

Harmony Relays - Solid State Relays

Choose long life and silent operation with Harmony 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

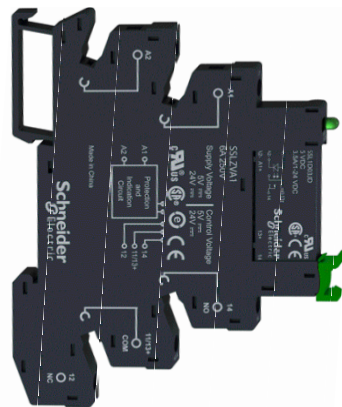
resistance to shock,
vibration, and
contamination

The Harmony SSR series offers slim interface (SSL), modular DIN rail (SSD, 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



Pre-assembled SSL relays*

Control input voltage	Load output voltage
~ 4...12 V	~ 1...24 V ~ 1...48 V ~ 24...250 V
~ 16...30 V	~ 1...24 V ~ 1...48 V ~ 24...250 V

* SSL relays + SSLZ sockets

SSL slim interface relay mounted on SSLZ socket

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

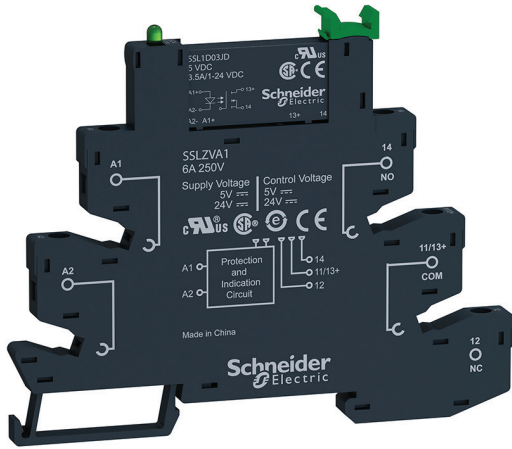


Screw connector

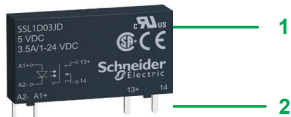


Spring terminal

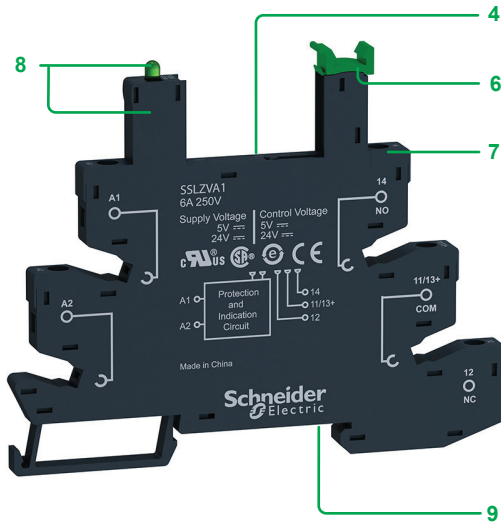
SSL (1-phase) + SSLZ (socket) → Slim plug-in interface solution



Pre-assembled solid state relay



SSL relay



Socket equipped with LED and protection circuit

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

These relays are available in both pre-assembled (single reference) and customer assembled offers.

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



SSL1A12JDRPR

Pre-assembled solid state slim relays					
Relays mounted on screw sockets (sold in lots of 30)					
Switching	Voltage range		Load current range	Reference	Weight
	Control input	Load output			
	V	V	A	kg/lb	
DC Switching	≡ 4 to 12	≡ 1 to 24	3.5	SSL1D03JDPV (SSL1D03JD + SSLZVA1)	0.033/0.073
	≡ 4 to 12	≡ 1 to 48	0.1	SSL1D101JDPV (SSL1D101JD+SSLZVA1)	0.033/0.073
Zero voltage switching	≡ 4 to 12	~ 24 to 250	2	SSL1A12JDPV (SSL1A12JD+SSLZVA1)	0.033/0.073
Random switching	≡ 4 to 12	~ 24 to 250	2	SSL1A12JDRPV (SSL1A12JDR+SSLZVA1)	0.033/0.073
DC Switching	≡ 16 to 30	≡ 1 to 24	3.5	SSL1D03BDPV (SSL1D03BD+SSLZVA1)	0.033/0.073
	≡ 16 to 30	≡ 1 to 48	0.1	SSL1D101BDPV (SSL1D101BD+SSLZVA1)	0.033/0.073
Zero voltage switching	≡ 16 to 30	~ 24 to 250	2	SSL1A12BDPV (SSL1A12BD+SSLZVA1)	0.033/0.073
Random switching	≡ 16 to 30	~ 24 to 250	2	SSL1A12BDRPV (SSL1A12BDR+SSLZVA1)	0.033/0.073
Relays mounted on spring sockets (sold in lots of 30)					
DC Switching	≡ 4 to 12	≡ 1 to 24	3.5	SSL1D03JDPR (SSL1D03JD+SSLZRA1)	0.033/0.073
	≡ 4 to 12	≡ 1 to 48	0.1	SSL1D101JDPR (SSL1D101JD+SSLZRA1)	0.033/0.073
Zero voltage switching	≡ 4 to 12	~ 24 to 250	2	SSL1A12JDPR (SSL1A12JD+SSLZRA1)	0.033/0.073
Random switching	≡ 4 to 12	~ 24 to 250	2	SSL1A12JDRPR (SSL1A12JDR+SSLZRA1)	0.033/0.073
DC Switching	≡ 16 to 30	≡ 1 to 24	3.5	SSL1D03BDPR (SSL1D03BD+SSLZRA1)	0.033/0.073
	≡ 16 to 30	≡ 1 to 48	0.1	SSL1D101BDPR (SSL1D101BD+SSLZRA1)	0.033/0.073
Zero voltage switching	≡ 16 to 30	~ 24 to 250	2	SSL1A12BDPR (SSL1A12BD+SSLZRA1)	0.033/0.073
Random switching	≡ 16 to 30	~ 24 to 250	2	SSL1A12BDRPR (SSL1A12BDR+SSLZRA1)	0.033/0.073

PF123409A



SSL1A12JD

PF123420B



SSLZVA1 + SSL1D03JD

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
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
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

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

Control voltage (Nominal)	For use with relays	Socket type		Unit reference	Weight
		Screw connector	Spring terminals		
V		Unit reference	Weight	Unit reference	Weight
			kg/lb		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



RSLZ2



RSLZ3

Accessories for sockets

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