



NJXB3 Relay

1. General

NJXB3 relay is used as an overvoltage, undervoltage, phase failure, phase sequence, three-phase voltage unbalance and PTC temperature protection device in three-phase three-wire control circuits with an AC voltage of 380V and a frequency of 50Hz and three-phase four-wire control circuits with an AC voltage of 220V and a frequency of 50Hz to make and break the circuit.

2. Type designation

N J XB 3 - □ □

Company code

Relay

Phase protection

Design sequence No.

1~18 function code (see Table 1)

P: PTC temperature protection, optional.

| 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 | PTC temperature protection |
|----------|------------------------|-----------------------|------------------------|------------------------|-------------------------|----------------------|---------------------------|--------------------------|----------------------------|
| NJXB3-1 | ● | | | ● | | | | ● | |
| NJXB3-2 | ● | | | | ● | | | ● | |
| NJXB3-3 | ● | | | ● | ● | | | ● | |
| NJXB3-4 | ● | | | ● | ● | | ● | ● | |
| NJXB3-5 | ● | | | ● | ● | Fixed | ● | ● | ○ |
| NJXB3-6 | ● | | | Fixed | Fixed | ● | ● | ● | ○ |
| NJXB3-7 | ● | | | ● | ● | ● | ● | ● | ○ |
| NJXB3-8 | ● | | | | | | | | ● |
| NJXB3-9 | ● | | | | | | ● | ● | ● |
| NJXB3-10 | ● | | | | | | ● | ● | |
| NJXB3-11 | | ● | ● | ● | | | | ● | |
| NJXB3-12 | | ● | ● | | ● | | | ● | |
| NJXB3-13 | | ● | ● | ● | ● | | | ● | |
| NJXB3-14 | | ● | | ● | ● | | ● | ● | |
| NJXB3-15 | | ● | | ● | ● | Fixed | ● | ● | ○ |
| NJXB3-16 | | ● | | Fixed | Fixed | ● | ● | ● | ○ |
| NJXB3-17 | | ● | | ● | ● | ● | ● | ● | ○ |
| NJXB3-18 | | ● | | | | | ● | ● | ○ |

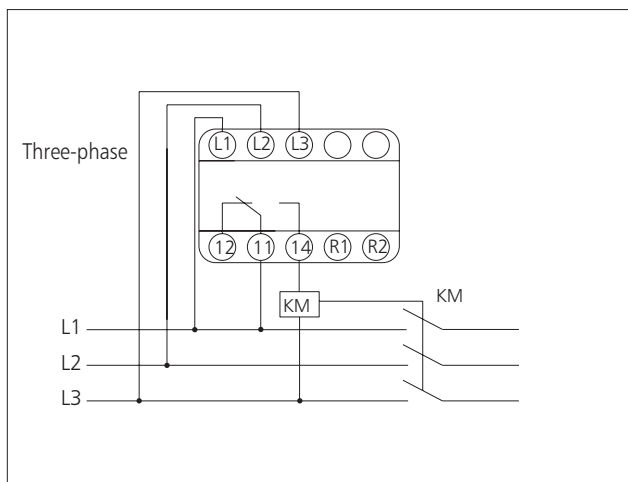
Note: ● denotes available functions, ○ denotes optional functions.

3. Technical data

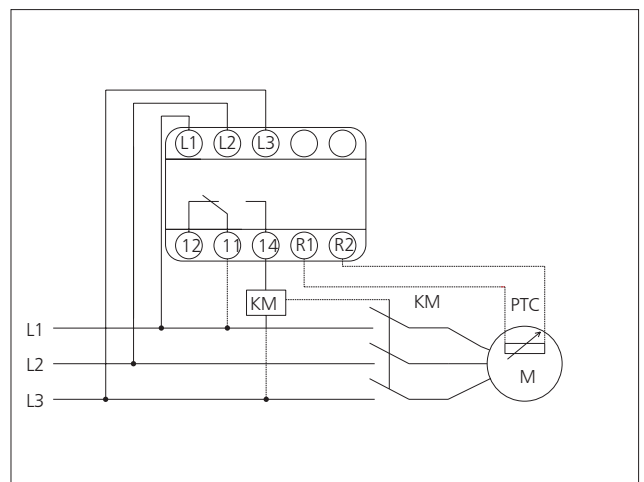
| Model | Protection function | Protection operation time | Rated operational voltage | Contact capacity | Contact form | Usage category | Conventional heating current (Ith) | Electrical life | Mechanical life |
|----------------------------|-------------------------------|---------------------------|--|--|-----------------|----------------|------------------------------------|-----------------|-----------------|
| NJXB3 | Overvoltage | 0.1s~10s | Three-phase three-wire system: AC 380V 50Hz | Resistive load: AC250V 6A $\cos\phi=1$ Inductive load: AC250V 1A $\cos\phi=0.4$ | 1 N/O, 1 N/C | AC-15 | 3A | 10^5 | 10^6 |
| | Undervoltage | | | | | | | | |
| | Three-phase voltage unbalance | | | | | | | | |
| | Phase failure, phase sequence | $\leq 1s$ | Three-phase four-wire system: AC 220V 50Hz | | | | | | |
| PTC temperature protection | | | | | | | | | |

4. Wiring diagram

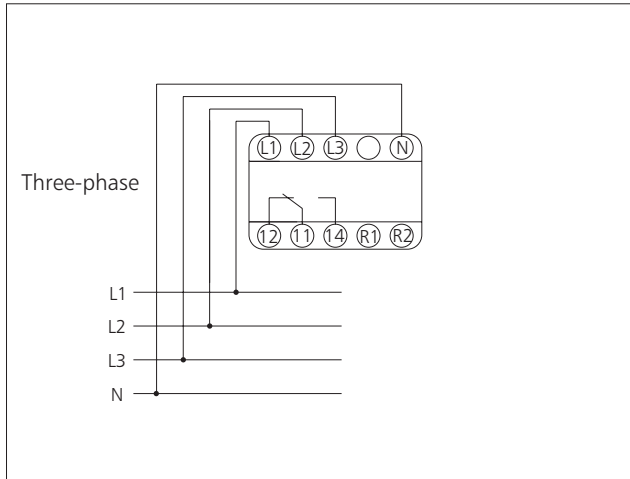
NJXB3-01, NJXB3-02, NJXB3-03, NJXB3-04, NJXB3-10
Wiring diagram



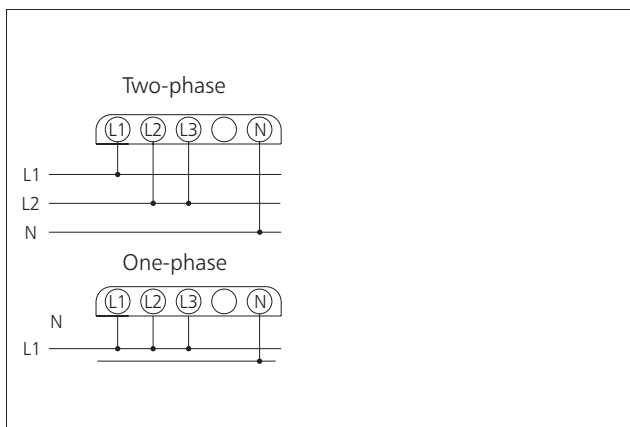
NJXB3-05(P), NJXB3-06(P), NJXB3-07(P), NJXB3-08(P), NJXB3-09
Wiring diagram



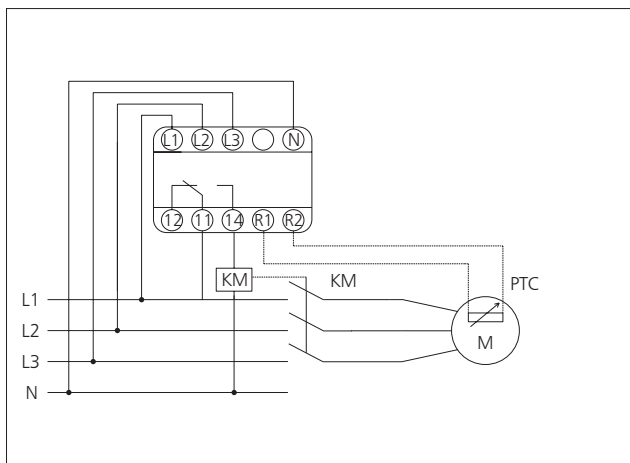
NJXB3-11, NJXB3-12, NJXB3-13 Wiring diagram



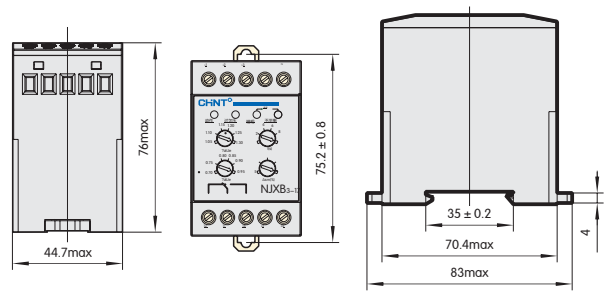
NJXB3 Wiring diagram



NJXB3-14, NJXB3-15(P), NJXB3-16(P), NJXB3-17(P), NJXB3-18 Wiring diagram



5. Overall and mounting dimensions (mm)



6. Installation and use

- 6.1 Connect the wires correctly in accordance with the connection diagram.
- 6.2 If the relay is of rail mounting type, use TH35-7.5 mounting rail.
- 6.3 If the relay is of installation mounting type, remove the limiter.