

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



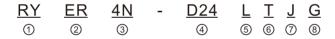
#### Characteristics

- Multiple sizes, including built-in LEDs
- Four sets of contact conversion forms
- Contact load capacity 5A 250VAC/30VDC
- Dust cover type package
- The mechanical life is more than 20 million times
- The withstand voltage between the coil contacts is 2000V
- Meet the use of sockets

## Order specifications

Order number	RYER4N-D24L RYER4N-A220L
Packing Units	20 pcs
Minimum order quantity	20 pcs
Unit weight (including packaging)	1
Unit weight (without packaging)	about 33 g
Origin	WZ

### Example of an order mark



- ① RY:Enterprise code
- ② Relay series
- 3 Contact conversion: 4N = four sets of conversion
- 4 Coil voltage: refer to the coil parameter table
- ⑤ L = with LED light; None = No LED lights
- ⑥ T=with test button; None = without test button
- ② J=with freewheeling diode; None = without freewheeling diode
- ® G = contact gold plating; None = contacts are not gold-plated

#### O 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	4NO4NC
Contact resistance(1)	≤50mΩ
Contact material	AgSnO2
Contact load	5A
Maximum switching voltage	250VAC/30VDC
Maximum switching current	5A
Maximum switching power	1750VA/210W
Mechanical durability(No load)	More than 20 million times
Electrical life	2×10 <sup>5</sup>

### Performance parameters

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Insulation resistance	≥1000MΩ(500VDC)
The medium is pressure-resistant	Between the contact and the coil 2000VAC 1min
	Between the same pole contacts 2000VAC 1min
	Between heteropolar contacts 2000VAC 1min
Action time	≤25ms
Release time	≤20ms
Coil temperature rise	≤85K
Impulse voltage	Waveform: 1.2/50us 4000V
Shock resistance	60HZ amplitude 2mm
Humidity	5~85%RH
Temperature	-40°C~+80°C (no icing)
Lead-out form	Plug-in
Encapsulation	Solder mask type

# Coil parameters

Poted seil news	Datad acil news	DC : about 0.9W		
Rated coil powe		AC : about 1.2VA		

#### D Note:

1. The above values are initial.



### Contact Parameters (DC Specification: 0.9W)

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_	J	·	

Rated voltageVDC	6	12	24	48	110(3)	220
Operating voltage(1)VDC	≤4.5	≤9.0	≤18.0	≤36.0	≤82.5	≤165.0
Release voltageVDC	≥0.6	≥1.2	≥2.4	≥4.8	≥11.0	≥22.0
Maximum voltage <sub>(2)</sub> VDC	6.6	13.2	26.4	52.8	121.0	242.0
Coil resistance( $\pm 10\%$ ) $\Omega$	40	160	640	2600	13450	42000

### Contact Parameters (AC Specification: 1.2VA)

23°C

Rated voltageVAC	6	12	24	48	110(3)	220(3)	380
Operating voltage(1)VAC	≤4.8	≤9.6	≤19.2	≤38.4	≤88.0	≤176.0	≤304.0
Release voltageVAC	≥1.8	≥3.6	≥7.2	≥14.4	≥33.0	≥66.0	≥114.0
Maximum voltage <sub>(2)</sub> VAC	6.6	13.2	26.4	52.8	121.0	242.0	418.0
Coil resistance( $\pm 10\%$ ) $\Omega$	12	45	180	700	3750	14500	42000

#### Note:

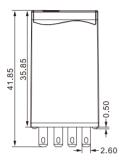
- (1) At room temperature, when the relay operates normally, the minimum value of the voltage applied to the coil foot of the relay shall not be less than 75% of the rated voltage value, but in order to achieve it specified product performance, please apply the rated voltage to the coil when using;
- (2) The maximum voltage refers to the maximum voltage that the relay coil can withstand in a short time;
- (3) A110: Rated voltage (100~110) Va.c;
  - A220: Rated voltage (220~240)Va.c;
  - A110: Rated voltage (100~110) Vd.c.

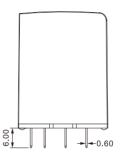


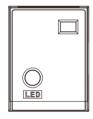
## **Exterior Dimension Drawing**

Unit:mm

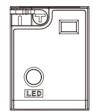
Vertical mounting type with pins



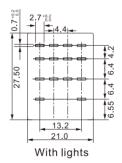


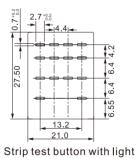


With lights



Strip test button with light

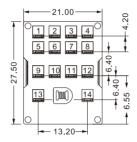




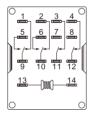
Schematic diagram of PCB mounting holes



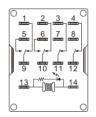
#### Bottom view



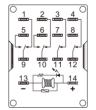
### Wiring diagram



Four-group conversion



Four-group conversion (with LED emitting diode)



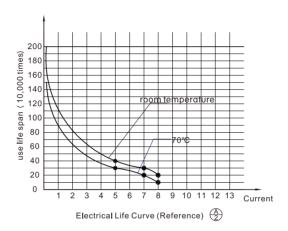
Four-group conversion (DC with freewheeling diode)

#### Note:

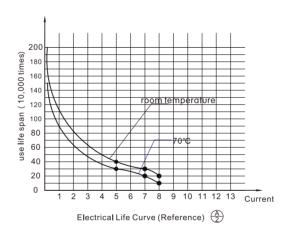
- 1. The overall dimensions of the product are not marked with dimensional tolerance, when the overall dimensions are ≤1mm, the tolerance is ±0.2mm; When the overall dimensions are between (1~5)mm, the tolerance is ±0.3mm; When the overall size > 5mm, the tolerance is ±0.4mm;
- 2. The size tolerance of the mounting hole is ±0.1mm;
- 3. DC with freewheeling diode products need to confirm the positive and negative electrodes before wiring.



## Performance graphs



Four-group conversion (with LED emitting diode)



Four-group conversion (DC with freewheeling diode)





#### Characteristics

- The withstand voltage of the medium can reach 2000 VAC, and the insulation resistance is  $1000M\Omega$
- PCB, screw, and rail mounting styles are available
- A variety of plug-in modules are available to achieve power-on indication and line protection
- Optional accessories: circlip, marker, plug-in module
- With finger protection function

# Order specifications

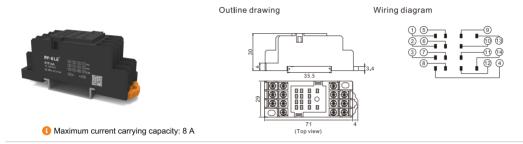
Model	Rated voltage	Curren rating	Ambient temperature	Pressure- resistant	Screw torque	External wires	Weight
RYF14A	250VAC	8A	-35°C~70°C	2500VAC	0.8-1.0N.m	7mm	about50g
RYF14A-E	250VAC	8A	-35°C~70°C	2500VAC	0.8-1.0N.m	7mm	about50g
RYF14A2	250VAC	8A	-35°C~70°C	2500VAC	0.8-1.0N.m	7mm	about48g
RYF14A-E2	250VAC	8A	-35°C~70°C	2500VAC	0.8-1.0N.m	7mm	about48g
18F-4Z-C4	250VAC	8A	-35°C~70°C	2500VAC	0.8-1.0N.m	7mm	about58g
18F-4Z-C5	250VAC	8A	-35°C~70°C	2500VAC	0.8-1.0N.m	7mm	about68g
RYF14A-PU	250VAC	8A	-35°C~70°C	2500VAC	-	7mm	about71g
RY14-C6	250VAC	8A	-35°C~70°C	2500VAC	0.8-1.0N.m	7mm	about48g
RY14-C8	250VAC	8A	-35°C~70°C	2500VAC	0.8-1.0N.m	7mm	about49g
18F-4Z-A1	250VAC	8A	-35°C~70°C	2500VAC	-	-	about6.7g



RYF14A-Screw wiring

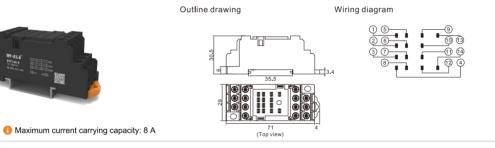
Unit:mm

Screw connection, black base, can be equipped with connecting strip LB-10-29H/HR/HB



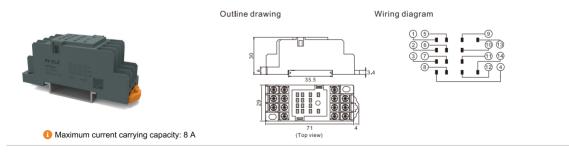
RYF14A-E-Screw wiring

Screw connection, black base, finger protection, can be equipped with connecting stripLB-10-29H/HR/HB



RYF14A-Screw wiring

Screw connection, grey base, can be equipped with connecting strip LB-10-29H/HR/HB

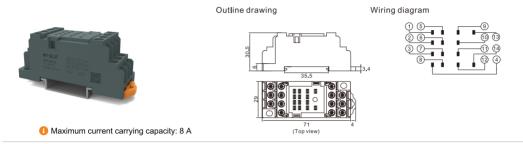




RYF14A-E-Screw wiring

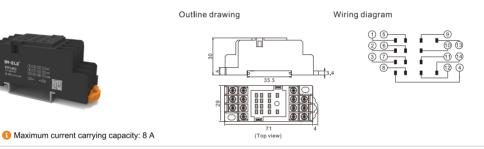
Unit:mm

Screw connection, grey base, finger protection, can be equipped with connecting strip LB-10-29H/HR/HB



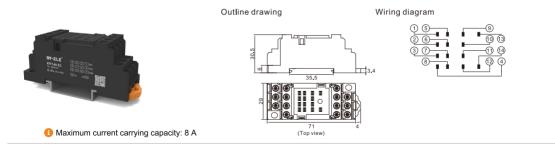
RYF14A2-Screw wiring

Screw connection, black economy base, can be equipped with connecting strip LB-10-29H/HR/HB



RYF14A-E2-Screw wiring

Screw connection, black economy base, finger protection, can be equipped with connecting strip LB-10-29H/HR/HB





Unit:mm

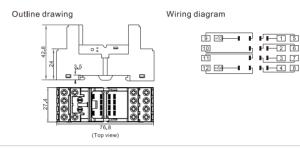
## Matching base

18F-4Z-C4-Screw wiring



1 Maximum current carrying capacity: 8 A

Screw wiring, black base, can be equipped with connecting strip 18F-27H, hook 18F-G, marker plate 18F-M, Surge protectors

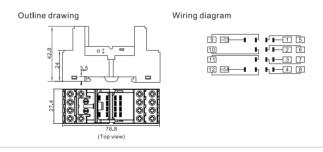


18F-4Z-C4-Screw wiring



1 Maximum current carrying capacity: 8 A

Screw wiring, white base, can be equipped with connecting strip 18F-27H, hook 18F-G, marker plate 18F-M, Surge protectors

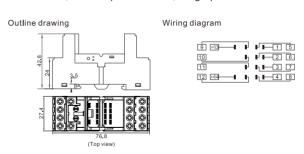


18F-4Z-C4-Screw wiring



1 Maximum current carrying capacity: 8 A

Screw wiring, grey base, can be equipped with connecting strip 18F-27H, hook 18F-G, marker plate 18F-M, Surge protectors

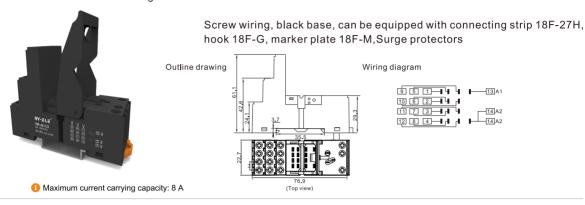




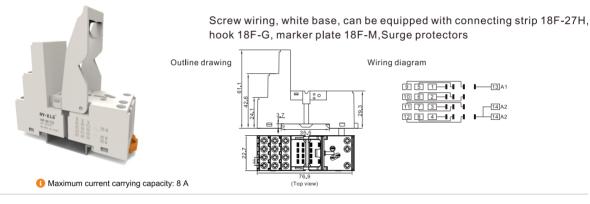
Unit:mm

### Matching base

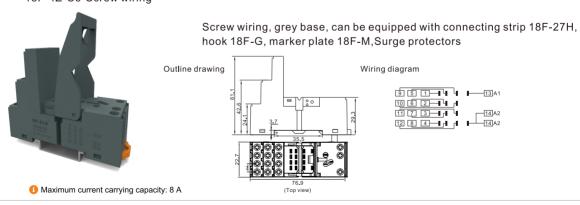
18F-4Z-C5-Screw wiring



#### 18F-4Z-C5-Screw wiring



#### 18F-4Z-C5-Screw wiring





Unit:mm

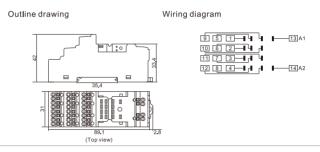
# Matching base

RYF14A-PU-Push-in wiring



1 Maximum current carrying capacity: 8 A

Push-in wiring, black base, can be equipped with connecting strip 18F-27H, hook 18F-G, marker plate 18F-M

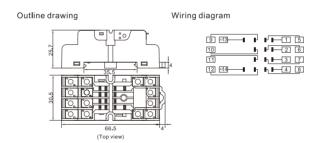


RY14-C6-Screw wiring

Screw connection, black base, marker, hook available



1 Maximum current carrying capacity: 8 A

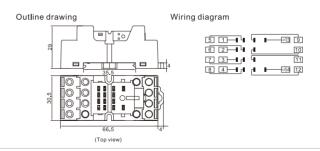


RY14-C8-Screw wiring

Screw connection, black base, marker, hook available



1 Maximum current carrying capacity: 8 A

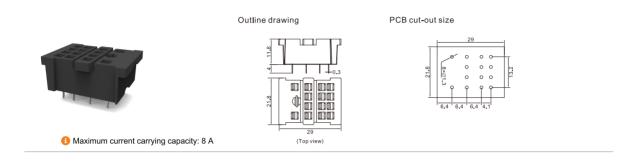




Unit:mm

18F-4Z-A1-PCB board soldering

PCB soldering base, black solder base, can be equipped with hooks



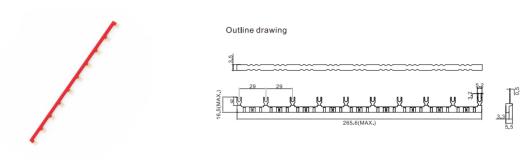


# Optional accessories

Unit:mm

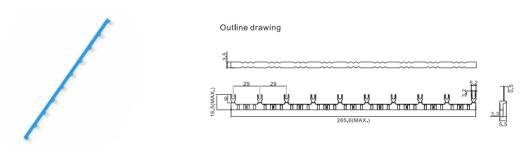
LB-10-29HR-10-position plug-in connecting strip

10-position plug-in connector, croppable, length 265.6mm, color: red



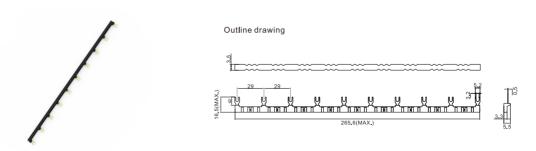
LB-10-29H-10-position plug-in connecting strip

10-position plug-in connector, croppable, length 265.6mm, color: blue



LB-10-29HB-10-position plug-in connecting strip

10-position plug-in connector, croppable, length 265.6mm, color: black





# Optional accessories

Unit:mm

18F-27H-2-position plug-in connecting strip

2-position plug-in connector, splicable, suitable for 18F-2Z-C4/18F-4Z-C4/18F-2Z-C5/18F-4Z-C5/RYF08A-PU/RTF08A-PU, color: black





18F-M-Marker signs

Marker Plate for 18F-2Z-C4/18F-4Z-C4/18F-2Z-C5/18F-4Z-C5/RYF08A-PU/RYF14A-PU/RTF08A-PU

Outline drawing

Outline drawing

Outline drawing





18F-G-Hooking

Hook for 18F-2Z-C4/18F-4Z-C4/18F-2Z-C5/18F-4Z-C5/RYF08A-PU/RYF14A-PU/RTF08A-PU









# Optional accessories

Unit:mm

Surge protectors

Surge Protector for 18F-2Z-C4/18F-4Z-C4/18F-2Z-C5/18F-4Z-C5/14F-1Z-C2/14F-2Z-C2/14F-1Z-C3/14F-2Z-C3 (Refer to Surge Module Selection)
Outline drawing



