



STAR-DELTA TIMER

- Capability of setting time for star start-up
- 50 milliseconds delay between star contactor closing and delta contactor opening
- Having two separate Single-contact relays
- Having one signal:
 - ▣ DELTA: To display delta status

▮ Principles of Operation:

Star-delta timer is designed to start up Squirrel-Cage-Induction-Motors with star to delta Change-Over. When supply voltage is applied to terminals A1 and A2, delta circuit timing starts (internal contact of terminal 15 to 16 is made). At the end of star time adjusted by DELAY potentiometer handle, star relay changes its status and delta relay will act (internal contact of terminal 25 to 28 is made).

This timer uses two separate timing circuits, one with variable time to control star contactor (adjustable by DELAY potentiometer handle) and the other with fixed 50-millisecond time to prevent the simultaneous operating of star and delta contactors. This time lag is to make sure star contactor is opened before proceeding delta contactor going to be closed.

Timer will be ready for retiming about one second after supply disconnection.

▮ Technical Specifications:

- ▣ Supply Voltage: 220 VAC \pm 10%
- ▣ Network Frequency: 50 \pm 5 Hz
- ▣ Internal Loss: About 3 W
- ▣ Star Delay Time: 3 to 60 seconds adjustable by DELAY potentiometer handle
- ▣ Delay between Star Opening and Delta Closing: 50 milliseconds
- ▣ Output Relay: Two Single-C/O contact relays
- ▣ Contact Current: 6 A, 220 VAC- 6A, 28 VDC

