## General Purpose

## Power Relay

## 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.

> A 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.

RELAY MODEL SELECTION GUIDE

| Type | Terminal | Contact | Catalog Listing |
| :---: | :---: | :---: | :---: |
| Standard | Plug-in/Solder | DPDT | SZR-MY2-1 |
|  |  | 4PDT | SZR-MY4-1 |
|  | PCB | DPDT | SZR-MY2-1P |
|  |  | 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

| Relay Contact | Din-rail Mounting | Solder Terminal | PCB Terminal |
| :--- | :---: | :---: | :---: |
| DPDT <br> For use with <br> SZR-MY2-1, -N1, - <br> D1, -X1 |  |  |  |

## CONTACT RATINGS

| Type |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Ratings Load | Resistive Load (p.f. = 1) | Inductive load $\text { (p.f. }=0.4, \mathrm{~L} / \mathrm{R}=7 \mathrm{~ms} \text { ) }$ | Resistive Load (p.f. = 1) | Inductive load $\text { (p.f. }=0.4, \mathrm{~L} / \mathrm{R}=7 \mathrm{~ms} \text { ) }$ |
| Rated load | 220 Vac, 5A <br> $24 \mathrm{Vdc}, 5 \mathrm{~A}$ | $\begin{aligned} & 220 \mathrm{Vac}, 2 \mathrm{~A} \\ & 24 \mathrm{Vdc}, 2 \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 220 \mathrm{Vac}, 3 \mathrm{~A} \\ & 24 \mathrm{Vdc}, 3 \mathrm{~A} \end{aligned}$ | $220 \mathrm{Vac}, 0.8 \mathrm{~A}$ <br> $24 \mathrm{Vdc}, 1.5 \mathrm{~A}$ |
| Carry current | 5A |  | 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 | $1 \mathrm{~mA}, 5 \mathrm{Vdc}$ |  | $1 \mathrm{~mA}, 1 \mathrm{Vdc}$ |  |

## COIL RATINGS

|  |  | Rated Current (mA) |  |  | Coil Inductance (H) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rated Voltage (V) | 50 Hz | 60 Hz | Coil <br> resistance <br> $(\Omega)$ | Armature OFF | Armature ON | Pick-up Voltage (V) | Dropout Voltage <br> (V) | Maximum Voltage (V) | Power Consumption (W) |
| AC | 6 | 214.1 | 183 | 12.2 | 0.04 | 0.08 | $\begin{aligned} & \text { Max. } \\ & 75 \% \end{aligned}$ | $\begin{aligned} & \text { Min. } \\ & 30 \% \end{aligned}$ | 110\% | Approx. 1.0 W to 1.2 W $(60 \mathrm{~Hz})$ |
|  | 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 |  |  |  |  |
|  | 100/110 | 11.7/12.9 | 10/11 | 3,750 | 14.54 | 24.6 |  |  |  | $\begin{gathered} \text { Approx } \\ 0.9 \mathrm{~W} \text { to } 1.1 \mathrm{~W} \\ (60 \mathrm{~Hz}) \end{gathered}$ |
|  | 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 |  |  |  |  |
|  | 220/240 | 4.8/5.3 | 4.2/4.6 | 18,790 | 83.5 | 136.4 |  |  |  |  |
| DC | 6 | 150 |  | 40 | 0.17 | 0.33 | $\begin{aligned} & \text { Max. } \\ & 75 \% \end{aligned}$ | $\begin{aligned} & \text { Min. } \\ & 10 \% \end{aligned}$ | 110\% | Approx.$0.9 \text { W }$ |
|  | 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 |  |  |  |  |

Note 1: The rated current and coil resistance are measured at a coil temperature of $23^{\circ} \mathrm{C}\left[73.4^{\circ} \mathrm{F}\right]$ with tolerances of $+15 \%$, $-20 \%$ for AC rated current and $\pm 15 \%$ for DC coil resistance.
Note 2: The rated current of N 1 and X 1 types is 4 mA higher than the value in the table above.

## General Purpose

## 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 <br> frequency | Mechanical | 18,000 operations per hour |
|  | Electrical | 1,800 operations per hour |
| Insulation resistance | Min. 100 Mw at 500 Vdc |  |
| Dielectric withstand voltage |  | $1,800 \mathrm{Vac} 50 \mathrm{~Hz} / 60 \mathrm{~Hz}$ for one minute between non-continuous current <br> carrying terminals and between coil thermals and contact terminals |
| Vibration <br> resistance | Mechanical durability | 10 Hz to 55 Hz at double amplitude of 1.0 mm |
|  | Malfunction durability | 10 Hz to 55 Hz at double amplitude of 1.0 mm |
|  | Mechanical durability | $1,000 \mathrm{~m} / \mathrm{s}^{2}$ (approx. 100 g ) |
| Service life | Mechanction durability | $200 \mathrm{~m} / \mathrm{s}^{2}$ (approx. 20 g ) |

Note 1: The data shown above are of initial value

## CHARACTERISTIC DATA



## General Purpose

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)


Figure 2. Dimensions For all SZX-SMB sockets


## General Purpose

## Power Relays

SZR-MY Series

## CATALOG LISTING MATRIX



## General Purpose

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

## General Purpose

## 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-


FIGURE 7. SZX-SMF-08N


FIGURE 8. SZX-SMF-14N



FIGURE 10. SZX-SMB-14


## General Purpose

Power Relays


## 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.

Specifications may change 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.

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:

1-800-537-6945 USA/Canada
1-815-235-6847 International

## FAX

1-815-235-6545 USA INTERNET
www.honeywell.com/sensing
info.sc@honeywell.com

Sensing and Control
www.honeywell.com/sensing
Honeywell
11 West Spring Street
Freeport, Illinois 61032

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for General Purpose Relays category:
Click to view products by Honeywell manufacturer:

Other Similar products are found below :
PCN-105D3MH,000 59641F200 LY1SAC110120 5X827E 5X837F 5X840F 5X842F 5X848E LY2N-AC120 LY2S-AC220/240 LY2-US-
AC120 LY3-US-AC120 LY4F-UA-DC12 LY4F-UA-DC24 LY4F-US-AC120 LY4F-US-AC240 LY4F-US-DC24 LY4F-VD-AC110
LYQ20DC12 M115C60 M115N010 M115N0150 6031007G 603-12D 61211T0B4 61212T400 61222Q400 61243B600 61243C500
61243Q400 61311BOA2 61311BOA6 61311BOA8 61311C0A2 61311COA1 61311COA6 61311F0A2 61311QOA1 61311QOA4
$\underline{61311 \mathrm{~T} 0 \mathrm{D} 6} \underline{61311 \mathrm{TOA} 6} \underline{61311 \mathrm{TOA} 7} \underline{61311 \mathrm{TOB} 3} \underline{61311 \mathrm{TOB} 4} \underline{61311 \mathrm{U} 0 \mathrm{~A} 6} \underline{61312 \mathrm{Q} 600} \underline{61312 \mathrm{~T} 400} \underline{61312 \mathrm{~T} 600} \underline{61313 \mathrm{U} 200} \underline{61313 \mathrm{U} 400}$

