Power Relay

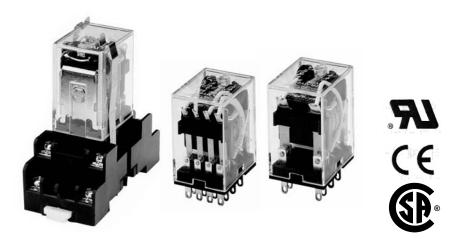
SZR-MY Series

#### **FEATURES**

- Small package design
- DPDT has a fine silver contact with 5 A capability
- 4PDT has a gold-plated silver contact with 3 A capability
- High dielectric strength (1,800 Vac)
- High reliability and long life
- Ultra-high sensitivity with quick response time (20 ms max.)
- · Options include LED indicator, diode protection, and LED indicator/diode protection
- UL listed, CE certified, CSA certified

### **TYPICAL APPLICATIONS**

- Control panels
- Elevator panels
- Machine tools
- Test equipment



SZR-MY Series general-purpose power relays are designed for a wide range of applications including power as well as logic control for factory machines and control panels.

SZR-MY Series relays have a small package design for multiple application needs. Relays are available in two configurations: DPDT with a 5A load and 4PDT with a 3 A load.

One standard and three options are available: LED indicator, internal surge protection diode, and LED indicator/diode protection. Honeywell's global sales and distribution channels ensure a rapid response and excellent customer service.



### **▲** WARNING

### **PERSONAL INJURY**

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.



### **WARNING**

### **MISUSE OF DOCUMENTATION**

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

**General Purpose**Power Relays SZR-MY Series

### **RELAY MODEL SELECTION GUIDE**

Туре	Terminal	Contact	Catalog Listing	
Standard	Plug-in/Solder	DPDT	SZR-MY2-1	
Sianuaru	Flug-III/Soldel	4PDT	SZR-MY4-1	
	PCB	DPDT	SZR-MY2-1P	
	РСБ	4PDT	SZR-MY4-1P	
LED Indicator	Plug-in/Solder	DPDT	SZR-MY2-N1	
		4PDT	SZR-MY4-N1	
DIODE surge suppression			DPDT	SZR-MY2-D1
		4PDT	SZR-MY4-D1	
LED indicator + surge suppression		DPDT	SZR-MY2-X1	
		4PDT	SZR-MY4-X1	

### **SOCKETS - REQUIRED ACCESSORIES**

	Din-rail Mounting	Solder Terminal	PCB Terminal
Relay Contact			
DPDT For use with SZR-MY2-1, -N1, - D1, -X1	SZX-SMF-08N	SZX-SMB-08	SZX-SMB-08P
4PDT For use with SZR-MY4-1, -N1, - D1, -X1	SZX-SMF-14N	SZX-SMB-14	SZX-SMB-14P

Power Relays

SZR-MY Series

### **CONTACT RATINGS**

Туре	DP	DT	4PDT		
Load Ratings	Resistive Load (p.f. = 1)	Inductive load (p.f. = 0.4, L/R = 7 ms)	Resistive Load (p.f. = 1)	Inductive load (p.f. = 0.4, L/R = 7 ms)	
Rated load         220 Vac, 5A         220 Vac, 2           24 Vdc, 5A         24 Vdc, 2/2			220 Vac, 3A 220 Vac, 0.8 A 24 Vdc, 3A 24 Vdc, 1.5 A		
Carry current	5	A	3A		
Max. operating voltage	250 Vac,	125 Vdc	250 Vac, 125 Vdc		
Max. operating current	5 A		3 A		
Max. switching capacity	1,100 VA, 120 W	440 VA, 48 W	660 VA, 72 W	176 VA, 16 W	
Min. permissible load	1 mA, 5 Vdc		1 mA, 1 Vdc		

### **COIL RATINGS**

		Rated Current (mA)			Coil Indu	ctance (H)				
	Rated Voltage (V)	50 Hz	60 Hz	Coil resistance $(\Omega)$	Armature OFF	Armature ON	Pick-up Voltage (V)	Dropout Voltage (V)	Maximum Voltage (V)	Power Consumption (W)
	6	214.1	183	12.2	0.04	0.08				Approx.
	12	106.5	91	46	0.17	0.33				1.0 W to 1.2 W
	24	53.8	46	180	0.69	1.3	Max.	Min.		(60 Hz)
AC	50	25.7	22	788	3.22	5.66	75 %	30%	110%	
	100/110	11.7/12.9	10/11	3,750	14.54	24.6				Approx
	110/120	9.9/10.8	8.4/9.2	4,430	19.2	32.1				0.9 W to 1.1 W
	200/220	6.2/6.8	5.3/5.8	12,950	54.75	94.07				(60 Hz)
	220/240	4.8/5.3	4.2/4.6	18,790	83.5	136.4				
	6	150	)	40	0.17	0.33				
DC	12	75		160	0.73	1.37	Max.	Min.		Approx.
	24	36.9		650	3.2	5.72	75%	10%	110%	0.9 W
	48	18.	5	2,600	10.6	21.0				
	100/110	9.1/	10	11,000	45.6	86.2				

Note 1: The rated current and coil resistance are measured at a coil temperature of 23  $^{\circ}$ C [73.4  $^{\circ}$ F] with tolerances of +15%, -20% for AC rated current and  $\pm$  15% for DC coil resistance.

Note 2: The rated current of N1 and X1 types is 4 mA higher than the value in the table above.

## Power Relays

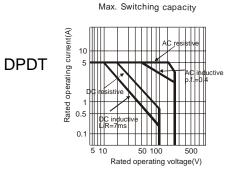
### SZR-MY Series

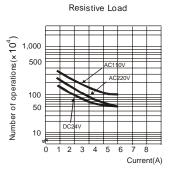
### **SPECIFICATIONS**

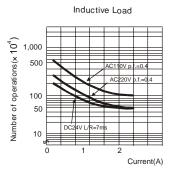
Contact material		Silver			
Contact resistance		Max. 50 MOhm			
Operate time		Max. 20 ms			
Release time		Max. 20 ms			
Operating	Mechanical	18,000 operations per hour			
frequency	Electrical	1,800 operations per hour			
Insulation resistance	ce	Min. 100 Mw at 500 Vdc			
Dielectric withstand voltage		1,800 Vac 50 Hz/60 Hz for one minute between non-continuous current			
		carrying terminals and between coil thermals and contact terminals			
Vibration	Mechanical durability	10 Hz to 55 Hz at double amplitude of 1.0 mm			
resistance	Malfunction durability	10 Hz to 55 Hz at double amplitude of 1.0 mm			
Shock resistance Mechanical durability		1,000 m/s <sup>2</sup> (approx. 100 g)			
	Malfunction durability	200 m/s <sup>2</sup> (approx. 20 g)			
Service life	Mechanical	AC: Min. 50 million operations (at operating frequency of 18,000 operations/hour)			
		DC: Min. 100 million operations (at operating frequency of 18,000 operations/hour)			
	Electrical	DPDT: Min. 500,000 operations (at operating frequency of 1,800 operations/hour)			
		4PDT: Min. 200,000 operations (at operating frequency of 1,800 operations/hour)			
Weight		Approximately 35 g			

Note 1: The data shown above are of initial value

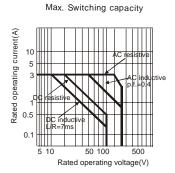
### **CHARACTERISTIC DATA**

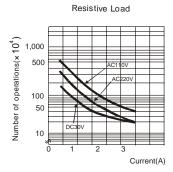


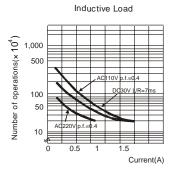










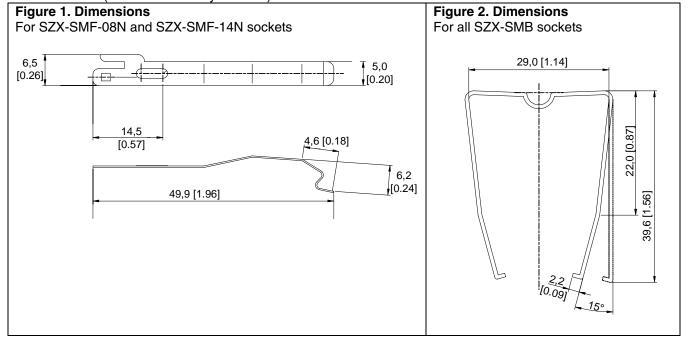


Power Relays SZR-MY Series

### **HOLDING CLIPS**

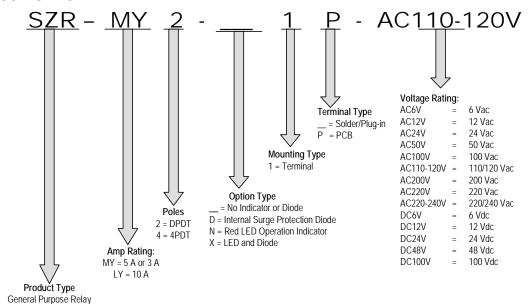
- Holding clips are included with the sockets
- Holding clips for the SMF-08N and SMF-14N cannot be removed once inserted
- Holding clips for all SMB sockets are wire for easy removal
- Holding clips are to be inserted into the slots provided on the socket

**DIMENSIONS** (For reference only – mm/in)



Power Relays SZR-MY Series

### **CATALOG LISTING MATRIX**



Power Relays SZR-MY Series

# FIGURE 3. DIMENSION, CIRCUIT DIAGRAM, TERMINAL ARRANGEMENT, AND MOUNTING HOLE FOR SZR-MY2-1, SZR-MY2-N1, SZR-MY2-D1, and SZR-MY2-X1

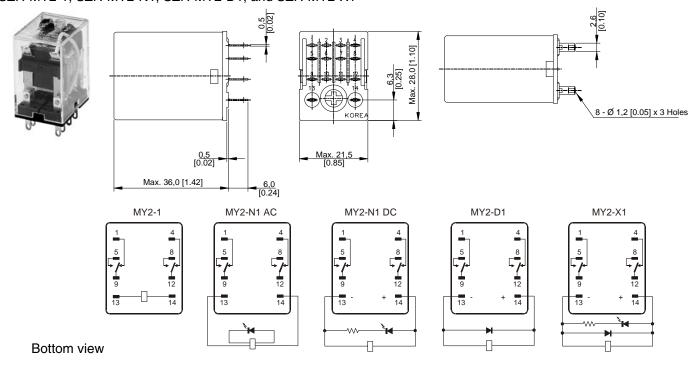
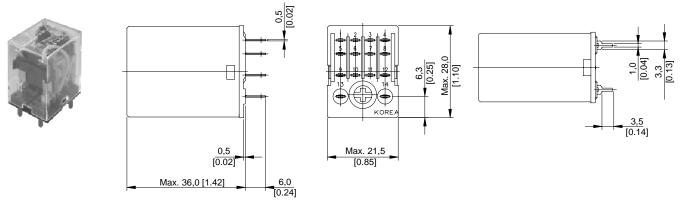


FIGURE 4. DIMENSION, CIRCUIT DIAGRAM, TERMINAL ARRANGEMENT, AND MOUNTING HOLE FOR SZR-MY2-1P and SZR-MY4-1P



The circuit diagram is the same wit standard type of SZR-MY2-1 or the SZR-MY4-1

Power Relays SZR-MY Series

# FIGURE 5. DIMENSION, CIRCUIT DIAGRAM, TERMINAL ARRANGEMENT, AND MOUNTING HOLE FOR SZR-MY4-1, SZR-MY4-N1, SZR-MY4-D1, and SZR-MY4-X1

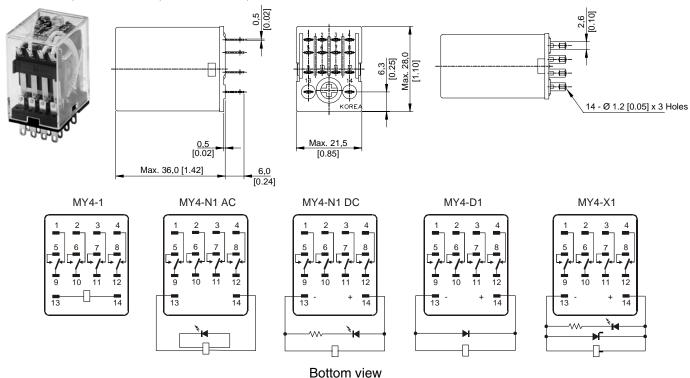
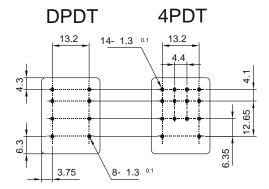


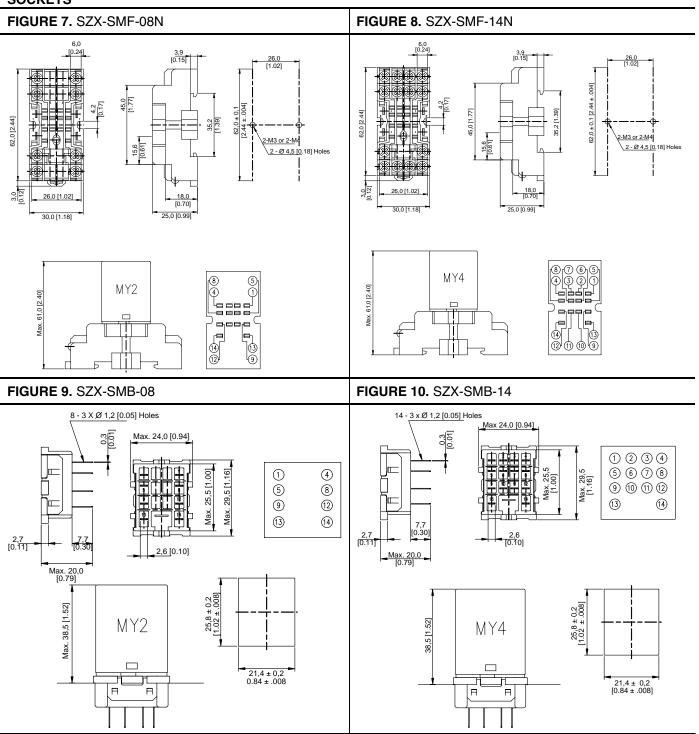
FIGURE 6. CIRCUIT DRAWING FOR SZR-MY2- and SZR-MY4-



SZR-MY Series

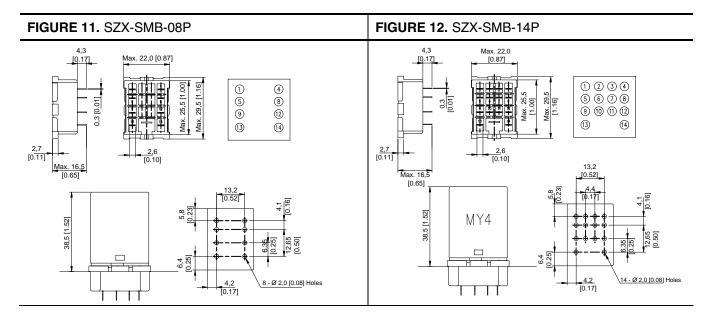
Power Relays

### **SOCKETS**



Power Relays

SZR-MY Series



### WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is Buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.

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While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

For application assistance, current specifications, or name of the nearest Authorized Distributor, contact a nearby sales office. Or call:

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