196
	≡ 90...280	~ 24...300	90	SSP1A490BDT	0.089/0.196
			125	SSP1A4125BDT	0.089/0.196
			10	SSP1A110M7T	0.089/0.196
			25	SSP1A125M7T	0.089/0.196
			50	SSP1A150M7T	0.089/0.196
			75	SSP1A175M7T	0.089/0.196
	~ 48...660	~ 48...660	50	SSP1A450M7T	0.089/0.196
			75	SSP1A475M7T	0.089/0.196
			90	SSP1A490M7T	0.089/0.196
125	SSP1A4125M7T	0.089/0.196			

#### Relays without embedded thermal pad

DC switching	≡ 3.5...32	≡ 1...150	12	SSP1D412BD	0.089/0.196
			25	SSP1D425BD	0.089/0.196
			40	SSP1D440BD	0.089/0.196
Zero voltage switching	≡ 3...32	~ 24...300	10	SSP1A110BD	0.089/0.196
			25	SSP1A125BD	0.089/0.196
			50	SSP1A150BD	0.089/0.196
	≡ 4...32	~ 48...660	75	SSP1A175BD	0.089/0.196
			50	SSP1A450BD	0.089/0.196
			75	SSP1A475BD	0.089/0.196
	≡ 90...280	~ 24...300	90	SSP1A490BD	0.089/0.196
			125	SSP1A4125BD	0.089/0.196
			10	SSP1A110M7	0.089/0.196
			25	SSP1A125M7	0.089/0.196
			50	SSP1A150M7	0.089/0.196
			75	SSP1A175M7	0.089/0.196
	~ 48...660	~ 48...660	50	SSP1A450M7	0.089/0.196
			75	SSP1A475M7	0.089/0.196
			90	SSP1A490M7	0.089/0.196
125	SSP1A4125M7	0.089/0.196			

#### Relays with embedded thermal pad and smart diagnostic features

Zero voltage switching	≡ 3...32	~ 24...300	25	SSP1A125BDS	0.097/0.214
			50	SSP1A150BDS	0.097/0.214
			≡ 4...32	~ 48...660	50
	75	SSP1A475BDS	0.097/0.214		
	90	SSP1A490BDS	0.097/0.214		
	125	SSP1A4125BDS	0.097/0.214		



SSP1A125BDS



# Zelio Relay - Solid state relays

## SSP solid state panel mount relays



SSP3A225P7

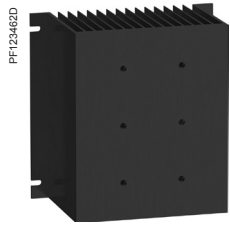
### SSP3 three-phase solid state relays

#### Relays with embedded thermal pad

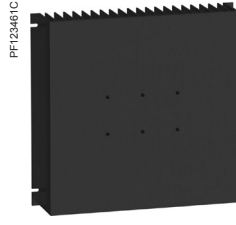
Switching	Voltage range		Load current range	Reference	Weight
	Control Input	Load Output			
	V	V	A		kg/lb
Zero voltage switching	≡ 4...32	~ 48...530	25	SSP3A225BDT	0.360/0.794
			50	SSP3A250BDT	0.360/0.794
	~ 18...36	~ 48...530	25	SSP3A225B7T	0.360/0.794
			50	SSP3A250B7T	0.360/0.794
	~ 90...140	~ 48...530	25	SSP3A225F7T	0.360/0.794
			50	SSP3A250F7T	0.360/0.794
	~ 180...280	~ 48...530	25	SSP3A225P7T	0.360/0.794
			50	SSP3A250P7T	0.360/0.794
Random switching	≡ 4...32	~ 48...530	25	SSP3A225BDRT	0.360/0.794
			50	SSP3A250BDRT	0.360/0.794
	~ 18...36	~ 48...530	25	SSP3A225B7RT	0.360/0.794
			50	SSP3A250B7RT	0.360/0.794
	~ 90...140	~ 48...530	25	SSP3A225F7RT	0.360/0.794
			50	SSP3A250F7RT	0.360/0.794
	~ 180...280	~ 48...530	25	SSP3A225P7RT	0.360/0.794
			50	SSP3A250P7RT	0.360/0.794

#### Relays without embedded thermal pad

Zero voltage switching	≡ 4...32	~ 48...530	25	SSP3A225BD	0.360/0.794
			50	SSP3A250BD	0.360/0.794
	~ 18...36	~ 48...530	25	SSP3A225B7	0.360/0.794
			50	SSP3A250B7	0.360/0.794
	~ 90...140	~ 48...530	25	SSP3A225F7	0.360/0.794
			50	SSP3A250F7	0.360/0.794
	~ 180...280	~ 48...530	25	SSP3A225P7	0.360/0.794
			50	SSP3A250P7	0.360/0.794
Random switching	≡ 4...32	~ 48...530	25	SSP3A225BDR	0.360/0.794
			50	SSP3A250BDR	0.360/0.794
	~ 18...36	~ 48...530	25	SSP3A225B7R	0.360/0.794
			50	SSP3A250B7R	0.360/0.794
	~ 90...140	~ 48...530	25	SSP3A225F7R	0.360/0.794
			50	SSP3A250F7R	0.360/0.794
	~ 180...280	~ 48...530	25	SSP3A225P7R	0.360/0.794
			50	SSP3A250P7R	0.360/0.794



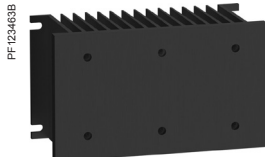
SSRHP05



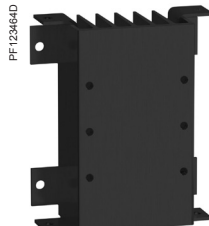
SSRHP02



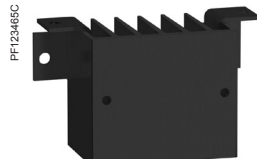
SSRHP07



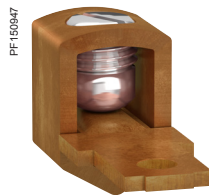
SSRHP10



SSRHP17



SSRHP25



SSRAL1



SSRAL2

### Heat sinks for customer assembly

Mounting	Number and type of relays supported	Surface area	Thermal resistance	Reference	Weight
		cm <sup>2</sup> /in <sup>2</sup>	°C/W		
Panel mount	Up to 3 SSP1 units 1 SSP3 unit	6,823/1,058	0.2	SSRHP02	2.592/5.714
	Up to 3 SSP1 units 1 SSP3 unit	4,406/683	0.5	SSRHP05	1.440/3.174
	1 SSP1 unit	1,640/254	0.7	SSRHP07	0.526/1.159
	Up to 3 SSP1 units 1 SSP3 unit	1,425/221	1	SSRHP10	0.620/1.367
DIN rail mount	Up to 2 SSP1 units	659/102	1.7	SSRHP17	0.195/0.430
	1 SSP1 unit	336/52.10	2.5	SSRHP25	0.100/0.220
	Up to 3 SSP1 units 1 SSP3 unit	1,425/221	1	SSRHD10	0.630/1.389

### Accessories

Description	Type of relays supported	Unit reference	Weight kg/lb
Copper terminal lug for AWG 6 (13.3 mm <sup>2</sup> ) to AWG 0 (53.5 mm <sup>2</sup> ) Sold in lots of 10	SSP1	SSRAL1	0.042/0.093
Copper terminal lug for AWG 14 (2.1 mm <sup>2</sup> ) to AWG 6 (13.3 mm <sup>2</sup> ) Sold in lots of 10	SSP1	SSRAL2	0.009/0.002

<b>R</b>			
RSLZ2	9	SSM1D26BD	11
RSLZ3	9	SSM1D36BD	11
RSLZ5	9	SSM1D212BD	11
		SSM1D312BD	11
<b>S</b>		SSM2A16BD	12
SSL1A12BD	9	SSM2A16BDR	12
SSL1A12BDR	9	SSM2A36BD	12
SSL1A12JD	9	SSM2A36BDR	12
SSL1A12JDR	9	SSM3A325BD	13
SSL1A12ND	9	SSM3A325BDR	13
SSL1A12NDR	9	SSM3A325F7	13
SSL1D03BD	9	SSM3A325P7	13
SSL1D03JD	9	SSP1A110BD	15
SSL1D03ND	9	SSP1A110BDT	15
SSL1D101BD	9	SSP1A110M7	15
SSL1D101JD	9	SSP1A110M7T	15
SSL1D101ND	9	SSP1A125BD	15
SSLZRA1	9	SSP1A125BDS	15
SSLZRA2	9	SSP1A125BDT	15
SSLZRA3	9	SSP1A125M7	15
SSLZRA4	9	SSP1A125M7T	15
SSLZVA1	9	SSP1A150BD	15
SSLZVA2	9	SSP1A150BDS	15
SSLZVA3	9	SSP1A150BDT	15
SSLZVA4	9	SSP1A150M7	15
SSM1A16B7	11	SSP1A150M7T	15
SSM1A16B7R	11	SSP1A175BD	15
SSM1A16BD	11	SSP1A175BDT	15
SSM1A16BDR	11	SSP1A175M7	15
SSM1A16F7	11	SSP1A175M7T	15
SSM1A16F7R	11	SSP1A450BD	15
SSM1A16P7	11	SSP1A450BDS	15
SSM1A16P7R	11	SSP1A450BDT	15
SSM1A36BD	11	SSP1A450M7	15
SSM1A36BDR	11	SSP1A450M7T	15
SSM1A112B7	11	SSP1A475BD	15
SSM1A112B7R	11	SSP1A475BDS	15
SSM1A112BD	11	SSP1A475BDT	15
SSM1A112BDR	11	SSP1A475M7	15
SSM1A112F7	11	SSP1A475M7T	15
SSM1A112F7R	11	SSP1A490BD	15
SSM1A112P7	11	SSP1A490BDS	15
SSM1A112P7R	11	SSP1A490BDT	15
SSM1A120BD	12	SSP1A490M7	15
SSM1A120M7	12	SSP1A490M7T	15
SSM1A130BD	12	SSP1A4125BD	15
SSM1A130M7	12	SSP1A4125BDS	15
SSM1A145BD	12	SSP1A4125BDT	15
SSM1A145F7	12	SSP1A4125M7	15
SSM1A312B7	11	SSP1A4125M7T	15
SSM1A312B7R	11	SSP1D412BD	15
SSM1A312BD	11	SSP1D412BDT	15
SSM1A312BDR	11	SSP1D425BD	15
SSM1A312F7	11	SSP1D425BDT	15
SSM1A312F7R	11	SSP1D440BD	15
SSM1A312P7	11	SSP1D440BDT	15
SSM1A312P7R	11	SSP3A225B7	16
SSM1A430BD	12	SSP3A225B7R	16
SSM1A430M7	12	SSP3A225B7RT	16
SSM1A445BD	12	SSP3A225B7T	16
SSM1A445F7	12	SSP3A225BD	16
SSM1A455BD	12	SSP3A225BDR	16
SSM1A455F7	12	SSP3A225BDRT	16
		SSP3A225BDT	16
		SSP3A225F7	16
		SSP3A225F7R	16
		SSP3A225F7RT	16
		SSP3A225F7T	16
		SSP3A225P7	16
		SSP3A225P7R	16
		SSP3A225P7RT	16
		SSP3A225P7T	16
		SSP3A250B7	16
		SSP3A250B7R	16
		SSP3A250B7RT	16
		SSP3A250B7T	16
		SSP3A250BD	16
		SSP3A250BDR	16
		SSP3A250BDRT	16
		SSP3A250BDT	16
		SSP3A250F7	16
		SSP3A250F7R	16
		SSP3A250F7RT	16
		SSP3A250F7T	16
		SSP3A250P7	16
		SSP3A250P7R	16
		SSP3A250P7RT	16
		SSP3A250P7T	16
		SSRAL1	17
		SSRAL2	17
		SSRHD10	17
		SSRHP02	17
		SSRHP05	17
		SSRHP07	17
		SSRHP10	17
		SSRHP17	17
		SSRHP25	17



Relays



## Schneider Electric Industries SAS

Head Office  
35, rue Joseph Monier  
F-92500 Rueil-Malmaison  
France

[www.schneider-electric.com/relays](http://www.schneider-electric.com/relays)

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Design: Schneider Electric  
Photos: Schneider Electric

DIA5ED2130302EN