



DESIGN FEATURES

- ◆ Available in On-Delay, True Off-Delay, and On/Off-Delay.
- ◆ Timing from 0.1 seconds to 60 minutes, fully calibrated in linear increments.
- ◆ Oversize time-calibrated adjustment knobs, serrated with high-resolution markings visible from all angles make this the most practical, easily-set timer available.
- ◆ Inherent Transient Immunity.
- ◆ Operating Voltages range from 6 to 550 VAC and 12 to 550 VDC with special voltages available.
- ◆ Available in 2-pole or 4-pole models.
- ◆ Many enclosure options: Explosion proof, Dust tight, Watertight, Hermetically-sealed, NEMA 1.
- ◆ Auxiliary timed and instantaneous switches can be added for greater switching flexibility.
- ◆ Numerous mounting options: Surface mount, Panel mount, Octal plug-in mounting
- ◆ Options and Accessories: Quick-connect terminals, Dial Stops, and Transient protection module.
- ◆ Front Terminals - easy-to-reach screw terminals, all on the face of the unit, clearly identified.
- ◆ Modular Assembly - timing head, coil assembly and switchblock are all individual modules, with coils and switches field-replaceable.

CONSTRUCTION

There are three main components of Series 7000 Timing Relays:

Calibrated Timing Head uses no needle valve, recirculates air under controlled pressure through a variable orifice to provide linearly adjustable timing. Patented design provides instant recycling, easy adjustment and long service life under severe operating conditions.

Precision-Wound Potted Coil module supplies the initial motive force with minimum current drain. Total sealing without external leads eliminates moisture problems, gives maximum insulation value.

Snap-Action Switch Assembly - custom-designed over-center mechanism provides greater contact pressure up to transfer time for positive, no flutter action.

Standard switches are DPDT arrangement, with flexible beryllium copper blades and silver-cadmium oxide contacts. Special "timing-duty" design assures positive wiping action, sustained contact pressure and greater heat dissipation during long delay periods.

Each of these subassemblies forms a self-contained module which is then assembled at the factory with the other two to afford a wide choice of operating types, coil voltages, and timing ranges.

The squared design with front terminals and rear mounting permits the grouping of Series 7000 units side-by-side in minimum panel space. Auxiliary switches may be added in the base of the unit, without affecting the overall width or depth.

OPERATION

Two basic operating types are available. "On-Delay" models provide a delay period on energization, at the end of which the switch transfers the load from one set of contacts to another. De-energizing the unit during the delay period immediately recycles the unit, readying it for another full delay period on reenergization.

In "Off-Delay" models the switch transfers the load immediately upon energization, and the delay period does not begin until the unit is deenergized. At the end of the delay period the switch returns to its original position.

Reenergizing the unit during the delay period immediately resets the timing, readying it for another full delay period on deenergization. No power is required during the timing period.

In addition to these basic operating types, "Double-Head" models offer sequential delays on pull-in and drop-out in one unit, as described on page 44. With the addition of auxiliary switches the basic models provide two-step timing, pulse actuation for interlock circuits, or added circuit capacity.