



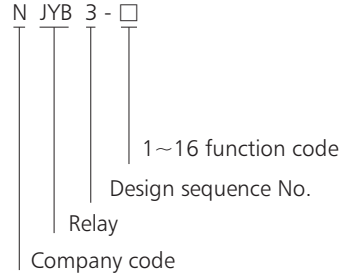
NJYB3 Relay

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/60Hz. 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	Electrical life	Mechanical life
NJYB3	Overvoltage	0.1s~10s	Three-phase three-wire system: AC 380V 50Hz/60Hz	Ue/Ie:AC-15 220V/0.75A, 380V/0.47A; Ith:3A	1 Z	10 ⁵	10 ⁶
	Undervoltage						
	Three-phase voltage unbalance						
	Phase failure, phase sequence	≤1s	Three-phase four-wire system: AC 220V 50Hz/60Hz				

Model	Three-phase three-wire	Three-phase four-wire	Single-phase/two-phase	Overvoltage protection	Undervoltage protection	Unbalance protection	Phase sequence protection	Phase failure protection
NJYB3-1	●						●	●
NJYB3-2	●			$(1.05\sim 1.3)\times U_e$				●
NJYB3-3	●				$(0.7\sim 0.95)\times U_e$			●
NJYB3-4	●			$(1.05\sim 1.3)\times U_e$	$(0.7\sim 0.95)\times U_e$			●
NJYB3-5	●			$(1.05\sim 1.3)\times U_e$	$(0.7\sim 0.95)\times U_e$		●	●
NJYB3-6	●			$(1.05\sim 1.3)\times U_e$	$(0.7\sim 0.95)\times U_e$	Fixed 20%	●	●
NJYB3-7	●			Fixed $120\%\times U_e$	Fixed $80\%\times U_e$	5%~15%	●	●
NJYB3-8	●			$(1.05\sim 1.3)\times U_e$	$(0.7\sim 0.95)\times U_e$	5%~15%	●	●
NJYB3-9		●	●	$(1.05\sim 1.3)\times U_e$				●
NJYB3-10		●	●		$(0.7\sim 0.95)\times U_e$			●
NJYB3-11		●	●	$(1.05\sim 1.3)\times U_e$	$(0.7\sim 0.95)\times U_e$			●
NJYB3-12		●		$(1.05\sim 1.3)\times U_e$	$(0.7\sim 0.95)\times U_e$		●	●
NJYB3-13		●		$(1.05\sim 1.3)\times U_e$	$(0.7\sim 0.95)\times U_e$	Fixed 20%	●	●
NJYB3-14		●		Fixed $120\%\times U_e$	Fixed $80\%\times U_e$	5%~15%	●	●
NJYB3-15		●		$(1.05\sim 1.3)\times U_e$	$(0.7\sim 0.95)\times U_e$	5%~15%	●	●
NJYB3-16		●					●	●

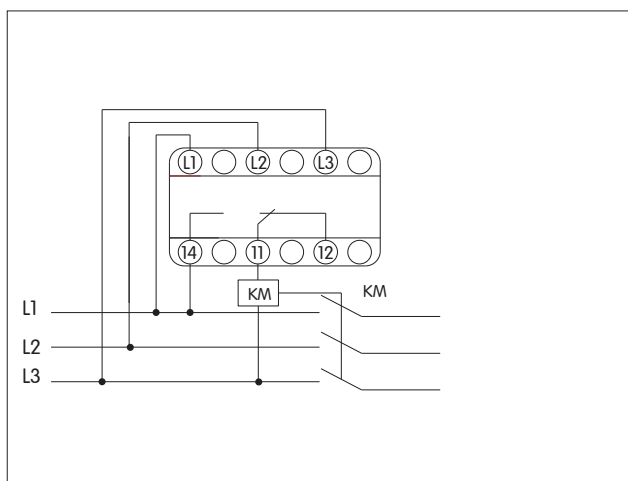
Note: ● denotes available functions, ○ denotes optional functions.

Immunity

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

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

