



## NJYB3 Relay

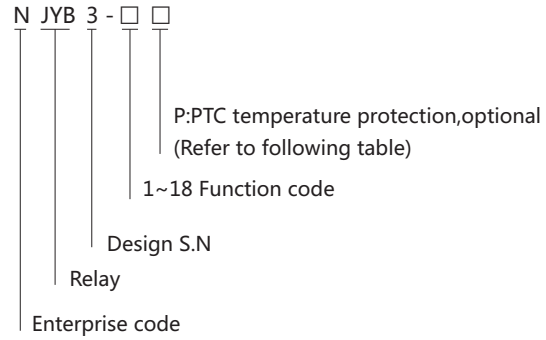
### 1. General

NJYB3 Relay is used to provide overvoltage, undervoltage, phase failure, phase sequence, three-phase unbalance, PTC temperature and load protection control in three-phase three-wire up to 415V circuits and three-phase four-wire up to 240V circuits with a frequency of AC50Hz.

This relay is a voltage protection relay. After detecting the voltage signal, the relay processes the input signal, judges if there is an overvoltage, undervoltage, phase failure, phase sequence, three-phase unbalance, PTC temperature and load error and controls the operation accurately and stably by means of the built-in microprocessor.

2 Type designation

### 2. Type designation



### 3. Technical data

Model	Protection function	Protection operation time	Rated operational voltage	Contact capacity	Contact form	Electrical life	Mechanical life
NJYB3	Overvoltage	0.1s~10s	Three-phase three-wire system: AC380V~AC415V 50Hz	Ue/Ie:AC-15 240V/0.75A, 415V/0.47A; Ith:3A	1 Z	10 <sup>5</sup>	10 <sup>5</sup>
	Undervoltage						
	Three-phase voltage unbalance						
	Phase failure, phase sequence PTC temperature	≤1s	Three-phase four-wire system: AC220V~AC240V 50Hz				

Model	Three-phase	Three-phase four-wire	Single-phase/two-phase	Oversvoltage protection	Undervoltage protection	Unbalance protection	Phase sequence protection	Phase failure protection	PTC Temperature protection	Load protection
NJYB3-1	●	—	—	—	—	—	●	●	○	—
NJYB3-2	●	—	—	(1.05~1.30)×Us	—	—	—	●	—	—
NJYB3-3	●	—	—	—	(0.70~0.95)×Us	—	—	●	—	—
NJYB3-4	●	—	—	(1.05~1.30)×Us	(0.70~0.95)×Us	—	—	●	—	—
NJYB3-5	●	—	—	(1.05~1.30)×Us	(0.70~0.95)×Us	—	●	●	—	—
NJYB3-6	●	—	—	(1.05~1.30)×Us	(0.70~0.95)×Us	Fixed 20%	●	●	○	—
NJYB3-7	●	—	—	Fixed 120%×Us	Fixed 80%×Us	5%~15%	●	●	○	—
NJYB3-8	●	—	—	(1.05~1.30)×Us	(0.70~0.95)×Us	5%~15%	●	●	○	—
NJYB3-9	—	●	●	(1.05~1.30)×Us	—	—	—	●	—	—
NJYB3-10	—	●	●	—	(0.70~0.95)×Us	—	—	●	—	—
NJYB3-11	—	●	●	(1.05~1.30)×Us	(0.70~0.95)×Us	—	—	●	—	—
NJYB3-12	—	●	—	(1.05~1.30)×Us	(0.70~0.95)×Us	Fixed 20%	●	●	—	—
NJYB3-13	—	●	—	(1.05~1.30)×Us	(0.70~0.95)×Us	5%~15%	●	●	○	—
NJYB3-14	—	●	—	Fixed 120%×Us	Fixed 80%×Us	5%~15%	●	●	○	—
NJYB3-15	—	●	—	(1.05~1.30)×Us	(0.70~0.95)×Us	—	●	●	○	—
NJYB3-16	—	●	—	—	—	—	●	●	○	—
NJYB3-17P	●	—	—	—	—	—	—	—	●	—
NJYB3-18	●	—	—	(1.05~1.30)×Us	(0.70~0.95)×Us	Fixed 20%	●	●	—	●

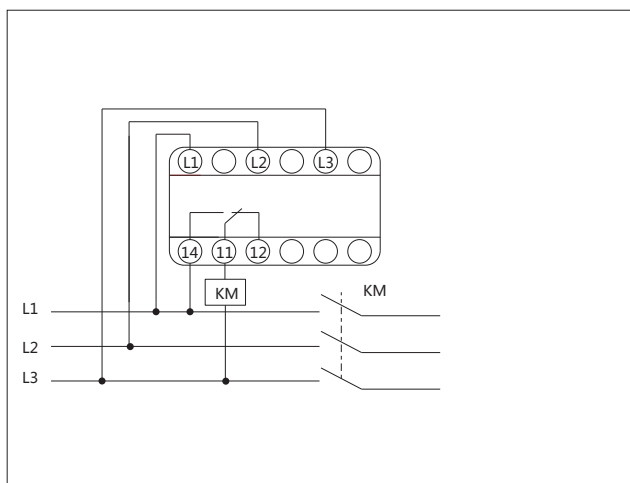
Note: ● mean it must have this function;  
 — mean it certainly does not have this function;  
 ○ mean this function can be chosen, or can be selected no.

### Immunity

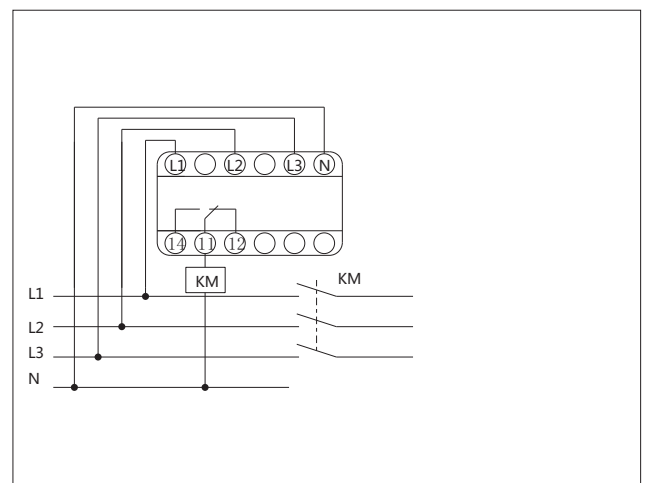
Item	Severity level
Electrostatic discharge immunity	8kV (air discharge)
Radiated electromagnetic field immunity	Test electric field strength: 10V/m
Fast transient immunity	For power line, 2kV, duration: 1min
Surge (impact) immunity	Open circuit test voltage: 1kV

## 4. Wiring diagram

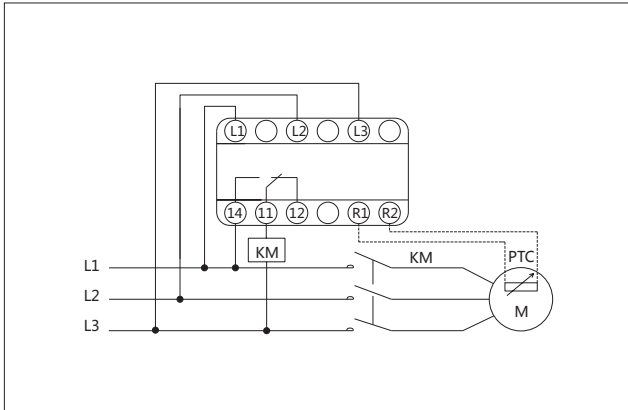
NJYB3-1, NJYB3-2, NJYB3-3, NJYB3-4, NJYB3-5,  
 NJYB3-6, NJYB3-7, NJYB3-8 Wiring diagram



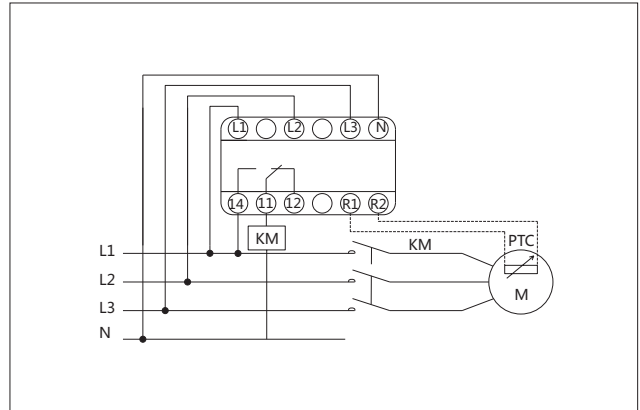
NJYB3-12, NJYB3-13, NJYB3-14, NJYB3-15, NJYB3-16  
 Wiring diagram



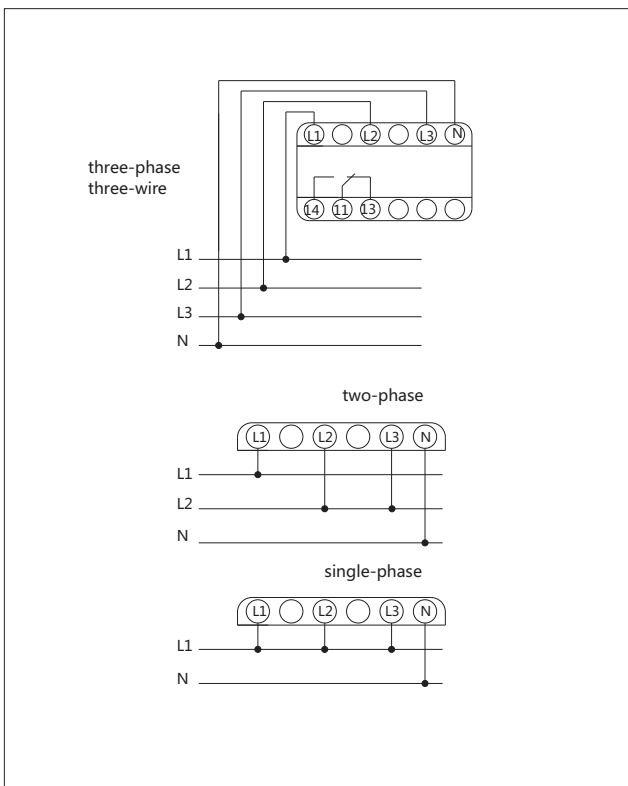
NJYB3-1P, NJYB3-6P, NJYB3-7P, NJYB3-8P, NJYB3-17P  
Wiring diagram



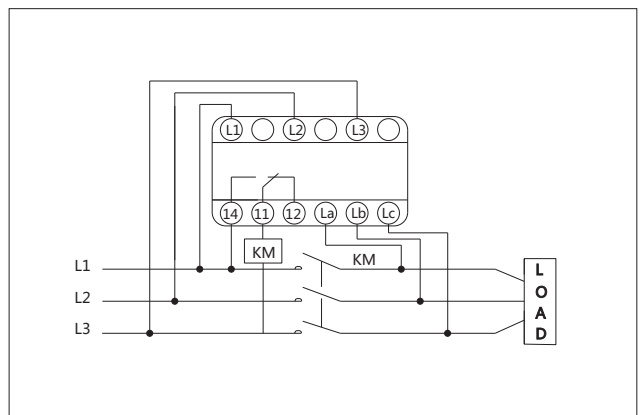
NJYB3-13P, NJYB3-14P, NJYB3-15P, NJYB3-16P  
Wiring diagram



NJYB3-9, NJYB3-10, NJYB3-11 Wiring diagram



NJYB3-18 Wiring diagram



## 5. Overall and mounting dimensions (mm)

