

Figure 1

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BRJ Series Electromechanical Relay Selection Guide



BRJ series relays are general purpose relays designed for a wide range of applications, from power to sequence controls in various factory machines and control panels. They are ideal for electric control panels requiring stable and reliable relays.

Features

- Small package design
- Large capacity main contact
- 1C/O contact 12A, 2C/O contact 8A
- High dielectric strength
- High reliability and long life
- Ultra-high sensitivity with quick response time (25 ms max.)
- High vibration and shock resistance
- LED indicator on all models, so you can easily see if relay is working properly without using a voltmeter
- Diode protection available on 24 VDC models, which protects contacts and electronic components from back EMF
- CE certified, ROHS approval pending
- 1PDT and DPDT models

• Order sOcket separately

BRJ Series Selection Guide						
<i>Part Number</i>	<i>Coil Voltage</i>	<i>Configuration</i>	<i>Contact Rating</i>	<i>Dimensions (see page 4-)</i>	<i>Relay Socket Part Number</i>	<i>Dimensions (see page 5)</i>
BRJ1D012I	12VDC	1PDT	12A	Figure 1	SRJ1E	Figure 3
BRJ2D012I		2PDT	8A	Figure2	SRJ2E	Figure 3
BRJ1D024I	24VDC	1PDT	12A	Figure 1	SRJ1E	Figure 3
BRJ2D024I		2PDT	8A	Figure2	SRJ2E	Figure 3
BRJ1A230I	230VAC	1PDT	12A	Figure 1	SRJ1E	Figure 3
BR2JA230I		2PDT	8A	Figure2	SRJ2E	Figure 3

BRJ Series Specification Table								
Part Numbers	BRJ1D012I	BRJ2D012I	BRJ1D024I	BRJ2D024I	BRJ1A230I	BRJ2A230I		
Contact Specifications								
Current Rating(1PDT . 2PDT)	12A.8A							
Contact Type	1PDT				2PDT			
Terminal Type	Spade Plug-In Socket							
RatedMax.Resistive Load	12A/250VAC (1C conversion type)				8A/250VAC (2C conversion type)			
Maximum switching power	3000VA (1C conversion type)				2000VA (2C conversion type)			
Minimum Recommended Load	100mA @ 5VDC							
Max. Switching Cap. (Resistive Load)	1000M Ω （ 500VDC ）							
contact resistance	100m below (DC6V, 1A)							
insulation resistance	1000MΩ （ 500VDC ）							
Max. Contact Rating	12A/250VAC (1C conversion type)				8A/250VAC (2C conversion type)			
Coil Specifications								
Options	LED Indicator/Diode Protection							
	Coil (test environment 23 C)				Coil (frequency 50HZ)			
Rated voltage	(V/DC) 12	(V/DC) 24	(V/DC) 48	(V/DC) 110	(V/AC) 24	(V/AC) 48	(V/AC) 100/110	(V/AC) 220/240
Rated current	44.4mA	22mA	11mA	4.8mA	46.5mA	25mA	11.0/13.0 mA	5.0/5.9mA
Power(w)	530mW	530mW	530mW	530mW	1.2~1.4m W	1.2~1.4m W	1.2~1.4m W	1.2~1.4m W
Coil impedance （ Ω ）	270±10%	530mW	4350±10%	22830±15 %	265±10%	1060±10%	4600±10%	22260±15 %
Vibration resistance	Maloperation 10-55HZ (double amplitude 1.5mm)				Durable 10-55HZ (double amplitude 1.5mm)			
Impact resistance	Strength 980m/s ²				Stability 98m/s ²			
General Specifications								
Surge withstand voltage	8000VAC （ 1.2/50μs ）							
Electrical durability	100000 times							
Mechanical durability	10,000,000 times							
contact material	Silver alloy							
Action voltage	80% below (ambient temperature)							
Release voltage	More than 10% (ambient temperature)							
ambient temperature	-40~70 DEG C (work); 20~85%RH							

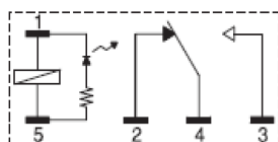
BRJ Series Wiring Diagrams and Derating Curves

Wiring Diagrams

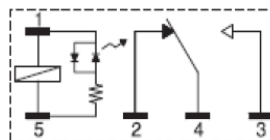
BRJ1D024L

BRJ2D024L

1 groups of transfer inserts

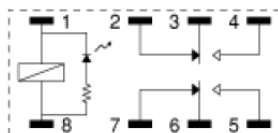


With LED light (type AC)

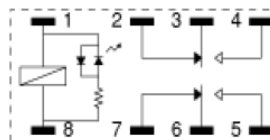


With LED light (type DC)

2 groups of transfer inserts



With LED light (type AC)

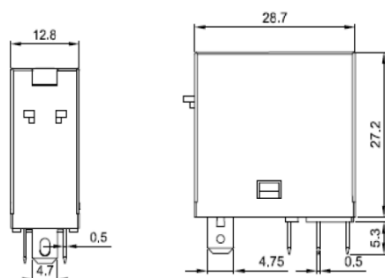


With LED light (type DC)

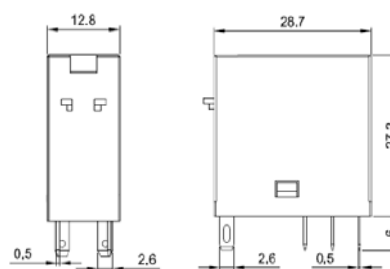
BRJ Series Dimensional Drawings

BRJ1D024L

BRJ2D024L



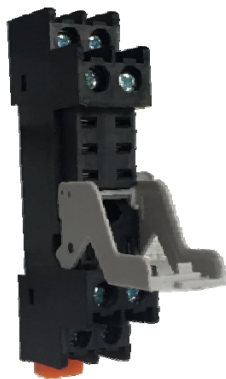
1 standard type shell insert type



2 standard type shell insert type

Sockets for BRJ Series Relays

SRJ2E



Din-rail mounting,
1PDT/2PDT, for use with
SRJ-E series relays

SRJ2W



Din-rail mounting,
1PDT/2PDT, for use with
SRJ-W series relays

SRJ2S



Din-rail mounting,
1PDT/2PDT, for use with
SRJ-S series relays

Sockets for BRJ Series Relays performance parameter

Performance parameter							
Socket type		SRJ 1E	SRJ2E	SRJ 1S	SRJ 2S	SRJ 1W	SRJ 2W
Rated load	Electric current	16A	10A	12A	10A	16A	10A
	Voltage	300V	300V	300V	300V	300V	300V
Dielectric Strength		4000V/S coil / contact 2500V/S electric shock room					
Screw torque		1.0Nm				-40~+65℃	
Outer connecting wire		20-14/0.5-2.5AWG/MM ²				-40~+65℃	
Using environment		-40~+85℃				-40~+65℃	

Socket Dimensions for SRJ1E/ SRJ2E /SRJ 1S/ SRJ 2S/SRJ 1W/SRJ 2W Series Relays

Dimensions

Figure 3
SRJ1E/SRJ2E (for BRJ1/BRJ2 Series Relays)

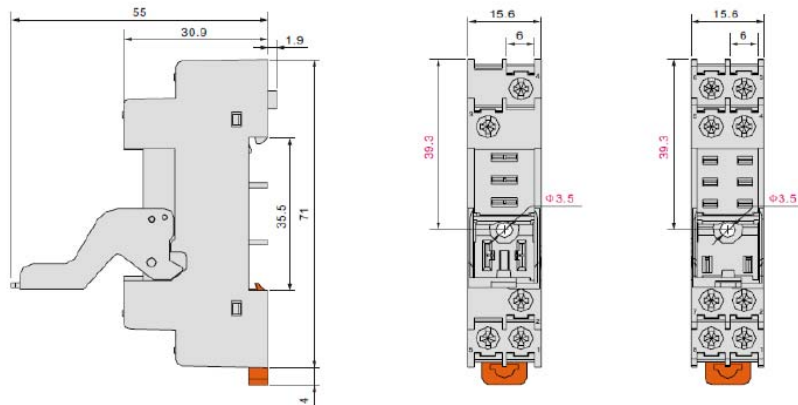


Figure 4
SRJ1S/SRJ2S (for BRJ1/BRJ2 Series Relays)

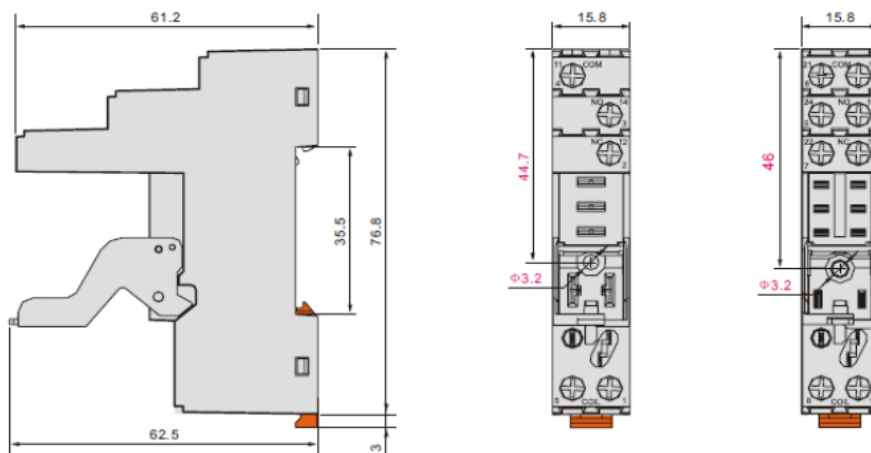


Figure 5
SRJ1E/SRJ2E (for BRJ1/BRJ2 Series Relays)

