Zelio Relay - Solid state relays
Solid state modular DIN rail relays

Choose modularity offer 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.*   18 mm/*0.709 in.*

SSM1: 6 A single-phase SSR

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.*   45 mm/*1.772 in.*

SSM1: 20 and 30 A single-phase SSR

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 channels)/**SSM3** (3-Phase) → **Plug & Play solution**

Zelio Relay - Solid state relays
Solid state modular DIN rail and
panel mount relays

Choose modularity offer 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 complete panel mount solution with SSP relays

Complete solution

> Single-phase and three-phase panel mount solid state relays with range of heat sinks & accessories to meet all application needs from 10 A to 125 A.

> Easy product selection with simplified :product nomenclature and direct heat sinks selection available in product data sheets.

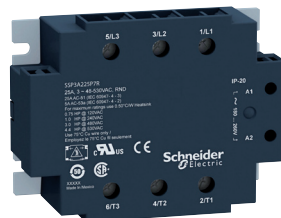> Wide choice of heat sinks with thermal resistance ratings of 0.2 °C/W to 2.5 °C/W.

SSP1 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: Single-phase panel mount SSR

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

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

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

SSP3: Three-phase panel mount SSR

Zelio SSR ➔ The new generation solid state relays

Schneider Electric

Zelio Relay - Solid state relays
Solid state panel mount relays

Choose complete panel mount solution with SSP relays (continued)

Simple, safe and robust screw terminals

> Simple and easy wiring. Allows wires with all 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 preventing screw jams.

Innovative SSP1.S offer with smart diagnostic and test button

> Smart diagnostic feature 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 ready factory-fit thermal pad.
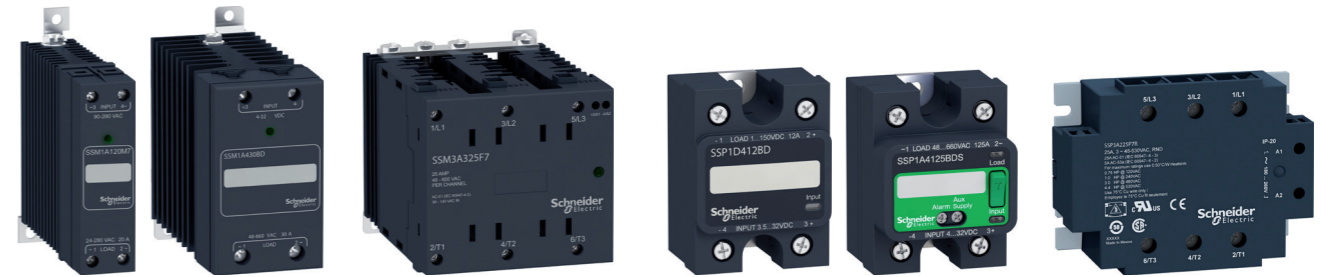
> Heat sink provides Panel and DIN rail mounting options.

SSP1 (1-Phase)**/SSP3** (3-Phase) **+ SSRH** (Heat sinks) **➔ Complete solution**

Zelio Relay - Solid state relays

Type of products	Slim interface SSR	Modular DIN rail SSR	
Number of phases	Single	Single	Single (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	
Load output voltage ∼	24…250 V	24…280 V 48…600 V	
⎓	1…24 V 1…48 V	1…60 V 1…100 V	–
Load output current ∼	2 A	6 A for SSM1 (12 mm) 12 A for SSM1 (18 mm)	6 A
⎓	0.1, 3.5 A	6 A for SSM1 (12 mm) 12 A for SSM1 (18 mm)	–
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	**SSL** *(1)*	**SSM1**	**SSM2**
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(1) SSL relay with SSLZ socket.

Type of products	Modular DIN rail SSR		Panel mount SSR	
Number of phases	Single	Three	Single	Three
Type of Mounting	DIN rail mounted	DIN rail mounted	Panel mounted	Panel mounted
Control input voltage ∼	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
Load output voltage ∼	24…280 V 48…660 V	48…600 V	24…300 V 48…660 V	48…530 V
⎓	–	–	1…150 V	–
Load output current ∼	20, 30 A for SSM1 (22.5 mm) 45, 55 A for SSM1 (45 mm)	25 A	10, 25, 50, 75, 90, 125 A	25, 50 A
⎓	–	–	12, 25, 40 A	–
Type of switching Zero voltage	Yes	Yes	Yes	Yes
Random	–	Yes	–	Yes
DC	–	–	Yes	–
Cooling	Built-in heat sink		Option with thermal pad	Option with thermal pad
Degree of protection	IP 20			
LED indication	Yes		Yes	Yes
Solid state relay type	**SSM1**	**SSM3**	**SSP1**	**SSP3**
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