

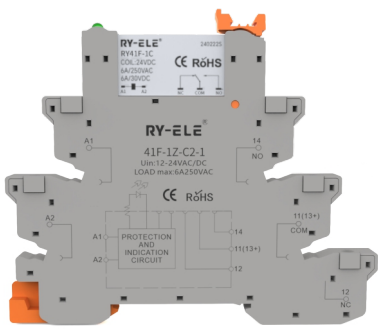
RY41F - Single relay

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

CC
Certification Number:
2023000303000021

CE
Certification Number:
ICR Polska/V/C/HD230501

RöHS
Certification Number:
TNVROHSRY551



Characteristics

- 6A load switching capability
- A set of contact conversion forms
- Withstands 80A inrush current
- The space distance is greater than 8mm, and the creepage distance is greater than 8mm
- The mechanical life is more than 10 million times
- Long life type is optional
- Meet the use of sockets

Order specifications

Order number	RY41F-1C/DC24	RY41F-1C/DC60
Packing Units	100 pcs	
Minimum order quantity	100 pcs	
Unit weight (including packaging)	/	
Unit weight (without packaging)	about5.0 g	
Origin	WZ	

Example of an order mark

RY

41F

=

1C

S

I

G

(XXX)

/

DC24

①

②

③

④

⑤

⑥

⑦

⑧

- ①RY:Enterprise code

② Relay series
- ③ Contact Type: 1A= 1 set of normally open type; 1C=1 group of conversion type
- ④ Protective structure: S = plastic type None = flux mask type
- ⑤ Contact Material:T=AgNi None=AgSnO2
- ⑥ Contact Plating:G=Gold Plating None = No plating
- ⑦ Characteristic code: XXX=customer-specific characteristic code e.g. Ex:(FLT)=Bending 90° of the pin, horizontally mounted
- ⑧ Coil voltage: Refer to the coil parameter table

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.

RY41F - Single relay

Contact parameters

Contact form	1NO1NC
Contact Resistance(1)	≤100mΩ (at 6VDC 1A)
Contact material	AgSnO2
Contact load	6A 277VAC/30VDC
Maximum switching voltage	277VAC/30VDC
Maximum switching current	6A
Maximum switching power	1662VA/180W
Mechanical durability	≥ 10 million times
Electrical Life(2) On-off time: 1s on/9s off, room temperature	NO:6A 250VAC,R-load,60000cycles min
	NO:6A 24VDC,R-load,100000cycles min
	NC:6A 250VAC,R-load,30000cycles min
	NC:6A 24VDC,R-load,30000cycles min

Performance parameters

Insulation resistance	≥1000MΩ(500VDC)
The medium is pressure-resistant	Between heteropolar contacts 1000VAC 1min
	Between the contact and the coil 5000VAC 1min
Action time	≤10ms
Release time	≤5ms
Coil temperature rise	≤85K
Impulse voltage	Waveform: 1.2/50us 4000V
Shock resistance	Frequency 10Hz-55Hz, double amplitude 1mm
Humidity	5 ~ 85%RH
Temperature	-40℃ ~ +80℃
Lead-out form	Plug-in / PCB mount type
Encapsulation	Solder mask or plastic type

 Note:

1. The above values are initial.

R Y41F - Single relay

Contact Parameters (DC Specification: 0.4W)						23°C
Rated voltage VDC	5	9	12	24	48	60
Operating voltage ⁽¹⁾ VDC	80%Max.					
Release voltage VDC	5%Min.					
The allowable voltage range of the coil VDC	95-120%					
Coil resistance(±10%)Ω	62.5	202	360	1440	5760	9000

- Note:

1.The above values are initial;

2.The maximum voltage refers to the maximum voltage that the relay coil can withstand in a short period of time;

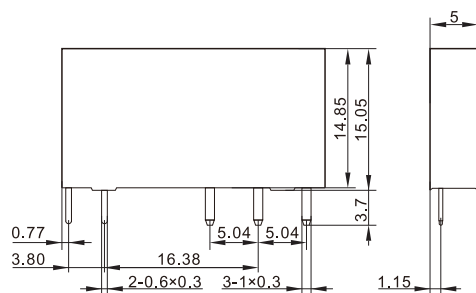
3 For products with a rated voltage of > 48V, in order to protect the coil from damage, in the test and application, there must be measures to suppress the overvoltage generated by the coil (such as: parallel diode in the coil, etc.); (4) If the operating voltage needs to <70% of the rated voltage, it can be special order.

RY41F - Single relay

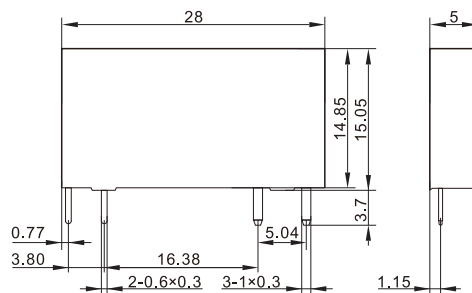
Exterior Dimension Drawing

Unit:mm

Vertical mounting type with pins

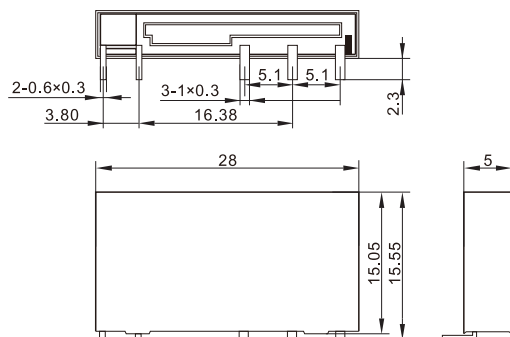


1 set of conversion type

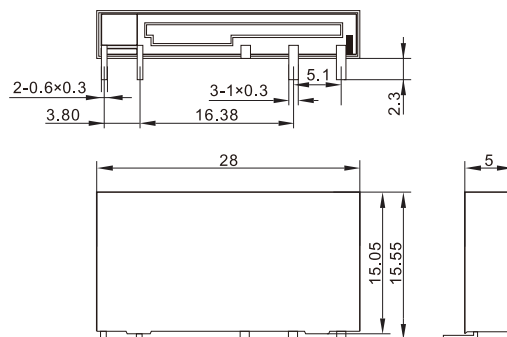


1 set of normally open type

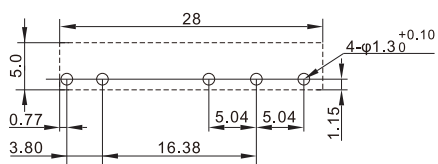
Lead-out pin horizontal mounting type



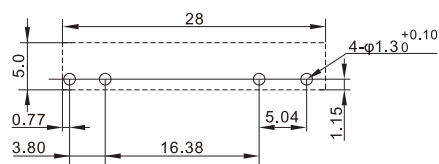
1 set of conversion type



1 set of normally open type



1 set of conversion type

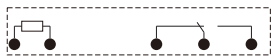


1 set of normally open type

PCB cut-out dimension drawing

RY41F - Single relay

Wiring diagram



1 set of conversion type

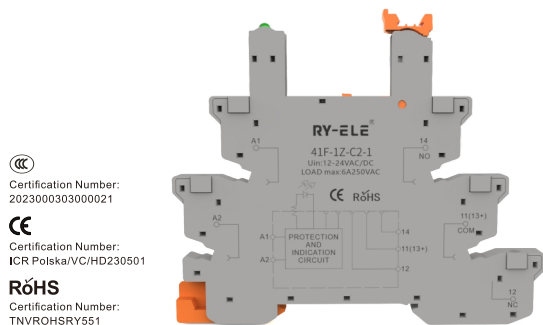


1 set of normally open type

- Note:**
- 1. When the overall size is $\leq 1\text{mm}$, the tolerance is $\pm 0.2\text{mm}$, and when the overall size is between $(1\sim 5)\text{mm}$, the tolerance is $\pm 0.3\text{mm}$; When the overall size $> 5\text{mm}$, the tolerance is $\pm 0.4\text{mm}$;
 - 2. The size tolerance of the mounting hole is $\pm 0.1\text{mm}$;
 - 3. DC with freewheeling diode products need to confirm the positive and negative electrodes before wiring.

RY41F - Single relay

Matching base



特性

- The withstand voltage of the medium can reach 4000VAC, and the insulation resistance is 1000MΩ
- 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 transmission input voltage range and other functions
- Low power consumption and easy to use

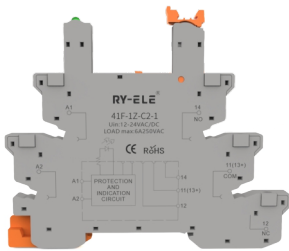
Order specifications

Model	Rated voltage	Curren rating	Ambient temperature	Input voltage	Coil voltage	Screw torque	External wires	Weight
41F-1Z-C2-1	250VAC	6A	-35℃~70℃	(6-24)V AC/DC	(6-24)VDC	0.8-1.0N.m	7mm	约29g
41F-1Z-C2-2	250VAC	6A	-35℃~70℃	(48-60)V AC/DC	(48-60)VDC	0.8-1.0N.m	7mm	约29g
41F-1Z-C2-3	250VAC	6A	-35℃~70℃	(110-125)V AC/DC	60VDC	0.8-1.0N.m	7mm	约29g
41F-1Z-C2-4	250VAC	6A	-35℃~70℃	(220-240)V AC/DC	60VDC	0.8-1.0N.m	7mm	约29g
41F-1Z-C2-5	250VAC	6A	-35℃~70℃	(5)V AC/DC	60VDC	0.8-1.0N.m	7mm	约29g
41F-1Z-C4-1	250VAC	6A	-35℃~70℃	(6-24)V AC/DC	(6-24)VDC	-	7mm	约27g
41F-1Z-C4-2	250VAC	6A	-35℃~70℃	(48-60)V AC/DC	(48-60)VDC	-	7mm	约27g
41F-1Z-C4-3	250VAC	6A	-35℃~70℃	(110-125)V AC/DC	60VDC	-	7mm	约27g
41F-1Z-C4-4	250VAC	6A	-35℃~70℃	(220-240)V AC/DC	60VDC	-	7mm	约27g
41F-1Z-C4-5	250VAC	6A	-35℃~70℃	(5)V AC/DC	60VDC	-	7mm	约27g
41F-1Z-C2N-1	250VAC	6A	-35℃~70℃	(6-24)V AC/DC	(6-24)VDC	0.8-1.0N.m	7mm	约27g
41F-1Z-C2N-2	250VAC	6A	-35℃~70℃	(48-60)V AC/DC	(48-60)VDC	0.8-1.0N.m	7mm	约27g
41F-1Z-C2N-3	250VAC	6A	-35℃~70℃	(110-125)V AC/DC	60VDC	0.8-1.0N.m	7mm	约27g
41F-1Z-C2N-4	250VAC	6A	-35℃~70℃	(220-240)V AC/DC	60VDC	0.8-1.0N.m	7mm	约27g
41F-1Z-C2N-5	250VAC	6A	-35℃~70℃	(5)V AC/DC	60VDC	0.8-1.0N.m	7mm	约27g
41F-1Z-A	250VAC	6A	-35℃~70℃	-	-	-	-	约5g
41F-1Z-A1	250VAC	6A	-35℃~70℃	-	-	-	-	约5g
41F-1Z-A2	250VAC	6A	-35℃~70℃	-	-	-	-	约3g

RY41F - Single relay

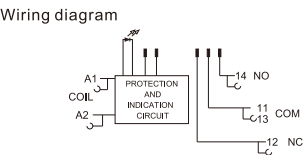
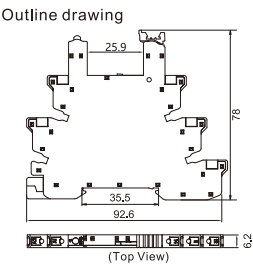
Matching base

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

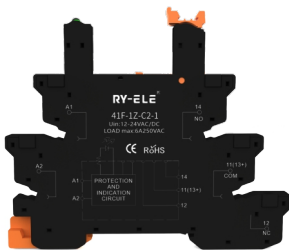


Maximum current carrying capacity: 6 A

Screw connection, grey base, with connector strip 41F-H/HR/HB, marking plate 41F-M/M1

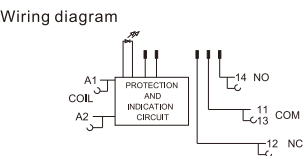
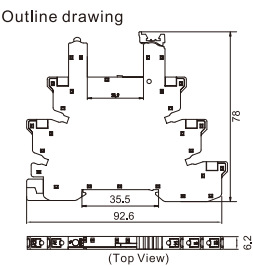


41F-1Z-C2-1/2/3/4/5-Screw wiring

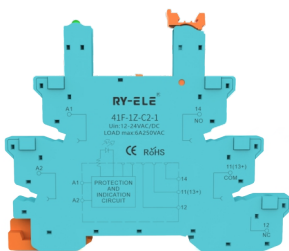


Maximum current carrying capacity: 6 A

Screw connection, black base, cwith connector strip 41F-H/HR/HB, marker plate 41F-M/M1

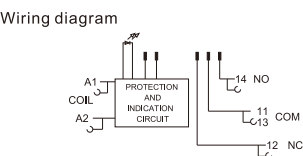
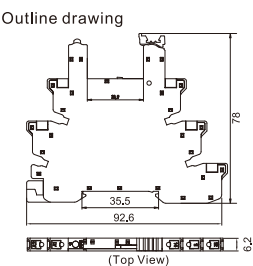


41F-1Z-C2-1/2/3/4/5-Screw wiring



Maximum current carrying capacity: 6 A

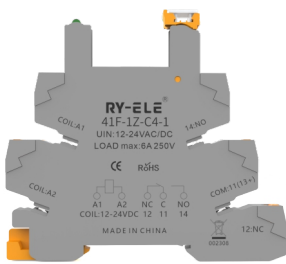
Screw connection, blue base, with connector strip 41F-H/HR/HB, marker plate 41F-M/M1



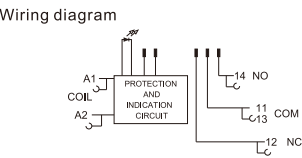
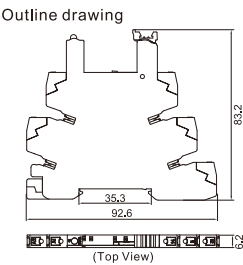
RY41F - Single relay

Matching base

41F-1Z-C4-1/2/3/4/5-Push-in wiring



Push-in cable, grey base, with connector strip 41F-H1/H1R/H1B, marker plate 41F-M/M1

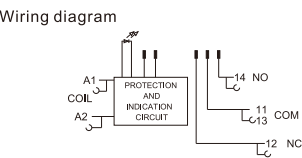
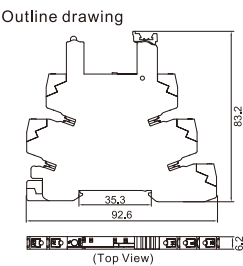


Maximum current carrying capacity: 6 A

41F-1Z-C4-1/2/3/4/5-Push-in wiring

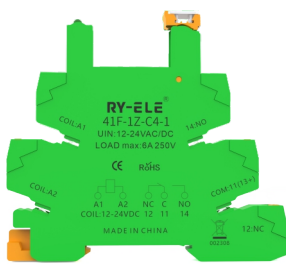


Push-in cable, black base, with connector strip 41F-H1/H1R/H1B, marker plate 41F-M/M1

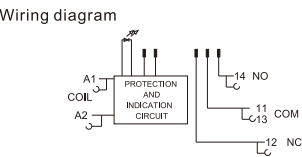
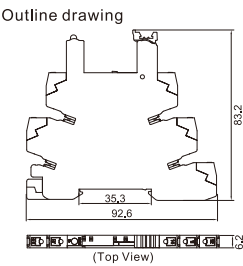


Maximum current carrying capacity: 6 A

41F-1Z-C4-1/2/3/4/5-Push-in wiring



Push-in cable, green base, with connector strip 41F-H1/H1R/H1B, marker plate 41F-M/M1

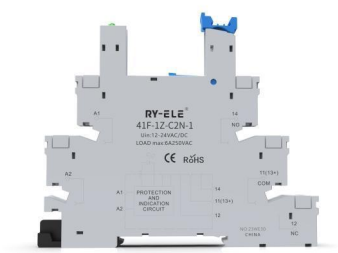


Maximum current carrying capacity: 6 A

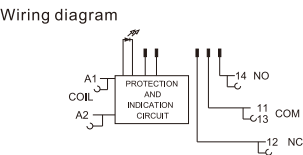
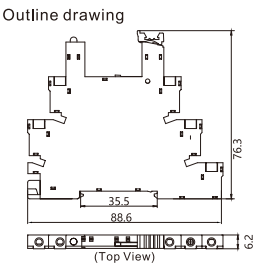
RY41F - Single relay

Matching base

41F-1Z-C2N-1/2/3/4/5

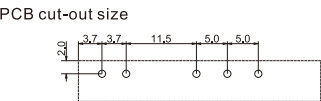
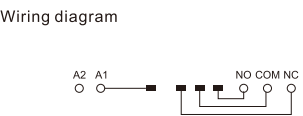
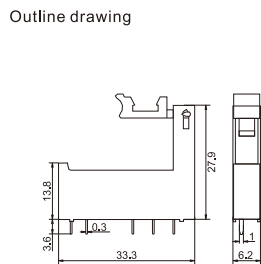
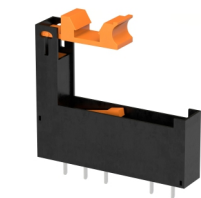


Screw connection, grey base, with connector strip 41F-H/HR/HB, marking plate 41F-M/M1



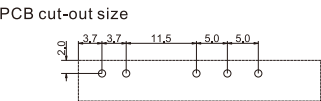
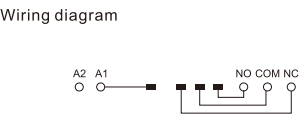
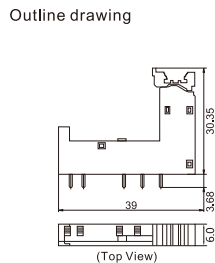
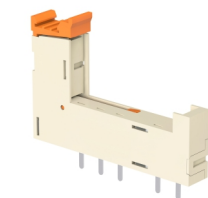
Maximum current carrying capacity: 6 A

41F-1Z-A-PCB board soldering



Maximum current carrying capacity: 6 A

41F-1Z-A1-PCB board soldering

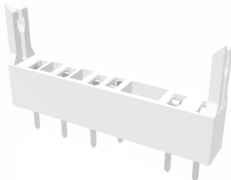


Maximum current carrying capacity: 6 A

RY41F - Single relay

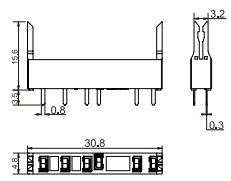
Matching base

41F-1Z-A2-PCB board soldering




PCB board soldering base, white soldering foot seat

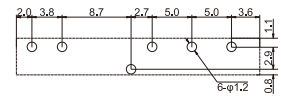
Outline drawing



Wiring diagram



PCB cut-out size



Maximum current carrying capacity: 6 A

RY41F - Single relay

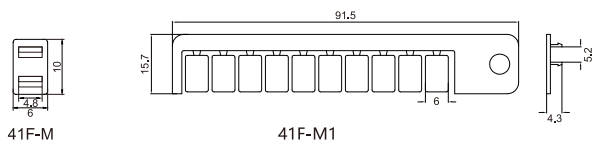
Optional accessories

41F-M/M1-Marker signs



10-digit marker plate, which can be cut and used to mark the line

Outline drawing

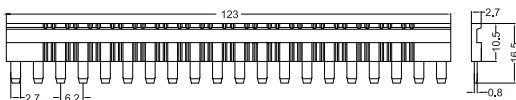


41F-H-20-position plug-in connecting strip

20-position plug-in strip, length 123mm, color: blue



Outline drawing

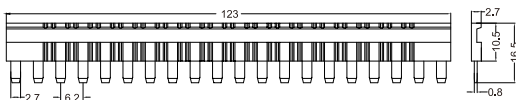


41F-HR-20-position plug-in connecting strip

20-position plug-in strip, length 123mm, color: red



Outline drawing



RY41F - Single relay

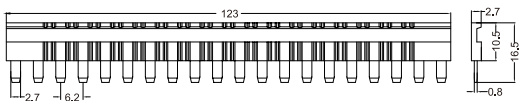
Optional accessories

41F-HB-20-position plug-in connecting strip

20-position plug-in strip, length 123mm, color: black

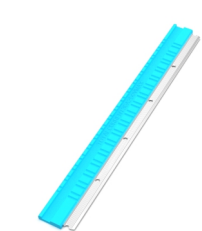


Outline drawing

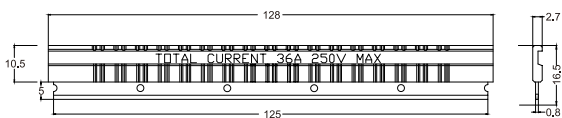


41F-H1-20-position plug-in connecting strip

20-position plug-in strip, length 123mm, color: blue

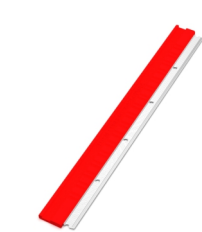


Outline drawing

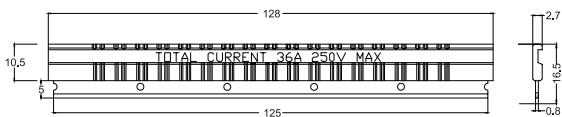


41F-H1R-20-position plug-in connecting strip

20-position plug-in strip, length 123mm, color: red



Outline drawing



RY41F - Single relay

Optional accessories

41F-H1B-20-position plug-in connecting strip

20-position plug-in strip, length 123mm, color: black



Outline drawing

