

Harmony Electromechanical Relays

Interface, miniature, and power electromechanical relays

Harmony Electromechanical Relays

Used to multiply the number of input and output contacts, or for logic processing control

RSL relays are compact modular relays conforming to IEC/EN 61810-1, UL508, CSA C22.2 No. 14, and EAC international standards.

Harmony relays offer interface, miniature, universal, and power electromechanical relays, from 1 CO to 4 CO contacts, up to 30 A. The electromechanical relays help to reduce the size of enclosures and at the same time increase machine reliability.

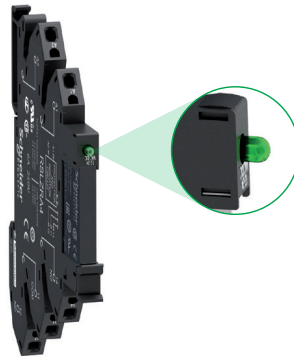
RSL relays for compactness

Flexible offer

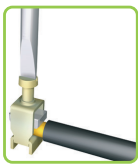
- > Available as a single-referenced complete product (relay and socket) or customer-assembled product
- > Wide choice of sockets ranging from 12 to 230 V ~
- > Standard and low level contact types

Enhanced performance

- > Sockets with integrated reverse polarity protection circuit
- > Relays for high breaking capacity or low-level current application requirements
- > Power-on and Relay status LED indicator



LED indicator for RSL relay status



Screw connector



Spring terminal

Simple installation and cabling

- > Locking/unlocking lever for removing and replacing the relay in the socket
- > Simple DIN rail mounting and commoning link accessory
- > Choice of screw connector or spring terminal connection for sockets

RXG relays for reliability

Complete offer

RXG relays offer a broad range of coil voltages, from 6 V to 110 V --- and 24 V to 230 V ~. The relays are available with/without lockable test button, LED, and clear cover.



Easy to mount and use

These are the latest relays with a single-step lockable test button. The Faston pin terminal mounts quickly and securely. The slim 16 mm/0.629 in. socket for 2 CO saves panel space.



Single-step lockable test button

Harmony RXG → Latest interface relay with easy testing function

RXG relays for reliability (continued)

Expandable relays

RXG relays can be expanded with protection modules such as diode, diode with LED, varistor with LED, and RC circuit.



RXM industrial relays bring features for easy and improved control of simple and complex automation systems.

RXM relays for automation control

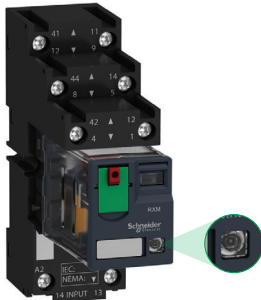
Easy to select

- > Wider choice of contacts (2, 3, and 4 CO)
- > Broad range of control circuit voltages and different socket types



Convenient to use

- > One-step lockable test button
- > Mechanical indicator for contact status
- > "Power On" LED for readiness



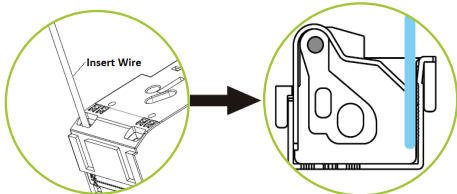
LED indicator for relay status

Simple to install

- > 64% less wiring time with Push-in Sockets (no screwdriver required)
- > Sockets for both DIN rail and panel mounting, time-saving bus jumper
- > Direct mounting with DIN rail or flange adapter

Designed to perform

- > Eco-design with RoHS and REACH
- > Flexible add-on protection modules
- > Push-in Socket with 223.75 Newton max pull out force, reliable in vibration environment




Push-in terminal: insert without tool

Note: The Zelio Relays range name has been changed in 2020 to Harmony Relays. As the timeline for each range is different, during the transition period there will be both Zelio and Harmony ranges shown on different product datasheets and packaging.

Harmony RXM → Miniature in size and powerful in performance

Harmony Electromechanical Relays

Interface, miniature, and power electromechanical relays

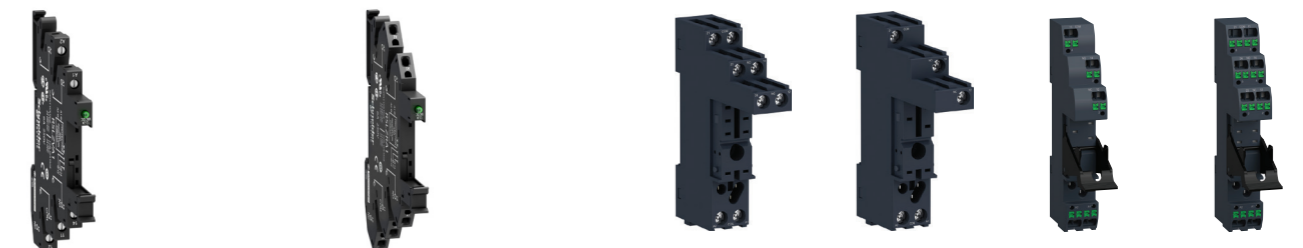
Type of product		Plug-in relays	
		Interface relays	
			
Number and type of contacts/conventional thermal current (Ith on NO contact)		1 CO/10 A 2 CO/5 A	
Control circuit voltage		24...230 V 6...110 V	
Pin type		Flat (Faston type)	
Operational voltage		Up to 250 V ~	
Durability (operating cycles per hour)		100,000 10,000,000 for AC coil 10,000,000 for DC coil	
Functions		LED Mechanical indicator Test button Contact type	
Accessories		Mounting adapters for DIN rail Mounting adapters with fixing lugs	
Type references		RXG●●●● (1)	
Pages		17	
Type of associated sockets		Sockets	



Contact terminal arrangements		Separate		Mixed	
Connection		Screw connector		Push-in terminals	
Accessories		Yes		Yes	
		No		No	
		Yes (plastic, integrated)		No	
		Yes		Yes	
		Yes		Yes, 2-pole	
Conventional thermal current (Ith)		10 A for 1 CO 5 A for 2 CO		10 A 5 A	
Type references		RGZE1S35M RGZE1S48M		RGZE05P RGZE08P	
Pages		18			

(1) Pre-assembled interface relays RSL1PV●● and RSL1PR●● (standard type relay + socket), RSB (relay + socket + clamp + protection module + label), and RXG (relay + socket + protection module) are also available.
 (2) When using relay RSB1A160●● with socket RSZE1S48M, terminals must be linked.

Plug-in relays		Interface relays	
Slim interface relays			
			
Number and type of contacts/conventional thermal current (Ith on NO contact)		1 CO/6 A 1 CO/16 A 1 CO/12 A 2 CO/8 A	
Control circuit voltage		24...240 V 6...110 V	
Pin type		Flat (PCB type, reinforced) Flat (PCB type)	
Operational voltage		Up to 400 V ~/300 V ~	
Durability (operating cycles per hour)		60,000 10,000,000	
Functions		LED Mechanical indicator Test button Contact type	
Accessories		Mounting adapters for DIN rail Mounting adapters with fixing lugs	
Type references		RSL1●B4●D (1) RSB●●●●●● (1)	
Pages		11 13	
Type of associated sockets		Sockets with LED and protection circuit Sockets without LED	



Contact terminal arrangements		Separate		Separate	
Connection		Screw connector		Push-in terminals	
Accessories		Yes		Yes	
		No		No	
		Yes (plastic, integrated)		Yes (plastic, integrated)	
		Yes		Yes	
		Yes, 20-pole		Yes, 2-pole	
Conventional thermal current (Ith)		10 A for 1 CO 5 A for 2 CO		10 A 5 A	
Type references		RSLZV●● RSLZR●●		RSZE1S35M RSZE1S48M	
Pages		11		13	

Harmony Electromechanical Relays

Plug-in relays

RSL slim interface relays

Presentation of the range

RSL slim interface relays offer the advantages of compact size and modular design. Their slim width (6 mm/0.236 in.) saves space when mounting on a DIN rail at the back of an enclosure.

RSL relays are available as:

■ **Pre-assembled offer:** a single reference comprising a standard relay mounted on its socket.

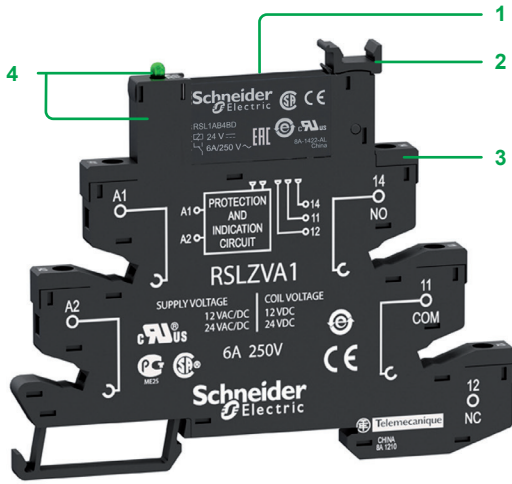
- The socket includes a protection circuit (against reverse polarity and surge) and an LED indicator as standard.
- 2 types of connector are available for wire connection: screw connectors or spring terminals.

□ This pre-assembled solution covers a wide range of operating voltages from 12 to 230 V.

■ **Customer assembly offer:**

□ The relay (standard or low level) and the socket are selected, as required, according to the operating voltage of the application.

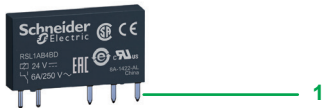
□ For maintenance, an RSL slim relay can be replaced without disconnecting the socket wiring.



Relay description

RSL slim interface relays, pre-assembled

- 1 6 A standard relay with 1 CO contact
- 2 Lever for retaining or easy withdrawal of the relay from its socket
- 3 Sockets: wire connection by screw connectors or spring terminals
- 4 Built-in protection circuit and LED indicator on all sockets



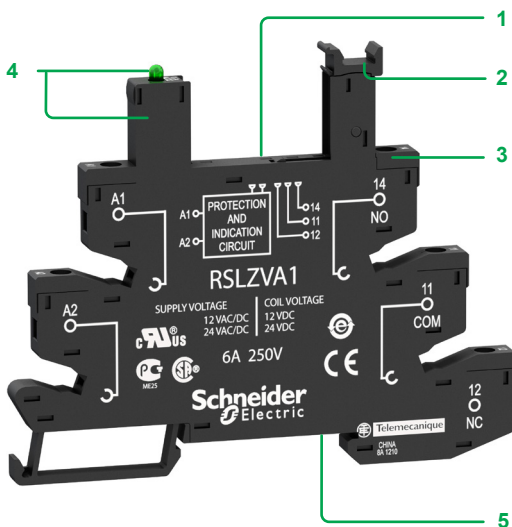
RSL slim interface relay

- 1 5 flat (PCB type) standard pins

Socket description

Sockets for RSL slim interface relays

- 1 5 female contacts for the relay pins
- 2 Retaining lever with marker label
- 3 Wire connection by screw connectors or spring terminals
- 4 Built-in protection circuit and LED indicator
- 5 Locating slot for mounting on DIN rail





Pre-assembled slim interface relays					
Standard relays mounted on socket equipped with LED and protection circuit (Sold in lots of 10)					
1 CO contact - 6A thermal current (Ith)					
Operating voltage V	Control circuit voltage V	Socket type		Spring terminal	
		Screw connector Unit reference	Weight kg/lb	Unit reference	Weight kg/lb
~/~ 12	~ 12	RSL1PVJU (RSL1AB4JD + RSLZVA1)	0.031/0.068	RSL1PRJU (RSL1AB4JD + RSLZRA1)	0.029/0.064
~/~ 24	~ 24	RSL1PVBU (RSL1AB4BD + RSLZVA1)	0.031/0.068	RSL1PRBU (RSL1AB4BD + RSLZRA1)	0.029/0.064
~/~ 48	~ 48	RSL1PVEU (RSL1AB4ED + RSLZVA2)	0.031/0.068	RSL1PREU (RSL1AB4ED + RSLZRA2)	0.029/0.064
~/~ 110	~ 60	RSL1PVFU (RSL1AB4ND + RSLZVA3)	0.031/0.068	RSL1PRFU (RSL1AB4ND + RSLZRA3)	0.029/0.064
~/~ 230	~ 60	RSL1PVPU (RSL1AB4ND + RSLZVA4)	0.031/0.068	RSL1PRPU (RSL1AB4ND + RSLZRA4)	0.029/0.064



Slim interface relays for customer assembly				
Relays with flat (PCB type) standard pins (Sold in lots of 10)				
1 CO contact - 6A Thermal current (Ith)				
Control circuit voltage V	Standard		Low level	
	Unit reference	Weight kg/lb	Unit reference	Weight kg/lb
~ 12	RSL1AB4JD	0.006/0.013	RSL1GB4JD	0.006/0.013
~ 24	RSL1AB4BD	0.006/0.013	RSL1GB4BD	0.006/0.013
~ 48	RSL1AB4ED	0.006/0.013	RSL1GB4ED	0.006/0.013
~ 60	RSL1AB4ND	0.006/0.013	RSL1GB4ND	0.006/0.013



Sockets equipped with LED and protection circuit (Sold in lots of 10)					
Operating voltage V	For use with relays	Socket type		Spring terminal	
		Screw connector Unit reference	Weight kg/lb	Unit reference	Weight kg/lb
~/~ 12 and ~/~ 24	RSL1B4JD RSL1B4BD	RSLZVA1	0.025/0.055	RSLZRA1	0.023/0.051
~/~ 48 and ~/~ 60	RSL1B4ED RSL1B4ND	RSLZVA2	0.025/0.055	RSLZRA2	0.023/0.051
~/~ 110	RSL1B4ND	RSLZVA3	0.025/0.055	RSLZRA3	0.023/0.051
~/~ 230	RSL1B4ND	RSLZVA4	0.025/0.055	RSLZRA4	0.023/0.051



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