



Harmony Electromechanical Relays

Interface, miniature, and power
electromechanical relays



Harmony

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Advanced operator interface and industrial relays

Harmony operator interface and industrial relays enhance operational efficiency and equipment availability across industrial and building applications. Harmony includes intelligent connected products and edge terminals that visualize, gather and process data, enabling informed operator decisions

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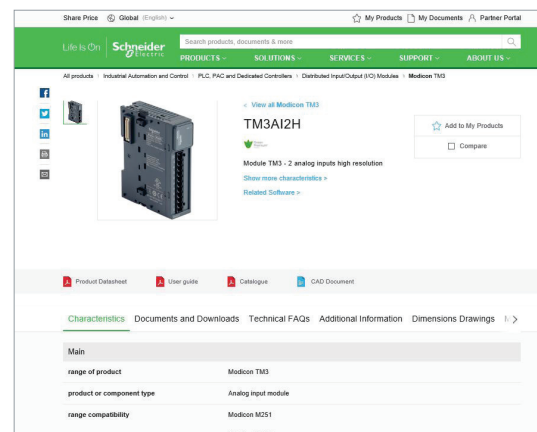
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References

Modicon TM3
I/O expansion modules for Modicon controllers
Analog I/O modules

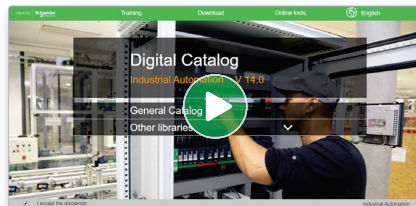
References	Modicon TM3 analog input modules	Number and type of channels	Input range	Output range	Resolution	Input terminal block (1)	Reference	Weight (g)
TM3A01	16-bit	2 independent inputs	-10...+10 VDC	-10...10 mA	16 bits	15-pin	TM3A01	0.170
		2 independent inputs	-10...+10 VDC 0...20 mA A.C. 20 mA	-10...10 mA	16 bits	15-pin	TM3A01	0.170
TM3A02	16-bit	4 independent inputs	-10...+10 VDC	-10...10 mA	16 bits	15-pin	TM3A02	0.170
		4 independent inputs	-10...+10 VDC 0...20 mA A.C. 20 mA	-10...10 mA	16 bits	15-pin	TM3A02	0.170
TM3A03	16-bit	2 independent inputs or temperature inputs	-10...+10 VDC (L, K, R, B, T, E, C) RTD: Pt100, Pt1000, Pt500, Pt10000, Pt100, Pt1000, Pt500, Pt10000	-10...10 mA	16 bits	15-pin	TM3A03	0.170
		2 independent inputs or temperature inputs	-10...+10 VDC (L, K, R, B, T, E, C) RTD: Pt100, Pt1000, Pt500, Pt10000	-10...10 mA	16 bits	15-pin	TM3A03	0.170
TM3A04	16-bit	2 independent inputs	-10...+10 VDC	-10...10 mA	16 bits	15-pin	TM3A04	0.170
		2 independent inputs	-10...+10 VDC 0...20 mA A.C. 20 mA	-10...10 mA	16 bits	15-pin	TM3A04	0.170



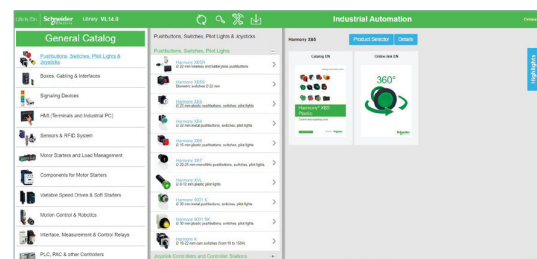
Each commercial reference presented in a catalog contains a hyperlink. Click on it to obtain the technical information of the product:

- Characteristics, Dimensions and drawings, Mounting and clearance, Connections and schemas, Performance curves
- Product image, Instruction sheet, User guide, Product certifications, End of life manual

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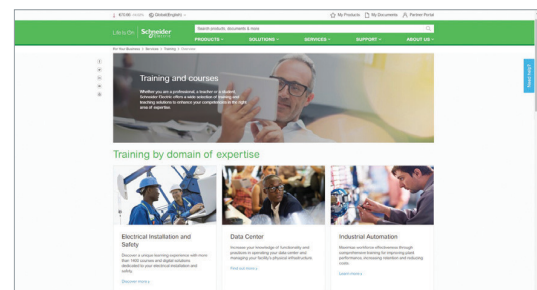


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General presentation

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RSL slim interface relays

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RSB interface relays

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RXG interface relays

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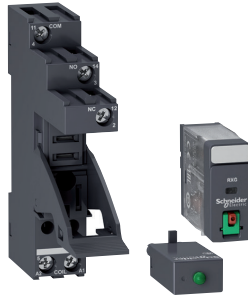
RXM miniature relays

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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

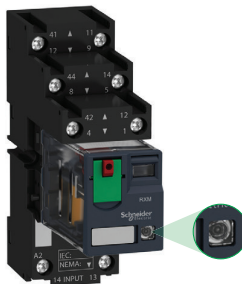
Easy to select

- > 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



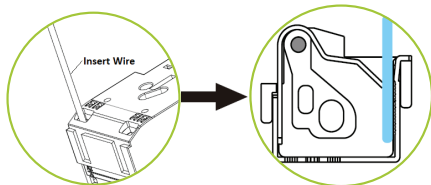
LED indicator for relay status

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)	~ ---
Control circuit voltage	~ ---
Pin type	Flat (Fasion type)
Operational voltage	Electrical, resistive load Mechanical, no-load
Durability (operating cycles per hour)	10,000,000 for AC coil 10,000,000 for DC coil
Functions	LED Mechanical indicator Test button
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

Connection	Separate	Mixed	
Accessories	Screw connector Yes No Yes (plastic, integrated) Yes	Push-in terminals Yes No Yes Yes, 2-pole	Screw clamp terminals No No No No
Conventional thermal current (Ith)	10 A for 1 CO 5 A for 2 CO	10 A 5 A 10 A 5 A	10 A 5 A
Type references	RGZE1S35M RGZE1S48M RGZE08P RGZE06E RGZE08E		
Pages	18		

(1) Pre-assembled interface relays **RSL1PV●●** and **RSL1PP●●** (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
Slim interface relays**



1 CO/6 A	1 CO/16 A 1 CO/12 A 2 CO/8 A
12...60 V	24...240 V 6...110 V
Flat (PCB type, reinforced)	Flat (PCB type)
60,000	100,000 30,000,000
10,000,000	
No	Yes (with protection modules)
No	
No	
Standard and low level	Standard
No	
No	
RSL1●B4●D (1)	RSB●●●●●● (1)
11	13
Sockets with LED and protection circuit	Sockets without LED



Separate	Separate	Separate	Separate
Screw connector	Screw connector	Screw connector	Screw connector
No	Yes	Yes	Yes
No	No	No	No
No	No	No	No
Yes	Yes	Yes	Yes
Yes, 2-pole	Yes, 2-pole	Yes, 2-pole	Yes, 2-pole
6 A	6 A	(2 terminals) × 10 A (2)	12 A 10 A
RSL1ZV●●	RSL1ZR●●	RSZE1S35M RSZE1S48M	RSZE08P RSZE06P RSZE08P
11	13		





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		2 CO - 5 A	
		Unit reference	Weight kg/lb	Unit reference	Weight kg/lb
24 ---	30	RXG12BDPV (RXG12BD + RGZE1S35M + RZM031RB)	0.059/0.130	RXG22BDPV (RXG22BD + RGZE1S48M + RZM031RB)	0.066/0.145
24 ~	30	RXG12B7PV (RXG12B7 + RGZE1S35M + RZM021RB)	0.059/0.130	RXG22B7PV (RXG22B7 + RGZE1S48M + RZM021RB)	0.067/0.148
230 ~	30	RXG12P7PV (RXG12P7 + RGZE1S35M + RZM021FP)	0.059/0.130	RXG22P7PV (RXG22P7 + RGZE1S48M + RZM021FP)	0.067/0.148

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

24 ---	30	RXG13BDPV (RXG13BD + RGZE1S35M + RZM031RB)	0.058/0.129	RXG23BDPV (RXG23BD + RGZE1S48M + RZM031RB)	0.066/0.145
230 ~	30	RXG13P7PV (RXG13P7 + RGZE1S35M + RZM021FP)	0.059/0.130	RXG23P7PV (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			RXG21BDPV (RXG21BD + RGZE1S48M + RZM031RB)	0.067/0.148
24 ~	30			RXG21B7PV (RXG21B7 + RGZE1S48M + RZM021RB)	0.067/0.148
230 ~	30			RXG21P7PV (RXG21P7 + RGZE1S48M + RZM021FP)	0.067/0.148



Interface relays for customer assembly

Standard cover relays with lockable test button

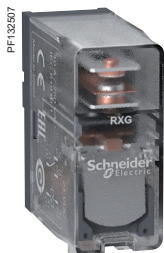
6 ---	10	—		RXG21RD	0.020/0.044
12 ---	10	RXG11JD		RXG21JD	0.020/0.044
24 ---	10	RXG11BD		RXG21BD	0.020/0.044
24 ~	10	RXG11B7		RXG21B7	0.020/0.044
48 ~	10	—		RXG21E7	0.020/0.044
120 ~	10	RXG11F7		RXG21F7	0.020/0.044
220 ~	10	—		RXG21M7	0.020/0.044
230 ~	10	RXG11P7		RXG21P7	0.020/0.044



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	RXG12RD	—	0.020/0.044
12 ---	10	RXG12JD	RXG22JD	0.020/0.044
24 ---	10	RXG12BD	RXG22BD	0.020/0.044
48 ---	10	RXG12ED	RXG22ED	0.020/0.044
110 ---	10	RXG12FD	RXG22FD	0.020/0.044
24 ~	10	RXG12B7	RXG22B7	0.020/0.044
48 ~	10	RXG12E7	RXG22E7	0.020/0.044
120 ~	10	RXG12F7	RXG22F7	0.020/0.044
220 ~	10	—	RXG22M7	0.020/0.044
230 ~	10	RXG12P7	RXG22P7	0.020/0.044

Standard cover relays with LED

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

Clear cover relays

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



RGZE1S48M



RGZE05P



RGZE05E



RZM031RB



RSZL300



RGZS08



RGZR215



RSZS02

Sockets for interface relays

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

Description	Thermal current (Ith)	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 (Ith)	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

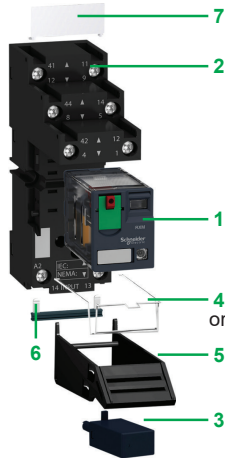
1 CO socket with 1 pole	10 A	RXG1●●●	10	RGZE05E	0.024/0.053
2 CO socket with 2 poles	5 A	RXG2●●●	10	RGZE08E	0.026/0.057

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
		24...60 ~	10	RZM041BN7	0.010/0.022
RC circuit	All separate sockets	110...240 ~	10	RZM041FU7	0.010/0.022
		6...24 ---	10	RZM031RB	0.004/0.009
		24...60 ---	10	RZM031BN	0.004/0.009
Diode + green LED	All separate sockets	110...230 ---	10	RZM031FPD	0.004/0.009
		6...24 ~/----	10	RZM021RB	0.005/0.011
		24...60 ~/----	10	RZM021BN	0.005/0.011
Varistor + green LED	All separate sockets	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

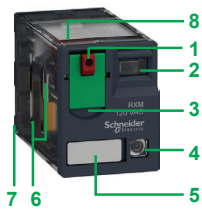


Presentation of the range

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: $\overline{\text{---}}$, 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 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

