

# NXJ plug-in relay



## Overview

### Applicable scope

Three types of contacts (2Z, 3Z, and 4Z): complete range of AC/DC models; high contact reliability, applicable to PLC control; transparent dust cover encapsulation; supplied with sockets; status indicators with optional specifications.

### Normal operation conditions and installation conditions

Temperature range	-40°C~+70°C
Relative humidity	Up to 95% at +25°C
Atmospheric pressure	86kPa~106kPa
Operation position	Any

## Description

NXJ	-	A	220V	-	2Z	1	D
Relay model		Coil type	Coil voltage		Contact form	Connection method	Additional function
		A: AC	DC: 5V, 6V, 12V, 24V, 36V, 48V,		2Z: Switching between two groups	1: Directly plugged	D: With status indicator
		None: DC	110V, 127V, 220V		3Z: Switching between three groups	6: Welded	B: With status indicator and surge suppressor (DC)
			AC: 6V, 12V, 24V, 36V, 48V, 110V, 127V, 220V, 240V, 380V, 400V, 415V		4Z: Switching between four groups		

Model example:

NXJ-A220-2Z1D represents the following relay: rated control coil voltage: AC220V; contact form: switching between two groups (1NO + 1NC for each contact group, contact rated operation current 5A); directly plugged, with indicator function.

## Parameters

### Contact parameters

Contact form	2Z (C), 3Z (C), 4Z (C), 2ZH(C)
Initial contact resistance	50mΩ
Contact material	Silver alloy
Contact load (cosφ=1.0)	2Z, 3Z: 5A; 4Z: 3A; 2ZH: 10A (240VAC/28VDC)
Maximum switch voltage	250VAC/30VDC
Maximum switch current	2Z, 3Z: 5A; 4Z: 3A; 2ZH: 10A
Maximum switch power	2Z, 3Z: 1250VA/140W, 2ZH: 2200VA/280W 4Z: 750VA/84W
Electrical life (cycles)	1.2×10 <sup>6</sup> * (see the safety certification report for details)
Mechanical life (cycles)	2×10 <sup>7</sup>

## Performance and characteristics parameters

Insulation resistance		1000M $\Omega$ (500VAC)
Dielectric strength	Between contact coils	1500VAC, 1min
	Between broken contacts	1000VAC, 1min
Action time		$\leq 15$ ms
Release time		$\leq 15$ ms
Impulse (stability)		Acceleration 100m/s <sup>2</sup> , pulse duration:11ms
Vibration		Dual-amplitude 1mm, (10~55)Hz
Form of leading-out end		Directly plugged, welded
Dimensions (mm)		27.5 $\times$ 21.5 $\times$ 35.5

## Coil parameters

Rated power	0.9~1W, 1.2~1.8VA
Pull-in voltage	DC $\leq$ 75% rated voltage; AC: $\leq$ 80% rated voltage
Release voltage	DC $\geq$ 10% rated voltage; AC: $\geq$ 20% rated voltage
Maximum voltage	120% rated voltage

## Specification parameters

Rated voltage VDC	Action voltage VDC ( $\leq$ )	Release voltage VDC ( $\geq$ )	Coil resistance (20 $^{\circ}$ C) $\Omega$
5	3.75	0.5	28 $\times$ (1 $\pm$ 10%)
6	4.5	0.6	40 $\times$ (1 $\pm$ 10%)
12	9.0	1.2	160 $\times$ (1 $\pm$ 10%)
24	18.0	2.4	640 $\times$ (1 $\pm$ 10%)
36	27.0	3.6	1440 $\times$ (1 $\pm$ 15%)
48	36.0	4.8	2200 $\times$ (1 $\pm$ 15%)
110	82.5	11.0	14500 $\times$ (1 $\pm$ 15%)
127	95.3	12.7	17000 $\times$ (1 $\pm$ 15%)
220	165.0	22.0	39000 $\times$ (1 $\pm$ 15%)

Rated voltage VAC	Action voltage VAC ( $\leq$ )	Release voltage VAC ( $\geq$ )	Coil resistance (20 $^{\circ}$ C) $\Omega$
6	4.8	1.2	10.5 $\times$ (1 $\pm$ 10%)
12	9.6	2.4	44 $\times$ (1 $\pm$ 10%)
24	19.2	4.8	180 $\times$ (1 $\pm$ 10%)
36	28.8	7.2	380 $\times$ (1 $\pm$ 10%)
48	38.4	9.6	650 $\times$ (1 $\pm$ 10%)
110	88.0	22	3670 $\times$ (1 $\pm$ 15%)
127	101.6	25.4	4100 $\times$ (1 $\pm$ 15%)
220/230/240	176.0	44	15800 $\times$ (1 $\pm$ 15%)
380	304.0	72	39000 $\times$ (1 $\pm$ 15%)
400	320	80	43000 $\times$ (1 $\pm$ 15%)
415	332	83	46000 $\times$ (1 $\pm$ 15%)

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## Accessories

### Supplied sockets (optional)

Relay model	NXJ/2Z (D)		
Supplied socket model	RS-NXJ-2Z/C1	RS-NXJ-2Z/C2	RS-NXJ-2Z/C3
Socket dimensions (mm)	72×23×31	72×23×31	63×30.5×26
Socket lead form	Screw type wiring terminal (device type, rail type)		

Relay model	NXJ/3Z (D)		
Supplied socket model	RS-NXJ-3Z/C1	RS-NXJ-3Z/C2	RS-NXJ-3Z/C3
Socket dimensions (mm)	72×30×31	72×30×31	63×30.5×26
Socket lead form	Screw type wiring terminal (device type, rail type)		

Relay model	NXJ/4Z (D)		
Supplied socket model	RS-NXJ-4Z/C1	RS-NXJ-4Z/C2	RS-NXJ-4Z/C3
Socket dimensions (mm)	72×30×31	72×30×31	63×30.5×26
Socket lead form	Screw type wiring terminal (device type, rail type)		

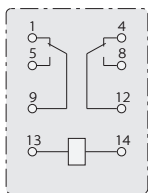
### Connection socket and fixing hook

Model \ type	Normal	With finger protection	With indication sign
NXJ/2Z □	RS-NXJ-2Z/C1	RS-NXJ-2Z/C2	RS-NXJ-2Z/C3
NXJ/3Z □	RS-NXJ-3Z/C1	RS-NXJ-3Z/C2	RS-NXJ-3Z/C3
NXJ/4Z □	RS-NXJ-4Z/C1	RS-NXJ-4Z/C2	RS-NXJ-4Z/C3
Fixing hook	NG102	NG102	NG103

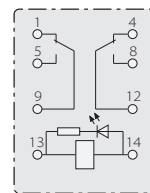
## Dimensions and installation

### Body dimensions and installation sizes

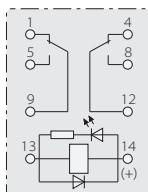
#### 2Z Bottom wiring diagram



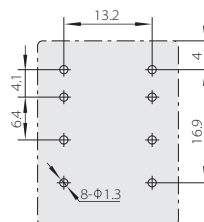
#### 2Z Bottom wiring diagram (with indicator)



#### 2Z Bottom wiring diagram (with indicator and diode)

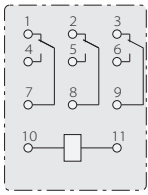


#### 2Z Installation hole position



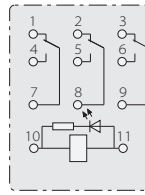
**3Z**

Bottom wiring diagram



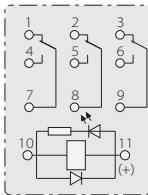
**3Z**

Bottom wiring diagram (with indicator)



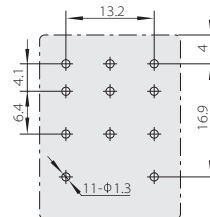
**3Z**

Bottom wiring diagram (with indicator and diode)



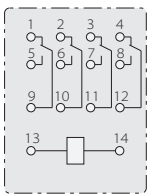
**3Z**

Installation hole position



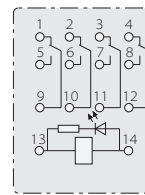
**4Z**

Bottom wiring diagram



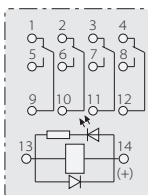
**4Z**

Bottom wiring diagram (with indicator)



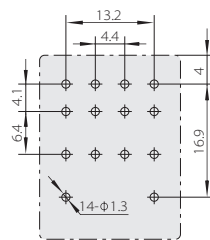
**4Z**

Bottom wiring diagram (with indicator and diode)



**4Z**

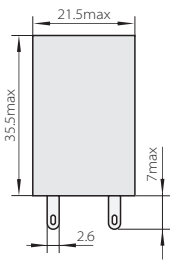
Installation hole position



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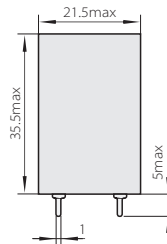
**2Z**

Outline drawings (directly plugged)



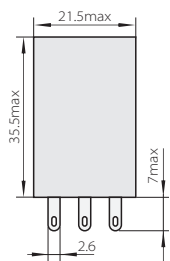
**2Z**

Outline drawings (welded)



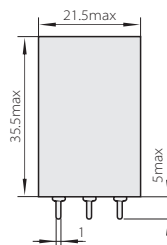
**3Z**

Outline drawings (directly plugged)



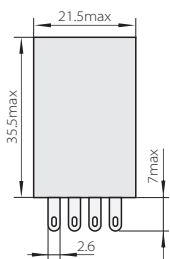
**3Z**

Outline drawings (welded)



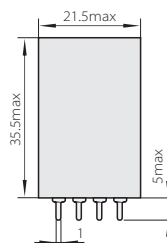
**4Z**

Outline drawings (directly plugged)



**4Z**

Outline drawings (welded)

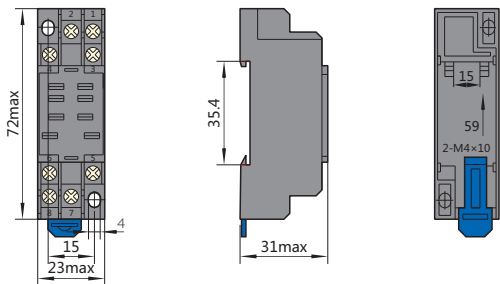


## Socket outline and dimensions

### RS-NXJ-2Z/C1



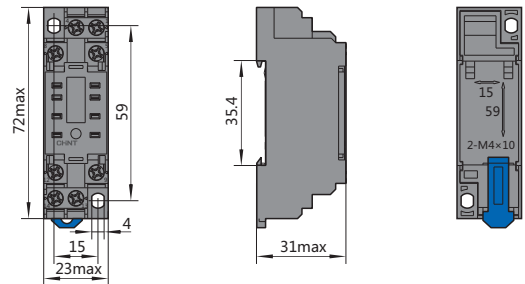
72×23×31 (mm)



### RS-NXJ-2Z/C2



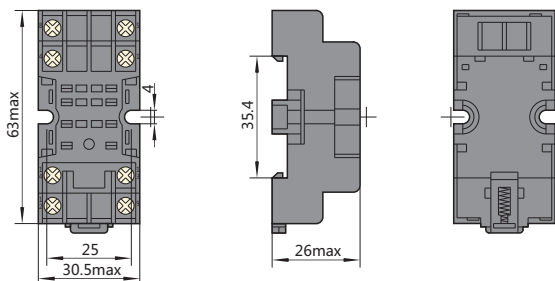
72×23×31 (mm)



### RS-NXJ-2Z/C3



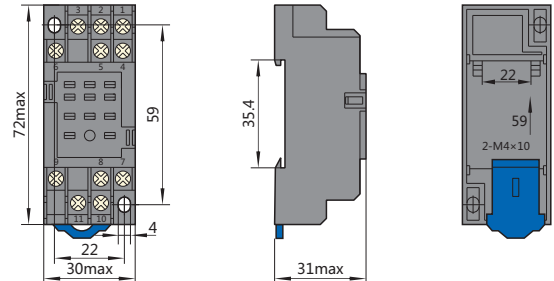
63×30.5×26 (mm)



### RS-NXJ-3Z/C1



72×30×31 (mm)

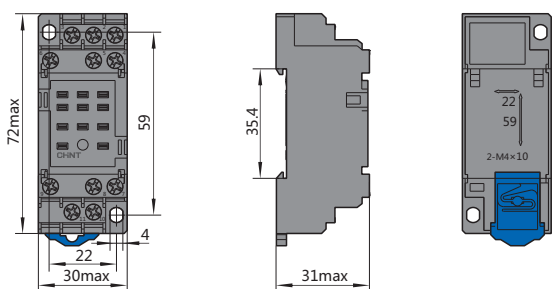


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## RS-NXJ-3Z/C2



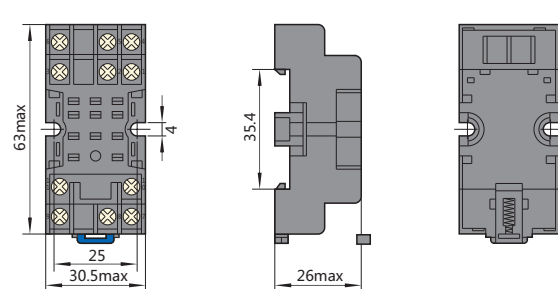
72×30×31 (mm)



## RS-NXJ-3Z/C3



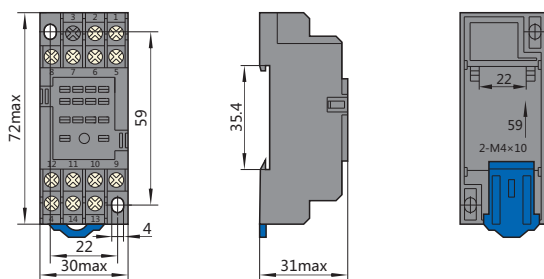
63×30.5×26 (mm)



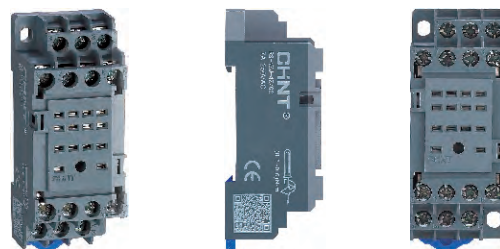
## RS-NXJ-4Z/C1



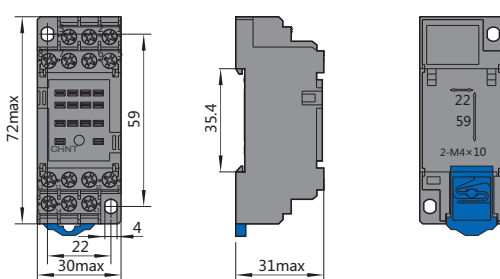
72×30×31 (mm)



## RS-NXJ-4Z/C2



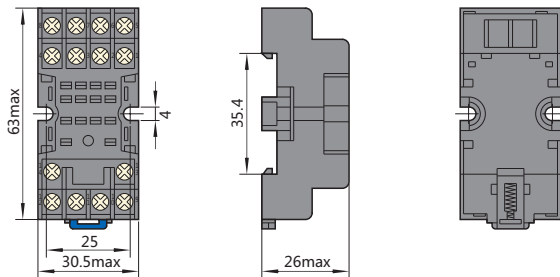
72×30×31 (mm)



## RS-NXJ-4Z/C3



63×30.5×26 (mm)



## Hook outline

### NG102



### NG103



### Socket + hook

