

# Trip circuit supervision relay Tiam TCS871

## Features :

- \* Continuous monitoring of circuit breaker trip circuits and other essential control circuits
- \* Preset operate time preventing unwanted alarm signals at circuit breaker operation
- \* Indication of relay operation with LED indicator on the front panel and output relay
- \* Detects bad contact, contact welding, trip coil and auxiliary voltage failures in the supervised circuit
- \* Standard 72\*144 case / flash mount

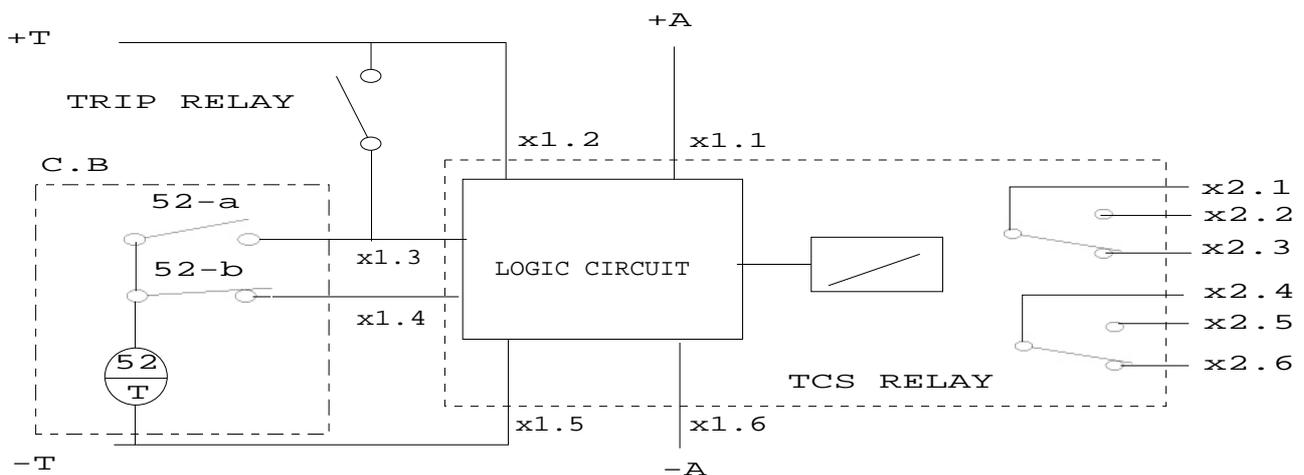
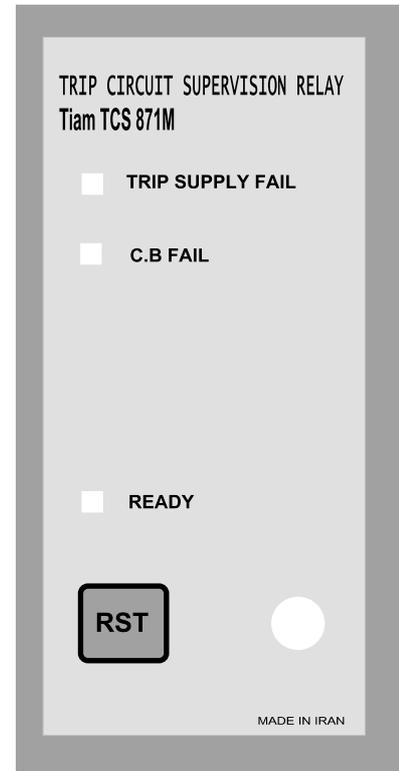
## Application :

The **Tiam** trip circuit supervision relay used for supervising important control circuits such as circuit breaker and disconnector control circuits and signalling circuits in power electrical installation. Generally one supervision relay is needed per circuit to be supervised. If several branches of a circuit are to be supervised, the required number of relays can be connected to the same control circuit.

## Design :

The supervision relay detects circuit interruption, high transition resistance caused by bad galvanic connection or malfunction of C.B mechanism, control contact welding, disappearing trip and relay supply voltage.

The supervision relay contains a constant current source, an opto-isolator, a triggering circuit, a time circuit, three LED indicators and a two changeover output relay. The constant current source forces a small current to flow through the supervised trip coil circuit. If the current, because of a fault in the circuit, cannot be fed through the circuit, the relay operates. When the triggering circuit detects a fault in the supervised circuit the relay generates a visual fault indication and an output relay function after a preset time delay of 700ms (or other on the ordering). The output relay is normally energized and as the relay operates the output relay drops. The output relay also drops if the auxiliary supply of the relay disappears.



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