## RY115F Relay - Single relay



https://www.ry-ele.com

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



#### Characteristics

- 20A contact switching capability
- Low height of only 15.7mm
- A variety of contact forms are available
- Comes with a variety of sockets to choose from
- Dimensions 29x12,7x15,9mm

#### Order specifications

Order number	RY115F-1C312S RY115F-1C324S
Packing Units	50 pcs
Minimum order quantity	50 pcs
Unit weight (including packaging)	1
Unit weight (without packaging)	about 13.0 g
Origin	WZ

#### Example of an order mark

①RY: Enterprise code

- ②Relay series
- ③Contact Type: 1= 1 group; 2=2 groups
- ©1=Single-stage, pin spacing 3.5mm, standard, 16A
  - 2=Single pole, pin pitch 5mm, standard, 16A
  - 3=Unipolar, 5mm pin pitch, high power type, 20A
  - 4=Bipolar, Pin Spacing 5mm, Standard, 8A
- **©** Coil voltage: Refer to the coil parameter table
- ⑦S = with air vents; None = no air vents for sealing
- ® Customer Code: Any combination of numbers or letters

#### 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.

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### Contact parameters

Contact form	1A/1B/1C	2A/2B/2C
Contact resistance(1)	≤100mΩ (at 6VDC 1A)	
Contact material	Silver alloy	
Contact load	NO/NC:20A/16A 277VAC	NO/NC:8A/8A 277VAC
Contactioad	NO/NC:16A/8A 277VAC	NO/NO.0A/0A 211 VAC
Maximum switching voltage	440VAC/30VDC	
Maximum switching current	20A/16A	8A
Maximum switching power	3000VA/4000VA	2000VA
Mechanical durability	≥ 10 million times	
Electrical life	1×105	

### Performance parameters

Insulation resistance	≥1000MΩ(500VDC)
The medium is pressure registent	Between heteropolar contacts 1000VAC 1min
The medium is pressure-resistant	Between the contact and the coil 5000VAC 1min
Action time	≤15ms
Release time	≤8ms
Coil temperature rise	≤85K
Impact resistance	Waveform: 1.2/50us 4000V
Shock resistance	Frequency 10Hz-55Hz, double amplitude 1mm
Humidity	5~85%RH
Temperature	-40°C ~ +105°C
Lead-out form	PCB mount type
Encapsulation	Molded type

#### 🕦 Note:

1. The above values are initial.

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### Contact Parameters (Sensitive DC Specification: 0.4W)

23	°C

Rated voltageVDC	5	6	9	12	18	24
Operating voltage(1)VDC	≤3.75	≤4.5	≤6.75	≤9.0	≤13.5	≤18.0
Release voltageVDC	≥0.25	≥0.3	≥0.45	≥0.6	≥0.9	≥1.2
Maximum voltage <sub>(2)</sub> VDC	6.5	7.8	11.7	15.6	23.4	31.2
Coil resistance( $\pm 10\%$ ) $\Omega$	62	90	202.5	360	810	1440

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

2	2	0	

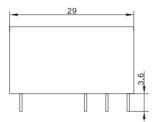
Rated voltageVDC	5	6	9	12	18	24
Operating voltage <sub>(1)</sub> VDC	≤3.75	≤4.5	≤6.75	≤9.0	≤13.5	≤18.0
Release voltageVDC	≥0.25	≥0.3	≥0.45	≥0.6	≥0.9	≥1.2
Maximum voltage <sub>(2)</sub> VDC	6.5	7.8	11.7	15.6	23.4	31.2
Coil resistance(±10%) $\Omega$	46	67	150	267	600	1066

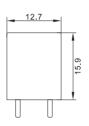


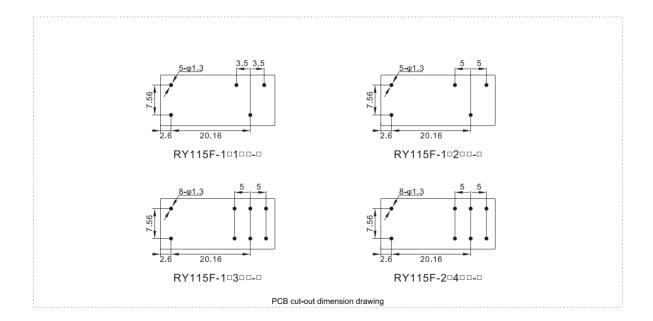
#### **Exterior Dimension Drawing**

Unit:mm

Vertical mounting type with pins





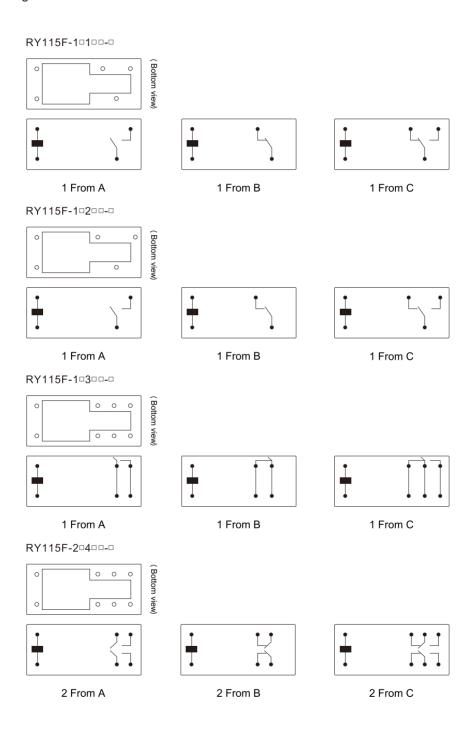


#### Note

- 1. The overall dimensions of the product are not marked with dimensional tolerance, when the overall dimensions are  $\leq 1$ mm, the tolerance is  $\pm 0.2$ mm; When the overall dimensions are between  $(1\sim5)$ mm, the tolerance is  $\pm 0.3$ mm; When the overall size > 5mm, the tolerance is  $\pm 0.4$ mm;
- 2. The unmarked size tolerance in the size of the mounting hole is  $\pm 0.1$ mm.



### Wiring diagram





### Matching base



Certification Number: ICR Polska/VC/HD230501

RŏHS

Certification Number: TNVROHSRY551



#### Characteristics

- Insulation resistance 1000MΩ
- With finger protection function
- PCB, screw, and rail mounting styles are available
- A variety of plug-in modules are available to realize power-on indication and line protection functions
- Optional accessories: circlip, marker, plug-in module
- The shell is made of PA66+G20 environmentally friendly flame retardant nylon

## Order specifications

Model	Rated voltage	Curren rating	Ambient temperature	Pressure- resistant	Screw torque	External wires	Weight
14F-1Z-C2	250VAC	16A	-35°C~70°C	2000	0.8-1.0N.m	7mm	about42g
14F-2Z-C2	250VAC	8A	-35°C~70°C	2000	0.8-1.0N.m	7mm	about42g
14F-1Z-C3	250VAC	16A	-35°C~70°C	2000	0.8-1.0N.m	7mm	about37g
14F-2Z-C3	250VAC	8A	-35°C~70°C	2000	0.8-1.0N.m	7mm	about43g
14F-1Z-A1	250VAC	16A	-35°C~70°C	2000	-	-	about3.5g
14F-2Z-A1	250VAC	8A	-35°C~70°C	2000	-	-	about3.7g
14F-1Z-A1X	250VAC	16A	-35°C~70°C	2000	-	-	about2.2g
14F-2Z-A1X	250VAC	8A	-35°C~70°C	2000	-	-	about2.2g
14F-1Z-A3	250VAC	16A	-35°C~70°C	2000	-	-	about5.1g
14F-2Z-A3	250VAC	8A	-35°C~70°C	2000	-	-	about5.1g



### Matching base

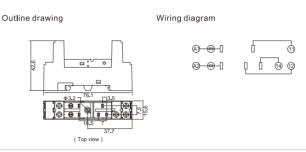
14F-1Z-C2-Screw wiring

Unit:mm



1 Maximum current carrying capacity: 16 A

Screw wiring, black base, can be equipped with hook 14F-G1, 14F-G2, 14F-G3, connector 14F-H1B

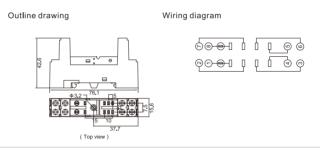


14F-2Z-C2-Screw wiring



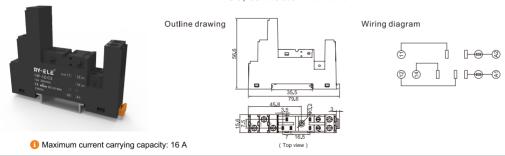
10 Maximum current carrying capacity: 12 A

Screw wiring, black base, can be equipped with hook 14F-G1, 14F-G2, 14F-G3, connector 14F-H1B



14F-1Z-C3-Screw wiring

Screw wiring, black base, can be equipped with hook 14F-G1, 14F-G2, 14F-G3, connector 14F-H1B





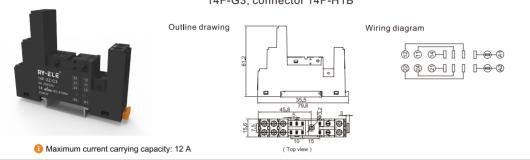
Unit:mm

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### Matching base

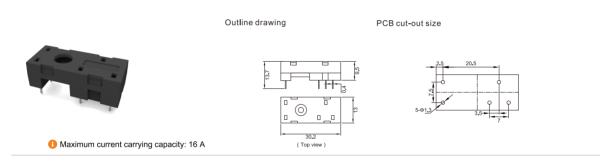
14F-2Z-C3-Screw wiring

Screw wiring, black base, can be equipped with hook 14F-G1, 14F-G2, 14F-G3, connector 14F-H1B



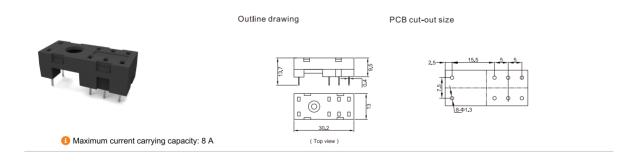
14F-1Z-A1-PCB board soldering

PCB board soldering, can be equipped with 15mm, 20mm, 25mm height hooks



14F-2Z-A1-PCB board soldering

PCB board soldering, can be equipped with 15mm, 20mm, 25mm height hooks



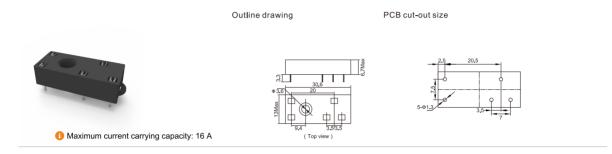


## Matching base

14F-1Z-A1X-PCB board soldering

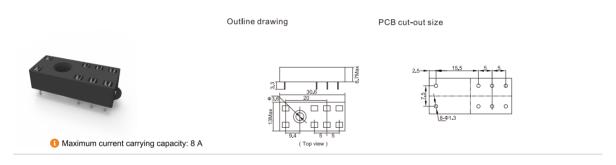
Unit:mm

PCB board soldering, can be equipped with 15mm, 20mm, 25mm height hooks



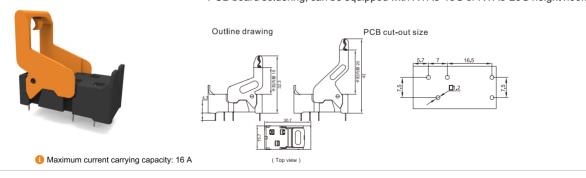
14F-2Z-A1X-PCB board soldering

PCB board soldering, can be equipped with 15mm, 20mm, 25mm height hooks



14F-1Z-A3-PCB board soldering

PCB board soldering, can be equipped with RYA3-15G or RYA3-25G height hook





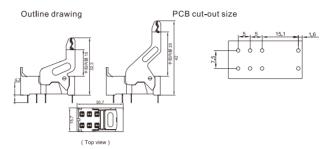
## Matching base

Unit:mm

14F-2Z-A3-PCB board soldering

PCB board soldering, can be equipped with RYA3-15G or RYA3-25G height hook





1 Maximum current carrying capacity: 8 A



## Matching base



#### Characteristics

- The medium withstand voltage can reach 2500VAC
- With finger protection function
- With relay puller, lock and prevent falling off, easy to replace
- Built-in protection circuit to achieve power-on indication, line protection, and extended relay transmissionInput voltage range and other functions
- Low power consumption and easy to use

#### Certification Number: ICR Polska/VC/HD230501

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Certification Number:
TNVROHSRY551

# Order specifications

Model	Rated voltage	Curren rating	Ambient temperature	Input voltage	Coil voltage	Screw torque	External wires	Weight
41F-2Z-C2-1	300VAC	16A	-25°C~80°C	(12-24)V AC/DC	(12-24)VDC	0.5N.m	8mm	about49g
41F-2Z-C2-2	300VAC	16A	-25°C~80°C	(48-60)V AC/DC	(48-60)VDC	0.5N.m	8mm	about49g
41F-2Z-C2-3	300VAC	16A	-25°C~80°C	(110-125)V AC/DC	110VDC	0.5N.m	8mm	about49g
41F-2Z-C2-4	300VAC	16A	-25°C~80°C	(220-240)V AC/DC	110VDC	0.5N.m	8mm	about49g
41F-2Z-C2-5	300VAC	16A	-25°C~80°C	(3-24)V AC/DC	(3-24)VDC	0.5N.m	8mm	about49g



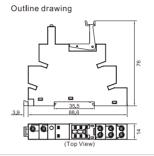
## Matching base

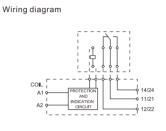
Unit:mm

41F-2Z-C2-1/2/3/4/5-Screw wiring



Screw connection, grey base, marking plate 41F-M/M1





Maximum current carrying capacity: 16 A



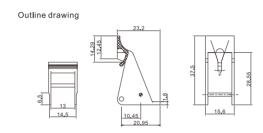
## Optional accessories

14F-G1-15mm hook

Unit:mm

It can be matched with base 14F-1Z-C2, 14-2Z-C2, 14F-1Z-C3, 14F-2Z-C3

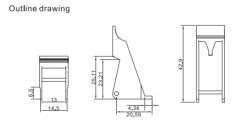




14F-G2-20mm hook

It can be matched with base 14F-1Z-C2, 14-2Z-C2, 14F-1Z-C3, 14F-2Z-C3

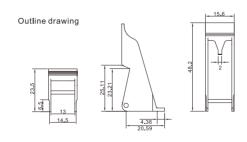




14F-G3-25mm hook

It can be matched with base 14F-1Z-C2, 14-2Z-C2, 14F-1Z-C3, 14F-2Z-C3







# Optional accessories

Unit:mm

14F-H1B-2-position plug-in connector

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





