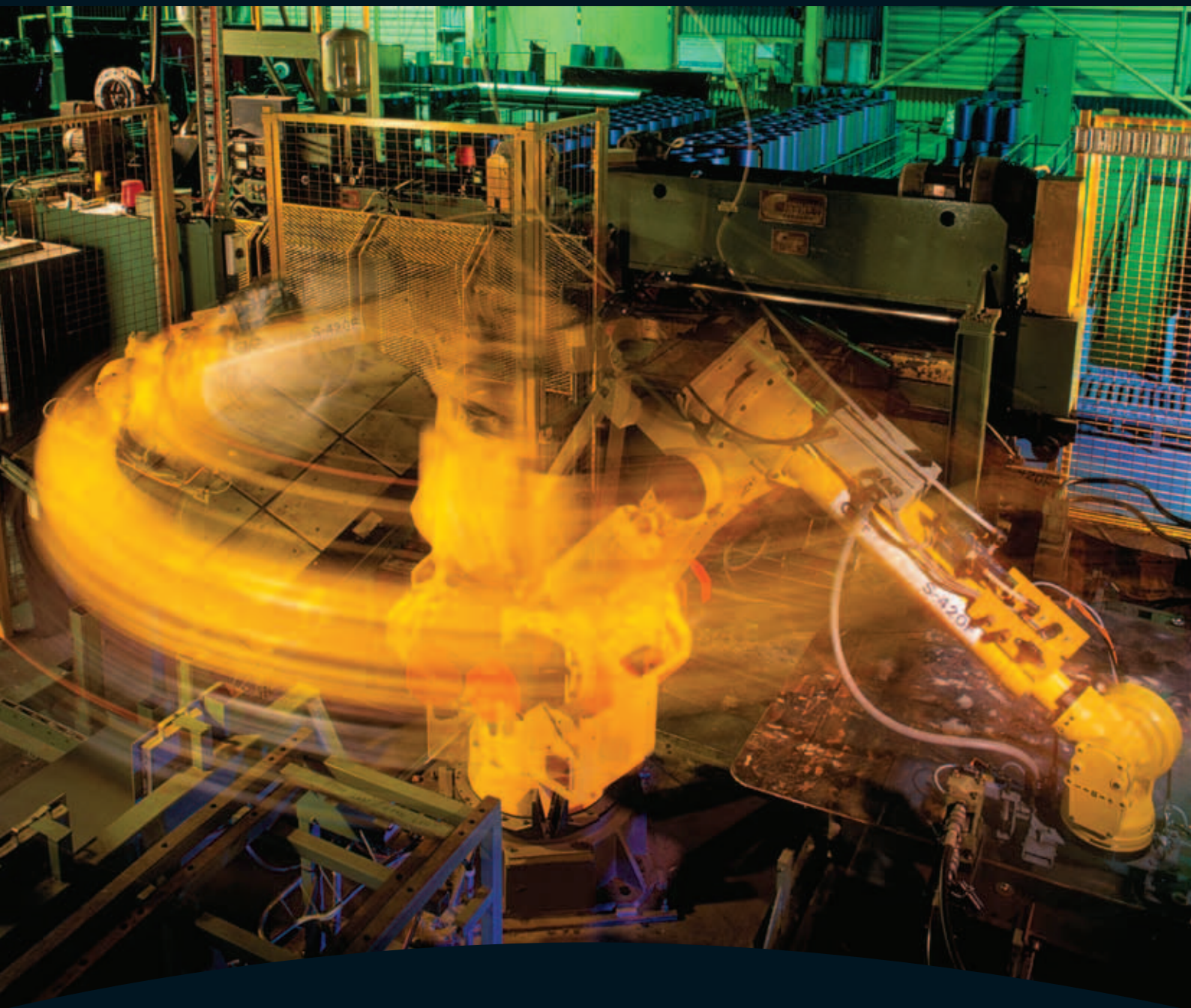


**Relay**

**Honeywell**



SENSING AND CONTROL

## **Product Range Guide**



# For innovation that's well apart, there's only Honeywell Sensing and Control.

With more than 50,000 products ranging from snap-action, limit, toggle, and pressure switches to position, speed, pressure, and airflow sensors, Honeywell Sensing and Control (S&C) has one of the broadest sensing and switching portfolios available.

Honeywell sensor, switch, and control components are tailored to exact specifications for stronger performance, longer productivity, and increased safety. Enhanced accuracy and durability are built into every part, improving output and endurance. For our customers, this can reduce expenditures and operational costs. Our global footprint and channels help to competitively price such components for your chosen application and provide immediate technical support.

Our expertise in aerospace and defense, transportation, medical, and industrial industries means we offer products and solutions for a wide range of applications. But, an impressive product line is only one part. We possess unique engineering expertise and value-added capabilities.

While Honeywell's switch and sensor solutions are suitable for a wide array of basic and complex applications, our custom-engineered solutions offer enhanced precision, repeatability, and ruggedness. We offer domain knowledge and technology resources, along with a close working relationship, to develop and deliver cost-effective, individually tailored solutions. Whether clean-slate development or simple modifications



to an existing design are needed, our expertly engineered solutions help to meet the most stringent requirements with worldclass product designs, technology integration, and customer-specific manufacturing.

With a 75-year legacy in the switch and sensor business, Honeywell S&C has earned a reputation for reliability and excellence. Our strong product designs, Six Sigma Plus manufacturing environment, and robust testing facilities help provide quality out of the box, as well as enhanced, sustainable performance down the line.

Global service, sourcing, and manufacturing. Industry-leading engineers. Value-added assemblies and solutions. Construction to required specifications. A one-stop, full-service, globally competitive supplier... Honeywell Sensing and Control.

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# SZR-MY/LY SERIES

## Relay

### DESCRIPTION

SZR-MY 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 are small sizes with two contact types, MY series 2 pole (DPDT) version break 5A load and 4 poles (4PDT) version break 3A load. LY series version break 10A load. They are ideal for electric control panels which require stable and reliable relays.

One standard type and two special types are available, general purpose type-with LED, and without LED. These options allow the customers to select the appropriate model based on their needs.

### FEATURES

- ◆ Small size, standard install size
- ◆ MY2: Ag alloy, 2-pole type breaks 5A load
- ◆ MY4: Ag alloy, 2-pole type breaks 3A load
- ◆ LY Series: Ag alloy, breaks 10A load
- ◆ LY series with Arc barrier to prevent Arc interruption
- ◆ High reliability and long life
- ◆ High sensitivity with quick response time  $\leq 20\text{ms}$
- ◆ High vibration and shock resistance
- ◆ With LED
- ◆ CE CQC approved

### APPLICATION

- ◆ Control panels / elevator panels / control cabinet
- ◆ Control system for elevator
- ◆ Machine tools control / factory logic control
- ◆ Test Equipment
- ◆ Transmission and Distribution of Electrical Energy

### MODEL

**SZR-MY    2   - S- N    1   AC110/120V**

①    ②    ③    ④    ⑤    ⑥    ⑦

① General relay

② Current level

MY: 5A or 3A

LY: 10A

③ Circuit

2: DPDT

4: 4PDT

④ Purchase type

S:                      NULL

⑤ Option

Blank:                Without LED

N:                     With LED

⑥    1:                      Null

⑦ Voltage level

AC6V = 6 VAC

AC12V = 12 VAC

AC24V = 24 VAC

AC48V = 48 VAC

AC110/120V = 110/120 VAC

AC220V = 220 VAC

DC6V = 6 VDC


DC12V = 12 VDC

DC24V = 24 VDC


DC48V = 48 VDC

DC110V = 110 VDC


## Options: SZR-MY2 SERIES PARAMETER

		SZR-MY2-S-1 AC6V SZR-MY2-S-1 AC12V	SZR-MY2-S-1 AC24V SZR-MY2-S-1 AC48V	SZR-MY2-S-1 AC110/120V SZR-MY2-S-1 AC220V	SZR-MY2-S-1 DC6V SZR-MY2-S-1 DC12V	SZR-MY2-S-1 DC24V SZR-MY2-S-1 DC48V	SZR-MY2-S-1 DC110V	SZR-MY2-S-N1 AC6V SZR-MY2-S-N1 AC12V	SZR-MY2-S-N1 AC24V SZR-MY2-S-N1 AC48V	SZR-MY2-S-N1 C110/120V SZR-MY2-S-N1 AC220V	SZR-MY2-S-N1 DC6V SZR-MY2-S-N1 DC12V	SZR-MY2-S-N1 DC24V SZR-MY2-S-N1 DC48V	SZR-MY2-S-N1 DC110V
Contact parameter	Rated current	5A											
	Contact form	DPDT											
	Resistance load	250VAC, 5A			30VDC, 5A			250VAC, 5A			30VDC, 5A		
	Switching capacity (resistance)	1250VA			150W			1250VA			150W		
Coil parameter	Options	Standard type, without LED						With LED					
	Coil voltage	6VAC	12VAC	24VAC	48VAC	110/120VAC	220VAC	6VDC	12VDC	24VDC	48VDC	110VDC	
	Coil resistance (ohm)	11.5	40	160	600	3750/3900	13000	40	160	630	2600	11000	
	Rated current(mA) 50Hz testing	215	106.9	62.4	33.3	12.6	6.5	150	75	36.9	18.5	10	
	Rated current (mA) 60Hz testing	190	98.2	52.2	27.8	10.8	5.4	150	75	36.9	18.5	10	
	Consumed power (W) 60Hz testing	1.2VA						0.9W					
	Voltage drop (for reted voltage)	Min. 30%						Min.10%					
	Min. operating voltage	Max.80% rated voltage						Max.75% rated voltage					
	Max. continuous operating voltage	110% rated voltage											
	Min.operating valtage	80% rated voltage											
Whole parameter	Operate time	Max.20hm											
	Release voltag	Max.20hm											
	Ambient temperature	-55 °C~70 °C											
	Humidity	35%~85% RH											
	Contact material	Ag alloy											
	Contact resistance	max. 50 mΩ											
	Electrical life	>100000 (1800ops/h)											
	Mechanical life	>1000000 (18000 ops/h)											
	Insulation resistance	>500zΩ (500VDC)											
	Dielectric strength	Between contact						1000VAC/1min					
		Between contact(different pole)						1000VAC/1min					
		Between contact and coil						2000VAC/1min					
	Vibration resistance	10~55Hz, Dual amplitude:1mm											
	Shock resistance	100m/s2 ( about 10g)											
	Weigh	35g											
	Certificate	CE CQC											

## Options: SZR-MY4 SERIES PARAMETER

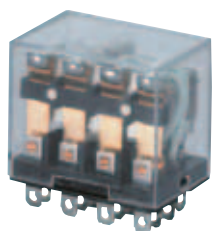
		SZR-MY4-S-1 AC6V	SZR-MY4-S-1 AC12V	SZR-MY4-S-1 AC24V	SZR-MY4-S-1 AC48V	SZR-MY4-S-1 AC110/120V	SZR-MY4-S-1 AC220V	SZR-MY4-S-1 DC6V	SZR-MY4-S-1 DC12V	SZR-MY4-S-1 DC24V	SZR-MY4-S-1 DC48V	SZR-MY4-S-1 DC110V	SZR-MY4-S-N1 AC6V	SZR-MY4-S-N1 AC12V	SZR-MY4-S-N1 AC24V	SZR-MY4-S-N1 AC48V	SZR-MY4-S-N1 AC110/120V	SZR-MY4-S-N1 AC220V	SZR-MY4-S-N1 DC6V	SZR-MY4-S-N1 DC12V	SZR-MY4-S-N1 DC24V	SZR-MY4-S-N1 DC48V	SZR-MY4-S-N1 DC110V
Contact parameter	Rated current	3A																					
	Contact form	4PDT																					
	Resistance load	250VAC, 3A				30VDC, 3A				250VAC, 3A				30VDC, 3A									
	Switching capacity (resistance)	750VA				90W				750VA				90W									
Coil parameter	Options	Standard type, without LED										With LED											
	Coil voltage	6VAC	12VAC	24VAC	48VAC	110/120VAC	220VAC	6VDC	12VDC	24VDC	48VDC	110VDC											
	Coil resistance (ohm)	11.5	40	160	600	3750/3900	13000	40	160	630	2600	11000											
	Rated current (mA) 50Hz testing	215	106.9	62.4	33.3	12.6	6.5	150	75	36.9	18.5	10											
	Rated current (mA) 60Hz testing	190	98.2	52.2	27.8	10.8	5.4	150	75	36.9	18.5	10											
	Consumed power (W) 60Hz testing	1.2VA						0.9W															
	Voltage drop (for reted voltage)	Min. 30%						Min.10%															
	Min. operating voltage	Max.80% rated voltage						Max.75% rated voltage															
	Max. continuous operating voltage	110% rated voltage																					
	Min.operating valtage	80% rated voltage																					
Whole parameter	Operate time	Max.20hm																					
	Release voltag	Max.20hm																					
	Ambient temperature	-55 °C~70 °C																					
	Humidity	35%~85% RH																					
	Contact material	Ag alloy																					
	Contact resistance	max. 50 mΩ																					
	Electrical life	>100000 (1800ops/h)																					
	Mechanical life	>1000000 (18000 ops/h)																					
	Insulation resistance	>500zΩ (500VDC)																					
	Dielectric strength	Between contact						1000VAC/1min															
		Between contact (different pole)						1000VAC/1min															
		Between contact and coil						2000VAC/1min															
	Vibration resistance	10~55Hz, 1mm																					
	Shock resistance	100m/s2 (10g)																					
	Weigh	35g																					
Certificate	CE CQC																						

## Options: SZR-LY2 SERIES PARAMETER





		SZR-LY2-S-N1 AC6V	SZR-LY2-S-N1 AC12V	SZR-LY2-S-N1 AC24V	SZR-LY2-S-N1 AC48V	SZR-LY2-S-N1 AC110/120V	SZR-LY2-S-N1 AC220V	SZR-LY2-S-N1 DC6V	SZR-LY2-S-N1 DC12V	SZR-LY2-S-N1 DC24V	SZR-LY2-S-N1 DC48V	SZR-LY2-S-N1 DC110V
Contact parameter	Rated current	10A										
	Contact form	DPDT										
	Resistance load	250VAC, 10A			30VDC, 10A			250VAC, 10A			30VDC, 10A	
	Switching capacity (resistance)	2500VA			300W			2500VA			300W	
Coil parameter	Options	With LED										
	Coil voltage	6VAC	12VAC	24VAC	48VAC	110/120VAC	220VAC	6VDC	12VDC	24VDC	48VDC	110VDC
	Coil resistance (ohm)	11.5	40	160	600	3750/3900	13000	40	160	630	2600	11000
	Rated current (mA) 50Hz testing	215	106.9	62.4	33.3	12.6	6.5	150	75	36.9	18.5	10
	Rated current (mA) 60Hz testing	190	98.2	52.2	27.8	10.8	5.4	150	75	36.9	18.5	10
	Consumed power (W) 60Hz testing	1.2VA						0.9W				
	Voltage drop (for reted voltage)	Min. 30%						Min.10%				
	Min. operating voltage	Max.80% rated voltage						Max.75% rated voltage				
	Max. continuous operating voltage	110% rated voltage										
	Min.operating valtage	80% rated voltage										
Whole parameter	Operate time	Max.20hm										
	Release voltag	Max.20hm										
	Ambient temperature	-25~55 °C										
	Humidity	35~85% RH										
	Contact material	Ag alloy										
	Contact resistance	max. 50 mΩ										
	Electrical life	>100000 (1800ops/h)										
	Mechanical life	>1000000 (18000 ops/h)										
	Insulation resistance	>500zΩ (500VDC)										
	Dielectric strength	Between contact						1000VAC/1min				
		Between contact (different pole)						1000VAC/1min				
		Between contact and coil						2000VAC/1min				
	Vibration resistance	10~55Hz, 1mm										
	Shock resistance	100m/s2 (10g)										
Weigh	35g											
Certificate	CE CQC											





## Options: SZR-LY4 SERIES PARAMETER

												
		SZR-LY4-S-N1 AC6V	SZR-LY4-S-N1 AC12V	SZR-LY4-S-N1 AC24V	SZR-LY4-S-N1 AC48V	SZR-LY4-S-N1 AC110/120V	SZR-LY4-S-N1 AC220V	SZR-LY4-S-N1 DC6V	SZR-LY4-S-N1 DC12V	SZR-LY4-S-N1 DC24V	SZR-LY4-S-N1 DC48V	SZR-LY4-S-N1 DC110V
Contact parameter	Rated current	10A										
	Contact form	4PDT										
	Terminal	PCB/ plug-in terminal						PCB				
	Resistance load	250VAC, 10A			30VDC, 10A			250VAC, 10A			30VDC, 10A	
	Switching capacity (resistance)	2500VA			300W			2500VA			300W	
Coil parameter	Options	With LED										
	Coil voltage	6VAC	12VAC	24VAC	48VAC	110/120VAC	220VAC	6VDC	12VDC	24VDC	48VDC	110VDC
	Coil resistance (ohm)	5	20	80	320	1680/2000	6700	24	96	360	1540	6800
	Rated current (mA) 50Hz testing	386	199	93.6	47	25.5/27	13.1	250	125	62	31	13.6
	Rated current (mA) 60Hz testing	330	170	80	40	21.8/22.6	11.2	250	125	62	31	13.6
	Consumed power (W) 60Hz testing	2.5VA						1.5W				
	Voltage drop (for reted voltage)	Min. 30%						Min.10%				
	Min. operating voltage	Max.80% rated voltage						Max.75% rated voltage				
	Max. continuous operating voltage	110% rated voltage										
	Min.operating voltage	80% rated voltage										
Whole parameter	Operate time	Max.20hm										
	Release voltag	Max.20hm										
	Ambient temperature	-25~55 °C										
	Humidity	35~85% RH										
	Contact material	Ag alloy										
	Contact resistance	max. 50 mΩ										
	Electrical life	>100000 (1800ops/h)										
	Mechanical life	>1000000 (18000 ops/h)										
	Insulation resistance	>500zΩ (500VDC)										
	Dielectric strength	Between contact						1000VAC/1min				
		Between contact(different pole)						1000VAC/1min				
		Between contact and coil						2000VAC/1min				
	Vibration resistance	10~55Hz, Dual amplitude:1mm										
	Shock resistance	100m/s2 (about 10g)										
	Weigh	65g										
Certificate	CE CQC											

## ■ Options: SZX SERIES PARAMETER

SZX-SMF-08SN		SZX-SMF-14SN	
			
SZX-SLF-08SE		SZX-SLF-14SE	
			
SZR-MY2 Matched socket	SZR-MY4 Matched socket	SZR-LY2 Matched socket	SZR-LY4 Matched socket
SZX-SMF-08SN	SZX-SMF-14SN	SZX-SLF-08SE	SZX-SLF-14SE

## ■ Options: SZX CLIP SERIES

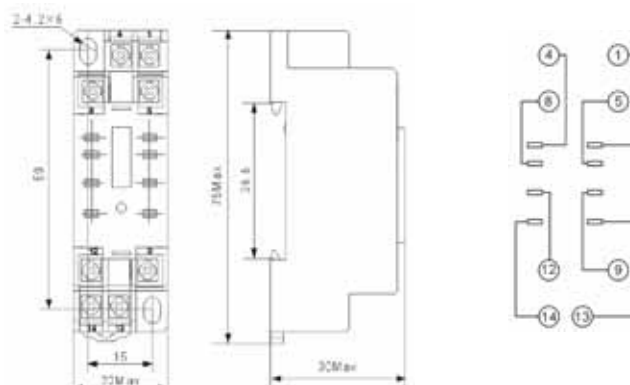
SZX-SMF-CM	SZX-SLF-CL
	
Matched socket SZX-SMF-08SN SZX-SMF-14SN	Matched socket SZX-SLF-08SE SZX-SLF-14SE



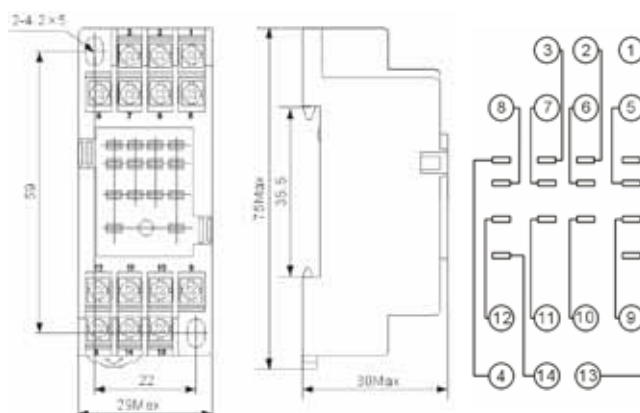
Technical drawing of the 10000mAh battery showing front, side, and top views with dimensions:

- Front View:** Width 28max, Height 36max, Bottom thickness 7, Bottom-left offset 0.5, Bottom-right offset 4.8.
- Side View:** Thickness 21.5max.
- Top View:** Shows the layout of the battery cells and internal components.

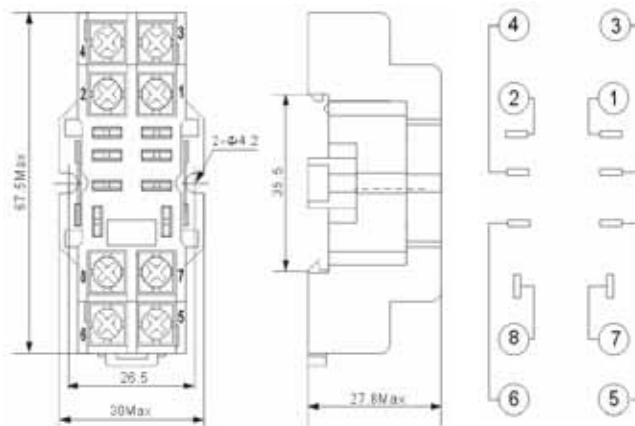
SZX-SMF-08SN outline & install dimension  
circuit diagram



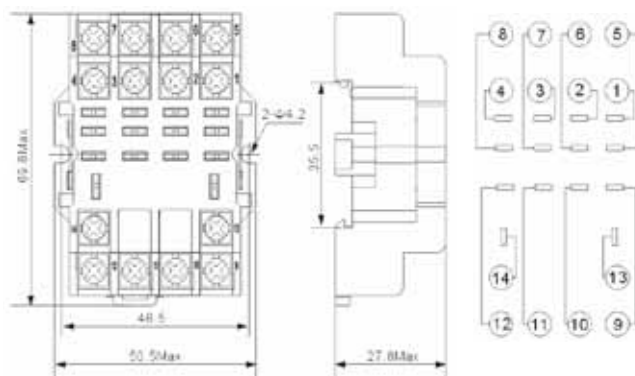
SZX-SMF-14SN outline & install dimension  
circuit diagram



SZX-SLF-08SE outline & install dimension  
circuit diagram



SZX-SLF-14SE outline & install dimension circuit  
diagram





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The Honeywell logo, consisting of the word "Honeywell" in a bold, red, sans-serif font.