



Harmony Solid State Relays

Slim interfaces, Modular DIN rail and
Panel mount solid state relays

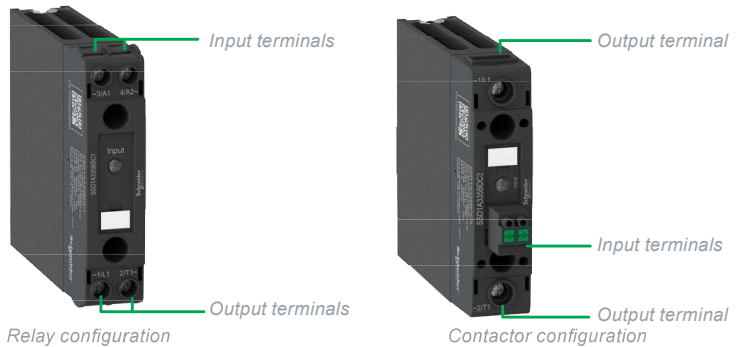
Choose reliability and flexibility with innovative DIN rail mount SSD relays

Performance

- > High I²T (up to 8320 A²S) to facilitate the use of circuit breakers instead of fuses, allowing Type 1 coordination protection (as per IEC 60947-4-3)
- > High current rating (up to 35 A for 22.5 mm models, and up to 60 A for 45 mm models) at a compact size, optimizing the size of your enclosure
- > Surge protection from applications with built-in transient overvoltage protection

Flexibility

- > Relay and Contactor configuration to suit your wiring preferences
- > Telescopic screw terminal options available to facilitate the use of lug terminals

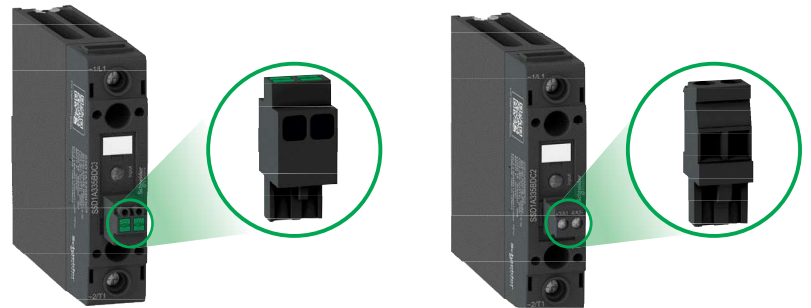


Relay configuration

Contactor configuration

Simplified selection and installation

- > Integrated heat sink to eliminate the need for thermal calculation
- > Spring and screw input connectors option is available for simplified wiring



Pluggable Spring input connectors

Pluggable Screw input connectors

Wide range of standards and certifications

- > Complies with IEC 61373 for railway and rolling stock application
- > Electromagnetic compatibility complying to IEC 60947-4-3 standard
- > Conforms to a wide range of internationally recognized standards and certification

22.5mm/0.886 in.



SSD1: 20, 30 and 35 A single-phase SSR

45mm/1.772 in.



SSD1: 45 and 60 A single-phase SSR

SSD relays	
Control input voltage	Load output voltage
⎓ 4...32 V	⎓ 1...150 V
⎓ 90...280 V	~ 48...600 V
	~ 48...600 V

Note: The SSD1 range references will be substituting the SSM1 range references for 22.5 mm/0.886 in. width (20 A, 30 A) and 45 mm/1.771 in. width (45 A, 55 A).

Harmony SSR → The new generation solid state relays

Presentation of the range

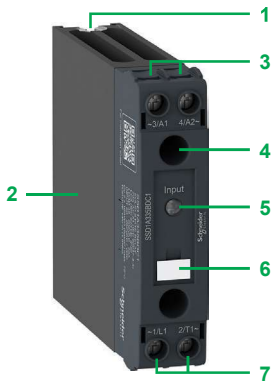
SSD1 solid state relays are single-phase DIN rail mounted relays with high-power density of up to 60 A and built-in heat sink. They are available in two configurations, namely the relay and contactor types.

The SSD1 family offers a unique range of terminal connections (input connectors: spring or screw plug-in, output terminals: telescopic, clamp cage or standard screw) providing options as per the wiring preference.

Relay description

SSD1 relay, 22.5 mm/0.886 in. – Relay configuration

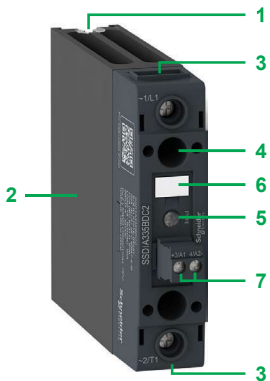
- 1 Locating slot for mounting on DIN rail
- 2 Built-in heat sink for heat dissipation
- 3 Control input connection terminals
- 4 Fixing hole for attaching relay to heat sink
- 5 LED input status indicator
- 6 Clip-in legend for easy identification
- 7 Load output connection terminals



SSD1 single-phase solid state DIN rail relay, 22.5 mm

SSD1 relay, 22.5 mm/0.886 in. – Contactor configuration with pluggable (screw or spring) input connector

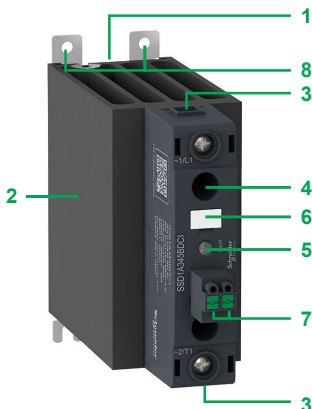
- 1 Locating slot for mounting on DIN rail
- 2 Built-in heat sink for heat dissipation
- 3 Load output connection terminals
- 4 Fixing hole for attaching relay to heat sink
- 5 LED input status indicator
- 6 Clip-in legend for easy identification
- 7 Pluggable input connector (spring or screw options available)



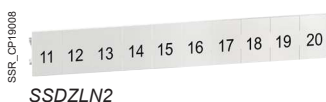
SSD1 single-phase solid state DIN rail contactor with pluggable screw input, 22.5 mm

SSD1 relay, 45 mm/1.771 in. – Contactor configuration with pluggable (screw or spring) input connector

- 1 Locating slot for mounting on DIN rail
- 2 Built-in heat sink for heat dissipation
- 3 Load output connection terminals
- 4 Fixing hole for attaching relay to heat sink
- 5 LED input status indicator
- 6 Clip-in legend for easy identification
- 7 Pluggable input connector (spring or screw options available)
- 8 Lugs for panel mounting



SSD1 single-phase solid state DIN rail contactor with pluggable spring input, 45 mm



SSD1 single-phase solid state relays (22.5 and 45 mm) ⁽¹⁾

Switching	Voltage range		Load current range	Configuration	Reference	Weight		
	Control input	Load output						
	V	V	A			kg/lb		
DC switching	≡ 4...32	≡ 1...150	20	Relay	SSD1D520BDC1	0.298/0.657		
			30	Relay	SSD1D530BDC1	0.298/0.657		
Zero voltage switching	≡ 4...32	~ 48...600	20	Relay	SSD1A320BDC1	0.298/0.657		
			20	Contactor, Screw input connector	SSD1A320BDC2	0.301/0.664		
			20	Contactor, Spring input connector	SSD1A320BDC3	0.301/0.664		
			35	Relay	SSD1A335BDC1	0.298/0.657		
			35	Contactor, Screw input connector	SSD1A335BDC2	0.301/0.664		
			35	Contactor, Spring input connector	SSD1A335BDC3	0.301/0.664		
		~ 90...280	~ 48...600	20	Relay	SSD1A345BDC2	0.507/1.117	
				20	Contactor, Screw input connector	SSD1A345BDC3	0.507/1.117	
				20	Contactor, Spring input connector	SSD1A345BDC2	0.507/1.117	
				20	Contactor, Spring input connector	SSD1A345BDC3	0.507/1.117	
				60	Contactor, Screw input connector	SSD1A360BDC2	0.507/1.117	
				60	Contactor, Spring input connector	SSD1A360BDC3	0.507/1.117	
		Random switching	≡ 4...32	~ 48...600	20	Relay	SSD1A320M7C1	0.298/0.657
					20	Contactor, Screw input connector	SSD1A320M7C2	0.301/0.664
					20	Contactor, Spring input connector	SSD1A320M7C3	0.301/0.664
					35	Relay	SSD1A335M7C1	0.298/0.657
					35	Contactor, Screw input connector	SSD1A335M7C2	0.301/0.664
					35	Contactor, Spring input connector	SSD1A335M7C3	0.301/0.664
~ 90...280	~ 48...600			45	Contactor, Screw input connector	SSD1A345M7C2	0.507/1.117	
				45	Contactor, Spring input connector	SSD1A345M7C3	0.507/1.117	
				60	Contactor, Screw input connector	SSD1A360M7C2	0.507/1.117	
				60	Contactor, Spring input connector	SSD1A360M7C3	0.507/1.117	
				20	Relay	SSD1A320BDR1	0.298/0.657	
				20	Contactor, Screw input connector	SSD1A320BDR2	0.301/0.664	
20	Contactor, Spring input connector	SSD1A320BDR3	0.301/0.664					
35	Relay	SSD1A335BDR1	0.298/0.657					
35	Contactor, Screw input connector	SSD1A335BDR2	0.301/0.664					
35	Contactor, Spring input connector	SSD1A335BDR3	0.301/0.664					
45	Contactor, Screw input connector	SSD1A345BDR2	0.507/1.117					
45	Contactor, Spring input connector	SSD1A345BDR3	0.507/1.117					
60	Contactor, Screw input connector	SSD1A360BDR2	0.507/1.117					
60	Contactor, Spring input connector	SSD1A360BDR3	0.507/1.117					
Random switching	≡ 4...32	~ 48...600	20	Relay	SSD1A320M7RC1	0.298/0.657		
			20	Contactor, Screw input connector	SSD1A320M7RC2	0.301/0.664		
			20	Contactor, Spring input connector	SSD1A320M7RC3	0.301/0.664		
			35	Relay	SSD1A335M7RC1	0.298/0.657		
			35	Contactor, Screw input connector	SSD1A335M7RC2	0.301/0.664		
			35	Contactor, Spring input connector	SSD1A335M7RC3	0.301/0.664		
		~ 90...280	~ 48...600	45	Contactor, Screw input connector	SSD1A345M7RC2	0.507/1.117	
				45	Contactor, Spring input connector	SSD1A345M7RC3	0.507/1.117	
				60	Contactor, Screw input connector	SSD1A360M7RC2	0.507/1.117	
				60	Contactor, Spring input connector	SSD1A360M7RC3	0.507/1.117	
				20	Relay	SSD1A320M7RC1	0.298/0.657	
				20	Contactor, Spring input connector	SSD1A320M7RC3	0.301/0.664	

Accessories

Description	For use with	Sold in lots of	Unit reference	Weight
				kg/lb
Clip-in Legends, Blank strip	All SSD1 solid state relays	10	SSDZLB	0.002/0.004
Clip-in Legends, Numbered strip (1 to 10)	All SSD1 solid state relays	10	SSDZLN1	0.002/0.004
Clip-in Legends, Numbered strip (11 to 20)	All SSD1 solid state relays	10	SSDZLN2	0.002/0.004

(1) The SSD1 range references will be substituting the SSM1 range references for 22.5 mm/0.886 in. width (20 A, 30 A) and 45 mm/1.771 in. width (45 A, 55 A).