

### 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



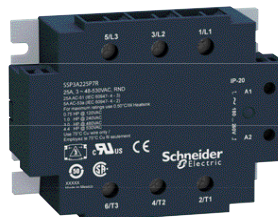
SSP1: Single-phase panel mount SSR

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	

#### 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

**SSP1 (1-phase)/SSP3 (3-phase) + SSRH (Heat sinks) → Complete solution**



SSP1D425BD

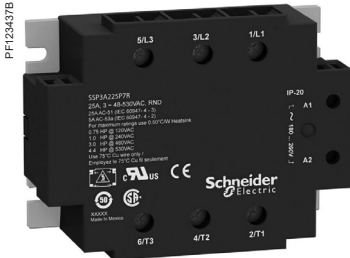
SSP1 single-phase solid state relays					
Relays with embedded thermal pad					
Switching	Voltage range		Load current range	Reference	Weight
	Control input	Load output			
	V	V	A		kg/lb
DC switching	= 3.5...32	= 1...150	12	SSP1D412BDT	0.089/0.196
			25	SSP1D425BDT	0.089/0.196
			40	SSP1D440BDT	0.089/0.196
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
			75	SSP1A175BDT	0.089/0.196
			125	SSP1A4125BDT	0.089/0.196
	= 4...32	~ 48...660	50	SSP1A450BDT	0.089/0.196
			75	SSP1A475BDT	0.089/0.196
			90	SSP1A490BDT	0.089/0.196
			125	SSP1A4125BDT	0.089/0.196
			125	SSP1A4125M7T	0.089/0.196
	~ 90...280	~ 24...300	10	SSP1A110M7T	0.089/0.196
			25	SSP1A125M7T	0.089/0.196
			50	SSP1A150M7T	0.089/0.196
			75	SSP1A175M7T	0.089/0.196
			125	SSP1A4125M7T	0.089/0.196
	~ 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	
		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
			75	SSP1A175BD	0.089/0.196
			125	SSP1A4125BD	0.089/0.196
	= 4...32	~ 48...660	50	SSP1A450BD	0.089/0.196
			75	SSP1A475BD	0.089/0.196
			90	SSP1A490BD	0.089/0.196
			125	SSP1A4125BD	0.089/0.196
			125	SSP1A4125M7	0.089/0.196
	~ 90...280	~ 24...300	25	SSP1A125M7	0.089/0.196
			50	SSP1A150M7	0.089/0.196
			75	SSP1A175M7	0.089/0.196
			90	SSP1A490M7	0.089/0.196
			125	SSP1A4125M7	0.089/0.196
	~ 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	
		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
			75	SSP1A175BDS	0.097/0.214
			90	SSP1A490BDS	0.097/0.214
			125	SSP1A4125BDS	0.097/0.214
	= 4...32	~ 48...660	50	SSP1A450BDS	0.097/0.214
			75	SSP1A475BDS	0.097/0.214
			90	SSP1A490BDS	0.097/0.214
			125	SSP1A4125BDS	0.097/0.214
			125	SSP1A4125BDS	0.097/0.214



SSP1A125BDS

# Harmony Solid State Relays

## SSP solid state panel mount relays

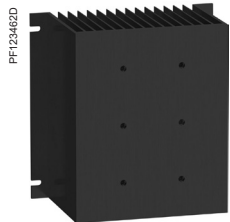


SSP3A225P7

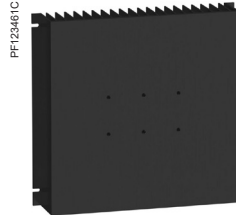
SSP3 three-phase solid state relays					
Relays with embedded thermal pad					
Switching	Voltage range		Load current range	Reference	Weight
	Control Input	Load Output			
	V	V	A		kg/lb
Zero voltage switching	≡ 4...32	~ 48...530	25	<a href="#">SSP3A225BDT</a>	0.240/0.529
			50	<a href="#">SSP3A250BDT</a>	0.240/0.529
	~ 18...36	~ 48...530	50	<a href="#">SSP3A250B7T</a>	0.240/0.529
			25	<a href="#">SSP3A225F7T</a>	0.240/0.529
	~ 90...140	~ 48...530	50	<a href="#">SSP3A250F7T</a>	0.240/0.529
			25	<a href="#">SSP3A225P7T</a>	0.240/0.529
~ 180...280	~ 48...530	50	<a href="#">SSP3A250P7T</a>	0.240/0.529	
		25	<a href="#">SSP3A225BDR</a>	0.240/0.529	
Random switching	≡ 4...32	~ 48...530	50	<a href="#">SSP3A250BDR</a>	0.240/0.529
			25	<a href="#">SSP3A225B7RT</a>	0.240/0.529
	~ 18...36	~ 48...530	50	<a href="#">SSP3A250B7RT</a>	0.240/0.529
			25	<a href="#">SSP3A250F7RT</a>	0.240/0.529
	~ 90...140	~ 48...530	50	<a href="#">SSP3A250F7RT</a>	0.240/0.529
			25	<a href="#">SSP3A250P7RT</a>	0.240/0.529
~ 180...280	~ 48...530	50	<a href="#">SSP3A250P7RT</a>	0.240/0.529	
		25	<a href="#">SSP3A225BD</a>	0.240/0.529	
Zero voltage switching	≡ 4...32	~ 48...530	50	<a href="#">SSP3A250BD</a>	0.240/0.529
			25	<a href="#">SSP3A225B7</a>	0.240/0.529
	~ 18...36	~ 48...530	50	<a href="#">SSP3A250B7</a>	0.240/0.529
			25	<a href="#">SSP3A225F7</a>	0.240/0.529
	~ 90...140	~ 48...530	50	<a href="#">SSP3A250F7</a>	0.240/0.529
			25	<a href="#">SSP3A225P7</a>	0.240/0.529
~ 180...280	~ 48...530	50	<a href="#">SSP3A250P7</a>	0.240/0.529	
		25	<a href="#">SSP3A225BDR</a>	0.240/0.529	
Random switching	≡ 4...32	~ 48...530	50	<a href="#">SSP3A250BDR</a>	0.240/0.529
			25	<a href="#">SSP3A225B7R</a>	0.240/0.529
	~ 18...36	~ 48...530	50	<a href="#">SSP3A250B7R</a>	0.240/0.529
			25	<a href="#">SSP3A250F7R</a>	0.240/0.529
	~ 90...140	~ 48...530	50	<a href="#">SSP3A250F7R</a>	0.240/0.529
			25	<a href="#">SSP3A225P7R</a>	0.240/0.529
~ 180...280	~ 48...530	50	<a href="#">SSP3A250P7R</a>	0.240/0.529	
		25	<a href="#">SSP3A225P7R</a>	0.240/0.529	

### Relays without embedded thermal pad

Zero voltage switching	≡ 4...32	~ 48...530	25	<a href="#">SSP3A225BD</a>	0.240/0.529
			50	<a href="#">SSP3A250BD</a>	0.240/0.529
	~ 18...36	~ 48...530	25	<a href="#">SSP3A225B7</a>	0.240/0.529
			50	<a href="#">SSP3A250B7</a>	0.240/0.529
	~ 90...140	~ 48...530	25	<a href="#">SSP3A225F7</a>	0.240/0.529
			50	<a href="#">SSP3A250F7</a>	0.240/0.529
~ 180...280	~ 48...530	25	<a href="#">SSP3A225P7</a>	0.240/0.529	
		50	<a href="#">SSP3A250P7</a>	0.240/0.529	
Random switching	≡ 4...32	~ 48...530	25	<a href="#">SSP3A225BDR</a>	0.240/0.529
			50	<a href="#">SSP3A250BDR</a>	0.240/0.529
	~ 18...36	~ 48...530	25	<a href="#">SSP3A225B7R</a>	0.240/0.529
			50	<a href="#">SSP3A250B7R</a>	0.240/0.529
	~ 90...140	~ 48...530	50	<a href="#">SSP3A250F7R</a>	0.240/0.529
			25	<a href="#">SSP3A225P7R</a>	0.240/0.529
~ 180...280	~ 48...530	25	<a href="#">SSP3A225P7R</a>	0.240/0.529	
		50	<a href="#">SSP3A250P7R</a>	0.240/0.529	



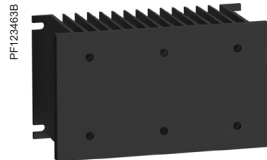
SSRHP05



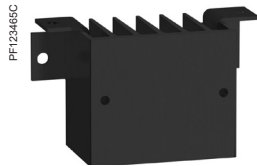
SSRHP02



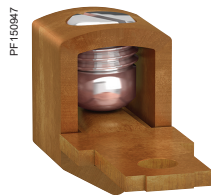
SSRHP07



SSRHP10



SSRHP25



SSRAL1

### 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	<a href="#">SSRHP02</a>	2.592/5.174
	Up to 3 SSP1 units 1 SSP3 unit	4,406/683	0.5	<a href="#">SSRHP05</a>	1.440/3.174
	1 SSP1 unit	1,640/254	0.7	<a href="#">SSRHP07</a>	0.526/1.159
	Up to 3 SSP1 units 1 SSP3 unit	1,425/221	1	<a href="#">SSRHP10</a>	0.620/1.367
	1 SSP1 unit	336/52.10	2.5	<a href="#">SSRHP25</a>	0.100/0.220
DIN rail mount	Up to 3 SSP1 units 1 SSP3 unit	1,425/221	1	<a href="#">SSRHD10</a>	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> ) <b>Sold in lots of 10</b>	SSP1	<a href="#">SSRAL1</a>	0.042/0.093