

Please note that please be sure to understand the precautions before ordering.



#### Characteristics

- 12A/8A load switching capability
- One/two sets of contacts are converted
- The original return spring structure is used to improve durability
- The use of highly conductive materials ensures stable energizing performance even at high currents
- The mechanical life is more than 20 million times
- Dust cover type package
- Meet the use of sockets

### Order specifications

Order number	RY1S-CL-D24 RY2S-CL-D24
Packing Units	40 pcs
Minimum order quantity	40 pcs
Unit weight (including packaging)	I
Unit weight (without packaging)	about 19 g
Origin	WZ

## Example of an order mark

- ①RY:Enterprise code
- ② Contact conversion: 1S = 1 set of conversions, 2S = 2 sets of conversions
- ③ Mechanical action display
- 4 L = with LED light, none = no LED light
- ⑤ Coil voltage: refer to the coil parameter table
- 6 Color: W = white transparent case, Y = beige yellow case

#### Note:

- 1. When ordering, refer to the coil specification table for relay voltage selection;
- 2. The special requirements of customers will be identified in the form of characteristic numbers after being reviewed by our technical department.



### Contact parameters

Contact form	1NO1NC	2NO2NC			
Contact resistance(1)	≤50mΩ				
Contact material	AgSnO2				
Contact load	12A	8A			
Maximum switching voltage	250VAC/30VDC				
Maximum switching current	12A	8A			
Maximum switching power	3000VA/360W				
Mechanical durability	DC coil: more than 20 million times				
(No load)	AC coil: more than 20 million times				
Electrical life Switching frequency: 1800 times/hour	DC load: more than 100,000 cycles				
	AC load: more than 200,000 cycles				

# Performance parameters

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Insulation resistance	$100 m\Omega$ or more (500V DC megohmmeter)
	Between the contact and the coil 5000VAC 1min
The medium is pressure-resistant	Between the same pole contacts 1000VAC 1min
	Between heteropolar contacts 3000VAC 1min
Action time	≤15ms
Release time	≤10ms
Coil temperature rise	≤85K
Impact resistance	1000m/s²
Shock resistance	Frequency 10Hz-55Hz, single amplitude 0.75mm
Humidity	5~85%RH
Temperature	-40°C ~ +70°C(No icing)
Lead-out form	Plug-in
Encapsulation	Solder mask type

### Performance parameters

Insulation resistance	DC: about 0.53W			
	AC: about 0.9VA			

#### 🕕 Note:

1. The above values are initial.



### Contact Parameters (DC Specification: 0.53W)

23°C
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Rated voltageVDC	6	12	24	48	100/110	220
Operating voltage(1)VDC	≤4.5	≤9.0	≤18	≤36	≤82.5	≤165
Release voltageVDC	≥0.60	≥1.20	≥2.40	≥4.80	≥11.0	≥22.0
Maximum voltage <sub>(2)</sub> VDC	6.6	13.2	26.4	52.8	121	242
Coil resistance( $\pm 10\%$ ) $\Omega$	40	160	640	2600	13450	42000

### Contact Parameters (AC Specification: 0.9VA)

23°C

Rated voltageVAC	6	12	24	48	100/110	220
Operating voltage(1)VAC	≤4.8	≤9.6	≤19.2	≤38.4	≤88.0	≤176
Release voltageVAC	≥1.80	≥3.60	≥7.20	≥14.4	≥33.0	≥66.0
Maximum voltage <sub>(2)</sub> VAC	6.6	13.2	26.4	52.8	121	242
Coil resistance(±10%)Ω	12	45	180	700	3750	14500

#### D Note:

<sup>1.</sup> At room temperature, when the relay operates normally, the minimum value of the voltage applied to the coil foot of the relay shall not be less than 80% of the rated voltage, but in order to reach to the specified product performance, please apply the rated voltage to the coil when using.

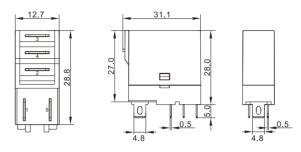
<sup>2.</sup> The maximum voltage refers to the maximum voltage that the relay coil can withstand in a short period of time.



### **Exterior Dimension Drawing**

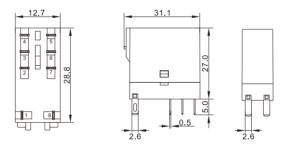
Unit:mm

### Vertical mounting type with pins



1 set of conversion type

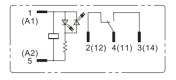
### Vertical mounting type with pins



2 sets of conversion types

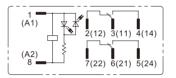


### Wiring diagram



1 set of conversion type

# Wiring diagram



2 sets of conversion types

#### Note:

1. When the overall size is  $\leq 1$  mm, the tolerance is  $\pm 0.2$  mm, and when the overall size is between  $(1\sim5)$  mm, the tolerance is  $\pm 0.3$  mm, when the overall dimensions  $\geq 5$  mm, the tolerance is  $\pm 0.4$  mm.





### Characteristics

- Small size, space-saving
- PCB, screw, and rail mounting styles are available
- With relay puller, lock and prevent falling off, easy to replace
- A variety of plug-in modules are available to realize power-on indication and line protection functions
- Optional accessories: circlip, marker, plug-in module

# Order specifications

Model	Rated voltage	Curren rating	Ambient temperature	Pressure- resistant	Screw torque	External wires	Weight
RY1S-05B	250VAC	12A	-35°C~70°C	1000	0.8-1.0N.m	7mm	about25g
RY2S-05B	250VAC	8A	-35°C~70°C	1000	0.8-1.0N.m	7mm	about29g
RY1S-05E	250VAC	12A	-35°C~70°C	1000	0.8-1.0N.m	7mm	about25g
RY2S-08E	250VAC	8A	-35°C~70°C	1000	0.8-1.0N.m	7mm	about28g
RY1S-05PU	250VAC	12A	-35°C~70°C	1000	-	7mm	about34g
RY2S-08PU	250VAC	8A	-35°C~70°C	1000	-	7mm	about39g
14F-1Z-C5	250VAC	12A	-35°C~70°C	1000	0.8-1.0N.m	7mm	about35g
14F-2Z-C5	250VAC	8A	-35°C~70°C	1000	0.8-1.0N.m	7mm	about42g
SJ1S-61	250VAC	12A	-35°C~70°C	1000	-	7mm	about4.1g
SJ2S-61	250VAC	8A	-35°C~70°C	1000	-	7mm	about4.1g
1S-61-S	250VAC	12A	-35°C~70°C	1000	-	7mm	about4.8g
2S-61-S	250VAC	8A	-35°C~70°C	1000	-	7mm	about4.8g



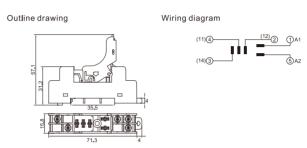
RY1S-05B-Screw wiring

Unit:mm

Screw connection, black base, can be equipped with connection strips ES-10-16H/HR/HB, 2S-10-H/HOG



Maximum current carrying capacity: 12 A

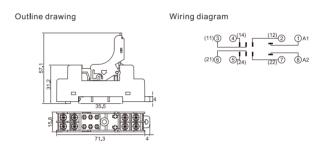


RY2S-05B-Screw wiring

Screw connection, black base, can be equipped with connection strips ES-10-16H/HR/HB, 2S-10-H/HOG



1 Maximum current carrying capacity: 8 A

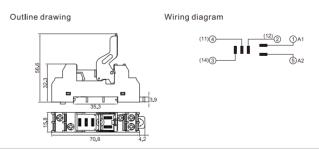


RY1S-05E-Screw wiring

Screw connection, black base with finger protection, can be equipped with connection strip ES-10-16H/HR/HB,2S-10-H/HOG



1 Maximum current carrying capacity: 12 A





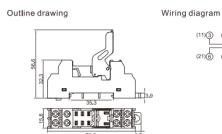
RY2S-08E-Screw wiring

Unit:mm

Screw connection, black base with finger protection, can be equipped with connection strip ES-10-16H/HR/HB,2S-10-H/HOG



Maximum current carrying capacity: 8 A

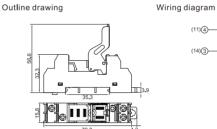


RY1S-05E-Screw wiring

Screw connection, grey base with finger protection, can be equipped with connection strip ES-10-16H/HR/HB,2S-10-H/HOG



1 Maximum current carrying capacity: 12 A



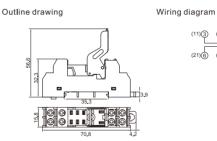
(11)(4) (12)(2) (1) A1 (14)(3) (5) A2

RY2S-08E-Screw wiring

Screw connection, grey base with finger protection, can be equipped with connection strip ES-10-16H/HR/HB,2S-10-H/HOG



1 Maximum current carrying capacity: 8 A

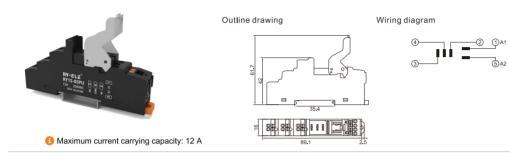




RY1S-05PU-Push-in wiring

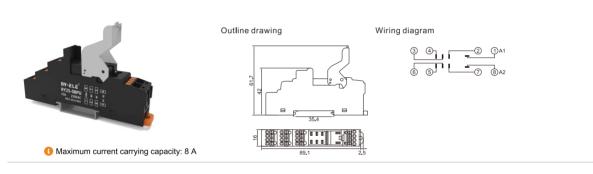
Unit:mm

Push-in cable, black base, can be equipped with connection strip 14F-H1B



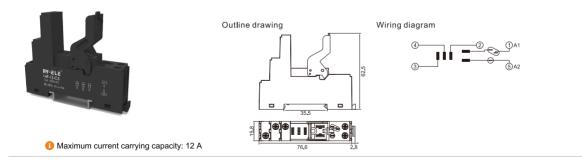
RY2S-08PU-Push-in wiring

Push-in cable, black base, can be equipped with connection strip 14F-H1B



14F-1Z-C5-Screw wiring

Screw wiring, black base, can be equipped with connector strip 14F-H1B



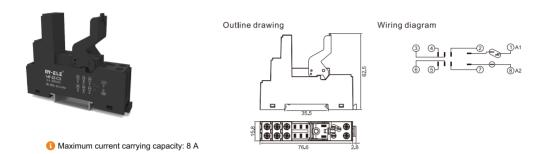


Unit:mm

# Matching base

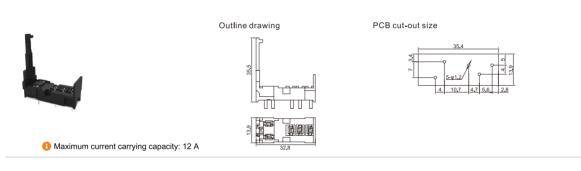
14F-2Z-C5-Screw wiring

Screw wiring, black base, can be equipped with connector strip 14F-H1B



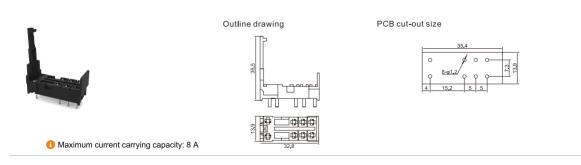
SJ1S-61-PCB board soldering

PCB board soldering base, black soldering footholder



SJ2S-61-PCB board soldering

PCB board soldering base, black soldering footholder



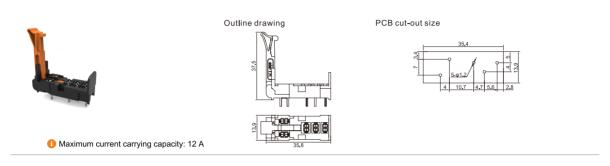


Unit:mm

# Matching base

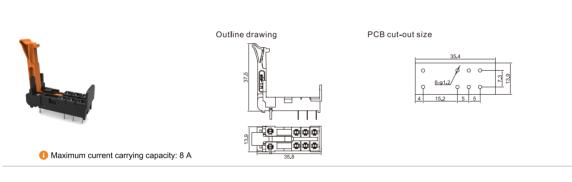
1S-61-S-PCB board soldering

PCB board soldering base, black soldering footholder



2S-61-S-PCB board soldering

PCB board soldering base, black soldering footholder



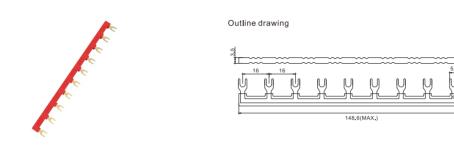


# Optional accessories

Unit:mm

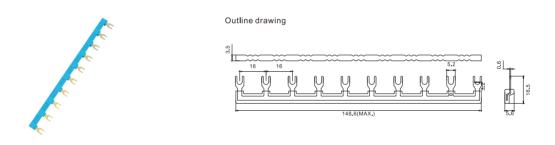
ES-10-16HR-10-position plug-in connecting strip

10-position plug-in connector, croppable, length 148.6mm, color: red



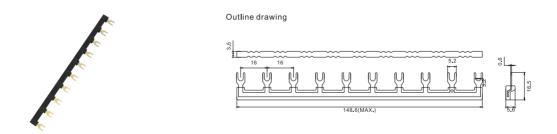
ES-10-16H-10-position plug-in connecting strip

10-position plug-in connector, croppable, length 148.6mm, color: blue



ES-10-16HB-10-position plug-in connecting strip

10-position plug-in connector, croppable, length 148.6mm, color: black





# Optional accessories

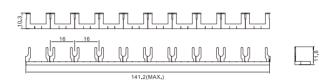
Unit:mm

2S-10-HOG-10-position plug-in connecting strip

10-position plug-in connecting strip, detachable, length 141.2mm, color: orange

Outline drawing

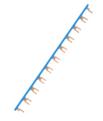


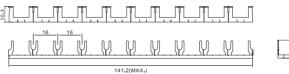


2S-10-H-10-position plug-in connecting strip

10-position plug-in connecting strip, detachable, length 141.2mm, color: blue

Outline drawing







14F-H1B-10-position plug-in connecting strip

2-position plug-in connector, splicable, length 16.8mm, color: black

Outline drawing





