



# Harmony Electromechanical Relays

Interface, miniature, and power  
electromechanical relays

Life Is On

**Schneider**  
Electric

# Harmony Electromechanical Relays

Interface, miniature, and power  
electromechanical relays

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# 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.

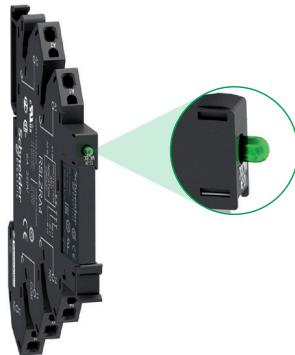
#### RSL relays for compactness

##### 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

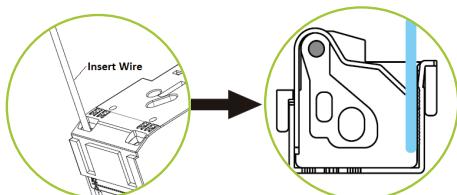


**Convenient to use**

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



*LED indicator for relay status*



*Push-in terminal: insert without tool*

**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

*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	Plug-in relays	Slim interface relays	Interface relays
					
Number and type of contacts/conventional thermal current (Ith on NO contact)	1 CO/10 A 2 CO/5 A				1 CO/6 A
Control circuit voltage	~ —	24...230 V 6...110 V			1 CO/16 A 1 CO/12 A 2 CO/8 A
Pin type	Flat (Faston type)		-	12...60 V	24...240 V
Operational voltage	Up to 250 V ~			Flat (PCB type, reinforced)	6...110 V
Durability (operating cycles per hour)	Electrical, resistive load Mechanical, no-load	100,000 10,000,000 for AC coil 10,000,000 for DC coil	60,000 10,000,000	Up to 400 V ~/300 V —	Flat (PCB type)
Functions	LED Mechanical indicator Test button Contact type	Yes (depending on version) Yes (depending on version) Yes, lockable (depending on version) Standard	No No No	Standard and low level	100,000 30,000,000
Accessories	Mounting adapters for DIN rail Mounting adapters with fixing lugs	No No	No	No	Yes (with protection modules)
Type references	RXG●●●● (1)	17	RSL1●B4●D (1)	11	RSB●●●●●●● (1)
Pages					13
Type of associated sockets	Sockets		Sockets with LED and protection circuit		Sockets without LED
					
Contact terminal arrangements	Separate	Mixed	Separate	Separate	Separate
Connection	Screw connector	Push-in terminals	Screw connector	Spring terminals	Screw connector
Accessories	Protection modules Timer module Maintaining clamps Socket identification legend Bus jumper	Yes No Yes (plastic, integrated) Yes Yes	No No No Yes Yes, 2-pole	No No No Yes Yes, 20-pole	Yes No Yes (plastic, integrated) Yes Yes, 2-pole
Conventional thermal current (Ith)	10 A for 1 CO 5 A for 2 CO	10 A 5 A	10 A 5 A	6 A	12 A (2 terminals) × 10 A (2)
Type references	RGZE1S35M	RGZE1S48M	RGZE05P	RGLZV●●	RSZE1S35M
Pages	18		RGZE08P	RSLZR●●	RSZE1S48M
			RGZE05E	11	RSZE05P
			RGZE08E		RSZE08P
					13

(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.



More technical Information on [www.se.com](http://www.se.com)



Ihr Schweizer Industriepartner



More technical Information on [www.se.com](http://www.se.com)

info@digiparts.ch

[www.digiparts.ch](http://www.digiparts.ch)

# Harmony Electromechanical Relays

Interface, miniature, and power electromechanical relays

Type of product	Plug-in relays	Miniature relays							
<b>Number and type of contacts/conventional thermal current (Ith on NO contact)</b>	2 CO/12 A 3 CO/10 A 4 CO/6 A 4 CO/3 A (low level)								
<b>Control circuit voltage</b>	~ 24...240 V 12...220 V								
<b>Pin type</b>	Flat (Faston type)								
<b>Operational voltage</b>	Up to 250 V ~								
<b>Durability</b> (operating cycles per hour)	Electrical, resistive load 100,000 Mechanical, no-load 10,000,000								
<b>Functions</b>	LED Mechanical indicator Test button Contact type	Yes (depending on version) Yes Yes, lockable Standard and low level							
<b>Accessories</b>	Mounting adapters for DIN rail Mounting adapters with fixing lugs	Yes Yes							
<b>Type references</b>	<b>RXM●●●●● (1)</b>	<b>782X●XH●●● (3)</b>							
<b>Pages</b>	21	27							
<b>Type of associated sockets</b>	Sockets without LED								
<b>Contact terminal arrangements</b>	Mixed	Separate							
<b>Connection</b>	Screw connector Screw clamp terminals	Screw connector Push-in terminals							
<b>Accessories</b>	Protection modules Timer module Maintaining clamps Socket identification legend Bus jumper	Yes No Yes Yes No							
<b>Conventional thermal current (Ith)</b>	10 A 10 A	12 A for 2 CO (2) 6 A for 4 CO 12 A for 2 CO 6 A for 4 CO							
<b>Type references</b>	<b>RXZE2M114M</b>	<b>RXZE2M114</b>	<b>RXZE2S●●M</b>	<b>RXZE14P</b>	<b>70-782E14-1</b>	<b>70-461-1</b>	<b>70-782EL14-1</b>	<b>70-378-1</b>	<b>70-379-1</b>
<b>Pages</b>	23	27							

(1) Pre-assembled miniature relays RXM (relay + socket + clamp + label) are also available.

(2) Except for sockets RXZE2S11●M: 10 A.

(3) To be used with specified sockets only.

(4) When using relay RSB1A160●● with socket RSZE1S48M, terminals must be linked.

Type of product	Plug-in relays	Hermetically sealed relays			
<b>Number and type of contacts/conventional thermal current (Ith on NO contact)</b>	4 CO/5 A 4 CO/3 A (low level) 2 CO/5 A				
<b>Control circuit voltage</b>	6...240 V 6...110 V				
<b>Pin type</b>	Flat (Plug-in type) (3)				
<b>Operational voltage</b>	Up to 264 V ~/121 V ...				
<b>Durability</b>	100,000 10,000,000				
<b>Functions</b>	No No No Standard and low level				
<b>Accessories</b>	No No				
<b>Type references</b>	<b>Sockets</b>	<b>782X●XH●●● (3)</b>			
<b>Pages</b>		27			
<b>Type of associated sockets</b>					
<b>Contact terminal arrangements</b>	Mixed	Separate			
<b>Connection</b>	Screw connector Screw clamp terminals	Screw connector Solder lug PCB pins			
<b>Accessories</b>	Yes No Yes Yes –	No No Yes Yes Yes, 2-pole			
<b>Conventional thermal current (Ith)</b>	10 A 10 A	10 A 5 A 10 A			
<b>Type references</b>	<b>70-782E14-1</b>	<b>70-461-1</b>	<b>70-782EL14-1</b>	<b>70-378-1</b>	<b>70-379-1</b>
<b>Pages</b>	23	27			

# Harmony Electromechanical Relays

Interface, miniature, and power electromechanical relays

Type of product	Plug-in socket mount	Panel/DIN rail mount with flat (Faston type) terminals	Panel/DIN rail mount with screw terminals
Power relays			
<b>Number and type of contacts/conventional thermal current (Ith on NO contact)</b>	1 NO/30 A 2 NO/25 A		
<b>Control circuit voltage</b>	~ 24...240 V 12...24 V		
<b>Pin type</b>	Flat (Faston type)	Flat (Faston type)	Screw type
<b>Operational voltage</b>	Up to 264 V ~/26.4 V $\sim$		
<b>Durability</b> (operating cycles per hour)	Electrical, resistive load 100,000	Mechanical, no-load 5,000,000	
<b>Functions</b>	LED Mechanical indicator Test button Yes, lockable Contact type Standard	Yes No Yes, non-lockable	Yes No Yes, non-lockable
<b>Accessories</b>	Mounting adapters for DIN rail Mounting adapters with fixing lugs	No No	
<b>Type references</b>	<b>725•XX•BM4L-•</b>	<b>725•XX•BC3ML-•</b>	<b>725•XX•SC3ML-•</b>
<b>Pages</b>	29	29	29
<b>Type of associated sockets</b>	<b>Socket</b>		
<b>Contact terminal arrangements</b>	Separate	–	
<b>Connection</b>	Screw connector	–	
<b>Accessories</b>	Protection modules Timer module Maintaining clamps Socket identification legend Bus jumper	– – – – –	
<b>Conventional thermal current (Ith)</b>	30 A	–	
<b>Type references</b>	<b>70-725-1</b>	–	
<b>Pages</b>	29	–	

(1) 100,000 for RPM1 and RPM2; 60,000 for RPM3 and RPM4.

(2) 30 A when mounted with 13 mm (0.51 in.) gap between two relays and 25 A when mounted side-by-side without a gap.

**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.

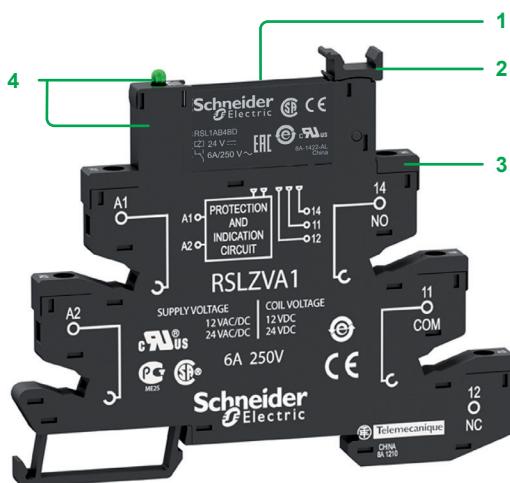
Plug-in relays	Power relays	Universal relays	Relays with clamp fixing
Power relays			Power relays
1 CO/15 A 2 CO/15 A 3 CO/15 A 4 CO/15 A		2 CO/10 A 3 CO/10 A	2 CO/10 A 3 CO/10 A
24...230 V 12...110 V		24...220 V 12...110 V	12...24 V
Flat (Faston type)		Cylindrical	Flat (Faston type)
Up to 250 V $\sim$		Up to 250 V $\sim$	Up to 250 V $\sim$
100,000 (1) 10,000,000		100,000 5,000,000	100,000 5,000,000
Yes (depending on version) Yes Yes, lockable Standard		Yes (depending on version) Yes Yes, lockable Low level (depending on version) Standard	– – – – –
No		No	– – –
Yes		Yes	– – –
<b>RPM••••</b>	<b>RUM•••••</b>	<b>RPF••••</b>	
31	35	39	
<b>Sockets without LED</b>	<b>Sockets without LED</b>		
Mixed Screw clamp terminals	Mixed Screw connector	Separate	–
Yes Yes (for 3-pole and 4-pole) Yes (on socket RPZF1)	Yes Yes Yes	– – –	
Yes No	Yes, 2-pole (Ith = 5 A)	– –	
16 A	12 A		
<b>RPZF•</b>	<b>RUZC•M</b>	<b>RUZSC•M</b>	<b>RUZSF3M</b>
32	35		

#### 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

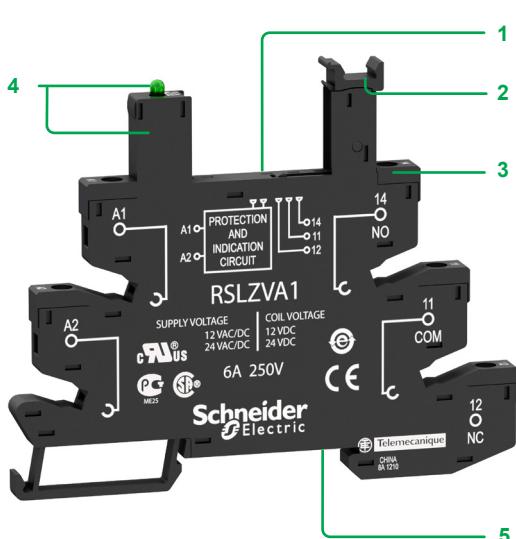
##### RSL slim interface relays, pre-assembled

- 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

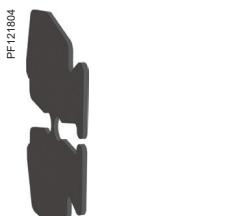
## References

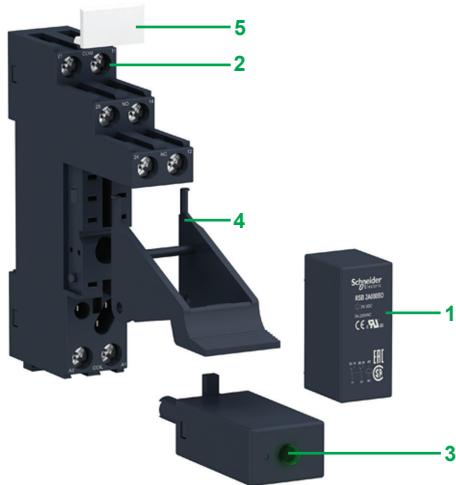
# Harmony Electromechanical Relays

## Plug-in relays

### RSL slim interface relays

 PF120937 RSL1PVBU	 PF120938 RSL1PRPU	<p><b>Pre-assembled slim interface relays</b></p> <p>Standard relays mounted on socket equipped with LED and protection circuit (Sold in lots of 10)</p> <p>1 CO contact - 6A thermal current (I<sub>th</sub>)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Operating voltage V</th><th>Control circuit voltage V</th><th>Socket type</th><th>Spring terminal</th></tr> <tr> <th></th><th></th><th>Screw connector</th><th>Unit reference</th></tr> </thead> <tbody> <tr> <td>.../~ 12</td><td>... 12</td><td><b>RSL1PVJU</b> (RSL1AB4JD + RSLZVA1)</td><td>0.031/0.068</td><td><b>RSL1PRJU</b> (RSL1AB4JD + RSLZRA1)</td><td>0.029/0.064</td></tr> <tr> <td>.../~ 24</td><td>... 24</td><td><b>RSL1PVBU</b> (RSL1AB4BD + RSLZVA1)</td><td>0.031/0.068</td><td><b>RSL1PRBU</b> (RSL1AB4BD + RSLZRA1)</td><td>0.029/0.064</td></tr> <tr> <td>.../~ 48</td><td>... 48</td><td><b>RSL1PVEU</b> (RSL1AB4ED + RSLZVA2)</td><td>0.031/0.068</td><td><b>RSL1PREU</b> (RSL1AB4ED + RSLZRA2)</td><td>0.029/0.064</td></tr> <tr> <td>.../~ 110</td><td>... 60</td><td><b>RSL1PVFU</b> (RSL1AB4ND + RSLZVA3)</td><td>0.031/0.068</td><td><b>RSL1PRFU</b> (RSL1AB4ND + RSLZRA3)</td><td>0.029/0.064</td></tr> <tr> <td>.../~ 230</td><td>... 60</td><td><b>RSL1PVPU</b> (RSL1AB4ND + RSLZVA4)</td><td>0.031/0.068</td><td><b>RSL1PRPU</b> (RSL1AB4ND + RSLZRA4)</td><td>0.029/0.064</td></tr> </tbody> </table>	Operating voltage V	Control circuit voltage V	Socket type	Spring terminal			Screw connector	Unit reference	.../~ 12	... 12	<b>RSL1PVJU</b> (RSL1AB4JD + RSLZVA1)	0.031/0.068	<b>RSL1PRJU</b> (RSL1AB4JD + RSLZRA1)	0.029/0.064	.../~ 24	... 24	<b>RSL1PVBU</b> (RSL1AB4BD + RSLZVA1)	0.031/0.068	<b>RSL1PRBU</b> (RSL1AB4BD + RSLZRA1)	0.029/0.064	.../~ 48	... 48	<b>RSL1PVEU</b> (RSL1AB4ED + RSLZVA2)	0.031/0.068	<b>RSL1PREU</b> (RSL1AB4ED + RSLZRA2)	0.029/0.064	.../~ 110	... 60	<b>RSL1PVFU</b> (RSL1AB4ND + RSLZVA3)	0.031/0.068	<b>RSL1PRFU</b> (RSL1AB4ND + RSLZRA3)	0.029/0.064	.../~ 230	... 60	<b>RSL1PVPU</b> (RSL1AB4ND + RSLZVA4)	0.031/0.068	<b>RSL1PRPU</b> (RSL1AB4ND + RSLZRA4)	0.029/0.064				
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<b>Slim interface relays for customer assembly</b>																																												
Relays with flat (PCB type) standard pins (Sold in lots of 10)																																												
1 CO contact - 6A Thermal current (I <sub>th</sub> )																																												
 PF120931 RSL1AB4ND	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Control circuit voltage V</th><th>Standard</th><th>Low level</th></tr> <tr> <th></th><th>Unit reference</th><th>Unit reference</th></tr> </thead> <tbody> <tr> <td>... 12</td><td><b>RSL1AB4JD</b></td><td>0.006/0.013</td><td><b>RSL1GB4JD</b></td><td>0.006/0.013</td></tr> <tr> <td>... 24</td><td><b>RSL1AB4BD</b></td><td>0.006/0.013</td><td><b>RSL1GB4BD</b></td><td>0.006/0.013</td></tr> <tr> <td>... 48</td><td><b>RSL1AB4ED</b></td><td>0.006/0.013</td><td><b>RSL1GB4ED</b></td><td>0.006/0.013</td></tr> <tr> <td>... 60</td><td><b>RSL1AB4ND</b></td><td>0.006/0.013</td><td><b>RSL1GB4ND</b></td><td>0.006/0.013</td></tr> </tbody> </table>							Control circuit voltage V	Standard	Low level		Unit reference	Unit reference	... 12	<b>RSL1AB4JD</b>	0.006/0.013	<b>RSL1GB4JD</b>	0.006/0.013	... 24	<b>RSL1AB4BD</b>	0.006/0.013	<b>RSL1GB4BD</b>	0.006/0.013	... 48	<b>RSL1AB4ED</b>	0.006/0.013	<b>RSL1GB4ED</b>	0.006/0.013	... 60	<b>RSL1AB4ND</b>	0.006/0.013	<b>RSL1GB4ND</b>	0.006/0.013											
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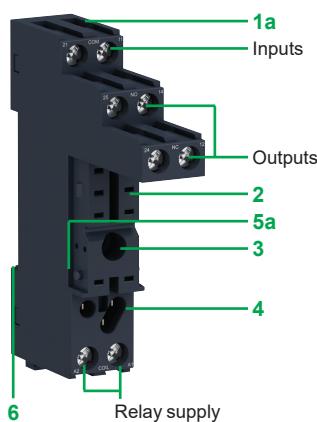


#### **Presentation of the range**

The RSB interface relay range comprises:

- 1 12 A relays with 1 CO contact , 16 A relays with 1 CO contact, and 8 A relays with 2 CO contacts
- 2 Sockets with separate contact terminals
- 3 Protection modules (diode, diode + LED, RC circuit, or varistor + LED) common to all sockets
- 4 A plastic maintaining clamp for all sockets
- 5 Clip-in legend for all sockets

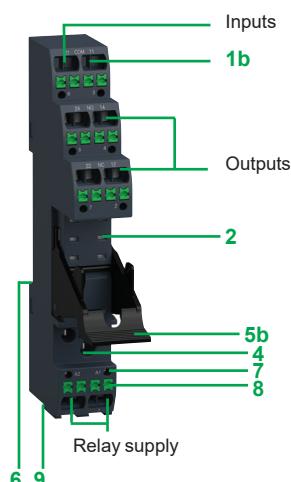
These relays are available in both pre-assembled (single reference) and customer assembled offers.



#### **Socket description**

##### **Sockets with separate contact terminals (1)**

- 1 a Connection by screw connector  
b Connection by push-in terminal
- 2 5 or 8 female contacts for the relay pins
- 3 Hole for panel mounting
- 4 Location for protection modules
- 5 a Locking components for plastic maintaining clamp  
b Built-in plastic maintaining clamp for locking components
- 6 Locating slot for mounting on DIN rail
- 7 Test point
- 8 Push button to release wire
- 9 Location for bus jumpers



(1) The inputs and outputs are separate from the relay supply.



RS\_S32\_OPMRFS1808BB

#### Pre-assembled interface relays

Relays mounted on sockets with protection module (LED version) and integrated clamp  
(sold in lots of 30)

Control circuit voltage V	Number and types of contact - Thermal current (I <sub>th</sub> )								
	1 CO - 12 A	Unit Reference	Weight kg/lb	1 CO - 16 A	Unit Reference	Weight kg/lb	2 CO - 8 A	Unit Reference	Weight kg/lb
12 ...	<b>RSB1A120JDPV</b> (RSB1A120JD + RSZE1S35M + RSZR215 + RZM031RB + RSZL300)	0.050/ 0.110	—	—	—	—	<b>RSB2A080JDPV</b> (RSB2A080JD + RSZE1S48M + RSZR215 + RZM031RB + RSZL300)	0.057/ 0.126	
24 ...	<b>RSB1A120BDPV</b> (RSB1A120BD + RSZE1S35M + RSZR215 + RZM031RB + RSZL300)	0.050/ 0.110	—	<b>RSB1A160BDPV</b> (RSB1A160BD + RSZE1S48M + RSZR215 + RZM031RB + RSZL300)	0.057/ 0.126	—	<b>RSB2A080BDPV</b> (RSB2A080BD + RSZE1S48M + RSZR215 + RZM031RB + RSZL300)	0.057/ 0.126	
24 ~	<b>RSB1A120B7PV</b> (RSB1A120B7 + RSZE1S35M + RSZR215 + RZM021RB + RSZL300)	0.050/ 0.110	—	—	—	—	<b>RSB2A080B7PV</b> (RSB2A080B7 + RSZE1S48M + RSZR215 + RZM021RB + RSZL300)	0.057/ 0.126	
120 ~	<b>RSB1A120F7PV</b> (RSB1A120F7 + RSZE1S35M + RSZR215 + RZM021FP + RSZL300)	0.050/ 0.110	—	—	—	—	<b>RSB2A080F7PV</b> (RSB2A080F7 + RSZE1S48M + RSZR215 + RZM021FP + RSZL300)	0.057/ 0.126	
220 ~	—	—	—	—	—	—	<b>RSB2A080M7PV</b> (RSB2A080M7 + RSZE1S48M + RSZR215 + RZM021FP + RSZL300)	0.057/ 0.126	
230 ~	<b>RSB1A120P7PV</b> (RSB1A120P7 + RSZE1S35M + RSZR215 + RZM021FP + RSZL300)	0.050/ 0.110	—	<b>RSB1A160P7PV</b> (RSB1A160P7 + RSZE1S48M + RSZR215 + RZM021FP + RSZL300)	0.057/ 0.126	—	<b>RSB2A080P7PV</b> (RSB2A080P7 + RSZE1S48M + RSZR215 + RZM021FP + RSZL300)	0.057/ 0.126	



RSB1A120JD + RZM031RB  
+ RSZE1S35M



RSB1A160JD + RSZE1S48M



RSZE05P

### Interface relays for customer assembly

RSB interface relays for standard applications (sold in lots of 10)

Control circuit voltage V	Number and type of contacts - Thermal current (I <sub>th</sub> )			Weight kg/lb
	1 CO - 12 A Unit reference	1 CO - 16 A Unit reference	2 CO - 8 A Unit reference	
6 ...	—	RSB1A160RD	—	0.014/0.031
12 ...	RSB1A120JD	RSB1A160JD	RSB2A080JD	0.014/0.031
24 ...	RSB1A120BD	RSB1A160BD	RSB2A080BD	0.014/0.031
48 ...	RSB1A120ED	RSB1A160ED	RSB2A080ED	0.014/0.031
60 ...	—	RSB1A160ND	—	0.014/0.031
110 ...	RSB1A120FD	RSB1A160FD	RSB2A080FD	0.014/0.031
24 ~	RSB1A120B7	RSB1A160B7	RSB2A080B7	0.014/0.031
48 ~	RSB1A120E7	RSB1A160E7	RSB2A080E7	0.014/0.031
120 ~	RSB1A120F7	RSB1A160F7	RSB2A080F7	0.014/0.031
220 ~	RSB1A120M7	RSB1A160M7	RSB2A080M7	0.014/0.031
230 ~	RSB1A120P7	RSB1A160P7	RSB2A080P7	0.014/0.031
240 ~	RSB1A120U7	RSB1A160U7	RSB2A080U7	0.014/0.031

### Sockets for interface relays

Sockets with separate contact terminal arrangement and screw connector connection

Rated insulation voltage	Thermal current (I <sub>th</sub> )	Relay type	Sold in lots of	Unit reference	Weight kg/lb
250 V ~	12 A	RSB1A120●●	10	RSZE1S35M	0.060/0.132
	10 A (1) RSB1A160●● (2) RSB2A080●●	RSB1A160●●	10		0.050/0.110

Sockets with separate contact terminal arrangement, push-in terminals, with built-in clamp

Rated insulation voltage	Thermal current (I <sub>th</sub> )	Relay type	Sold in lots of	Unit reference	Weight kg/lb
250 V ~	12 A	RSB1A●●●●●	10	RSZE05P	0.037/0.082
	10 A	RSB2A●●●●●	10		0.042/0.093

### Protection modules

Description	For use with	Voltage V	Sold in lots of	Unit reference	Weight kg/lb
Diode	All sockets	6...230 ...	10	RZM040W	0.003/0.007
RC circuit	All sockets	24...60 ~	10	RZM041BN7	0.010/0.022
		110...240 ~	10	RZM041FU7	0.010/0.022
Diode + green LED	All sockets	6...24 ...	10	RZM031RB	0.004/0.009
		24...60 ...	10	RZM031BN	0.004/0.009
		110...230 ...	10	RZM031FPD	0.004/0.009
Varistor + green LED	All sockets	6...24 .../~	10	RZM021RB	0.005/0.011
		24...60 .../~	10	RZM021BN	0.005/0.011
		110...230 .../~	10	RZM021FP	0.005/0.011

(1) RSZE1S48M is a two terminal socket each carrying 10 A.

(2) If RSZE1S48M / RSZE08P socket terminals are linked, relay RSB1A160●● can be used up to 16 A. See "Wiring diagrams" on [www.se.com/harmonyelectromechanicalrelays](http://www.se.com/harmonyelectromechanicalrelays)



Accessories				
Description	For use with	Sold in lots of	Unit reference	Weight kg/lb
Plastic maintaining clamp	All sockets	10	<a href="#">RSZR215</a>	0.002/0.004

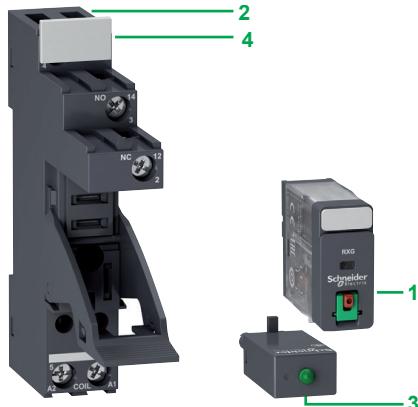
Legend	All sockets	10	<a href="#">RSZL300</a>	0.001/0.002
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<b>Bus jumper</b> (10 x 8-pole jumper)	For inputs (A1, A2) of RSZE screw sockets (RSZE1S35M, RSZE1S48M)	10	<a href="#">RGZS08</a>	0.006/0.013
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<b>Bus jumper</b> (10 x 2-pole jumper)	For input (A2) of RSZE push-in sockets (RSZE05P, RSZE08P)	10	<a href="#">RSZS02</a>	0.002/0.004
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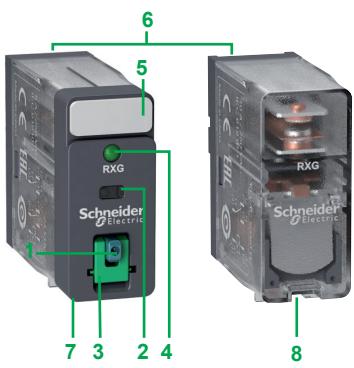
#### Presentation of the range

RXG relays are interface plug-in relays with Faston pins for better reliability and robust installation. They are used in PLC applications.

The RXG interface relay range comprises:

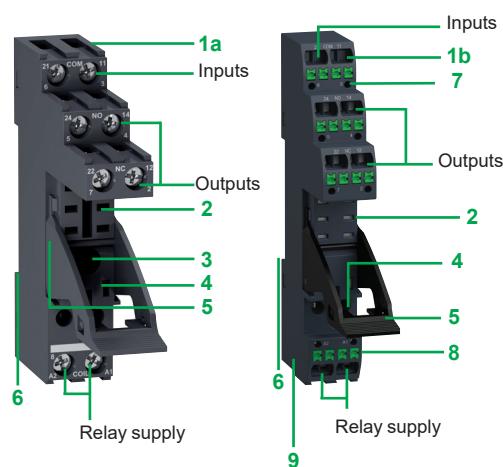
- 1 10 A relays with 1 CO contact and 5 A relays with 2 CO contacts
- 2 Sockets with separate or mixed contact terminals, built-in plastic maintaining clamp
- 3 Protection modules (diode, diode + LED, RC circuit, or varistor + LED) for RXG separate sockets
- 4 Clip-in legends for RXG separate sockets

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



#### Relay description

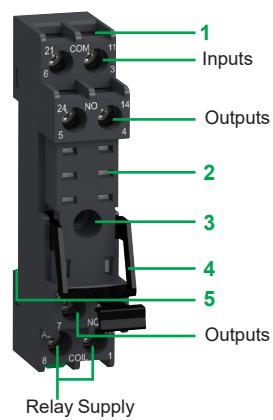
- 1 Spring-return pushbutton for testing the contacts (green: —, red: ~)
- 2 Mechanical “relay status” indicator
- 3 Removable lock-down door enabling forced maintaining of the contacts for test sequences or maintenance purposes
- 4 LED (depending on version) indicating the relay status
- 5 Removable legend for relay identification
- 6 5 or 8 Faston type pins
- 7 Standard cover-type relay with pushbutton, mechanical indicator, and LED options
- 8 Clear cover-type relay



#### Socket description

##### Sockets with separate contact terminals (1)

- 1 a Connection by screw connector
- 1 b Connection by push-in terminal
- 2 5 or 8 female contacts for the relay pins
- 3 Hole for panel mounting
- 4 Location for protection modules
- 5 Built-in plastic maintaining clamp for locking components
- 6 Locating slot for mounting on DIN rail
- 7 Test point
- 8 Push button to release wire
- 9 Location for bus jumpers



##### Sockets with mixed contact terminals (2)

- 1 Connection by screw clamp
- 2 5 or 8 female contacts for the relay pins
- 3 Hole for panel mounting
- 4 Built-in plastic maintaining clamp for locking components
- 5 Locating slot for mounting on DIN rail

(1) The inputs and outputs are separate from the relay supply.

(2) The outputs NC are mixed with the relay supply, with the outputs NO and inputs being located on the opposite side of the socket.



RXG22BDPV



RXG11BD

RS-532-CRMFS18088C

PF132501

### Pre-assembled interface relays

Relays with lockable test button and LED, mounted on sockets with protection module and integrated clamp

Control circuit voltage V	Sold in lots of	Number and type of contacts - Thermal current (Ith)			
		1 CO - 10 A Unit reference	2 CO - 5 A Unit reference	Weight kg/lb	Weight kg/lb
24 ...	30	<b>RXG12BDPV</b> (RXG12BD + RGZE1S35M + RZM031RB)	0.059/0.130	<b>RXG22BDPV</b> (RXG22BD + RGZE1S48M + RZM031RB)	0.066/0.145
24 ~	30	<b>RXG12B7PV</b> (RXG12B7 + RGZE1S35M + RZM021RB)	0.059/0.130	<b>RXG22B7PV</b> (RXG22B7 + RGZE1S48M + RZM021RB)	0.067/0.148
230 ~	30	<b>RXG12P7PV</b> (RXG12P7 + RGZE1S35M + RZM021FP)	0.059/0.130	<b>RXG22P7PV</b> (RXG22P7 + RGZE1S48M + RZM021FP)	0.067/0.148

### Relays with LED, mounted on sockets with protection module, and integrated clamp

24 ...	30	<b>RXG13BDPV</b> (RXG13BD + RGZE1S35M + RZM031RB)	0.058/0.129	<b>RXG23BDPV</b> (RXG23BD + RGZE1S48M + RZM031RB)	0.066/0.145
230 ~	30	<b>RXG13P7PV</b> (RXG13P7 + RGZE1S35M + RZM021FP)	0.059/0.130	<b>RXG23P7PV</b> (RXG23P7 + RGZE1S48M + RZM021FP)	0.067/0.148

### Relays with lockable test button and without LED, mounted on sockets with protection module, and integrated clamp

24 ...	30			<b>RXG21BDPV</b> (RXG21BD + RGZE1S48M + RZM031RB)	0.067/0.148
24 ~	30			<b>RXG21B7PV</b> (RXG21B7 + RGZE1S48M + RZM021RB)	0.067/0.148
230 ~	30			<b>RXG21P7PV</b> (RXG21P7 + RGZE1S48M + RZM021FP)	0.067/0.148

### Interface relays for customer assembly

#### Standard cover relays with lockable test button

6 ...	10	—	<b>RXG21RD</b>	0.020/0.044
12 ...	10	<b>RXG11JD</b>	<b>RXG21JD</b>	0.020/0.044
24 ...	10	<b>RXG11BD</b>	<b>RXG21BD</b>	0.020/0.044
24 ~	10	<b>RXG11B7</b>	<b>RXG21B7</b>	0.020/0.044
48 ~	10	—	<b>RXG21E7</b>	0.020/0.044
120 ~	10	<b>RXG11F7</b>	<b>RXG21F7</b>	0.020/0.044
220 ~	10	—	<b>RXG21M7</b>	0.020/0.044
230 ~	10	<b>RXG11P7</b>	<b>RXG21P7</b>	0.020/0.044

# Harmony Electromechanical Relays

## Plug-in relays

### RXG interface relays



RXG22B7



RXG13BD



RXG15BD

#### Interface relays for customer assembly

##### Standard cover relays with lockable test button and LED

Control circuit voltage V	Sold in lots of	Number and type of contacts - Thermal current (Ith)			Weight kg/lb
		1 CO - 10 A Unit reference	2 CO - 5 A Unit reference		
6 ...	10	<b>RXG12RD</b>	—		0.020/0.044
12 ...	10	<b>RXG12JD</b>	<b>RXG22JD</b>		0.020/0.044
24 ...	10	<b>RXG12BD</b>	<b>RXG22BD</b>		0.020/0.044
48 ...	10	<b>RXG12ED</b>	<b>RXG22ED</b>		0.020/0.044
110 ...	10	<b>RXG12FD</b>	<b>RXG22FD</b>		0.020/0.044
24 ~	10	<b>RXG12B7</b>	<b>RXG22B7</b>		0.020/0.044
48 ~	10	<b>RXG12E7</b>	<b>RXG22E7</b>		0.020/0.044
120 ~	10	<b>RXG12F7</b>	<b>RXG22F7</b>		0.020/0.044
220 ~	10	—	<b>RXG22M7</b>		0.020/0.044
230 ~	10	<b>RXG12P7</b>	<b>RXG22P7</b>		0.020/0.044

##### Standard cover relays with LED

12 ...	10	<b>RXG13JD</b>	—	0.020/0.044
24 ...	10	<b>RXG13BD</b>	<b>RXG23BD</b>	0.020/0.044
24 ~	10	<b>RXG13B7</b>	<b>RXG23B7</b>	0.020/0.044
48 ~	10	—	<b>RXG23E7</b>	0.020/0.044
120 ~	10	<b>RXG13F7</b>	<b>RXG23F7</b>	0.020/0.044
220 ~	10	—	<b>RXG23M7</b>	0.020/0.044
230 ~	10	<b>RXG13P7</b>	<b>RXG23P7</b>	0.020/0.044

##### Clear cover relays

12 ...	10	<b>RXG15JD</b>	—	0.019/0.042
24 ...	10	<b>RXG15BD</b>	<b>RXG25BD</b>	0.019/0.042
24 ~	10	—	<b>RXG25B7</b>	0.018/0.040
120 ~	10	<b>RXG15F7</b>	<b>RXG25F7</b>	0.018/0.040
220 ~	10	—	<b>RXG25M7</b>	0.018/0.040
230 ~	10	<b>RXG15P7</b>	<b>RXG25P7</b>	0.018/0.040



RGZE1S48M



RGZE05P



RGZE05E



RZM031RB



RSZL300



RGZS08



RGZR215

XSCK\_CPK1931BA  
RSZS02

### Sockets for interface relays

Sockets with separate contact terminals arrangement, screw connector connection, and built-in clamp

Description	Thermal current (I <sub>th</sub> )	Relay type	Sold in lots of	Unit reference	Weight kg/lb
1 CO socket with 1 pole	10 A	RXG1●●●	10	RGZE1S35M	0.034/0.075
2 CO socket with 2 poles	5 A	RXG2●●●	10	RGZE1S48M	0.042/0.093

### Sockets with separate contact terminals arrangement, push-in terminals, and built-in clamp

Description	Thermal current (I <sub>th</sub> )	Relay type	Sold in lots of	Unit reference	Weight kg/lb
1 CO socket with 1 pole	10 A	RXG1●●●	10	RGZE05P	0.039/0.086
2 CO socket with 2 poles	5 A	RXG2●●●	10	RGZE08P	0.042/0.093

### Sockets with mixed contact terminals arrangement, screw clamp connection, and built-in clamp

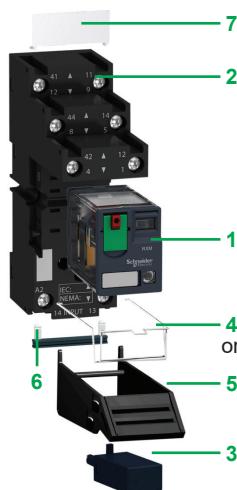
Description	Thermal current (I <sub>th</sub> )	Relay type	Sold in lots of	Unit reference	Weight kg/lb
1 CO socket with 1 pole	10 A	RXG1●●●	10	RGZE05E	0.024/0.053
2 CO socket with 2 poles	5 A	RXG2●●●	10	RGZE08E	0.026/0.057

### Protection modules

Description	For use with	Voltage V	Sold in lots of	Unit reference	Weight kg/lb
Diode	All separate sockets	6...230 -	10	RZM040W	0.003/0.007
RC circuit	All separate sockets	24...60 ~	10	RZM041BN7	0.010/0.022
		110...240 ~	10	RZM041FU7	0.010/0.022
Diode + green LED	All separate sockets	6...24 -	10	RZM031RB	0.004/0.009
		24...60 -	10	RZM031BN	0.004/0.009
		110...230 -	10	RZM031FPD	0.004/0.009
Varistor + green LED	All separate sockets	6...24 ~/-	10	RZM021RB	0.005/0.011
		24...60 ~/-	10	RZM021BN	0.005/0.011
		110...230 ~/-	10	RZM021FP	0.005/0.011

### Accessories

Description	For use with	Sold in lots of	Unit reference	Weight kg/lb
Plastic maintaining clamp	All separate sockets	10	RGZR215	0.002/0.004
Legend	All separate sockets	10	RSZL300	0.001/0.002
Clip-in legends (sheet of 16 legends)	All relays	10	RGZL520	0.001/0.002
Bus jumper (10 x 8-pole jumper)	For inputs (A1, A2) of RGZE screw sockets (RGZE1S35M, RGZE1S48M)	10	RGZS08	0.006/0.013
Bus jumper (10 x 2-pole jumper)	For input (A2) of RGZE push-in sockets (RGZE05P, RGZE08P)	10	RSZS02	0.002/0.004

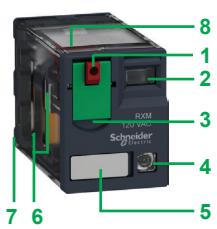


#### Presentation of the range

The RXM miniature relay range comprises:

- 1 12 A relays with 2 CO contacts, 10 A relays with 3 CO contacts, 6 A relays with 4 CO contacts, and 3 A "low level" relays with 4 CO contacts (all these relays have the same dimensions)
- 2 Sockets with mixed or separate contact terminals
- 3 Protection modules (diode, RC circuit, or varistor) common to all sockets
- 4 Metal maintaining clamp for all sockets
- 5 Plastic maintaining clamp for all sockets
- 6 2-pole bus jumper that can be used on sockets with separate contact terminals in order to simplify cabling when creating an equipotential link between the coil terminals
- 7 Clip-in legends for all sockets except RXZE2M114

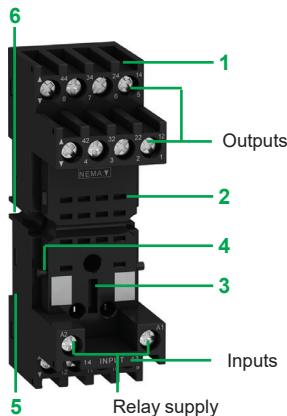
These relays are available in both pre-assembled (single reference) and customer assembled offers.



#### Relay description

- 1 Spring-return pushbutton for testing the contacts (green:  $\square$ , red:  $\sim$ )
- 2 Mechanical "relay status" indicator
- 3 Removable lock-down door enabling forced maintaining of the contacts for test sequences or maintenance purposes
- 4 LED (depending on version) indicating the relay status
- 5 Removable legend for relay identification
- 6 4 notches for rail mounting adapter or panel mounting adapter with mounting lugs
- 7 8, 11, or 14 Faston type pins
- 8 Area by which the product can be easily gripped
- 9 Mounting adapter enabling direct mounting of the relay on a panel
- 10 Mounting adapter enabling direct mounting of the relay on a DIN rail



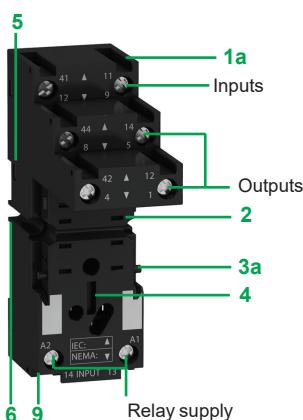


Sockets with mixed contact terminals

## Socket description

### Sockets with mixed contact terminals (1)

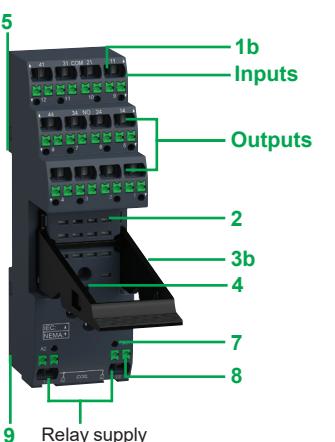
- 1 Connection by screw clamp terminals or screw connector
- 2 14 female contacts for the relay pins
- 3 Location for protection modules
- 4 Locking components for plastic and metal maintaining clamps
- 5 Locating slot for mounting on DIN rail with compression spring or mounting clip
- 6 2 or 4 holes for panel mounting



Sockets with separate contact terminals

### Sockets with separate contact terminals (2)

- 1 a Connection by screw connector  
b Connection by push in terminal
- 2 8, 11, or 14 female contacts for the relay pins
- 3 a Locking components for plastic and metal maintaining clamps  
b Built-in plastic maintaining clamp for locking components
- 4 Location for protection modules
- 5 Locating slot for mounting on DIN rail with compression spring or mounting clip
- 6 2 holes for panel mounting
- 7 Test point
- 8 Push button to release wire
- 9 Location for bus jumpers



Sockets with separate contact terminals

(1) The inputs are mixed with the relay supply, with the outputs being located on the opposite side of the socket.

(2) The inputs and outputs are separate from the relay supply.



RXM4AB1BDPVS

Pre-assembled interface relays						
Relays without LED, mounted on sockets with clamp and socket legend (sold in lots of 30)						
Control circuit voltage V	Type of socket	Number and type of contacts - Thermal current (Ith)			Weight kg/lb	Weight kg/lb
		2 CO - 10 A	4 CO - 6 A	Unit reference		
24 ---	Mixed terminal socket	—	—	—	<b>RXM4AB1BDPVM</b> (RXM4AB1BD + RXZE2M114M + RXZR335 + RXZL520)	0.099/ 0.218
24 ~		—	—	—	<b>RXM4AB1B7PVM</b> (RXM4AB1B7 + RXZE2M114M + RXZR335 + RXZL520)	0.099/ 0.218
230 ~		—	—	—	<b>RXM4AB1P7PVM</b> (RXM4AB1P7 + RXZE2M114M + RXZR335 + RXZL520)	0.099/ 0.218
24 ---	Separate terminal socket	—	—	—	<b>RXM4AB1BDPVS</b> (RXM4AB1BD + RXZE2S114M + RXZR335 + RXZL520)	0.113/ 0.249
24 ~		—	—	—	<b>RXM4AB1B7PVS</b> (RXM4AB1B7 + RXZE2S114M + RXZR335 + RXZL520)	0.113/ 0.249
230 ~		—	—	—	<b>RXM4AB1P7PVS</b> (RXM4AB1P7 + RXZE2S114M + RXZR335 + RXZL520)	0.113/ 0.249
Relays with LED, mounted on sockets with clamp and socket legend (sold in lots of 30)						
24 ---	Mixed terminal socket	<b>RXM2AB2BDPVM</b> (RXM2AB2BD + RXZE2M114M + RXZR335 + RXZL520)	0.099/ 0.218	<b>RXM4AB2BDPVM</b> (RXM4AB2BD + RXZE2M114M + RXZR335 + RXZL520)	0.099/ 0.218	
24 ~		<b>RXM2AB2B7PVM</b> (RXM2AB2B7 + RXZE2M114M + RXZR335 + RXZL520)	0.099/ 0.218	<b>RXM4AB2B7PVM</b> (RXM4AB2B7 + RXZE2M114M + RXZR335 + RXZL520)	0.099/ 0.218	
230 ~		<b>RXM2AB2P7PVM</b> (RXM2AB2P7 + RXZE2M114M + RXZR335 + RXZL520)	0.099/ 0.218	<b>RXM4AB2P7PVM</b> (RXM4AB2P7 + RXZE2M114M + RXZR335 + RXZL520)	0.099/ 0.218	
24 ---	Separate terminal socket	<b>RXM2AB2BDPVS</b> (RXM2AB2BD + RXZE2S108M + RXZR335 + RXZL520)	0.101/ 0.223	<b>RXM4AB2BDPVS</b> (RXM4AB2BD + RXZE2S114M + RXZR335 + RXZL520)	0.113/ 0.249	
24 ~		<b>RXM2AB2B7PVS</b> (RXM2AB2B7 + RXZE2S108M + RXZR335 + RXZL520)	0.101/ 0.223	<b>RXM4AB2B7PVS</b> (RXM4AB2B7 + RXZE2S114M + RXZR335 + RXZL520)	0.113/ 0.249	
230 ~		<b>RXM2AB2P7PVS</b> (RXM2AB2P7 + RXZE2S108M + RXZR335 + RXZL520)	0.101/ 0.223	<b>RXM4AB2P7PVS</b> (RXM4AB2P7 + RXZE2S114M + RXZR335 + RXZL520)	0.113/ 0.249	

## References (continued)

# Harmony Electromechanical Relays

Plug-in relays  
RXM miniature relays



PF153500  
RXM2AB1BD



PF106011  
RXM2AB1F7



PF153504  
RXM2AB2ED



PF153506  
RXM2AB2F7



PF153502A  
RXM4GB1BD



PF153500A  
RXM4GB1P7



PF153504A  
RXM4GB2BD



PF153506A  
RXM4GB2F7

### Miniature relays for customer assembly

#### RXM miniature relays without LED (sold in lots of 10)

Control circuit voltage V	Number and type of contacts - Thermal current (Ith)			Unit reference	Weight kg/lb	
	2 CO - 12 A	3 CO - 10 A	4 CO - 6 A			
12 ...	<b>RXM2AB1JD</b>	0.037/0.082	<b>RXM3AB1JD</b>	0.037/0.082	<b>RXM4AB1JD</b>	0.037/0.082
24 ...	<b>RXM2AB1BD</b>	0.037/0.082	<b>RXM3AB1BD</b>	0.037/0.082	<b>RXM4AB1BD</b>	0.037/0.082
48 ...	<b>RXM2AB1ED</b>	0.037/0.082	<b>RXM3AB1ED</b>	0.037/0.082	<b>RXM4AB1ED</b>	0.037/0.082
110 ...	<b>RXM2AB1FD</b>	0.037/0.082	<b>RXM3AB1FD</b>	0.037/0.082	<b>RXM4AB1FD</b>	0.037/0.082
220 ...	-	-	-	-	<b>RXM4AB1MD</b>	0.037/0.082
24 ~	<b>RXM2AB1B7</b>	0.037/0.082	<b>RXM3AB1B7</b>	0.037/0.082	<b>RXM4AB1B7</b>	0.037/0.082
48 ~	<b>RXM2AB1E7</b>	0.037/0.082	<b>RXM3AB1E7</b>	0.037/0.082	<b>RXM4AB1E7</b>	0.037/0.082
120 ~	<b>RXM2AB1F7</b>	0.037/0.082	<b>RXM3AB1F7</b>	0.037/0.082	<b>RXM4AB1F7</b>	0.037/0.082
230 ~	<b>RXM2AB1P7</b>	0.037/0.082	<b>RXM3AB1P7</b>	0.037/0.082	<b>RXM4AB1P7</b>	0.037/0.082
240 ~	-	-	-	-	<b>RXM4AB1U7</b>	0.037/0.082

#### RXM miniature relays with LED (sold in lots of 10)

12 ...	<b>RXM2AB2JD</b>	0.037/0.082	<b>RXM3AB2JD</b>	0.037/0.082	<b>RXM4AB2JD</b>	0.037/0.082
24 ...	<b>RXM2AB2BD</b>	0.037/0.082	<b>RXM3AB2BD</b>	0.037/0.082	<b>RXM4AB2BD</b>	0.037/0.082
48 ...	<b>RXM2AB2ED</b>	0.037/0.082	-	-	<b>RXM4AB2ED</b>	0.037/0.082
110 ...	<b>RXM2AB2FD</b>	0.037/0.082	<b>RXM3AB2FD</b>	0.037/0.082	<b>RXM4AB2FD</b>	0.037/0.082
125 ...	-	-	-	-	<b>RXM4AB2GD</b>	0.037/0.082
24 ~	<b>RXM2AB2B7</b>	0.037/0.082	<b>RXM3AB2B7</b>	0.037/0.082	<b>RXM4AB2B7</b>	0.037/0.082
48 ~	<b>RXM2AB2E7</b>	0.037/0.082	<b>RXM3AB2E7</b>	0.037/0.082	<b>RXM4AB2E7</b>	0.037/0.082
120 ~	<b>RXM2AB2F7</b>	0.037/0.082	<b>RXM3AB2F7</b>	0.037/0.082	<b>RXM4AB2F7</b>	0.037/0.082
230 ~	<b>RXM2AB2P7</b>	0.037/0.082	<b>RXM3AB2P7</b>	0.037/0.082	<b>RXM4AB2P7</b>	0.037/0.082

#### RXM miniature relays with low level contacts, without LED (sold in lots of 10)

Control circuit voltage V	Number and type of contacts Thermal current (Ith)	
	4 CO - 3 A	Unit reference
12 ...		<b>RXM4GB1JD</b>
24 ...		<b>RXM4GB1BD</b>
24 ~		<b>RXM4GB1B7</b>
48 ~		<b>RXM4GB1E7</b>
120 ~		<b>RXM4GB1F7</b>
230 ~		<b>RXM4GB1P7</b>

#### RXM miniature relays with low level contacts, with LED (sold in lots of 10)

12 ...	<b>RXM4GB2JD</b>	0.037/0.082
24 ...	<b>RXM4GB2BD</b>	0.037/0.082
48 ...	<b>RXM4GB2ED</b>	0.037/0.082
125 ...	<b>RXM4GB2GD</b>	0.037/0.082
220 ...	<b>RXM4GB2MD</b>	0.037/0.082
24 ~	<b>RXM4GB2B7</b>	0.037/0.082
48 ~	<b>RXM4GB2E7</b>	0.037/0.082
120 ~	<b>RXM4GB2F7</b>	0.037/0.082
230 ~	<b>RXM4GB2P7</b>	0.037/0.082
240 ~	<b>RXM4GB2U7</b>	0.037/0.082



RXZE2M114M



RXZE14P



RXM041●●

PF106016

<b>Sockets</b>					
Contact terminal arrangement	Connection	Relay type	Sold in lots of	Unit reference	Weight kg/lb
Mixed	Screw clamp	RXM2●●●●● (3) RXM4●●●●●	10	RXZE2M114 (1)	0.048/0.106
	Screw connector	RXM2●●●●● (3) RXM4●●●●●	10	RXZE2M114M (1)	0.056/0.124
Separate	Push-in terminal	RXM2●●●●● RXM4●●●●●	10	RXZE14P	0.080/0.176
	Screw connector	RXM2●●●●●	10	RXZE2S108M (2)	0.058/0.128
		RXM3●●●●●	10	RXZE2S111M (1)	0.066/0.146
		RXM4●●●●●	10	RXZE2S114M (1)	0.070/0.154

<b>Protection modules</b>					
Description	Voltage V	For use with	Sold in lots of	Unit reference	Weight kg/lb
Diode	6...250 -	All sockets	10	RXM040W	0.003/0.007
RC circuit	24...60 ~	All sockets	10	RXM041BN7	0.010/0.022
	110...240 ~	All sockets	10	RXM041FU7	0.010/0.022
Varistor	6...24 ~/-	All sockets	10	RXM021RB	0.030/0.066
	24...60 ~/-	All sockets	10	RXM021BN	0.030/0.066
	110...240 ~/-	All sockets	10	RXM021FP	0.030/0.066

<b>Timing relays</b>			
Description	For use with	Unit reference	Weight kg/lb
2 or 4 timed CO contacts (function A)	RXZE●●●●● sockets	REXL2●● (4)	-
		REXL4●● (4)	-

(1) Thermal current (I<sub>th</sub>): 10 A.(2) Thermal current (I<sub>th</sub>): 12 A.

(3) When mounting relay RXM2●●●●● on socket RXZE2M●●●●●, the thermal current should not exceed 10 A.

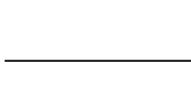
(4) Please refer to "Harmony Timer Relays" catalog.

(5) Test button becomes inaccessible.

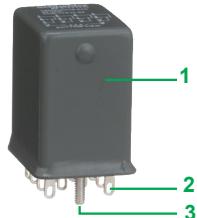
## References (continued)

# Harmony Electromechanical Relays

Plug-in relays  
RXM miniature relays

Accessories					
Description	For use with	Sold in lots of	Unit reference	Weight kg/lb	
<b>Metal maintaining clamp</b>	All sockets	10	<b>RXZ400</b>	0.001/0.002	
<b>Plastic maintaining clamp</b>	All sockets except push-in socket RXZE14P	10	<b>RXZR335</b>	0.005/0.011	
	REXL4••				
	RXZR315	RXZE14P	10	<b>RXZR315</b>	0.004/0.009
	<b>2-pole bus jumper (Ith: 5 A)</b>	All screw sockets with separate contacts (RXZE2S••••)	10	<b>RXZS2</b>	0.005/0.011
	<b>Bus jumper (10 x 2-pole jumper)</b>	For input (A2) of RXZE push in sockets (RXZE14P)	10	<b>RSZS02</b>	0.002/0.004
	<b>Mounting adapter with panel mounting lugs</b>	RXM2••••• RXM3•••••	10	<b>RXZE2FA</b>	0.002/0.004
	<b>Clip-in legends</b>	All relays (sheet of 108 legends)	10	<b>RXZL520</b>	0.080/0.176
	RXZE2FA	RXZE14P	10	<b>RXZL300</b>	0.004/0.009
	RXZ400	All sockets except RXZE2M114	10	<b>RXZL420</b>	0.001/0.002
	RXZL520				

- (1) Thermal current (Ith): 10 A.
- (2) Thermal current (Ith): 12 A.
- (3) When mounting relay RXM2••••• on socket RXZE2M••••, the thermal current should not exceed 10 A.
- (4) Please refer to "Harmony Timer Relays" catalog.
- (5) Test button becomes inaccessible.



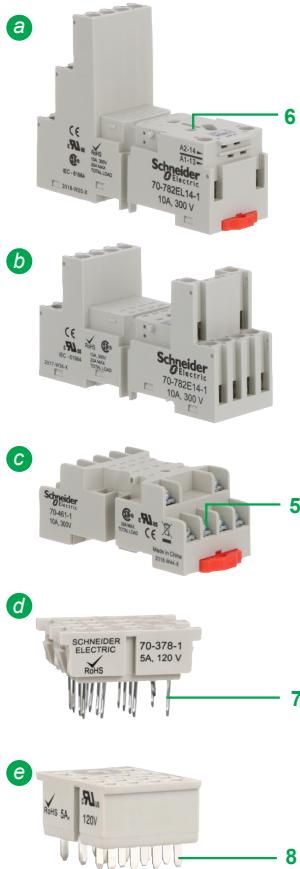
#### Presentation of the range

The hermetically sealed 782H series relays comply with UL Class I Division 2 requirements for use in hazardous locations. They are suitable for installation in harsh, hazardous, and corrosive environments like offshore mining and refineries in the oil and gas, petrochemical, chemical, and mines and minerals sectors.

782H hermetically sealed relays comprise:

- Relays with 3 A/5 A, 2 CO/4 CO contacts
- Sockets with multiple configuration, finger-safe according to IP20, and compatible with DIN rail or panel mounting
- Accessories (protection modules and/or LED indicator)

These relays are available in panel, DIN rail, PCB, and chassis mount versions.



#### Description

##### Relay

- 1 Hermetically sealed enclosure
- 2 Flat (Plug-in type) terminal
- 3 Stub to mount in panel

##### Socket

- 4 There are different types of sockets:
  - DIN rail or panel mount sockets
    - a with screw connector
    - b with screw connector
    - c with screw clamp terminals
  - Other types of terminals
    - d Solder terminals for chassis mount
    - e Printed circuit terminals for PCB mount
- 5 Connection by screw connector
- 6 Location for protection modules
- 7 Solder lug
- 8 PCB pins

## References (continued)

# Harmony Electromechanical Relays

## Plug-in relays

### 782H hermetically sealed relays

782H hermetically sealed relays



782DXH21-12D



70-782EL14-1



70-782E14-1



70-461-1



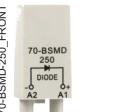
70-379-1



70-378-1



70-BSMM-24



70-BSMD-250



70-BSMLG-24



16-1342



RXZS2

## Plug-in relays

### 782H hermetically sealed relays (sold in lots of 10)

Coil voltage V	Contact type - Thermal current (Ith)			Weight kg/lb	Unit reference	Weight kg/lb
	4 CO - 3 A	4 CO - 5 A	2 CO - 5 A			
6 ~	782DXH10-6A	0.045/0.099	—	—	—	—
24 ~	782DXH10-24A	0.045/0.099	—	—	—	—
120 ~	782DXH10-120A	0.045/0.099	782DXH21-120A	0.045/0.099	—	—
240 ~	782DXH10-240A	0.045/0.099	782DXH21-240A	0.045/0.099	—	—
6 ---	782DXH10-6D	0.045/0.099	—	—	—	—
12 ---	782DXH10-12D	0.045/0.099	782DXH21-12D	0.045/0.099	—	—
24 ---	782DXH10-24D	0.045/0.099	782DXH21-24D	0.045/0.099	782XBH21-24D	0.045/0.099
48 ---	—	—	782DXH21-48D	0.045/0.099	—	—
110 ---	782DXH10-110D	0.045/0.099	—	—	—	—

## Sockets for all 782H relays

Contact terminal arrangement	Connection	Mounting	Unit reference	Sold in lots of	Weight Kg/lb
Mixed	Screw clamp terminals	DIN rail/ Panel	RXZE2M114 (1)	10	0.07/0.154
	Screw connector	—	RXZE2M114M (1) 70-782E14-1	—	0.06/0.132
	Screw clamp terminals	—	70-461-1	—	0.044/0.097
Separate	Screw connector	—	RXZE2S114M (1) 70-782EL14-1	—	0.06/0.132
	Solder terminals	Chassis	70-378-1	—	0.007/0.015
	Printed circuit terminals	PCB	70-379-1	—	0.007/0.015

## Protection modules

Description	For use with sockets	Coil voltage	Unit reference	Sold in lots of	Weight Kg/lb
Diode	70-782EL14-1, 70-782E14-1	6 to 250 ---	70-BSMD-250	10	—
MOV suppressor		24 ~ 120 ~ 240 ~	70-BSMM-24 70-BSMM-120 70-BSMM-240	—	—
LED indicator		24 ~	70-BSMLG-24	—	—

## Accessories

Description	For use with sockets	Unit reference	Sold in lots of	Weight Kg/lb
Metal spring clip	All sockets	16-1342	10	—
Plastic ID tag	70-782E14-1, 70-782EL14-1	RXL420	—	—
Insulated coil bus jumper system	70-782EL14-1	RXZS2	—	—

(1) 782H relays are:

- UL Recognized when used with RXZE• sockets
- UL Listed when used with 70-782• sockets



#### Presentation of the range

The 725 series are power relays offering multiple mounting options for ease of use, enhanced reliability, and robust installation. They are used in high-capacity switching applications such as EV charging, CNC machines, and HVAC compressors.

725 power relays comprise:

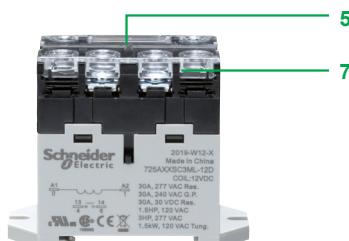
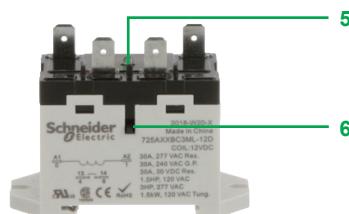
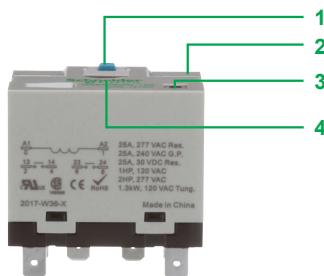
- 30 A relays with 1 NO contact and 25 A relays with 2 NO contacts
- Socket for plug-in type version with flat (Faston type) terminals
- Protection modules as accessories (diode, separate LED indicator, RC circuit)

Apart from Plug-in relays with flat (Faston type) terminals, these relays are also available in Panel/DIN rail mount versions with screw type and flat (Faston type) terminals.

#### Description

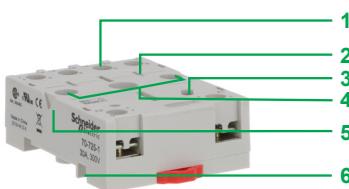
##### Plug-in socket mount power relay

- 1 Spring-return pushbutton for testing the contacts (blue: —; red: ~)
- 2 Mechanical "relay status" indicator
- 3 LED indicating the relay status
- 4 Lock-down door enabling forced maintaining of the contacts for testing purposes



##### DIN rail/Panel mount power relay

- 5 LED indicating the relay status
- 6 Side-mounted spring-return pushbutton for testing the contacts
- 7 Touch-proof cover (for screw type terminal)



#### Socket

- 1 Connection by screw connector
- 2 6 female contacts for the relay pins
- 3 Location for protection modules
- 4 Holes for panel mounting
- 5 Spring clip location
- 6 Locating slot for mounting on DIN rail

## References

# Harmony Electromechanical Relays

Plug-in and DIN rail/Panel mount relays  
725 power relays



### Power relays

#### 725 power relays with DIN rail/Panel mounting (sold in lots of 10)

Coil voltage V	Terminal style	Contact type - (Thermal current (I <sub>th</sub> )		Weight kg/lb	Unit reference	Weight kg/lb
		2 NO - 25 A	1 NO - 30 A			
24 ~	Flat (Faston type)	725BXXBC3ML-24A	0.120/0.265	725AXXBC3ML-24A	0.120/0.265	725AXXBC3ML-24A
	Screw terminals	725BXXSC3ML-24A	0.120/0.265			
120 ~	Flat (Faston type)	725BXXBC3ML-120A	0.120/0.265	725AXXBC3ML-120A	0.120/0.265	725AXXBC3ML-120A
	Screw terminals	725BXXSC3ML-120A	0.120/0.265			
240 ~	Flat (Faston type)	725BXXBC3ML-240A	0.120/0.265	725AXXBC3ML-240A	0.120/0.265	725AXXBC3ML-240A
	Screw terminals	725BXXSC3ML-240A	0.120/0.265			
12 ---	Flat (Faston type)	725BXXBC3ML-12D	0.120/0.265	725AXXBC3ML-12D	0.120/0.265	725AXXBC3ML-12D
	Screw terminals	725BXXSC3ML-12D	0.120/0.265			
24 ---	Flat (Faston type)	725BXXBC3ML-24D	0.120/0.265	725AXXBC3ML-24D	0.120/0.265	725AXXBC3ML-24D
	Screw terminals	725BXXSC3ML-24D	0.120/0.265			

#### 725 power relays with Plug-in socket mounting (sold in lots of 10)

24 ~	Flat (Faston type)	725BXXBM4L-24A	0.120/0.265	725AXXBM4L-24A	0.120/0.265
120 ~	Flat (Faston type)	725BXXBM4L-120A	0.120/0.265	725AXXBM4L-120A	0.120/0.265
240 ~	Flat (Faston type)	725BXXBM4L-240A	0.120/0.265	725AXXBM4L-240A	0.120/0.265
12 ---	Flat (Faston type)	725BXXBM4L-12D	0.120/0.265	725AXXBM4L-12D	0.120/0.265
24 ---	Flat (Faston type)	725BXXBM4L-24D	0.120/0.265	725AXXBM4L-24D	0.120/0.265

### Socket

Contact terminal arrangement	Connection	Sold in lots of	Relay type	Unit reference	Weight Kg/lb
Separate	Screw connector	10	725 relays with Plug-in socket mount cover	70-725-1	0.055/0.121

### Socket modules

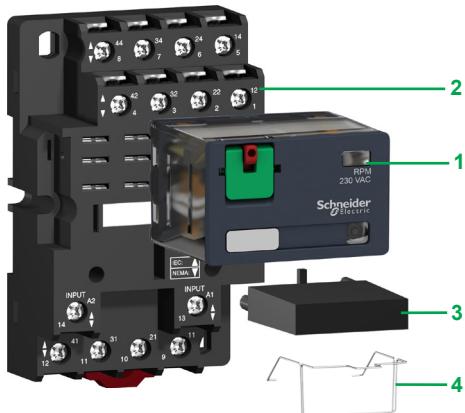
Description	For use with sockets	Sold in lots of	Coil voltage V	Unit reference	Weight Kg/lb
Diode	70-725-1	10	6 to 250 ---	70-ASMD-250	—

### MOV suppressor

24 ~	70-ASMM-24
120 ~	70-ASMM-120
240 ~	70-ASMM-240

### Socket accessories

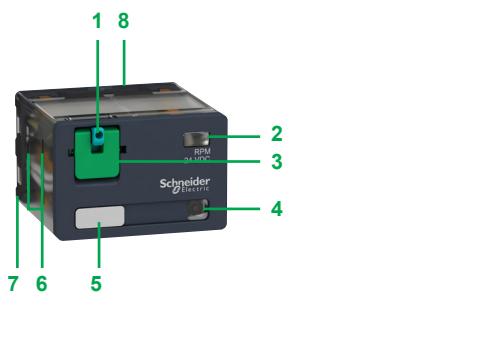
Description	For use with sockets	Sold in lots of	Unit reference	Weight Kg/lb
Spring clip	70-725-1	10	16-725SC-1	—



### Presentation of the range

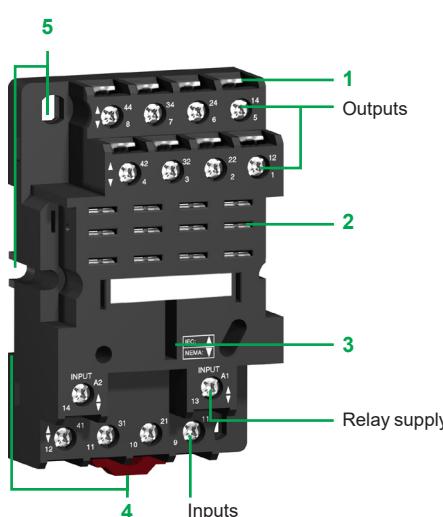
The RPM power relay range comprises:

- 1 15 A relay with 1, 2, 3, and 4 CO contacts
- 2 Sockets with mixed contact terminals
- 3 Protection modules (diode, RC circuit, or varistor) or 1 timer module (these protection modules are common to all sockets except for the timer module, which can be used on 3-pole or 4-pole sockets only)
- 4 Metal maintaining clamp for single-contact relays



### Relay description

- 1 Spring-return pushbutton for testing the contacts (green:  $\text{---}$ , red:  $\sim$ )
- 2 Mechanical “relay status” indicator
- 3 Removable lock-down door enabling forced maintaining of the contacts for test sequences or maintenance purposes
- 4 LED (depending on version) indicating the relay status
- 5 Removable legend for relay identification
- 6 4 notches for rail mounting adapter or panel mounting adapter with mounting lugs
- 7 5, 8, 11, or 14 Faston type pins
- 8 Area by which the product can be easily gripped
- 9 Mounting adapter enabling direct mounting of the relay on a panel
- 10 Mounting adapter enabling direct mounting of the relay on a U-rail



### Socket description

#### Sockets with mixed contact terminals (1)

- 1 Connection by screw clamp terminals
- 2 5, 8, 11, or 14 female contacts for the relay pins
- 3 Location for protection modules or the timer module
- 4 Locating slot for mounting on rail with mounting clip
- 5 2 or 4 holes for panel mounting

(1) The inputs are mixed with the relay supply, with the outputs being located on the opposite side of the socket.



### Power relays for customer assembly

#### Power relays without LED (sold in lots of 10)

Control circuit voltage V	Number and type of contacts - Thermal current (I <sub>th</sub> )							
	1 CO - 15 A		2 CO - 15 A		3 CO - 15 A		4 CO - 15 A	
	Unit reference	Weight kg/lb	Unit reference	Weight kg/lb	Unit reference	Weight kg/lb	Unit reference	Weight kg/lb
12 ...	<b>RPM11JD</b>	0.026/0.057	<b>RPM21JD</b>	0.036/0.079	<b>RPM31JD</b>	0.054/0.119	<b>RPM41JD</b>	0.071/0.157
24 ...	<b>RPM11BD</b>	0.026/0.057	<b>RPM21BD</b>	0.036/0.079	<b>RPM31BD</b>	0.054/0.119	<b>RPM41BD</b>	0.071/0.157
48 ...	<b>RPM11ED</b>	0.026/0.057	<b>RPM21ED</b>	0.036/0.079	<b>RPM31ED</b>	0.054/0.119	<b>RPM41ED</b>	0.071/0.157
110 ...	<b>RPM11FD</b>	0.026/0.057	<b>RPM21FD</b>	0.036/0.079	<b>RPM31FD</b>	0.054/0.119	<b>RPM41FD</b>	0.071/0.157

24 ~	<b>RPM11B7</b>	0.026/0.057	<b>RPM21B7</b>	0.036/0.079	<b>RPM31B7</b>	0.054/0.119	<b>RPM41B7</b>	0.071/0.157
48 ~	<b>RPM11E7</b>	0.026/0.057	<b>RPM21E7</b>	0.036/0.079	<b>RPM31E7</b>	0.054/0.119	<b>RPM41E7</b>	0.071/0.157
120 ~	<b>RPM11F7</b>	0.026/0.057	<b>RPM21F7</b>	0.036/0.079	<b>RPM31F7</b>	0.054/0.119	<b>RPM41F7</b>	0.071/0.157
230 ~	<b>RPM11P7</b>	0.026/0.057	<b>RPM21P7</b>	0.036/0.079	<b>RPM31P7</b>	0.054/0.119	<b>RPM41P7</b>	0.071/0.157

Power relays with LED (sold in lots of 10)								
12 ...	<b>RPM12JD</b>	0.026/0.057	<b>RPM22JD</b>	0.036/0.079	<b>RPM32JD</b>	0.054/0.119	<b>RPM42JD</b>	0.071/0.157
24 ...	<b>RPM12BD</b>	0.026/0.057	<b>RPM22BD</b>	0.036/0.079	<b>RPM32BD</b>	0.054/0.119	<b>RPM42BD</b>	0.071/0.157
48 ...	<b>RPM12ED</b>	0.026/0.057	<b>RPM22ED</b>	0.036/0.079	<b>RPM32ED</b>	0.054/0.119	<b>RPM42ED</b>	0.071/0.157
110 ...	—	—	<b>RPM22FD</b>	0.036/0.079	—	—	<b>RPM42FD</b>	0.071/0.157

24 ~	<b>RPM12B7</b>	0.026/0.057	<b>RPM22B7</b>	0.036/0.079	<b>RPM32B7</b>	0.054/0.119	<b>RPM42B7</b>	0.071/0.157
48 ~	<b>RPM12E7</b>	0.026/0.057	<b>RPM22E7</b>	0.036/0.079	<b>RPM32E7</b>	0.054/0.119	<b>RPM42E7</b>	0.071/0.157
120 ~	<b>RPM12F7</b>	0.026/0.057	<b>RPM22F7</b>	0.036/0.079	<b>RPM32F7</b>	0.054/0.119	<b>RPM42F7</b>	0.071/0.157
230 ~	<b>RPM12P7</b>	0.026/0.057	<b>RPM22P7</b>	0.036/0.079	<b>RPM32P7</b>	0.054/0.119	<b>RPM42P7</b>	0.071/0.157



RPZF4 + Relay RPM42P7



RUW24\*\*\*

<b>Sockets</b>					
Contact terminal arrangement	Connection	Relay type	Sold in lots of	Unit reference	Weight kg/lb
Mixed	Screw clamp terminals	RPM1***	10	RPZF1	0.042/0.093
		RPM2***	10	RPZF2	0.054/0.119
		RPM3***	10	RPZF3	0.072/0.159
		RPM4***	10	RPZF4	0.094/0.207
<b>Protection modules</b>					
Description	Voltage V	Socket type	Sold in lots of	Unit reference	Weight kg/lb
Diode	6...250 -/-	RPZF1 RPZF2	10	RXM040W	0.003/0.007
		RPZF3 RPZF4	10	RUW240BD	0.004/0.009
RC circuit	24...60 ~	RPZF1 RPZF2	10	RXM041BN7	0.010/0.022
	110...240 ~	RPZF1 RPZF2	10	RXM041FU7	0.010/0.022
Varistor	6...24 ~/-/-	RPZF1 RPZF2	10	RXM021RB	0.030/0.066
	24...60 ~/-/-	RPZF1 RPZF2	10	RXM021BN	0.030/0.066
	110...240 ~/-/-	RPZF1 RPZF2	10	RXM021FP	0.030/0.066
	24 ~/-/-	RPZF3 RPZF4	10	RUW242B7	0.004/0.009
	240 ~/-/-	RPZF3 RPZF4	10	RUW242P7	0.004/0.009
<b>Timer module (1)</b>					
Description	Voltage V	Socket type	Reference		Weight kg/lb
Multifunction	24... 240 ~/-/-	RPZF3 RPZF4	RUW101MW		0.020/0.044

(1) See timer module description (selection of functions and time delays) on [www.se.com/harmonyelectromechanicalrelays](http://www.se.com/harmonyelectromechanicalrelays).



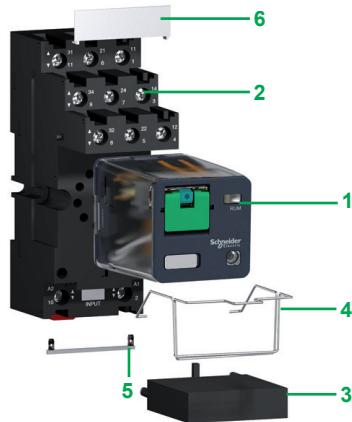
RPZ4DA



RPZ1FA

Accessories				
Description	For use with	Sold in lots of	Unit reference	Weight kg/lb
<b>Metal maintaining clamp</b> (for single-pole relays)	RPZF1	10	<b>RPZR235</b>	0.001/0.002
<b>Mounting adapters for 1U rail (1)</b>	RPM4***	10	<b>RPZ4DA</b>	0.006/0.013
<b>Mounting adapters with panel mounting lugs</b>	RPM1***	10	<b>RPZ1FA</b>	0.002/0.004
	RPM2***	10	<b>RXZE2FA</b>	0.002/0.004
	RPM3***	10	<b>RPZ3FA</b>	0.003/0.007
<b>Clip-in legends</b> (sheet of 108 legends)	All relays	10	<b>RXZL520</b>	0.080/0.176
<b>Clip-in legends</b> (sheet of 16 legends)	All relays	10	<b>RGZL520</b>	0.080/0.176

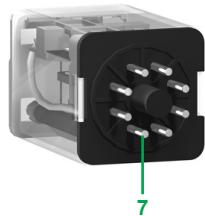
(1) Test button becomes inaccessible.



#### Presentation of the range

The RUM universal relay range comprises:

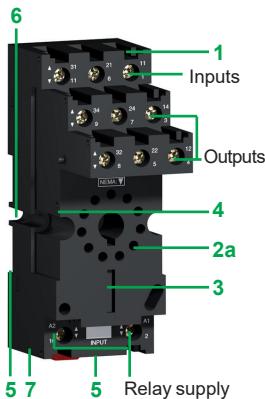
- 1 10 A relays with 2 and 3 CO contacts, and cylindrical or flat (Faston type) pins (all these relays have the same dimensions)
- 2 Sockets with mixed or separate contact terminals
- 3 Protection modules (diode, RC circuit, or varistor) or 1 timer module, common to all RUM sockets
- 4 Metal maintaining clamp for all RUM sockets
- 5 2-pole bus jumper that can be used on sockets with separate contact terminals in order to simplify cabling when creating an equipotential link between the coil terminals
- 6 Clip-in legends for the sockets



#### Relay description

- 1 Spring-return pushbutton for testing the contacts (green:  $\perp$ , red:  $\sim$ )
- 2 Mechanical "relay status" indicator
- 3 Removable lock-down door enabling forced maintaining of the contacts for test sequences or maintenance purposes (1)
- 4 LED (depending on version) indicating the relay status
- 5 Removable legend for relay identification
- 6 Area by which the product can be easily gripped
- 7 8 or 11 cylindrical pins
- 8 8 or 11 flat (Faston type) pins

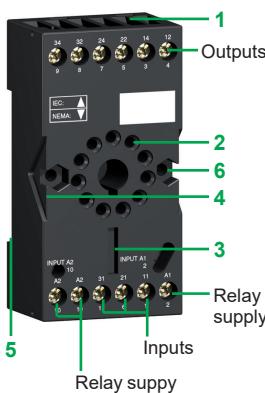
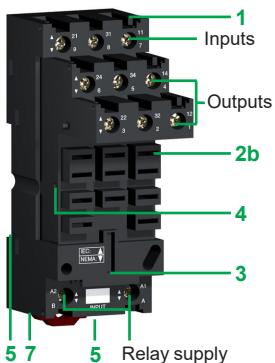
(1) During operation, this lock-down door must always be in the closed position.



### Socket description

#### Sockets with separate contact terminals (1)

- 1 Connection by screw connector
- 2 a 8 or 11 female contacts for the relay cylindrical pins
  - b 11 female contacts for the relay flat pins
- 3 Location for protection modules or the timer module
- 4 Locking component for metal maintaining clamp
- 5 Locating slot for mounting on DIN rail with mounting clip
- 6 2 holes for panel mounting
- 7 Location for bus jumpers (see dimensions for mounting on sockets on [www.se.com/harmonyelectromechanicalrelays](http://www.se.com/harmonyelectromechanicalrelays))



#### Sockets with mixed contact terminals

- 1 Connection by screw connector
- 2 8 or 11 female contacts for the relay cylindrical pins
- 3 Location for protection modules or the timer module
- 4 Locking component for metal maintaining clamp
- 5 A locating slot for mounting on DIN rail
- 6 2 holes for panel mounting

(1) The inputs and outputs are separate from the relay supply.

## Harmony Electromechanical Relays

### Plug-in relays

### RUM universal relays



RUMC21BD



RUMC21F7



RUMC32BD



RUMF32F7

PF140700C

PF140725B

PF140708C

PF140735

### Universal relays for customer assembly

Relays for standard applications, with lockable test button and without LED (sold in lots of 10)

Pins	Control circuit voltage V	Number and type of contacts - Thermal current (I <sub>th</sub> )			
		2 CO - 10 A Unit reference	Weight kg/lb	3 CO - 10 A Unit reference	Weight kg/lb
Cylindrical	— 12	RUMC21JD	0.086/0.190	RUMC31JD	0.086/0.190
	— 24	RUMC21BD	0.086/0.190	RUMC31BD	0.086/0.190
	— 48	—	—	RUMC31ED	0.086/0.190
	— 60	—	—	RUMC31ND	0.086/0.190
	— 110	RUMC21FD	0.086/0.190	RUMC31FD	0.086/0.190
	— 125	—	—	RUMC31GD	0.086/0.190
	— 220	—	—	RUMC31MD	0.086/0.190
	~ 24	RUMC21B7	0.086/0.190	RUMC31B7	0.086/0.190
	~ 48	—	—	RUMC31E7	0.086/0.190
	~ 120	RUMC21F7	0.086/0.190	RUMC31F7	0.086/0.190
	~ 230	RUMC21P7	0.086/0.190	RUMC31P7	0.086/0.190
Flat (Faston type)	— 12	RUMF21JD	0.086/0.190	RUMF31JD	0.086/0.190
	— 24	RUMF21BD	0.086/0.190	RUMF31BD	0.086/0.190
	— 48	RUMF21ED	0.086/0.190	RUMF31ED	0.086/0.190
	— 110	RUMF21FD	0.086/0.190	RUMF31FD	0.086/0.190
	~ 24	RUMF21B7	0.086/0.190	RUMF31B7	0.086/0.190
	~ 48	RUMF21E7	0.086/0.190	RUMF31E7	0.086/0.190
	~ 120	RUMF21F7	0.086/0.190	RUMF31F7	0.086/0.190

### Relays for standard applications, with lockable test button and LED (sold in lots of 10)

Cylindrical	— 12	RUMC22JD	0.086/0.190	RUMC32JD	0.086/0.190
	— 24	RUMC22BD	0.086/0.190	RUMC32BD	0.086/0.190
	— 48	RUMC22ED	0.086/0.190	RUMC32ED	0.086/0.190
	— 110	RUMC22FD	0.086/0.190	RUMC32FD	0.086/0.190
	— 125	—	—	RUMC32GD	0.086/0.190
	~ 24	RUMC22B7	0.086/0.190	RUMC32B7	0.086/0.190
	~ 48	RUMC22E7	0.086/0.190	RUMC32E7	0.086/0.190
	~ 120	RUMC22F7	0.086/0.190	RUMC32F7	0.086/0.190
	~ 230	RUMC22P7	0.086/0.190	RUMC32P7	0.086/0.190
Flat (Faston type)	— 12	RUMF22JD	0.086/0.190	RUMF32JD	0.086/0.190
	— 24	RUMF22BD	0.086/0.190	RUMF32BD	0.086/0.190
	— 110	—	0.086/0.190	RUMF32FD	0.086/0.190
	~ 24	RUMF22B7	0.086/0.190	RUMF32B7	0.086/0.190
	~ 120	RUMF22F7	0.086/0.190	RUMF32F7	0.086/0.190
	~ 230	RUMF22P7	0.086/0.190	RUMF32P7	0.086/0.190

(1) The inputs are mixed with the relay supply, with the outputs being located on the opposite side of the socket.

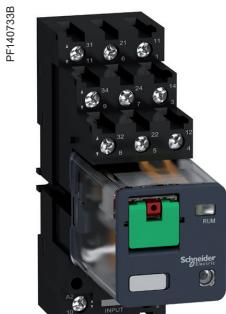
## References (continued)

# Harmony Electromechanical Relays

Plug-in relays  
RUM universal relays

 <b>PF1407398</b> <b>RUZSC3M + Relay RUMC3●●●</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="6"><b>Sockets</b></th> </tr> <tr> <th>Contact terminal arrangement</th><th>Connection</th><th>Relay type</th><th>Sold in lots of</th><th>Unit reference</th><th>Weight kg/lb</th></tr> </thead> <tbody> <tr> <td rowspan="2">Mixed</td><td rowspan="2">Screw connector</td><td>RUMC2●●●</td><td>10</td><td><a href="#">RUZC2M</a></td><td>0.054/0.119</td></tr> <tr> <td>RUMC3●●●</td><td>10</td><td><a href="#">RUZC3M</a></td><td>0.054/0.119</td></tr> <tr> <td rowspan="4">Separate</td><td rowspan="4">Screw connector</td><td>RUMC2●●●</td><td>10</td><td><a href="#">RUZSC2M</a></td><td>0.095/0.209</td></tr> <tr> <td>RUMC3●●●</td><td>10</td><td><a href="#">RUZSC3M</a></td><td>0.100/0.220</td></tr> <tr> <td>RUMF2●●●</td><td>10</td><td><a href="#">RUZSF3M</a></td><td>0.095/0.209</td></tr> <tr> <td>RUMF3●●●</td><td></td><td></td><td></td></tr> </tbody> </table> <table border="1" style="width: 100%; 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(1) Please refer to "Harmony Timer Relays" catalog.



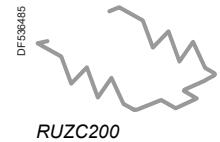
**PF1407398**  
**RUZSC3M + Relay RUMC3●●●**



**PF16027**  
**RUW241P7**



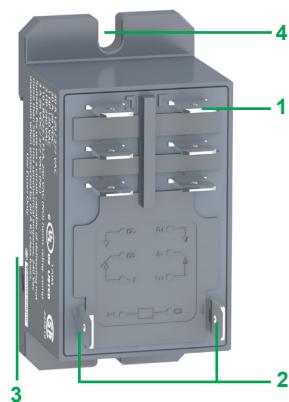
**PF16229**  
**RUW101MW**



**DF536485**  
**RUZC200**



**DF536203**  
**RUZS2**



**Presentation of the range**

RPF power relays with 2 CO or 2 NO contacts comprise:

- 1** 4 or 6 Faston type pins
- 2** 2 relay supply pins
- 3** Locating slot for mounting on DIN rail
- 4** 2 holes for panel mounting



RPF2A••

Power relays				
Control circuit voltage V	Sold in lots of	Number and type of contacts - Thermal current (Ith)		
		2 NO - 30 A (1)	2 CO - 30 A (1)	
12 ---	10	RPF2AJD	RPF2BJD	0.082/ 0.181
24 ---	10	RPF2ABD	RPF2BBD	0.082/ 0.181
24 ~	10	RPF2AB7	RPF2BB7	0.082/ 0.181
120 ~	10	RPF2AF7	RPF2BF7	0.082/ 0.181
230 ~	10	RPF2AP7	RPF2BP7	0.082/ 0.181

(1) 30 A when mounted with 13 mm (0.51 in.) gap between two relays and 25 A when mounted side by side without a gap.

# Harmony Electromechanical Relays

## Interface, miniature and power electromechanical relays

Relays			
Contact types			
Symbol	Configuration	EU	USA
	Make contact (Normally Open)	NO	SPST-NO DPST-NO nPST-NO (1)
-	Break contact (Normally Closed)	NC	SPST-NC DPST-NC nPST-NC (1)
L	Changeover Contact	CO	SPDT DPDT nPDT (1)

Utilization categories		
Category	Type of current	Applications
AC-1	~ 1-phase ~ 3-phase	Resistive or slightly inductive loads
AC-3	~ 3-phase	Starting and braking of squirrel cage motors; reversing direction of rotation only after stopping of motor
AC-4	~ 3-phase	Starting of squirrel cage motors, inching; plugging, reversing direction of rotation
DC-1	---	Resistive or slightly inductive loads (2)
AC-14	~ 1-phase	Control of electromagnetic loads (< 72 VA), auxiliary control relays, power contactors, electromagnetic solenoid valves, and electromagnets
AC-15	~ 1-phase	Control of electromagnetic loads (> 72 VA), auxiliary control relays, power contactors, electromagnetic solenoid valves, and electromagnets
DC-13	---	Control of electromagnetic loads, auxiliary control relays, power contactors, magnetic solenoid valves, and electromagnets

Protection categories		
Category	Explanation	Condition
RT 0	Unenclosed relay	Relay not provided with a protective case
RT I	Dust protected relay	Relay provided with a case that helps to protect its mechanism from dust
RT II	Flux-proof relay	Relay capable of being automatically soldered without allowing the migration of solder fluxes beyond the intended areas
RT III	Wash-tight relay	Relay capable of being automatically soldered and then washed to remove flux residues and minimize the possibility of ingress of flux or washing solvents
RT IV	Sealed relay	Relay provided with a case that has no venting to the outside atmosphere
RT V	Hermetically sealed relay	Sealed relay with an enhanced level of sealing

(1) n = number of contacts.

(2) The switchable voltage can be doubled, for an equal current, by connecting 2 contacts in series.

### Protection modules

Whenever an inductive load is de-energized (coil of a relay or of a contactor), an overvoltage appears at its terminals. This voltage peak can reach several thousand volts and a frequency of several MHz.

It is likely to disturb the operation of automation systems that contain electronic devices.

Protection modules are used to reduce the voltage peak on de-energization and therefore limit the energy of interference signals to a level that will not disturb surrounding coils and electronic devices.

These modules are used to help reduce the risk of:

- electromagnetic compatibility problems
- deterioration of contact materials
- damage to insulation due to overvoltage
- damage to electronic components

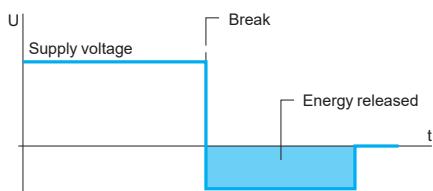
#### Diode protection module (with or without LED)

##### ■ Advantages

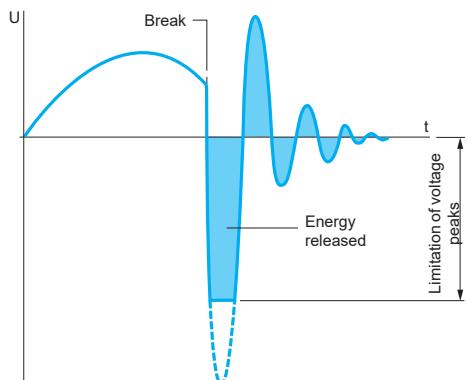
- accumulation of energy allowing current to flow in the same direction
- absence of any voltage peaks at the coil terminals
- low cost

##### ■ Disadvantages

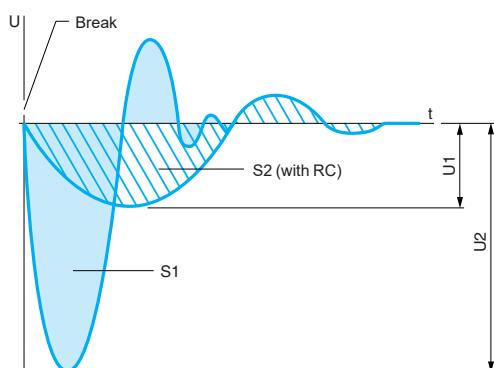
- increase in relay drop-out time (3 to 4 times the usual time)
- no polarity protection
- de-energization of the relay



Coil voltage with diode protection module (--- only)



Coil voltage with varistor protection module (~ and ---)



Coil voltage with RC circuit protection module (~ only)

S1 = S2 = Energy released

#### Protection module with varistor

##### ■ Advantages

- can be used with ~ and --- supply
- voltage peak limited to about 2 Un
- little effect on relay drop-out time

##### ■ Disadvantages

- no modification of coil's own oscillating frequency
- limitation of switching frequency

#### Protection module with RC circuit

##### ■ Advantages

- coil oscillating frequency reduced to about 150 Hz
- voltage peak limited to 3 Un
- little effect on relay drop-out time

##### ■ Disadvantages

- no protection for low voltages

# Harmony Electromechanical Relays

## Interface, miniature and power electromechanical relays

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<b>#</b>	<b>R</b>					
16-1342	RE48App	37	RPM31P7	31	RSB2A080B7PV	13
16-725SC-1	REXL2pp	24	RPM32B7	31	RSB2A080BD	14
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70-379-1	RGZE05E	19	RPM32E7	31	RSB2A080E7	14
70-461-1	RGZE05P	19	RPM32ED	31	RSB2A080ED	14
70-725-1	RGZE08E	19	RPM32F7	31	RSB2A080F7	14
70-782E14-1	RGZE08P	19	RPM32JD	31	RSB2A080F7PV	13
70-782EL14-1	RGZE1S35M	19	RPM32P7	31	RSB2A080FD	14
70-ASMD-250	RGZE1S48M	19	RPM41B7	31	RSB2A080JD	14
70-ASMM-120	RGZL520	19	RPM41BD	31	RSB2A080JDPV	13
70-ASMM-24	RGZS08	15	RPM41E7	31	RSB2A080M7	14
70-ASMM-240	RGZR215	19	RPM41ED	31	RSB2A080M7PV	13
70-BSMSD-250	RGZF2AB7	39	RPM41F7	31	RSB2A080P7	14
70-BSMLG-24	RGZF2ABD	39	RPM41FD	31	RSB2A080P7PV	13
70-BSMM-120	RGZF2AF7	39	RPM41JD	31	RSB2A080U7	14
70-BSMM-24	RGZF2AJD	39	RPM41P7	31	RSL1AB4BD	11
70-BSMM-240	RGZF2AP7	39	RPM42B7	31	RSL1AB4ED	11
725AXXBC3ML-120A	RGZF2BB7	39	RPM42BD	31	RSL1AB4JD	11
725AXXBC3ML-12D	RGZF2BF7	39	RPM42E7	31	RSL1AB4ND	11
725AXXBC3ML-240A	RGZF2BJD	39	RPM42ED	31	RSL1GB4BD	11
725AXXXBM4L-120A	RGZF2BP7	39	RPM42F7	31	RSL1GB4ED	11
725AXXXBM4L-12D	RGZF2BD	39	RPM42FD	31	RSL1GB4JD	11
725AXXXBM4L-24A	RGZF2BF7	39	RPM42JD	31	RSL1GB4ND	11
725AXXXBM4L-24D	RGZF2BP7	39	RPM42P7	31	RSL1PRBU	11
725AXXXBM4L-240A	RGZF2BD	39	RPM11B7	31	RSL1PREU	11
725AXXXBM4L-240A	RGZF1FA	33	RPM11BD	31	RSL1PRFU	11
725AXXXBM4L-24A	RGZF3FA	33	RPM11E7	31	RSL1PRJU	11
725AXXXBM4L-24D	RGZF4DA	33	RPM11ED	31	RSL1PRPU	11
725AXXXBM4L-240A	RGZF5F1	32	RPM11F7	31	RSL1PVBU	11
725AXXSC3ML-120A	RGZF5F2	32	RPM11FD	31	RSL1PVEU	11
725AXXSC3ML-12D	RGZF5F3	32	RPM11JD	31	RSL1PVFU	11
725AXXSC3ML-240A	RGZF5F4	32	RPM11P7	31	RSL1PVJU	11
725AXXSC3ML-24A	RGZR235	33	RPM12B7	31	RSL1PVPU	11
725AXXSC3ML-24D	RSB1A120B7	14	RPM12BD	31	RSL2Z	11
725BXXBC3ML-120A	RSB1A120B7PV	13	RPM12E7	31	RSLZ3	11
725BXXBC3ML-12D	RSB1A120BD	14	RPM12ED	31	RSLZ5	11
725BXXBC3ML-240A	RSB1A120BDPV	13	RPM12F7	31	RSLZRA1	11
725BXXBC3ML-24A	RSB1A120E7	14	RPM12JD	31	RSLZRA2	11
725BXXBC3ML-24D	RSB1A120ED	14	RPM12P7	31	RSLZRA3	11
725BXXBM4L-120A	RSB1A120F7	14	RPM21B7	31	RSLZRA4	11
725BXXBM4L-12D	RSB1A120F7PV	13	RPM21BD	31	RSLZVA1	11
725BXXBM4L-240A	RSB1A120FD	14	RPM21E7	31	RSLZVA2	11
725BXXBM4L-24A	RSB1A120JD	14	RPM21ED	31	RSLZVA3	11
725BXXBM4L-24D	RSB1A120JDPV	13	RPM21F7	31	RSLZVA4	11
725BXXSC3ML-120A	RSB1A120M7	14	RPM21FD	31	RSZE05P	14
725BXXSC3ML-12D	RSB1A120P7	14	RPM21JD	31	RSZE08P	14
725BXXSC3ML-240A	RSB1A120P7PV	13	RPM21P7	31	RSZE1S35M	14
725BXXSC3ML-24A	RSB1A120U7	14	RPM22B7	31	RSZE1S48M	14
725BXXSC3ML-24D	RSB1A160B7	14	RPM22BD	31	RSZL300	15
782XBH21-24D	RSB1A160BD	14	RPM22E7	31	RSZL300	19
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782XDGH10-120A	RSB1A160E7	14	RPM22F7	31	RSZS02	15
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782XDGH10-240A	RSB1A160F7	14	RPM22JD	31	RUMC21BD	36
782XDGH10-24A	RSB1A160FD	14	RPM22P7	31	RUMC21F7	36
782XDGH10-24D	RSB1A160JD	14	RPM31B7	31	RUMC21F7	36
782XDGH10-6A	RSB1A160M7	14	RPM31BD	31	RUMC21F7	36
782XDGH10-6D	RSB1A160ND	14	RPM31E7	31	RUMC21F7	36
782XDGH10-120A	RSB1A160P7	14	RPM31ED	31	RUMC21F7	36
782XDGH10-12D	RSB1A160P7PV	13	RPM31F7	31	RUMC21F7	36
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# Harmony Electromechanical Relays

## Interface, miniature and power electromechanical relays

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<b>RUZSF3M</b>	37	<b>RXG25F7</b>	18	<b>RXM4AB1MD</b>	23	<b>RZM031BN</b>	14
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<b>RXG11BD</b>	17	<b>RXG25P7</b>	18	<b>RXM4AB1P7PVM</b>	22	<b>RZM031FPD</b>	14
<b>RXG11F7</b>	17	<b>RXM021BN</b>	24	<b>RXM4AB1P7PVS</b>	22		19
<b>RXG11JD</b>	17		32	<b>RXM4AB1U7</b>	23	<b>RZM031RB</b>	14
<b>RXG11P7</b>	17	<b>RXM021FP</b>	24	<b>RXM4AB2B7</b>	23		19
<b>RXG12B7</b>	18		32	<b>RXM4AB2B7PVM</b>	22	<b>RZM040W</b>	14
<b>RXG12B7PV</b>	17	<b>RXM021RB</b>	24	<b>RXM4AB2B7PVS</b>	22		19
<b>RXG12BD</b>	18		32	<b>RXM4AB2BD</b>	23	<b>RZM041BN7</b>	14
<b>RXG12BDPV</b>	17	<b>RXM040W</b>	24	<b>RXM4AB2BDPVM</b>	22		19
<b>RXG12E7</b>	18		32	<b>RXM4AB2BDPVS</b>	22	<b>RZM041FU7</b>	14
<b>RXG12ED</b>	18	<b>RXM041BN7</b>	24	<b>RXM4AB2E7</b>	23		19
<b>RXG12F7</b>	18		32	<b>RXM4AB2ED</b>	23		
<b>RXG12FD</b>	18	<b>RXM041FU7</b>	24	<b>RXM4AB2F7</b>	23		
<b>RXG12JD</b>	18		32	<b>RXM4AB2FD</b>	23		
<b>RXG12P7</b>	18	<b>RXM2AB1B7</b>	23	<b>RXM4AB2GD</b>	23		
<b>RXG12P7PV</b>	17	<b>RXM2AB1BD</b>	23	<b>RXM4AB2JD</b>	23		
<b>RXG12RD</b>	18	<b>RXM2AB1E7</b>	23	<b>RXM4AB2P7</b>	23		
<b>RXG13B7</b>	18	<b>RXM2AB1ED</b>	23	<b>RXM4AB2P7PVM</b>	22		
<b>RXG13BD</b>	18	<b>RXM2AB1F7</b>	23	<b>RXM4AB2P7PVS</b>	22		
<b>RXG13BDPV</b>	17	<b>RXM2AB1FD</b>	23	<b>RXM4GB1B7</b>	23		
<b>RXG13F7</b>	18	<b>RXM2AB1JD</b>	23	<b>RXM4GB1BD</b>	23		
<b>RXG13JD</b>	18	<b>RXM2AB1P7</b>	23	<b>RXM4GB1E7</b>	23		
<b>RXG13P7</b>	18	<b>RXM2AB2B7</b>	23	<b>RXM4GB1F7</b>	23		
<b>RXG13P7PV</b>	17	<b>RXM2AB2B7PVM</b>	22	<b>RXM4GB1JD</b>	23		
<b>RXG15BD</b>	18	<b>RXM2AB2BDPVS</b>	22	<b>RXM4GB1P7</b>	23		
<b>RXG15F7</b>	18	<b>RXM2AB2E7</b>	23	<b>RXM4GB2B7</b>	23		
<b>RXG15JD</b>	18	<b>RXM2AB2ED</b>	23	<b>RXM4GB2BD</b>	23		
<b>RXG15P7</b>	18	<b>RXM2AB2F7</b>	23	<b>RXM4GB2E7</b>	23		
<b>RXG21B7</b>	17	<b>RXM2AB2FD</b>	23	<b>RXM4GB2ED</b>	23		
<b>RXG21B7PV</b>	17	<b>RXM2AB2JD</b>	23	<b>RXM4GB2F7</b>	23		
<b>RXG21BD</b>	17	<b>RXM2AB2P7</b>	23	<b>RXM4GB2GD</b>	23		
<b>RXG21BDPV</b>	17	<b>RXM2AB2P7PVM</b>	22	<b>RXM4GB2JD</b>	23		
<b>RXG21E7</b>	17	<b>RXM2AB2P7PVS</b>	22	<b>RXM4GB2MD</b>	23		
<b>RXG21F7</b>	17	<b>RXM3AB1B7</b>	23	<b>RXM4GB2P7</b>	23		
<b>RXG21JD</b>	17	<b>RXM3AB1BD</b>	23	<b>RXM4GB2U7</b>	23		
<b>RXG21M7</b>	17	<b>RXM3AB1E7</b>	23	<b>RXZ400</b>	25		
<b>RXG21P7</b>	17	<b>RXM3AB1ED</b>	23	<b>RXZE14P</b>	24		
<b>RXG21P7PV</b>	17	<b>RXM3AB1F7</b>	23	<b>RXZE2FA</b>	25		
<b>RXG21RD</b>	17	<b>RXM3AB1FD</b>	23	<b>RXZE2FA</b>	33		
<b>RXG22B7</b>	18	<b>RXM3AB1JD</b>	23	<b>RXZE2M114</b>	24		
<b>RXG22B7PV</b>	17	<b>RXM3AB1P7</b>	23		27		
<b>RXG22BD</b>	18	<b>RXM3AB2B7</b>	23	<b>RXZE2M114M</b>	24		
<b>RXG22BDPV</b>	17	<b>RXM3AB2BD</b>	23		27		
<b>RXG22E7</b>	18	<b>RXM3AB2E7</b>	23	<b>RXZE2S108M</b>	24		
<b>RXG22ED</b>	18	<b>RXM3AB2F7</b>	23	<b>RXZE2S111M</b>	24		
<b>RXG22F7</b>	18	<b>RXM3AB2JD</b>	23	<b>RXZE2S114M</b>	24		
<b>RXG22FD</b>	18	<b>RXM3AB2P7</b>	23	<b>RXZL300</b>	25		
<b>RXG22JD</b>	18	<b>RXM4AB1B7</b>	23	<b>RXZL420</b>	25		
<b>RXG22M7</b>	18	<b>RXM4AB1BD</b>	23	<b>RXZL520</b>	25		
<b>RXG22P7</b>	18	<b>RXM4AB1BDPVM</b>	22		33		
<b>RXG22P7PV</b>	17	<b>RXM4AB1BDPVS</b>	22		37		
<b>RXG23B7</b>	18	<b>RXM4AB1E7</b>	23	<b>RXZR315</b>	25		
<b>RXG23BD</b>	18			<b>RXZR335</b>	25		
<b>RXG23BDPV</b>	17			<b>RXZS2</b>	27		
<b>RXG23E7</b>	18			<b>RXZS2</b>	25		
<b>RXG23F7</b>	18			<b>RZM021BN</b>	14		
<b>RXG23M7</b>	18				19		