
# XJ3 Phase-Failure and Phase-Sequence Protective Relay

## 1. General

XJ3 series phase failure and phase sequence protection relay is used to provide overvoltage, undervoltage and phase failure protection in three-phase AC circuits and phase sequence protection in irreversible transmission devices and features reliable performance, wide application and convenient use.

The protector starts to function when it is connected to the power control circuit in accordance with the drawing. When the fuse of any phase of the three-phase circuit is open or when there is a phase failure in the power supply circuit, the XJ3 operates immediately to control the contact to cut off the power supply of the AC contactor coil of the main circuit so that the main contact of the AC contactor operates to provide the load with phase failure protection.

When the phases of a three-phase irreversible device with predetermined phase sequence are connected incorrectly due to maintenance or change of the power supply circuit, the XJ3 series will identify the phase sequence, stop supplying power to the power supply circuit and achieve the goal of protecting the device.

## 2. Type designation

XJ 3 - □/ □

- Rated power supply voltage
- Remodel (derived model)
  G: monochrome luminotron fault indication type;
  S: two-color luminotron fault indication type;
  D: multifunction protection, multimode indication type
- Design sequence No.
- Phase-failure and phase-sequence protective relay

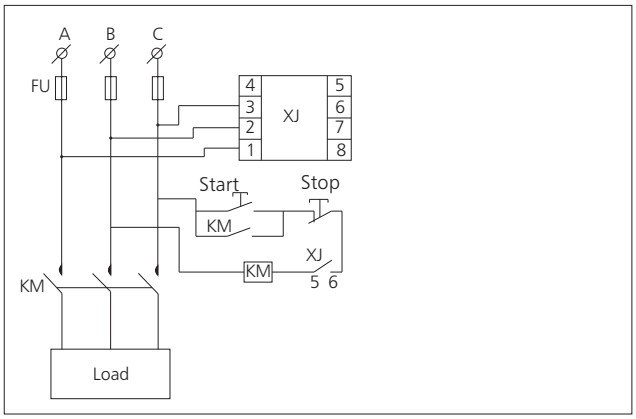
## 3. Technical data

| Type | XJ3-G | XJ3-S | XJ3-D |
|---|---|---|---|
| Protection function | Phase-failure Phase-sequence error & Three phase voltage unbalance⩾8%~13% | | Overvoltage Undervoltage Phase-failure Phase-sequence error |
| Overvoltage protection(AC) | | | 380V~460V 1.5s~4s (adjustable) |
| Undervoltage protection(AC) | | | 300V~380V 2s~9s(adjustable) |
| Operating voltage | AC 380V 50Hz/60Hz, Allowable fluctuating range±10% | | AC 380V 50Hz |
| Contact number | 1 normally open & 1 normally close | | 1 group changeover |
| Contact capacity | Ue/Ie:AC-15 380V/0.95A; Ith:5A | | Ue/Ie:AC-15 380V/0.47A; Ith:3A |
| Phase-failure and phase-sequence protection | Reacting time⩽2s | | |
| Electrical life | $1\times10^5$ | | |
| Mechanical life | $1\times10^6$ | | |
| Ambient temperature | -5℃~40℃ | | |
| Installation mode | TH35-7.5(thickness 1.0 mm)rail | | 35mm Track installation or soleplate mounting |

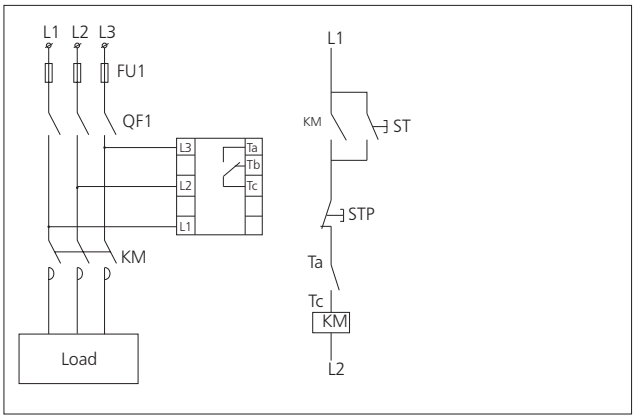
Note: in the example diagram fo application circuit, protective relay can provide protection only under the condition of phase-failure occurring at terminal 1, 2, 3 and among three phase of power supply A, B, C.

## 4. Wiring diagram

XJ3-G, S wiring diagram

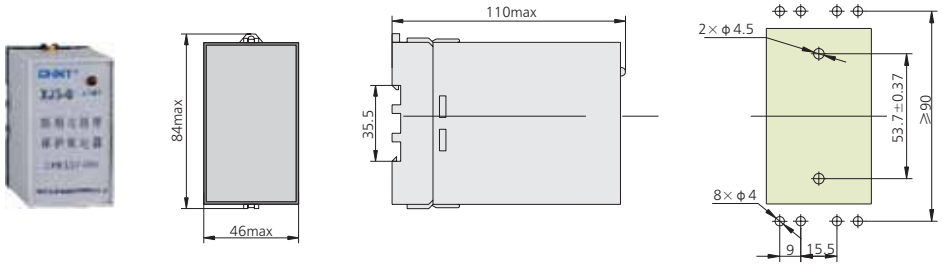



XJ3-D wiring diagram




## 5. Overall and mounting dimensions (mm)

XJ3-G, S profile and installation dimension




XJ3-D profile and installation dimension