



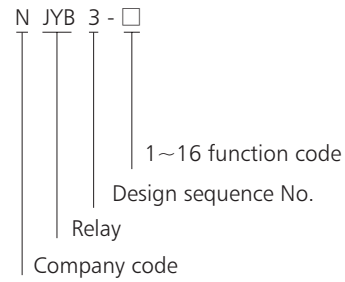
NJYB3 Relay

1. General

NJYB3 relay is used to provide overvoltage, undervoltage, phase failure, phase sequence and three-phase unbalance control in three-phase three-wire 380V circuits and three-phase four-wire 220V circuits with a frequency of AC 50Hz. For example, it is used for power control systems, air conditioning systems and motors.

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, error-phase or unbalance and controls the operation accurately and stably by means of the built-in microprocessor.

2. Type designation



3. Technical data

Model	Protection function	Protection operation time	Rated operational voltage	Contact capacity	Contact form	Usage category	Conventional heating current (Ith)	Electrical life	Mechanical life
NJYB3	Overvoltage	0.1s~10s	Three-phase three-wire system: AC 380V 50Hz	Resistive load: AC250V 6A cosφ=1	1 N/O, 1 N/C	AC-15	3A	10 ⁵	10 ⁶
	Undervoltage								
	Three-phase voltage unbalance								
	Phase failure, phase sequence	≤1s	Three-phase four-wire system: AC 220V 50Hz	Inductive load: AC250V 1A cosφ=0.4					

Model	Three-ph ase three- wire	Three-ph ase four- wire	Single- phase/ two- phase	Overvol tage protecti on	Undervol tage protecti on	Unbalance protecti on	Phase sequ ence protecti on	Phase fai lure protecti on
NJYB3-1	●						●	●
NJYB3-2	●			●				●
NJYB3-3	●				●			●
NJYB3-4	●			●	●			●
NJYB3-5	●			●	●		●	●
NJYB3-6	●			●	●	Fixed	●	●
NJYB3-7	●			Fixed	Fixed	●	●	●
NJYB3-8	●			●	●	●	●	●
NJYB3-9		●	●	●				●
NJYB3-10		●	●		●			●
NJYB3-11		●	●	●	●			●
NJYB3-12		●		●	●		●	●
NJYB3-13		●		●	●	Fixed	●	●
NJYB3-14		●		Fixed	Fixed	●	●	●
NJYB3-15		●		●	●	●	●	●
NJYB3-16		●					●	●

Note: ● denotes available functions, ○ denotes optional functions.

Basic data of auxiliary circuit

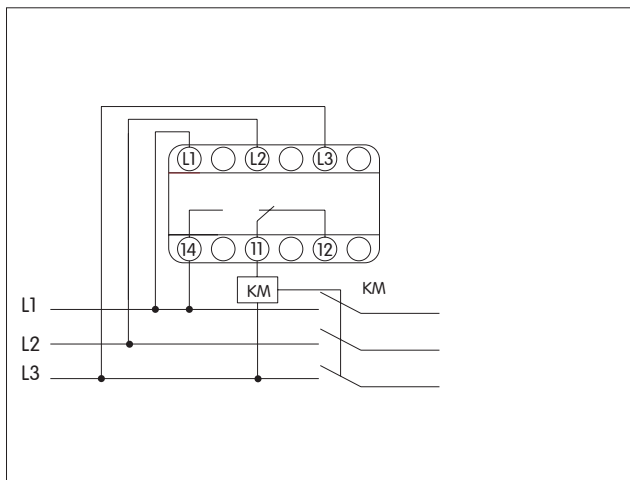
Contact form	Conventional heating current Ith (A)	Usage category	Rated operational voltage Ue(V)	Rated operational current Ue(A)
1 group of change-over contacts	3	AC-15	220	0.75
			380	0.47

Immunity

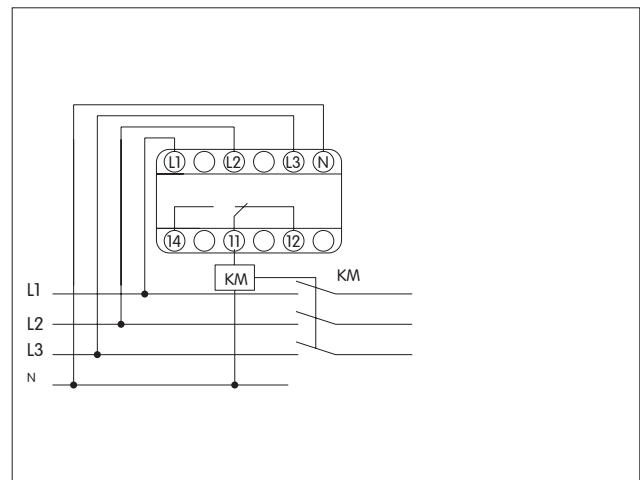
Item	Severity level
Electrostatic discharge immunity	$8 \times (1 \pm 10\%) \text{ kV}$ (air discharge)
Radiated electromagnetic field immunity	Test electric field strength: $10 \times (1 \pm 10\%) \text{ V/m}$
Fast transient immunity	For power line, $2 \times (1 \pm 10\%) \text{ kV}$, duration: 1 min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

4. Wiring diagram

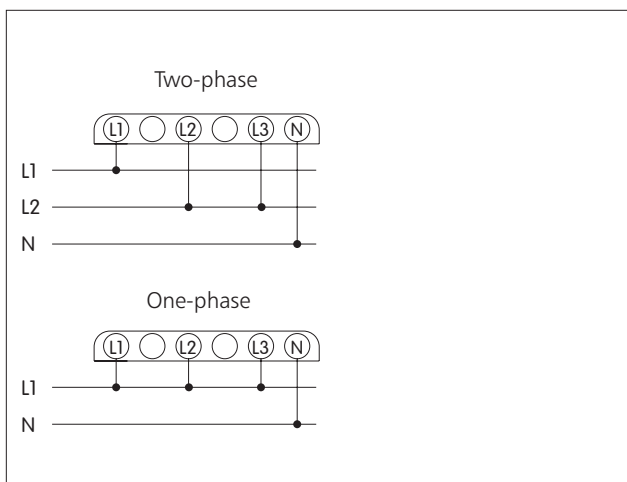
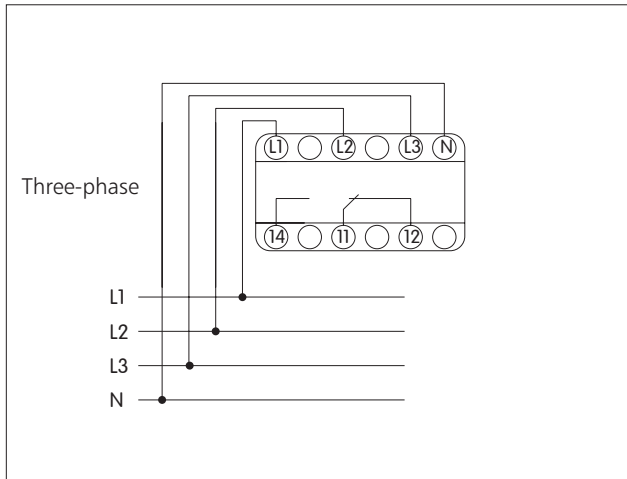
NJYB3-01, NJYB3-02, NJYB3-03, NJYB3-04, NJYB3-05, NJYB3-06, NJYB3-07, NJYB3-08 Wiring diagram



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



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



5. Overall and mounting dimensions (mm)

