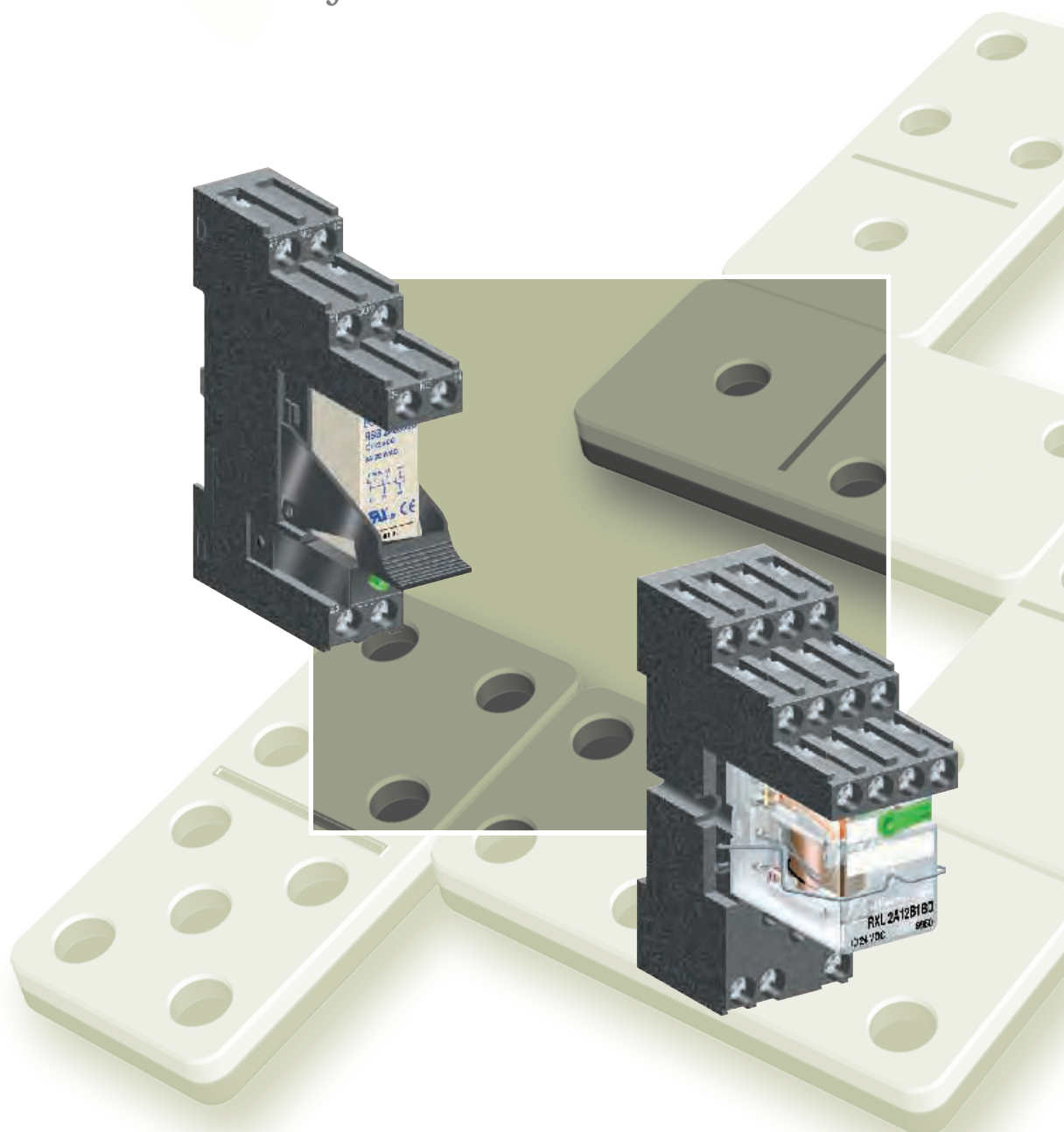


Telemecanique
Zelio Relay
complementary
and easy to assemble



RS interface relays

- Compact dimensions, enabling multiplication of contacts in electrical enclosures.
- Plug-in relay, fast and easy interchangeability.
- Simplicity; no adjustment required in normal use.
- Function marking on relay.



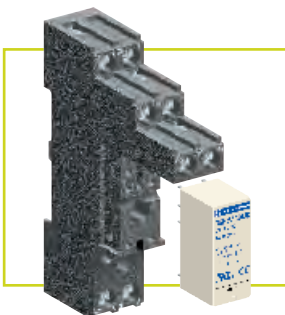
CONTACT				COIL									
Number & type	Rated current A	Max switching voltage DC/AC	Min switching voltage DC	Rated voltage								Rated power	
				V DC				V AC 50-60 Hz				VA	W
2	8	250/400	5	12 V	24 V	48 V	120 V	24 V	48 V	120 V	230 V	0.75	0.45
* RSB2A080				JD	BD	ED	FD	B7	E7	F7	P7		



CONTACT				COIL									
Number & type	Rated current A	Max switching voltage DC/AC	Min switching voltage DC	Rated voltage								Rated power	
				V DC				V AC 50-60 Hz				VA	W
1	12	250/400	5	12 V	24 V	48 V	120 V	24 V	48 V	120 V	230 V	0.75	0.45
* RSB1A120				JD	BD	ED	FD	B7	E7	F7	P7		



CONTACT				COIL									
Number & type	Rated current A	Max switching voltage DC/AC	Min switching voltage DC	Rated voltage								Rated power	
				V DC				V AC 50-60 Hz				VA	W
1	16	250/400	5	12 V	24 V	48 V	120 V	24 V	48 V	120 V	230 V	0.75	0.45
* RSB1A160				JD	BD	ED	FD	B7	E7	F7	P7		

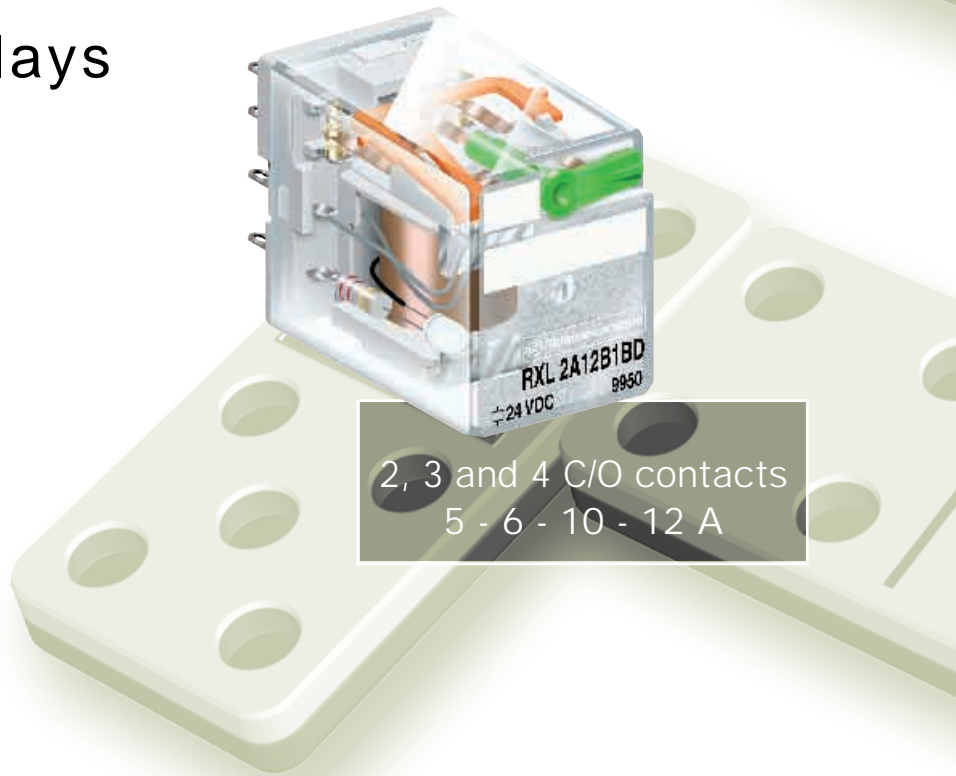


* insert an S after the complete product reference to order the relay and + its socket :

RSB2A080JDS

RX miniature relays

- Choice of number of contacts.
- Relay conforming to international standards.
- Adaptable to all common voltages.
- Fast and easy “plug-in” interchangeability.
- Adjustment by manual control; LED relay state display.
- Simplicity; no adjustment required in normal use.



CONTACT					
Number & type	Rated current A	Max switching voltage DC/AC	Min switching voltage DC	LED	
				without	with
2	12	250/400	5		

RXL2A12B

1 2

COIL									
Rated voltage								Rated power VA W	
V DC				V AC 50-60 Hz				VA	W
12 V	24 V	48 V	120 V	24 V	48 V	120 V	230 V		
JD	BD	ED	FD	B7	E7	F7	P7		



CONTACT					
Number & type	Rated current A	Max switching voltage DC/AC	Min switching voltage DC	LED	
				without	with
3	10	250/400	5		

RXL3A10B

1 2

COIL									
Rated voltage								Rated power VA W	
V DC				V AC 50-60 Hz				VA	W
12 V	24 V	48 V	120 V	24 V	48 V	120 V	230 V		
JD	BD	ED	FD	B7	E7	F7	P7		



CONTACT					
Number & type	Rated current A	Max switching voltage DC/AC	Min switching voltage DC	LED	
				without	with
4	6	250/400	5		

RXL4A06B

1 2

COIL									
Rated voltage								Rated power VA W	
V DC				V AC 50-60 Hz				VA	W
12 V	24 V	48 V	120 V	24 V	48 V	120 V	230 V		
JD	BD	ED	FD	B7	E7	F7	P7		



CONTACT					
Number & type	Rated current A	Max switching voltage DC/AC	Min switching voltage DC	LED	
				without	with
2	5	250/250	5		

RXN21E1

1 2

COIL									
Rated voltage								Rated power VA W	
V DC				V AC 50-60 Hz				VA	W
12 V	24 V	48 V	120 V	24 V	48 V	120 V	230 V		
JD	BD	ED	FD	B7	E7	F7	P7		



CONTACT					
Number & type	Rated current A	Max switching voltage DC/AC	Min switching voltage DC	LED	
				without	with
4	5	250/250	5		

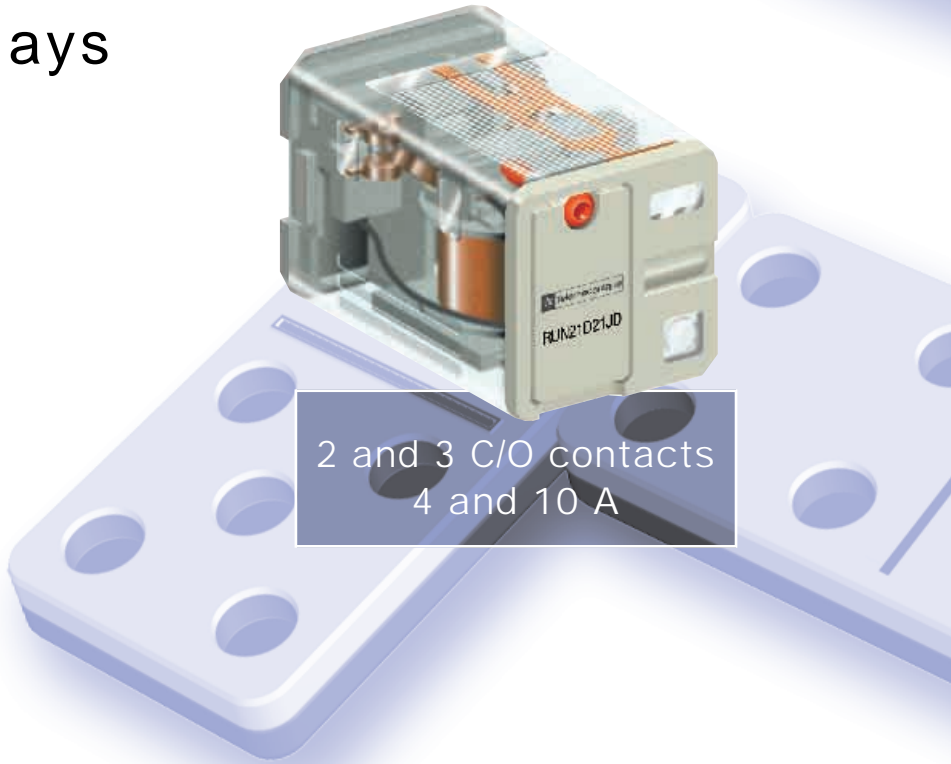
RXN41G1

1 2

COIL									
Rated voltage								Rated power VA W	
V DC				V AC 50-60 Hz				VA	W
12 V	24 V	48 V	120 V	24 V	48 V	120 V	230 V		
JD	BD	ED	FD	B7	E7	F7	P7		

RU universal relays

- Choice of plug type (universal/flat tags).
- Extremely wide power range.
- Adaptable to all common voltages.
- Adjustment by manual control, LED relay state display.
- Possibility of paralleling simplifies data processing.
- Fast and easy “plug-in” interchangeability.
- Simplicity; no adjustment required in normal use.



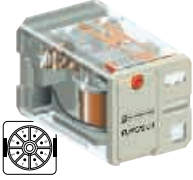
CONTACT					
Number & type	Rated current A	Max switching voltage DC/AC	Min switching voltage DC	LED	
				without	with
2	10	220/250	10mA 17V	without	with

COIL									
Rated voltage								Rated power VA W	
V DC				V AC 50-60 Hz				2.3	1.2
12 V	24 V	48 V	120 V	24 V	48 V	120 V	230 V		
JD	BD	ED	FD	B7	E7	F7	P7		



CONTACT					
Number & type	Rated current A	Max switching voltage DC/AC	Min switching voltage DC	LED	
				without	with
3	10	220/250	10mA 17V	without	with

COIL									
Rated voltage								Rated power VA W	
V DC				V AC 50-60 Hz				2.3	1.2
12 V	24 V	48 V	120 V	24 V	48 V	120 V	230 V		
JD	BD	ED	FD	B7	E7	F7	P7		



CONTACT					
Number & type	Rated current A	Max switching voltage DC/AC	Min switching voltage DC	LED	
				without	with
3	4	220/250	3mA 5V	without	with

COIL									
Rated voltage								Rated power VA W	
V DC				V AC 50-60 Hz				2.3	1.2
12 V	24 V	48 V	120 V	24 V	48 V	120 V	230 V		
JD	BD	ED	FD	B7	E7	F7	P7		



CONTACT					
Number & type	Rated current A	Max switching voltage DC/AC	Min switching voltage DC	LED	
				without	with
2	10	220/250	20	without	with

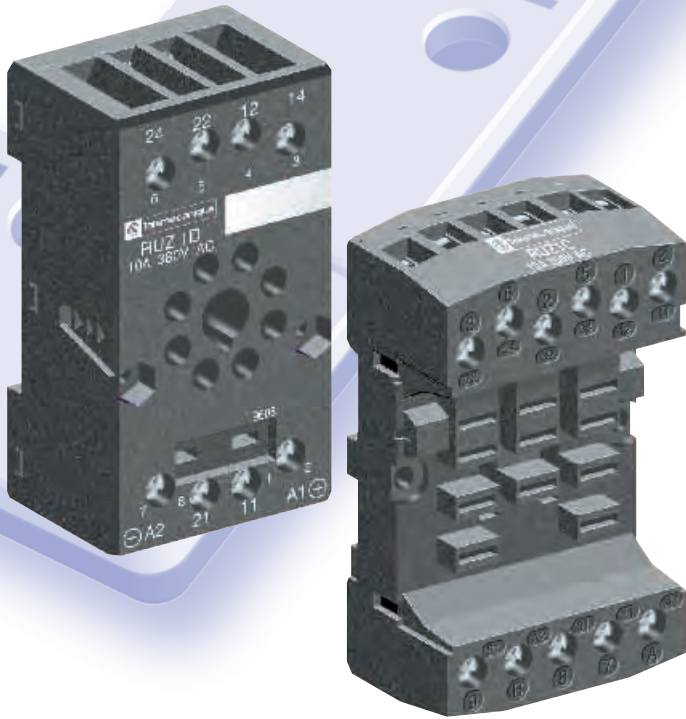
COIL									
Rated voltage								Rated power VA W	
V DC				V AC 50-60 Hz				3	1.5
12 V	24 V	48 V	120 V	24 V	48 V	120 V	230 V		
JD	BD	ED	FD	B7	E7	F7	P7		




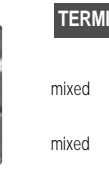
CONTACT					
Number & type	Rated current A	Max switching voltage DC/AC	Min switching voltage DC	DEL	
				without	with
3	10	220/250	20	without	with


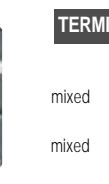
COIL									
Rated voltage								Rated power VA W	
V DC				V AC 50-60 Hz				3	1.5
12 V	24 V	48 V	120 V	24 V	48 V	120 V	230 V		
JD	BD	ED	FD	B7	E7	F7	P7		


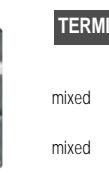
RUZ sockets





- **DIN rail or panel mounting.**
- **Easy integration into existing equipment.**
- **Cage terminal block connection.**
- **Simplicity of installation and connection.**
- **Conforms to international standards.**
- **A range of external accessories plug directly into socket.** (protection module, LED state display).
- **Highly compact enabling insertion of more functions in enclosures.**

	TERMINAL ARRANGEMENT	MODULE	VOLTAGE	CURRENT	DIMENSIONS
	Coil/contact	None	400 VAC	10 A	H x W x D 66.5 x 37.5 x 25 mm
	mixed				
	Coil/contact	Type E2	400 VAC	10 A	H x W x D 75 x 38 x 26 mm
	mixed				

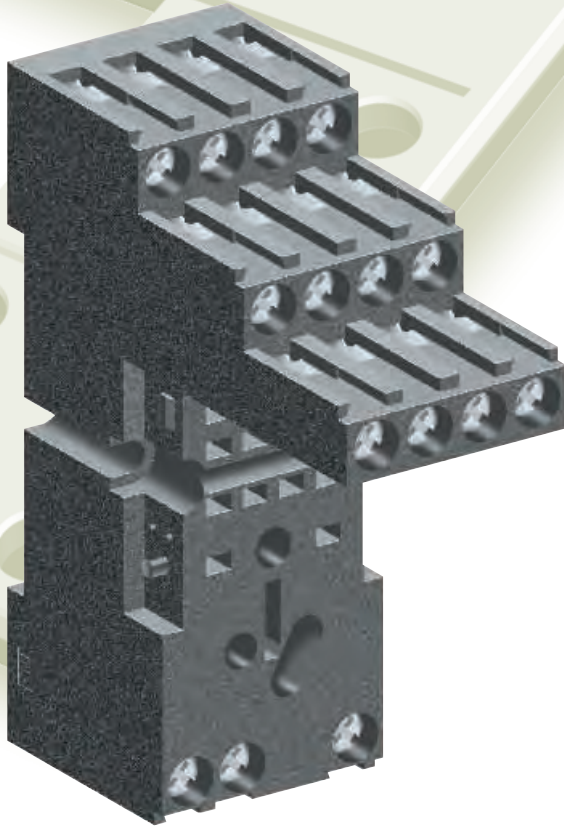
	TERMINAL ARRANGEMENT	MODULE	VOLTAGE	CURRENT	DIMENSIONS
	Coil/contact	None	400 VAC	10 A	H x W x D 66.5 x 37.5 x 25 mm
	mixed				
	Coil/contact	Type E2	400 VAC	10 A	H x W x D 75 x 38 x 26 mm
	mixed				

	TERMINAL ARRANGEMENT	MODULE	VOLTAGE	CURRENT	DIMENSIONS
	Coil/contact	None	400 VAC	10 A	H x W x D 66.5 x 37.5 x 25 mm
	mixed				
	Coil/contact	Type E2	400 VAC	10 A	H x W x D 75 x 38 x 26 mm
	mixed				

	TERMINAL ARRANGEMENT	MODULE	VOLTAGE	CURRENT	DIMENSIONS
	Coil/contact	None	250 VAC	10 A	H x W x D 72 x 44 x 26 mm
	mixed				

	TERMINAL ARRANGEMENT	MODULE	VOLTAGE	CURRENT	DIMENSIONS
	Coil/contact	None	250 VAC	10 A	H x W x D 72 x 44 x 26 mm
	mixed				

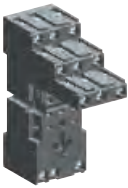
RXZE sockets



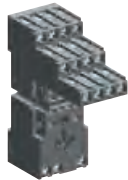
- **DIN rail or panel mounting.**
- **Possibility of paralleling.**
- **Cage terminal block connection.**
- **Simplicity of installation and connection.**
- **Conforms to international standards.**
- **Easy integration into existing equipment.**
- **Highly compact enabling insertion of more functions in enclosures.**
- **A range of external accessories plug directly into socket.** (protection module, LED state display).



TERMINAL ARRANGEMENT	MODULE	VOLTAGE	CURRENT	DIMENSIONS
Coil/contact				H x W x D
separate RXZE1S108M	Type E	300 VAC	12 A	75 x 27 x 61 mm
mixed RXZE1M114	None		10 A	



TERMINAL ARRANGEMENT	MODULE	VOLTAGE	CURRENT	DIMENSIONS
Coil/contact				H x W x D
separate RXZE1S111M	Type L	300 VAC	12 A	75 x 27 x 61 mm



TERMINAL ARRANGEMENT	MODULE	VOLTAGE	CURRENT	DIMENSIONS
Coil/contact				H x W x D
separate RXZE1S114M	Type E	300 VAC	12 A	75 x 27 x 61 mm
mixed RXZE1M114	None		10 A	

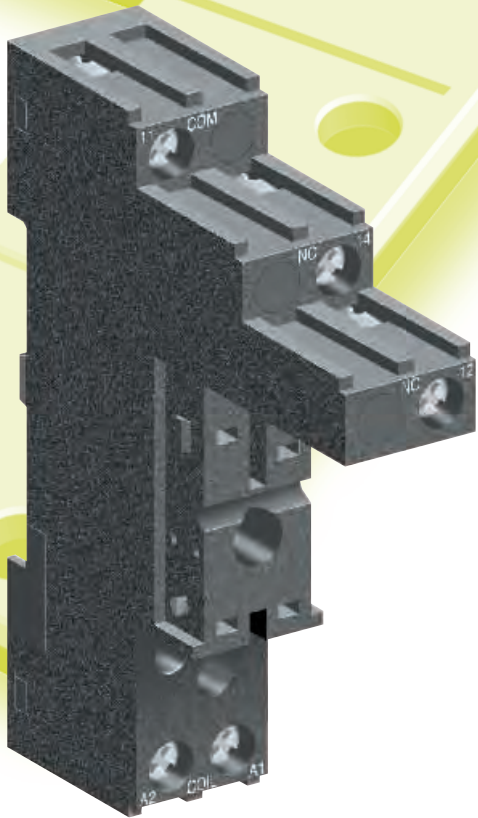


TERMINAL ARRANGEMENT	MODULE	VOLTAGE	CURRENT	DIMENSIONS
Coil/contact				H x W x D
separate RXZE1M108M	Type E	300 VAC	12 A	75 x 27 x 61 mm
mixed RXZ7G	Type L	250 VAC	5 A	74 x 27.4 x 42 mm
mixed RXZE1M114	None	300 VAC	10 A	66 x 29.5 x 29 mm



TERMINAL ARRANGEMENT	MODULE	VOLTAGE	CURRENT	DIMENSIONS
Coil/contact				H x W x D
separate RXZE1M114M	Type E	300 VAC	12 A	75 x 27 x 61 mm
mixed RXZ7G	Type L	250 VAC	5 A	74 x 27.4 x 42 mm
mixed RXZE1M114	None	300 VAC	10 A	66 x 29.5 x 29 mm

RSZE sockets



- **DIN rail or panel mounting.**
- **Cage terminal block connection.**
- **Conforms to international standards.**
- **Simplicity of installation and connection.**
- **Possibility of paralleling.**
- **Easy integration into existing equipment.**
- **Function marking on socket.**
- **A range of external accessories plug directly into socket.** (protection module, LED state display).



TERMINAL ARRANGEMENT

Coil/contact
separate

MODULE

Yes
Type E

VOLTAGE

300 VAC

CURRENT

12 A

DIMENSIONS

H x W x D
78.5 x 15.5 x 61 mm

RSZE1S48M



TERMINAL ARRANGEMENT

Coil/contact
separate

MODULE

Yes
Type E

VOLTAGE

300 VAC

CURRENT

12 A

DIMENSIONS

H x W x D
78.5 x 15.5 x 61 mm

RSZE1S35M



TERMINAL ARRANGEMENT

Coil/contact
separate

MODULE

Yes
Type E

VOLTAGE

300 VAC

CURRENT

12 A

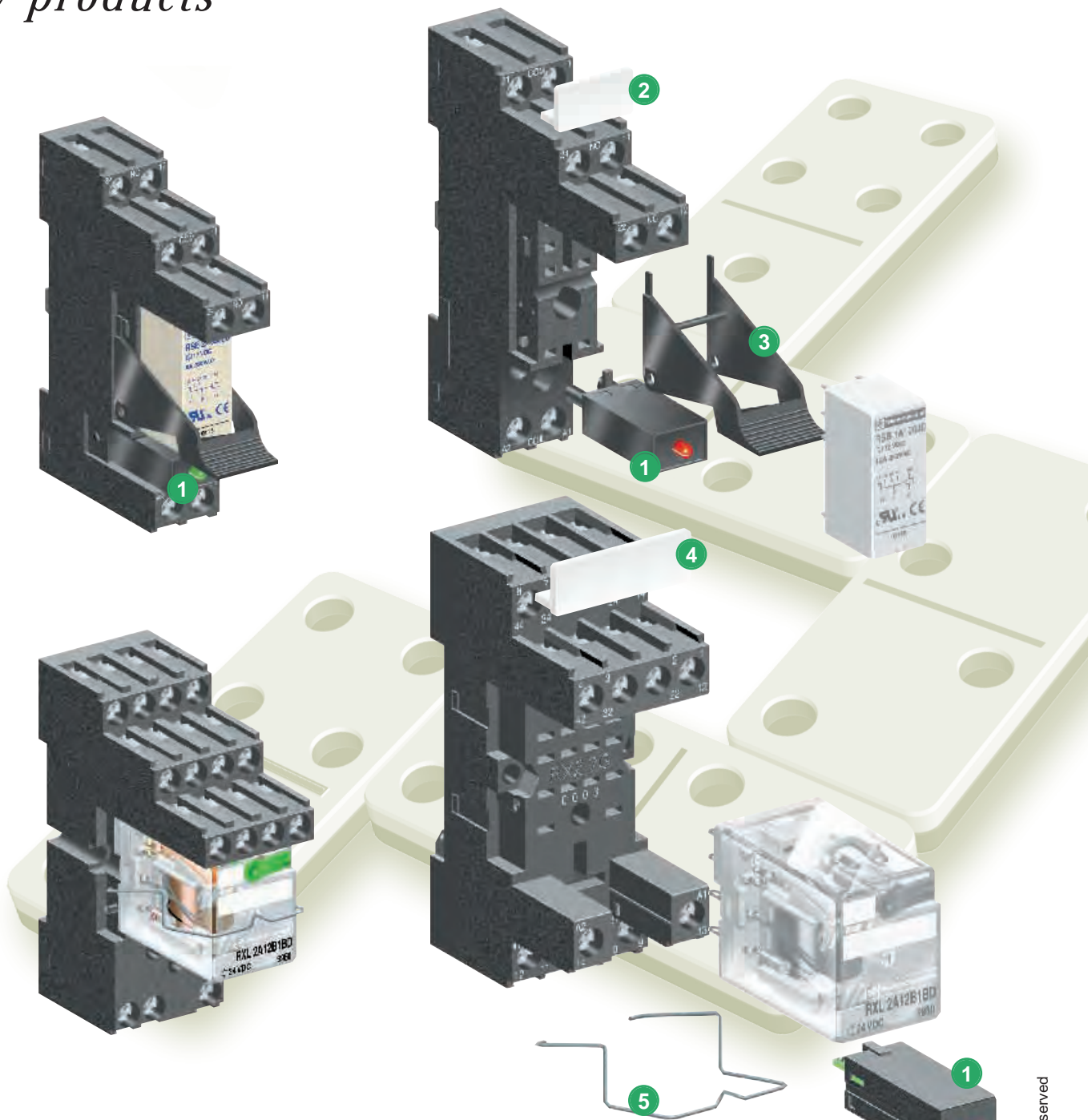
DIMENSIONS

H x W x D
78.5 x 15.5 x 61 mm

RSZE1S48M

Accessories

New products



- 1 Diode
- Surge Suppressor + green LED (DC)
- Surge Suppressor + green LED (AC)
- RC circuit

- RZM 040 .
- RZM 031 ...
- RZM 021 ..
- RZM 041 ...

- 2 Label
- 3 Maintaining clamp
- 4 Label
- 5 Maintaining clamp

- RSZL300
- RSZR215
- RXZL320
- RXZR235

(● according to voltage)

Schneider Electric Industries S.A.

5, rue Nadar
92506 Rueil-Malmaison
Cedex - France
Tel: (33) 01 41 29 82 00
Fax: (33) 01 47 51 80 20

Due to evolution of standards and equipment, characteristics indicated in text and images of this document are non-contractual and confirmation should be obtained from our services.

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Design, illustration and production : ATTR - Tel: (33) 01 43 60 91 66

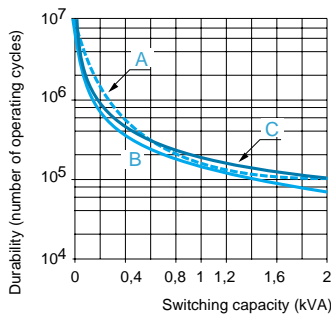
Relay type	RSB 2A080●●	RSB 1A120●●	RSB 1A160●●
Contact characteristics			
Number and type of contacts	2 C/O	1 C/O	1 C/O
Contact materials	(AgNi)		
Conventional rated thermal current (Ith)	For temperature ≤ 40°C A 8	12	16
Maximum operating rate In operating cycles/h	No-load	72 000	
	Under load	600	
Switching voltage	Minimum	V 5	
	Maximum	V ~ 400, --- 250	
Maximum breaking capacity	VA 2000	3000	4000

Coil characteristics			
Rated voltage (Un)	~	V 24...240, 50/60 Hz	
	---	V 6...110	
Average consumption	~	VA 0.75	
	---	W 0.45	
Permissible voltage variation		0.8...1.1 Un (50/60 Hz or ---) à 20 °C	
Drop-out voltage threshold	~	≥ 0.15	
	---	≥ 0.1 Un	

Environment			
Conforming to standards	Standard version	IEC 61810-1	
Approvals (pending)	Standard version	UL, CSA	
Ambient air temperature around the device	Storage	°C	- 40...+ 85
	Operation	°C	--- - 40...+ 85, ~ - 40...+ 70
Vibration resistance	Conforming to IEC 68-2-6	> 10 gn (10...150 Hz)	
Degree of protection		IP 40	
Shock resistance		10 gn (closing), 5 gn (opening)	
Mechanical durability	In millions of operating cycles	≥ 30	
Operating time (response time)	Between coil energisation and making of the On-delay contact	~	ms About 12
		---	ms About 9
	Between coil de-energisation and making of the Off-delay contact	~	ms About 10
		---	ms About 4
Electrical durability In millions of operating cycles/h	Resistive load	8 A - 250 V : ≥ 0.1	
	Inductive load	See curves below	

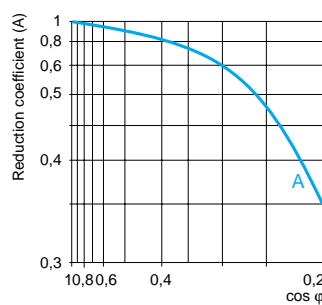
Insulation characteristics			
Rated insulation voltage (Ui)	Conforming to IEC 947	V	400
Insulation class	Conforming to VDE 0110		C 250
Dielectric strength (rms voltage)	Between coil and contact	~	V 5000
	Between poles		V 2500
	Between contacts	~	V 1000

Electrical durability of the contacts
Resistive load ~

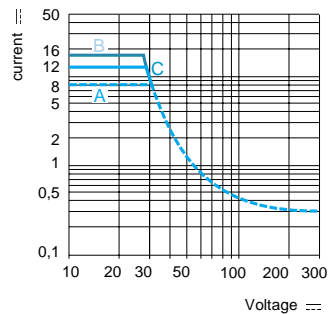


A RSB 2A080●●
B RSB 1A160●●
C RSB 1A120●●

Reduction coefficient for inductive load ~
(depending on power factor cos φ)



Maximum switching capacity on a resistive load ---



Durability (inductive load) = durability (resistive load) x reduction coefficient.

References



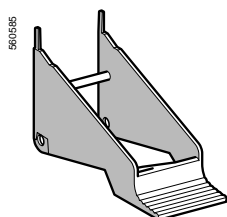
RSB 2A080BD + RSZ E1S48M



RSB 1A120JD + RZM 030FPD + RSZ E1S35M



RSB 1A160BD + RSZ E1S48M



RSZ 215

Relays for standard applications

Number of C/O contacts	Conventional rated thermal current	Sold in lots of	Unit reference, to be completed by adding the control voltage code (1) (2)	Weight
	A			kg
2	8	10	RSB 2A080●●	0.014
1	12	10	RSB 1A120●●	0.014
	16	10	RSB 1A160●●	0.014

Protection modules

Description	Type	Voltage	Sold in lots of	Unit reference	Weight
		V			kg
Diode	E	≡	6...230	10 RZM 040W	0.003
Diode + LED	E	≡	6...24	10 RZM 031RB	0.004
		≡	24...60	10 RZM 031BN	0.004
		≡	110...230	10 RZM 031FPD	0.004
Varistor + LED	E	≡ or ~	6...24	10 RZM 021RB	0.005
		≡ or ~	24...60	10 RZM 021BN	0.005
		≡ or ~	110...230	10 RZM 021FP	0.005
RC circuit	E	~	24...60	10 RZM 041BN7	0.010
		~	110...240	10 RZM 041FU7	0.010

Sockets - 12 A, ~ 300 V

For use with	Sold in lots of	Unit reference	Weight
RSB 2A080 and RSB 1A160	10	RSZ E1S48M	0.050
RSB 1A120	10	RSZ E1S35M	0.060

Accessories

Application	Sold in lots of	Unit reference	Weight
Maintaining clamp	10	RSZ R215	0.002
Legend	10	RSZ L300	0.001

(1) Standard control circuit voltages

Volts	6	12	24	48	60	110	120	220	230	240	
≡		RD	JD	BD	ED	ND	FD	-	-	-	
~ 50/60 Hz		-	-	B7	E7	-	-	F7	M7	P7	U7

For other voltages, please consult your Regional Sales Office.

(2) To order a relay complete with socket: add suffix **S** to the references selected above.
Example: RSB 2A080●● becomes RSB 2A080●●S

Coil characteristics

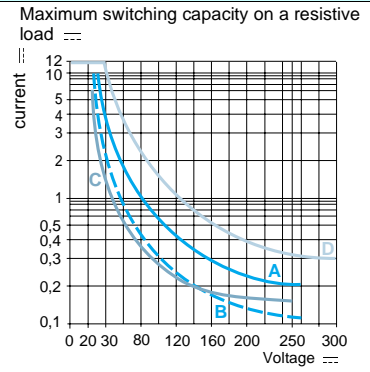
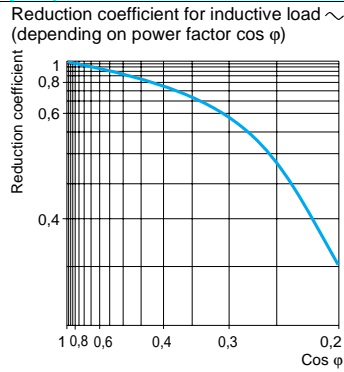
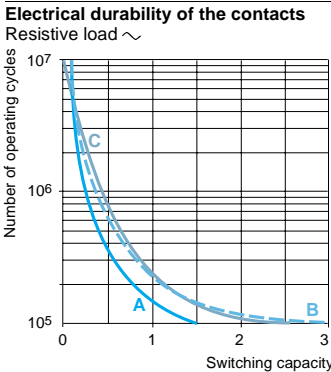
Control circuit voltage U _c	d.c. supply			a.c. supply, 50/60 Hz				
	Average resistance at 20 °C ± 10%	Cod.	Operating voltage limits	Average resistance at 20 °C ± 15 %	Cod.	Operating voltage limits		
V	Ω		V	V	Ω	V	V	
6	90	RD	4.2	15.3	-	-	-	
12	360	JD	8.4	30.6	-	-	-	
24	1440	BD	16.8	61.2	400	B7	19.2	26.4
48	5700	ED	33.6	122.4	1550	E7	38.4	32.8
60	7500	ND	42	153	-	-	-	
110	25 200	FD	77	280	-	-	-	
120	-	-	-	-	10 200	F7	96	132
220	-	-	-	-	35 500	M7	176	242
230	-	-	-	-	38 500	P7	184	253
240	-	-	-	-	42 500	U7	192	264

Relay type	RXL 2A12B●●●	RXL 3A10B●●●	RXL 4A06B●●●	RXL 4G06B●●●
Contact characteristics				
Number and type of contacts	2 C/O	3 C/O	4 C/O	
Contact materials	(AgNi)			AgNi/AU 0.2 μ
Rated conventional thermal current (I _{th})	For temperature ≤ 40°C	A 12	10	6
Maximum operating rate	No-load	18 000		
	In operating cycles/h	1200		
Switching voltage	Minimum	V 5		
	Maximum	V ~ 400, --- 250		
Maximum breaking capacity	VA	3000	2500	1500

Coil characteristics				
Rated voltage (U _n)	~	V 24...230, 50/60 Hz		
	---	V 12...110		
Average consumption	~	VA 1.6		
	---	W 0.9		
Permissible voltage variation		0.8...1.1 U _n (50/60 Hz or ---)		
Drop-out voltage threshold	~	≥ 0.15 U _n		
	---	≥ 0.1 U _n		

Environment					
Conforming to standards	Standard version	IEC 61810-1			
Approvals (pending)	Standard version	UL, CSA			
Ambient air temperature around the device	Storage	°C	- 40...+ 85		
	Operation	°C	--- - 40...+ 70, ~ - 40...+ 55		
Vibration resistance	To IEC 68-2-6	> 5 gn (10...150 Hz)			
Degree of protection		IP 40			
Shock resistance		10 gn (closing), 5 gn (opening)			
Mechanical durability	In millions of operating cycles		≥ 20	≥ 20	
Operating time (response time)	Between coil energisation and making of the On-delay contact	~	ms	About 12	
		---	ms	About 12	
	Between coil de-energisation and making of the Off-delay contact	~	ms	About 12	
		---	ms	About 4	
Electrical durability	Resistive load		12 A - 250 V: ≥ 0.1	10 A - 250 V: ≥ 0.1	
	Inductive load		See curves below		

Insulation characteristics				
Rated insulation voltage (U _i)	Conforming to IEC 947	V	250	
Insulation class	Conforming to VDE 0110		C 250	B 250
Dielectric strength (rms voltage)	Between coil and contact	~	V 2500	
	Between poles	V	2500	2000
	Between contacts	~	V 1500	



- A RXL 4
- B RXL 2
- C RXL 3

— RXL 2, RXL 3 and RXL 4

- A RXL 3 (T = 0 ms)
- B RXL 3 (T = 40 ms)
- C RXL 4
- D RXL 2

Durability (inductive load) = durability (resistive load) x reduction coefficient

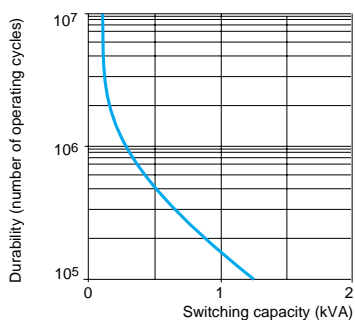
Relay type		RXN 21E1●●●	RXN 41G1●●●
Contact characteristics			
Number and type of contacts		2 C/O	4 C/O
Contact materials		AgNI	
Conventional rated thermal current (I _{th})	For temperature ≤ 40°C	A	5
Maximum operating rate	No-load		7200
	In operating cycles/h		3600
Switching voltage	Minimum	V	5
	Maximum	V	400 ~ , 250 ---
Maximum breaking capacity		VA	1250

Coil characteristics			
Rated voltage (U _n)	~	V	24...230, 50/60 Hz
	---	V	12...110
Average consumption	~	VA	1.9
	---	W	0.9
Permissible voltage variation			0.8...1.1 U _n (50/60 Hz or ---)
Drop-out voltage threshold	~		≥ 0.15 U _n
	---		≥ 0.1 U _n

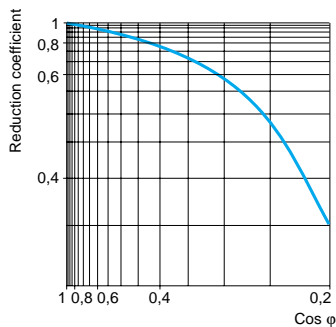
Environment				
Conforming to standards	Standard version		IEC 61 810-1	
Approvals (pending)	Standard version		CSA, UL	
Ambient air temperature around the device	Storage	°C	- 40...+ 70	
	Operation	°C	- 20...+ 50	
Vibration resistance	Conforming to IEC 68-2-6		> 5 gn (30...150 Hz)	
Degree of protection			IP 40	
Shock resistance			20 gn	
Mechanical durability	In millions of operating cycles		20	
Operating time (response time)	Between coil energisation and making of the On-delay contact	~	ms	About 12
		---	ms	About 12
	Between coil de-energisation and making of the Off-delay contacts	~	ms	About 12
		---	ms	About 4
Electrical durability	Resistive load		5 A / 250 V	
	In millions of operating cycles/h	Inductive load	See curves below	

Insulation characteristics				
Rated insulation voltage (U _i)	Conforming to IEC 947	V	250	
Insulation class	Conforming to VDE 0110		A 250	
Dielectric strength (rms voltage)	Between coil and contact	~	V	2000
	Between poles		V	2000
	Between contacts	~	V	1500

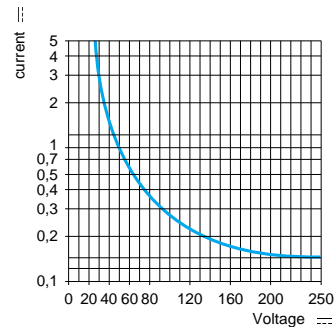
Electrical durability of the contacts
Resistive load ~



Reduction coefficient for inductive load ~ (depending on power factor cos φ)



Maximum switching capacity on a resistive load ---



Durability (inductive load) = durability (resistive load) x reduction coefficient

Zelio Relay plug-in relays

Miniature relays



RXN 21E12BD + RXZ E1M114



RXL 4A06B1BD + RXZ E1S114M



RXL 2A12B2BD + RXZ P20 + RXZ E1S108M

RXL 2A12B2BD + ZRM 030RB
+ RXZ P10 + RXZ E1S111M

References

Relays for standard applications (1)

Number of C/O contacts	Conventional rated thermal current	LED	Sold in lots of	Unit reference, to be completed by adding the control voltage code (2)	Weight
					kg
2	5	Red	10	RXN 21E12●●	0.035
		Without	10	RXN 21E11●●	0.034
	12	Green	10	RXL 2A12B2●●	0.036
3	10	Without	10	RXL 2A12B1●●	0.035
		Green	10	RXL 3A10B2●●	0.036
4	5	Without	10	RXL 3A10B1●●	0.035
		Red	10	RXN 41G12●●	0.035
	6	Without	10	RXN 41G11●●	0.034
		Green	10	RXL 4A06B2●●	0.036
		Without	10	RXL 4A06B1●●	0.035

Relays with gold-flashed contacts (1)

4	6	With	10	RXL 4G06B1●●	0.036
		Without	10	RXL 4G06B2●●	0.035

Protection modules for sockets RXZ 7G

Description	Type	Voltage	Sold in lots of	Unit reference	Weight
					kg
Diode	L	—	12...250	RXW 040MD	0.010

Protection modules for relay/sockets RXZ E●●●●M

Diode	—	—	6...230	10	RZM 040W	0.003
Diode + Green LED	E	—	6...24	10	RZM 031RB	0.004
		—	24...60	10	RZM 031BN	0.004
Varistor + Green LED	E	—	110...230	10	RZM 031FPD	0.004
		— or ~	6...24	10	RZM 021RB	0.005
		— or ~	24...60	10	RZM 021BN	0.005
RC circuit	E	— or ~	110...230	10	RZM 021FP	0.005
		~	24...60	10	RZM 041BN7	0.010
		~	110...240	10	RZM 041FU7	0.010

(2) Standard control circuit voltages

Volts	12	24	48	110	120	230
—		JD	BD	ED	FD	—
~ (50/60 Hz)		RXN	B7	E7	F7	P7
		RXL	B7	E7	—	F7

For other voltages, please consult your Regional Sales Office.

Coil characteristics

Control circuit voltage Uc	d.c. supply Average resistance at 20 °C ± 10%	Cod. Operating voltage limits		a.c. supply, 50/60 Hz		
		Min	Max	Average resistance at 20 °C ± 15 %	Cod. Operating voltage limits Min	Max
V	Ω	V	V	Ω	V	V
RXN relays						
12	160	JD	9.6	13.2	—	—
24	640	BD	19.2	26.4	150	B7 19.2 26.4
48	2600	ED	38.4	52.8	635	E7 38.4 52.8
110	13 600	FD	88	121	—	F7 — —
230	—	—	—	—	15 400	P7 184 253
RXL relays						
12	160	JD	9.6	13.2	—	—
24	640	BD	19.2	26.4	158	B7 19.2 26.4
48	2600	ED	38.4	52.8	640	E7 38.4 52.8
110	13 600	FD	88	121	—	—
120	—	—	—	—	3770	F7 96 132
230	—	—	—	—	16 100	P7 184 253

(1) These relays have a lockable Test button on their front face, which can be converted to non-lockable or can be eliminated, see accessories on page opposite.

Characteristics:
pages 28042/2 and 28042/3

Dimensions:
page 28046/2

Schemes:
page 28047/2

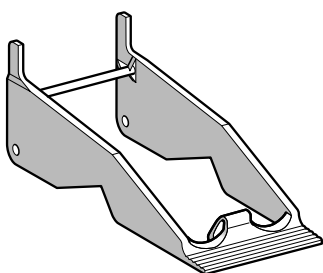
References

590590



RXZ 200

590591



RXZ R235

Sockets (1)

Protection module	Application	Type	I/O	Sold in lots of	Unit reference	Weight kg
Without	RXN 21, RXN 41, L RXL 2A12 and RXL 4A06	Mixed		10	RXZ E1M114	0.048
With	RXN 21, RXN 41, E RXL 2, RXL 4	Mixed		10	RXZ 7G	0.055
	RXN 21, RXL 2	E	Separate	10	RXZ E1S108M	0.058
	RXL 3A10	E	Separate	10	RXZ E1S111M	0.065
	RXN 4, RXL 4A06	E	Separate	10	RXZ E1S114M	0.070
		E	Mixed	10	RXZ E1M114M	0.070

Accessories

Description	Application	Sold in lots of	Unit reference	Weight kg
Button	For non-lockable Test function	20 (2)	RXZ P20	0.001
Blanking cover	For elimination of Test function	20 (2)	RXZ P10	0.001
Metal maintaining clamps	For use on all sockets	10	RXZ 200	0.001
Plastic maintaining clamps	RXZ E	10	RSZ R235	0.005
Legends	Clip-in fixing on socket RXZ-7G	10	RXZ 300	0.010
	Clip-in fixing on socket RXZ-7G in place of module RXW 040MD	10	RXZ 310	0.011
	Clip-in fixing on socket RXZ-E	10	RSZ L320	0.001

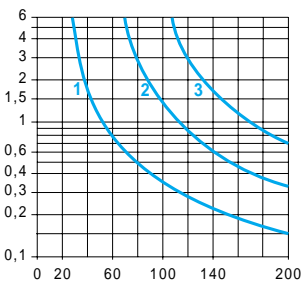
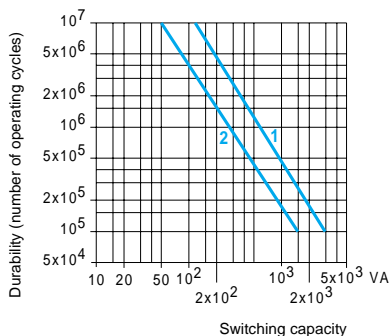
(1) A bag containing ten **RXZ 300** legends is supplied with sockets **RXZ 7G**.**RXZ E1M114**: 7 A, ~ 300 V.**RXZ 7G**: 6 A, ~ 300 V.**RXZ E1S114M**: 12 A, ~ 300 V.

(2) 10 red and 10 green.

Relay type		RUN 21C	RUN 31C	RUN 21D	RUN 31A	RUN 33D
Contact characteristics						
Number and type of contacts		2 C/O	3 C/O	2 C/O	3 C/O	3 C/O linked
Contact materials		AgNi				Hard silver, 10 μ gold-flashed
Conventional rated thermal current (I _{th})	For temperature ≤ 40°C	A 10		10		4
Maximum operating rate	No-load			36 000		36 000
	In operating cycles/h			3600		3600
Switching voltage	Minimum	V 20		20		10
	Maximum	V ~ / --- 250		~ / --- 250		~ 250, --- 125
Maximum breaking capacity		VA 3000		3000		1000
Coil characteristics						
Rated voltage (U _n)	~	V 24, 48, 110, 230, 50/60 Hz (Other voltages available on request)				
	---	V 12, 24, 48, 110 (Other voltages available on request)				
Average consumption	Inrush	~	VA 3.5	3.5		3.5
	Sealed	~	VA 2.3	2.3		2.3
		---	W 1.5		1.5	
Permissible voltage variation			0.8...1.1 U _n (50 Hz or ---), 0.85...1.1 U _n (60 Hz)			
Drop-out voltage threshold	~		≥ 0.15 U _n			≥ 0.15 U _n
	---		≥ 0.05 U _n			
Environment						
Conforming to standards	Standard version		EN 61810-1			
Approvals (pending)	Standard version		UL, CSA			
Ambient air temperature around the device	Storage		°C - 40...+ 70			
	Operation	~	°C - 20...+ 40			
		---	°C - 20...+ 60			
Vibration resistance	Conforming to IEC EN 68-2-6		4 gn (30...100 Hz)			
Degree of protection			IP 40			
Shock resistance			10 gn			
Mechanical durability	In millions of operating cycles		20			
Operating time (response time)	Between coil energisation and making of the On-delay contact	~	ms About 15			
		---	ms About 15			
	Between coil de-energisation and making of the Off-delay contact	~	ms About 15			
		---	ms About 15			
Electrical durability	Resistive load		≥ 0.1 to 10 A			
	In millions of operating cycles/h	Inductive load		See curves below		
Insulation characteristics						
Rated insulation voltage (U _i)	Conforming to IEC 947	V 250				
Insulation class	Conforming to VDE 0110	C250, B380				
Dielectric strength (rms voltage)	Between coil and contact	~	V 2500			
	Between poles		V 2500			
	Between contacts	~	V 1000			

Durability in N (230 V, 50 Hz)

Switching capacity on a --- supply for minimum durability of: 10⁶ operating cycles (resistive or inductive load with diode RVW 040BD).



- 1 Resistive load
- 2 Inductive load

- 1 Contact
- 2 Contacts in series
- 3 Contacts in series

References



RUN 31C22●● + RUZ 1C



RUN 31A21●● + RUZ 1A



RUN 33A22●● + RUW 101MW + RUZ 7A



RUZ 200

Relays for standard applications

Number of C/O contacts	Conventional rated thermal current A	LED	Pins	Sold in lots of	Unit reference, to be completed by adding the control voltage code (1)	Weight kg
2	10	without	Octal	10	RUN 21D21●●	0.105
			8 flat pins	10	RUN 21C21●●	?
		Green	Octal	10	RUN 21D22●●	0.105
			8 flat pins	10	RUN 21C22●●	?
3	10	Without	Undecal	10	RUN 31A21●●	0.105
			11 flat pins	10	RUN 31C21●●	?
		Green	Undecal	10	RUN 31A22●●	0.105
			11 flat pins	10	RUN 31C22●●	?

Relays with gold-flashed contacts

3	4	Green	Undecal	10	RUN 33A22●●	0.105
---	---	-------	---------	----	-------------	-------

LED indicator modules

Description	Voltage V		Sold in lots of	Unit reference	Weight kg
"Power on" indication	~	110/230	20	RUW 010P7	0.006
	—	6/24	20	RUW 030BD	0.006
	With protection diode				

Protection module

Diode	—	6...220	20	RUW 040BD	0.006
Varistor	~	24	20	RUW 042B7	0.006
	~	230	20	RUW 042P7	0.006
RC circuit	~	110...240	20	RUW 041P7	0.006

Timer modules

Multifunction	≈	24...240	1	RUW 101MW	0.020
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Sockets

Protection module	Application	I/O	Sold in lots of	Unit reference	Weight kg
Without	RUN 21 octal	Mixed	10	RUZ 1D	0.067
	RUN 31 and RUN 33 undecal	Mixed	10	RUZ 1A	0.067
	RUN 21C and RUN 31C	Mixed	10	RUZ 1C	0.067
With	RUN 31 and RUN 33	Mixed	10	RUZ 7D	0.069
	RUN 21 octal	Mixed	10	RUZ 7A	0.069

Accessories

Description	Sold in lots of	Unit reference	Weight kg
Maintaining clamp	25	RUZ 200	0.001

(1) Standard control circuit voltages

Volts		12	24	48	110	230
—	RUN 21 and RUN 31	JD	BD	ED	FD	—
	RUN 33	—	BD	ED	—	—
~ 50/60 Hz	RUN 21, RUN 31 and RUN 33	—	B7	E7	F7	P7

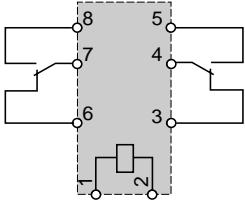
For other voltages, please consult your Regional Sales Office.

Coil characteristics

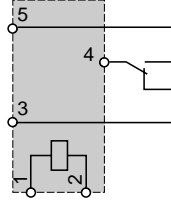
Control circuit voltage Uc	d.c. supply				a.c. supply, 50/60 Hz			
	Average resistance at 20 °C ± 10%	Cod. Operating voltage limits		Average resistance at 20 °C ± 15 %	Cod. Operating voltage limits			
V	Ω	V	V	Ω	V	V		
12	96	JD	9.6 19.2	—	—	—	—	
24	384	BD	19.2 26.4	73.7	B7	204	26.4	
48	1336	ED	38.4 52.8	305	E7	408	54.8	
110	7660	FD	88 121	1710	F7	93.5	121	
230	—	—	—	7500	P7	196	253	

Interface relays

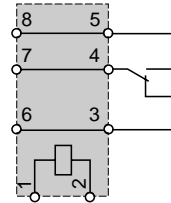
RSB 2A080●●



RSB 1A120●●



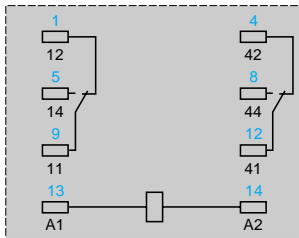
RSB 1A160●●



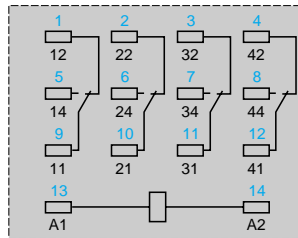
When using relay RSB 1A160●● with socket RSZ E1S48M, terminals 11 and 21, 14 and 24, 12 and 22 must be linked.

Miniature relays

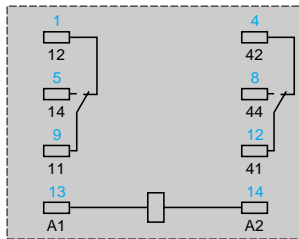
RXN 21E1●●●



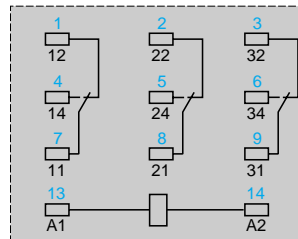
RXN 41G



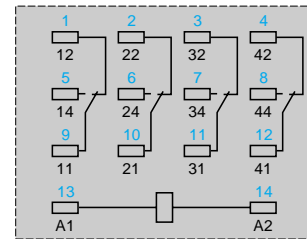
RXL 2●●



RXL 3●●

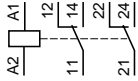


RXL 4●●

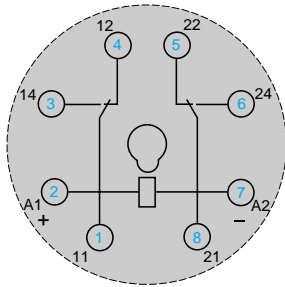


Universal relays

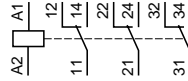
RUN 21D2●●●, RUN 21C2●●●



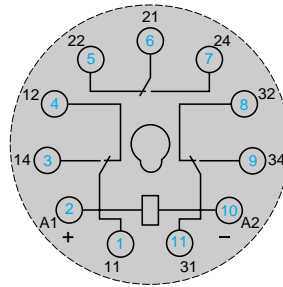
RUN 21D2●●●



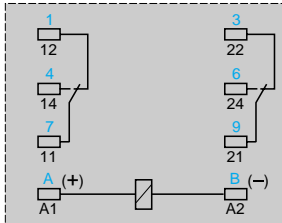
RUN 31A2●●●, RUN 33A2●●●
RUN 31C2●●●



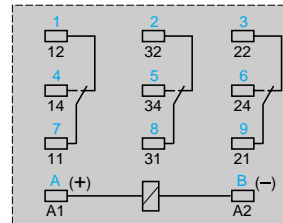
RUN 33A2●●●



RUN 21C2●●●

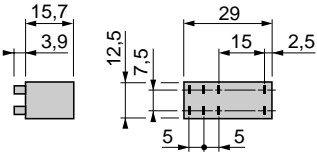


RUN 31C2●●●

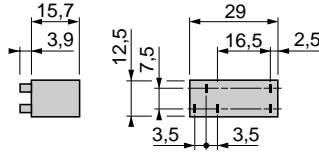


Interface relays (References: page 28041/3)

RSB 2A080●●, RSB 1A160●●

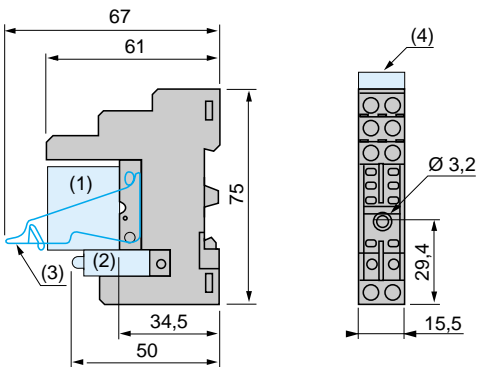


RSB 1A120●●

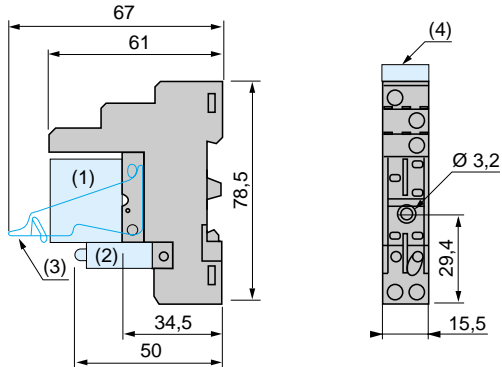


Sockets

RSZ E1S48M



RSZ E1S35M



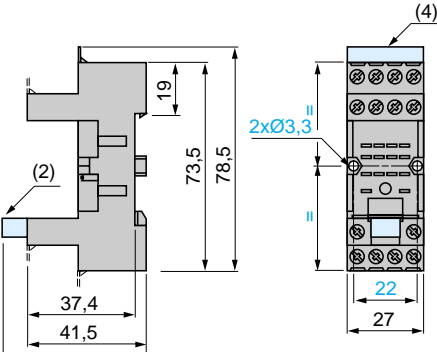
Miniature relays (References: pages 28042/4 and 28042/5)

RXN 21E1●●●, RXN 41G1●●●, RXL

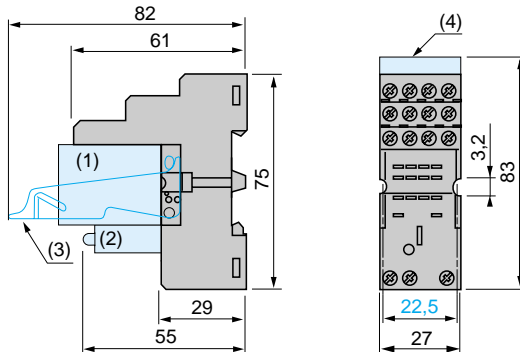


Sockets

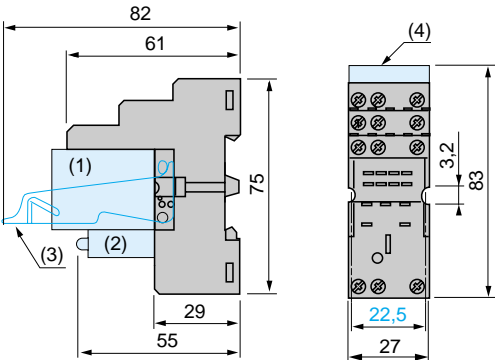
RXZ 7G



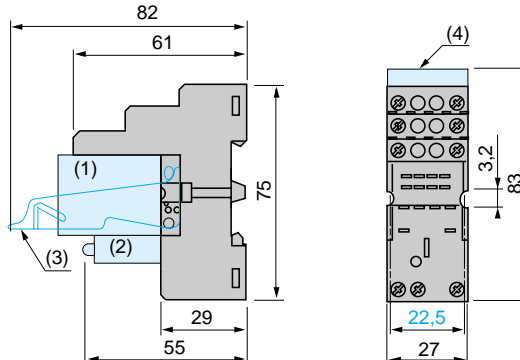
RXZ E1S108M



RXZ E1S111M



RXZ E1S114M, RXZ E1M114M

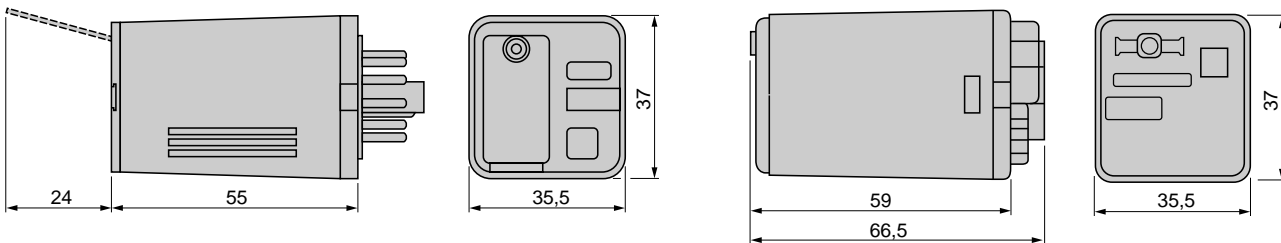


(1) Relays, (2) Add-on protection module,
(3) Maintaining clamp, (4) Legend.

Universal relays (References: page 28043/3)

RUN 21D2●●●
 RUN 31A2●●●
 RUN 33A2●●●

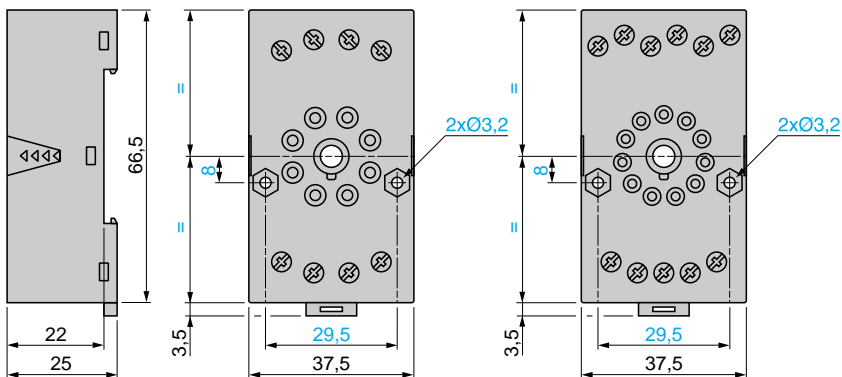
RUN 21C2●●●
 RUN 31C2●●●



Sockets

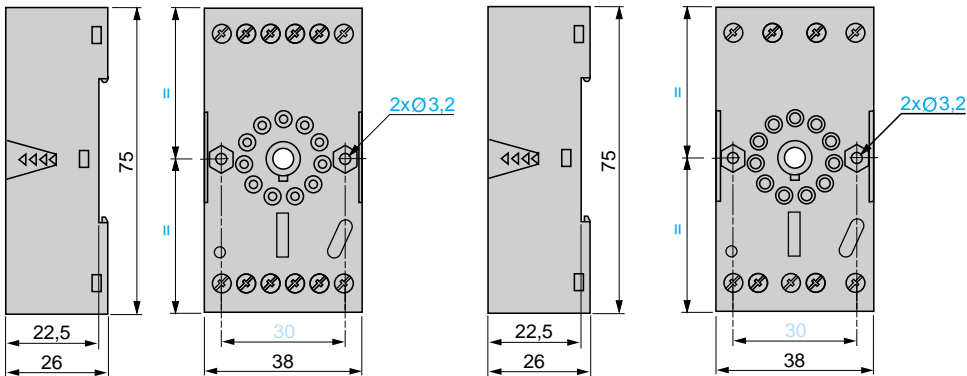
RUZ 1D

RUZ 1A



RUZ 7D

RUZ 7A



RUZ 1C

