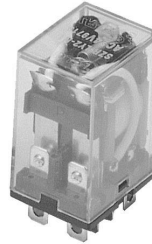


General Purpose Relay

SZR-LY series



FEATURES

- A wide range of applications from power to sequence control
- Designed small, general purpose 10A relay
- Arc barrier equipped
- High contact deposition resistance with (Ag-CdO) contact
- High dielectric strength of 1,800VAC
- High vibration and shock resistance
- Contains LED for output indicator
- Contains a diode to absorb counter electromotive voltage
- UL, CE approved

DESCRIPTION

SZR-LY series general purpose power relays are designed for general purpose and a wide range of applications from power to sequence controls in various factory machines and control panels.

These relays break 10A loads and ideal for electric control panels which require stable and reliable relays.

One standard type and three special types are available – LED self-contained, diode self-contained and LED & diode self-contained. These options allow the customers to select the appropriate model based on their needs.

A rapid response and excellent support is ensured via Honeywell's global sales and distribution channels.

APPLICATIONS

- Control Panels
- Elevator Panels
- Machine tools
- Test equipment

WARNINGS



- DO NOT USE this product as safety or emergency devices or in any other applications where failure of the product could result in a personal injury
- This information presented in this product sheet is for reference only. DO NOT USE this document as product installation information.

MODEL SELECTION GUIDE

■ Relay

Type	Terminal	Contact	Catalog Listing
Standard	Plug-in/Solder	DPDT	SZR-LY2-1
		4PDT	SZR-LY4-1
	PCB	DPDT	SZR-LY2-1P
		4PDT	SZR-LY4-1P
LED Indicator	Plug-in/Solder	DPDT	SZR-LY2-N1
DIODE surge suppression		4PDT	SZR-LY4-N1
		DPDT	SZR-LY2-D1
LED Indicator + DIODE surge suppression		4PDT	SZR-LY4-D1
		DPDT	SZR-LY2-X1
		4PDT	SZR-LY4-X1

Select the catalog listing and specify the needed coil voltage rating[e.g., SZR-LY2-N1 AC110V]

■ Socket

Relay Contact \ Mounting	Track mounting	Solder terminal	PCB terminal
DPDT	SZX-SLF-08N	SZX-SLB-08	SZX-SLB-08P
4PDT	SZX-SLF-14	SZX-SLB-14	SZX-SLB-14P

TECHNICAL INFORMATION

■ Contact Ratings

Rating \ Load	Resistive load (p.f.=1)	Inductive load (p.f.=0.4, L/R=7ms)
Rated load	AC110V 10A, DC24V 10A	AC110V 7.5A, DC24V 5A
Carry current	10A	
Max. operating voltage	AC 250V DC 125V	
Max. operating current	10A	
Max. switching capacity	1,100VA 240W	825VA 120W
Min. permissible load	DC5V 100mA	

General Purpose Relay

SZR-LY series

■ Coil Ratings

(DPDT)

Item Rated voltage (V)		Rated current (mA)		Coil resistance (Ω)	Coil inductance (H)		Pick-up voltage (V)	Dropout voltage (V)	Maximum voltage (V)	Power consumption (W)
		50 Hz	60 Hz		Armature OFF	Armature ON				
AC	6	214.1	183	12.2	0.04	0.08	Max. 80%	Min. 30%	110%	Approx. 1.0 to 1.2 (60Hz)
	12	106.5	91	46	0.17	0.33				
	24	53.8	46	180	0.69	1.3				
	50	25.7	22	788	3.22	5.66				Approx. 0.9 to 1.1 (60Hz)
	100/110	11.7/12.9	10/11	3,750	14.54	24.6				
	110/120	9.9/10.8	8.4/9.2	4,430	19.2	32.1				
	200/220	6.2/6.8	5.3/5.8	12,950	54.75	94.07				
DC	220/240	4.8/5.3	4.2/4.6	18,790	83.5	136.4	Max. 80%	Min. 10%	110%	Approx. 0.9
	6	150		40	0.17	0.33				
	12	75		160	0.73	1.37				
	24	36.9		650	3.2	5.72				
	48	18.5		2,600	10.6	21.0				
	100/110	9.1/10		11,000	45.6	86.2				

(4PDT)

Item Rated voltage (V)		Rated current (mA)		Coil resistance (Ω)	Coil inductance (H)		Pick-up voltage (V)	Dropout voltage (V)	Maximum voltage (V)	Power consumption (W)
		50 Hz	60 Hz		Armature OFF	Armature ON				
AC	6	386	330	5	0.02	0.04	Max. 80%	Min. 30%	110%	Approx. 1.95 ~ 2.5 (60Hz)
	12	199	170	20	0.1	0.17				
	24	93.6	80	78	0.38	0.67				
	50	46.8	40	350	1.74	2.88				
	100/110	22.5/25.5	19/21.8	1,800	10.5	17.3				
	200/220	11.5/13.1	9.8/11.2	6,700	33.1	57.9				
DC	6	240		25	0.09	0.21	Max. 80%	Min. 10%	110%	Approx. 1.5
	12	120		100	0.39	0.84				
	24	69		350	1.41	2.91				
	48	30		1,600	6.39	13.6				
	100/110	15/15.9		6,900	32	63.7				

Note: 1. The rated current and coil resistance are measured at a coil temperature of 23℃ with tolerances of +15%,-20% for AC rated current and ± 15% for DC coil resistance.
2. The rated current of N1 and X1 type is 4mA higher than the value in the table above.

■ Specifications

Contact material		AgCdO
Contact resistance		Max. 50 mΩ
Operate time		Max. 25 ms
Release time		Max. 25 ms
Operating frequency	Mechanical	18,000 operations/hour
	Electrical	1,800 operations/hour
Insulation resistance		Min. 100 M Ω at 500 VDC
Dielectric withstand voltage		AC 1,800V 50/60 Hz for 1 minute between non-continuous current carrying terminals and between coil terminals and contact terminals AC 1,000V 50/60 Hz for 1 minute between contacts of same polarity
Vibration resistance	Mechanical durability	10~55 Hz at double amplitude of 1.0 mm
	Malfunction durability	10~55 Hz at double amplitude of 1.0 mm
Shock resistance	Mechanical durability	1,000 m/s ² (Approx. 100G)
	Malfunction durability	200 m/s ² (Approx. 20G)
Service life	Mechanical	AC : Min. 50million operations (at operating frequency of 18,000 operations/hour) DC : Min. 100million 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		DPDT: Approx. 35g 4PDT: Approx. 65g

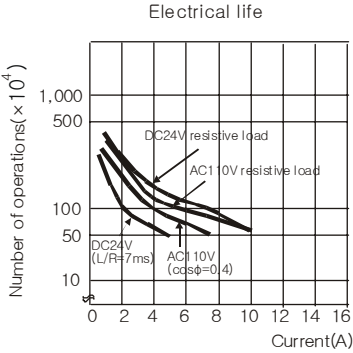
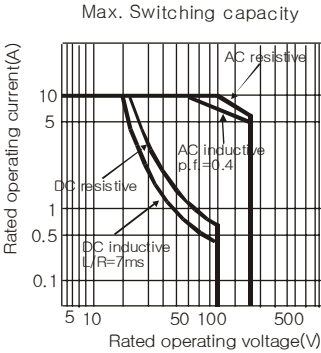
Note : The data shown above are of initial value

General Purpose Relay

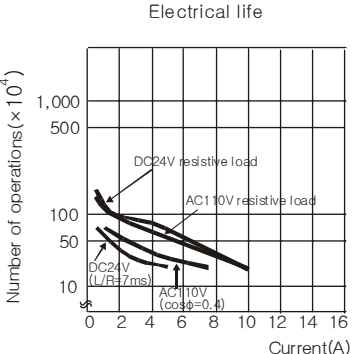
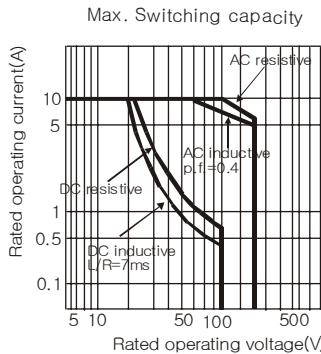
SZR-LY series

■ Characteristic Data

DPDT



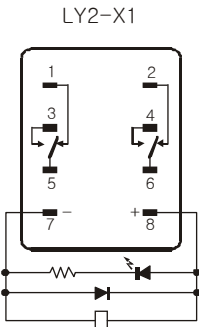
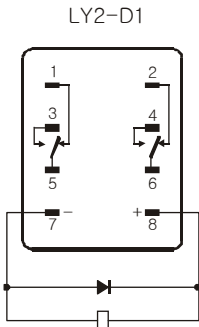
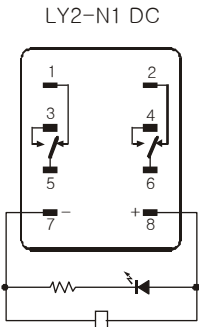
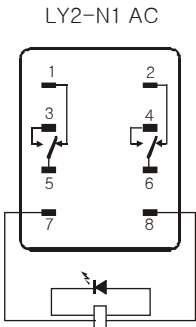
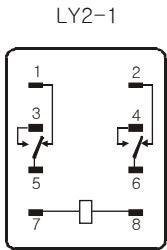
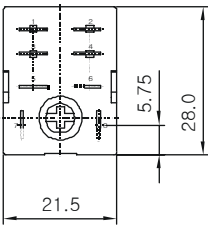
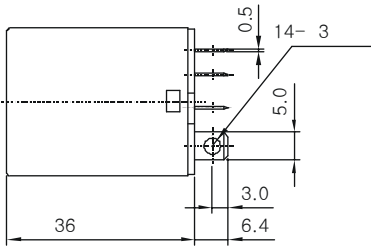
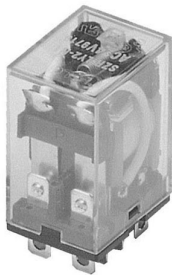
4PDT



■ Dimension, circuit diagram, terminal arrangement and mounting hole

— Relays

SZR-LY2-1
SZR-LY2-N1
SZR-LY2-D1
SZR-LY2-X1

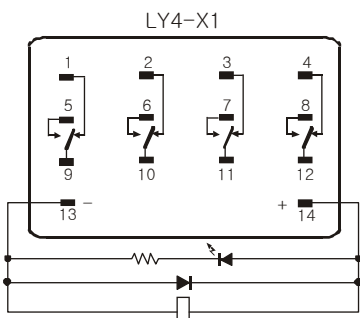
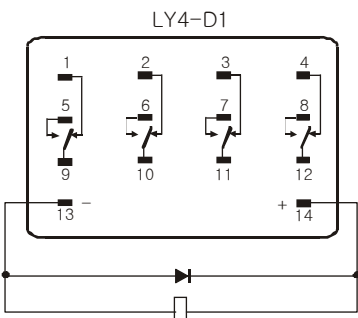
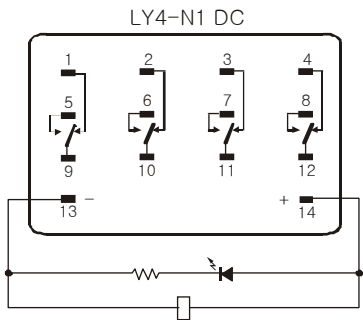
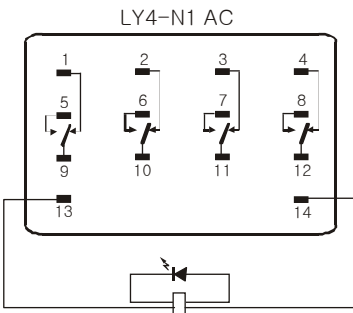
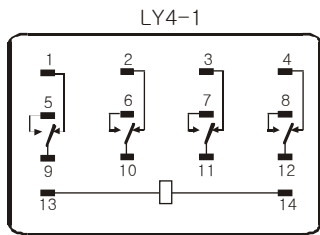
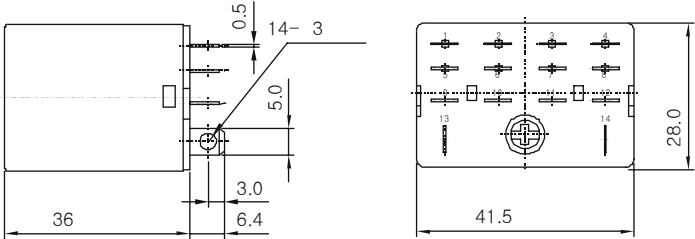


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General Purpose Relay

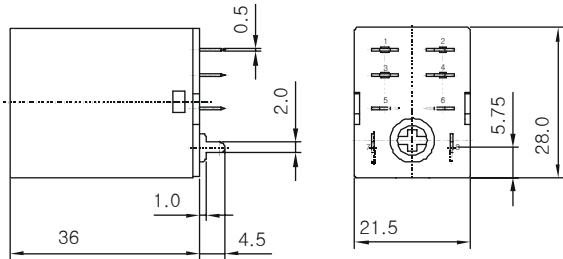
SZR-LY series

SZR-LY4-1
SZR-LY4-N1
SZR-LY4-D1
SZR-LY4-X1



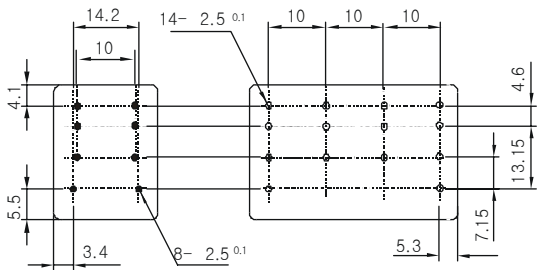
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SZR-LY2-1P
SZR-LY4-1P



DPDT

4PDT



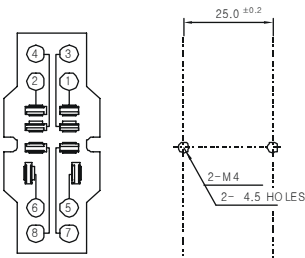
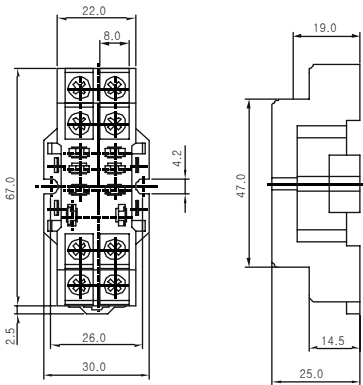
Note: The circuit diagram is same with standard type of SZR-LY2-1 / SZR-LY4-1

General Purpose Relay

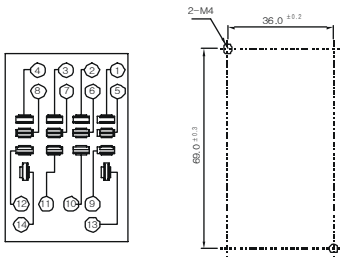
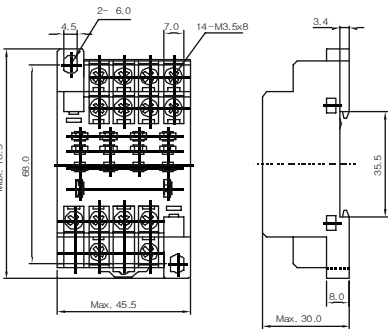
SZR-LY series

– Socket

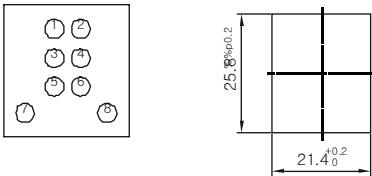
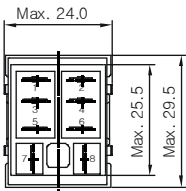
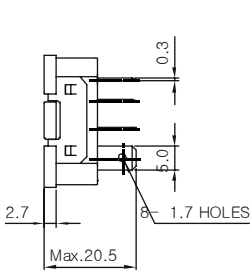
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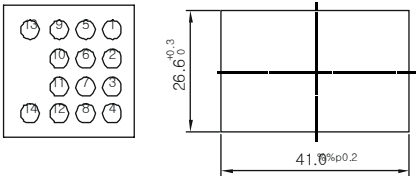
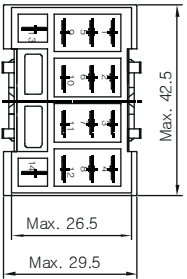
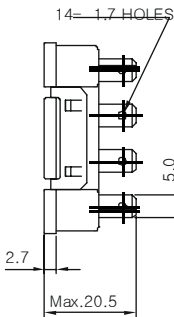
SZX-SLF-14



SZX-SLB-08



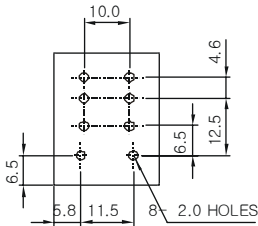
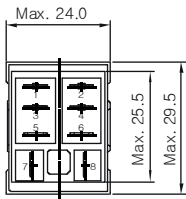
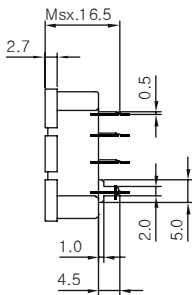
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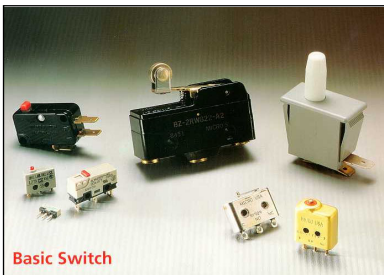
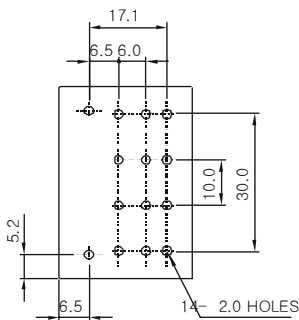
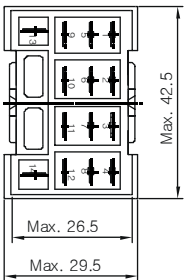
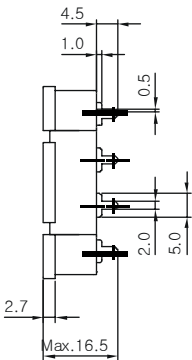
General Purpose Relay

SZR-LY series

SZX-SLB-08P



SZX-SLB-14P



In addition to the SZR-LY series, Honeywell offers one of the industry's widest range of components to meet virtually any application requirement. Please contact your local Honeywell office for more information.

General Purpose Relay

SZR-LY series

Warranty/Remedy

Honeywell warrants goods of its manufacture as being free of defective material and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during that 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.

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

Specifications may change at any time without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

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Honeywell serves its customers through a worldwide network of sales offices and distributors. For application assistance, current specifications, pricing, or name of the nearest Authorized Distributor, contact your local sales office or:

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