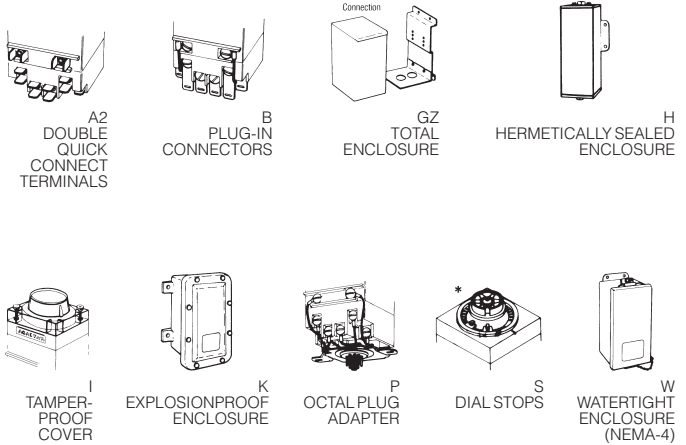
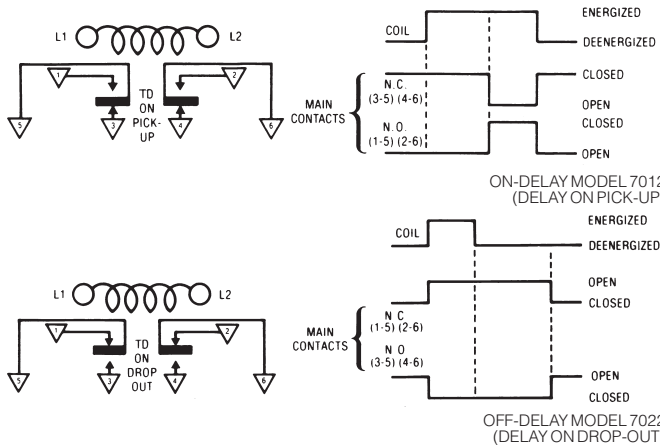
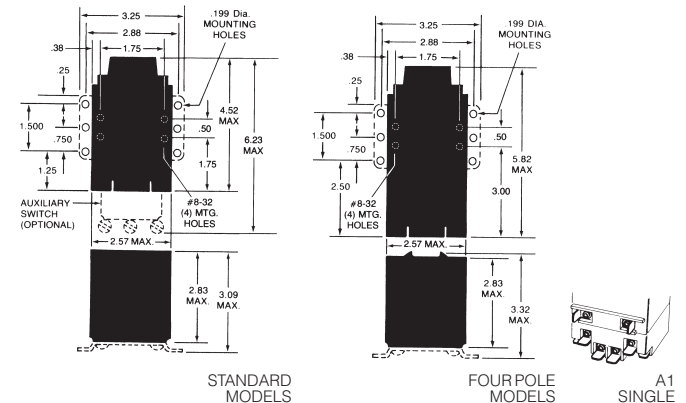
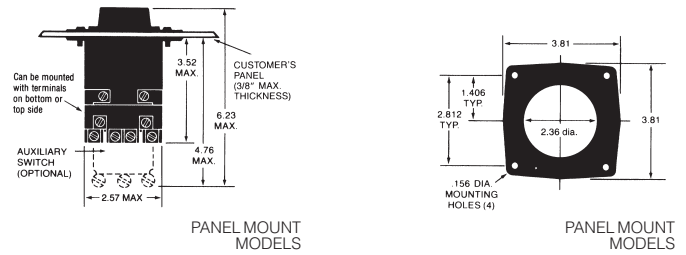
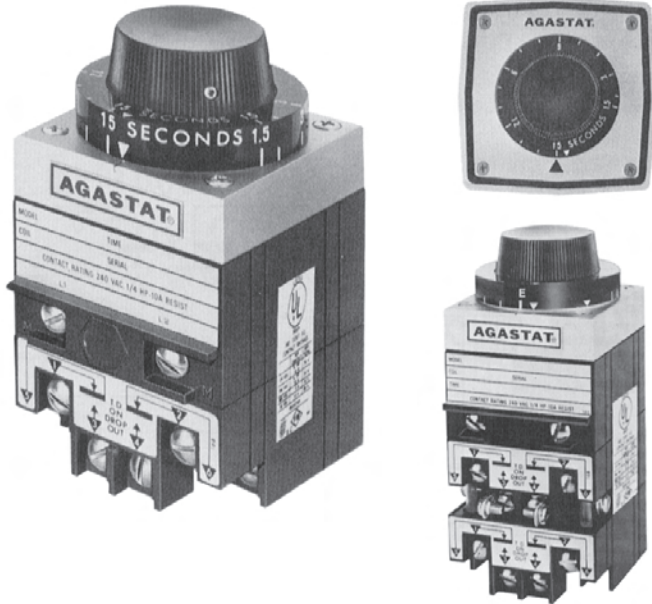


AGASTAT Timing Relays

MANU
344
CODE

tyco / Electronics



MODEL CODE

70	1	2	A	D	T	A2
Series	Variation	Contact Arrangement	Coil Voltage	Time Range	Aux. Switch Options	Optional Features or Enclosures
70	1 On-Delay 2 Off-Delay	2 Double Pole Double Throw 4 Four Pole Double Throw	A 120V 60Hz B 240V 60Hz C 480V 60Hz D 550V 60Hz E 24V 60Hz F 127V 50Hz G 240V 50Hz H 12V 60Hz I 6V 60Hz J 208V 60Hz K Dual Voltage (combines A & B) M 28VDC N 48VDC O 24VDC P 120VDC	Models 7012, 7022, 7024 A .1 to 1 sec B .5 to 5 sec C 1.5 to 15 sec D 5 to 50 sec E 20 to 200 sec F 1 to 10 min G 3 to 30 min H 6 to 60 min I 3 to 120 cyc J 1 to 300 sec Model 7014 A 2 to 2 sec B 7 to 7 sec C 2 to 20 sec	L 1 Form C** LL 2 Form C** T 1 Form C ** On-Delay Models Only	A1 Single Quick-Connect Terminals A2 Double Quick-Connect Plug-in connectors BZ Total Enclosure with bottom KO's H Hermetically Sealed I1 Tamper-Proof (Opaque) I2 Tamper-Proof (Clear) K Explosion-Proof M Dust-Tight P Octal Plug Adapter S Dial Stops W Water-Tight X Panel Mount

Continued on next page...

AGASTAT 7000 SERIES TIME DELAY RELAYS

7000 Series offers distinct improvements over earlier models. The wide range of variations available, the oversize time-calibrated adjustment knobs, and modular assembly are but a few of the features designed into the 7000 Series. All components used in the manufacturing of these relays have been custom-designed for their specific role in the overall timing function—providing stability and repeat accuracy never before available in an electro-pneumatic timer.

The basic operating types are available—"On-Delay" models provide a delay period on energization, at the end of which the switch contacts transfer. De-energizing the unit during the delay period immediately recycles the unit, readying it for another full delay period on re-energization. In "Off-Delay" models, the switch transfers immediately upon energization, and the delay period does not begin until the unit is de-energized. At the end of the delay period the switch returns to its original position. Re-energizing the unit during the delay period immediately recycles the timer, readying it for another delay period on de-energization. No power is required during the timing period. Reset times (maximum): On-Delay models—.050 second; Off-Delay models—.050 second (AC); .100 second (DC).

The AGASTAT 7000 Series offers the ease of adjustment and resetting of the time period by means of a calibrated dial head. Timing is set simply by turning the dial (in either direction) to the desired time value. In the zone of approximately 25° separating the high and low ends of timing ranges A, D, E, and K, instantaneous operation (no time delay) will occur. All other ranges produce an infinite time delay when the dial is set in this zone.

Normal mounting of the unit is in a vertical position, from the back of the panel. Four tapped holes are provided in the back plate of the unit, making it interchangeable with earlier AGASTAT models. A front mounting bracket is also supplied with each basic unit, for installation from the front of the panel.

ON-DELAY MODEL 7012 (DELAY ON PICK-UP)

Applying continuous voltage to the coil (L1-L2) starts a time delay lasting for the preset time. During this period the normally closed contacts (3-5 and 4-6) remain closed. At the end of the delay period the normally closed contacts break and the normally open contacts (1-5 and 2-6) make. The contacts remain in this transferred position until the coil is de-energized, at which time the switch instantaneously returns to its original position. De-energizing the coil, either during or after the delay period, will recycle the unit within .050 second. It will then provide a full delay period upon re-energization, regardless of how often the coil voltage is interrupted before the unit has been permitted to "time-out" to its full delay setting.

OFF-DELAY MODEL 7022 (DELAY ON DROP-OUT)

Applying voltage to the coil (for at least .050 second) will instantaneously transfer the switch, breaking the normally closed contacts (1-5 and 2-6), and making the normally open contacts (3-5 and 4-6). Contacts remain in this transferred position as long as the coil is energized. The time delay begins immediately upon de-energization. At the end of the delay period the switch returns to its normal position. Reenergizing the coil during the delay period will immediately return the timing mechanism to a point where it will provide a full delay period upon subsequent de-energization. The switch remains in the transferred position.

FOUR POLE AGASTAT

With the addition of an extra switch block at the bottom of the basic unit, this version of the 7000 series offers four pole switching capacity with simultaneous timing or two step timing. The two step operation is achieved by adjustment to your specifications. In all other respects this 7000 series unit is identical to the other basic models of the series. This additional feature adds only 1/4" to the height and 1/8" to the depth.

PANEL MOUNT AGASTAT

Combines the proven performance and reliability of the 7000 series electropneumatic operation with the modern design and adjustability of a panel-mounted timer. All the time ranges are calibrated directly in linear increments. Simple single hole mounting. Specifications and operation identical to the standard 7000 series timers. To designate panel mount add "X" to part number when ordering.

AGASTAT 7000 SERIES TIME/DELAY/RELAY, FRONT PANEL MOUNT 8 Watts, DPDT contacts, 10 Amps (resistive)

Cat. No.	Input Voltage	Time Range	Option	Net Price
TIME DELAY ON PULL-IN				
7012-AA	120VAC	.1 to 1 Sec.	—	\$339.69
7012-AB	120VAC	.5 to 5 Sec.	—	344.57
7012-AC	120VAC	1.5 to 15 Sec.	—	301.48
7012-AD	120VAC	5 to 50 Sec.	—	344.57
7012-AE	120VAC	20 to 200 Sec.	—	344.57
7012-AF	120VAC	1 to 10 Min.	—	380.94
7012-AH	120VAC	3 to 30 Min.	—	393.07
7012-AI	120VAC	6 to 60 Min.	—	429.48
7012-AK	120VAC	1 to 300 Sec.	—	344.57

AGASTAT 7000 SERIES TIME/DELAY/RELAY, FRONT PANEL MOUNT 8 Watts, DPDT contacts, 10 Amps (resistive)

Cat. No.	Input Voltage	Time Range	Option	Net Price
TIME DELAY ON PULL-IN (CONTINUED)				
7012ACL	120VAC	1.5 to 15 Sec.	Aux. Switch Instant Transfer	\$380.94
7012BC	240VAC	1.5 to 15 Sec.	—	344.57
7012NC	48VAC	1.5 to 15 Sec.	—	373.68
7012PA	125VDC	.1 to 1 Sec.	—	373.68
7012PB	125VDC	.5 to 5 Sec.	—	373.68
7012PK	125VDC	1 to 300 Sec.	—	373.68
7012PC	125VDC	1.5 to 15 Sec.	—	373.68
7012PD	125VDC	5 to 50 Sec.	—	373.68
7012PF	125VDC	1 to 10 Min.	—	410.09
7012PJ	125VDC	3 to 120 Hz	—	373.68
7012PJX	125VDC	3 to 120 Hz	Panel Mount Horizontal	414.93

AGASTAT 7000 SERIES TIME/DELAY/RELAY, FRONT PANEL MOUNT 8 Watts, DPDT contacts, 10 Amps (resistive)

Cat. No.	Input Voltage	Time Range	Option	Net Price
TIME DELAY ON DROP-OUT				
7022-AA	120VAC	.1 to 1 Sec.	—	\$344.57
7022-AB	120VAC	.5 to 5 Sec.	—	344.57
7022-AC	120VAC	1.5 to 15 Sec.	—	301.48
7022-AD	120VAC	5 to 50 Sec.	—	344.57
7022-AE	120VAC	20 to 200 Sec.	—	344.57
7022-AF	120VAC	1 to 10 Min.	—	380.94
7022-AH	120VAC	3 to 30 Min.	—	393.07
7022-AI	120VAC	6 to 60 Min.	—	429.48
7022-AK	120VAC	1 to 300 Sec.	—	344.57
7022BC	240VAC	1.5 to 15 Sec.	—	344.57
7022PB	125VDC	.5 to 5 Sec.	—	373.68
7022PK	125VDC	1 to 300 Sec.	—	373.68
7022PC	125VDC	1.5 to 15 Sec.	—	373.68

AUXILIARY SWITCH OPTIONS

Auxiliary switches may be added to switch additional circuits, provide two-step timing action or furnish electrical interlock for sustained coil energization from a momentary impulse, depending on the type selected and its adjustment. Because of their simple attachment and adjustment features, they can be installed at the factory or in the field. All auxiliary switches are SPDT with contact rated at 10 amperes at 125 volts, AC.

FOR 7012 & 7012-X MODELS (T.D. on pull-in); For instant transfer use model code "L" Auxiliary switch kit. This switch is non-adjustable. For two step timing, use model code "T" Auxiliary switch kit. The first delay is independently adjustable, up to 30% of the overall delay (recommended maximum 100 seconds).

FOR 7022 & 7022-X Models (T.D. on drop-out); For either instant transfer or two step timing, use model code "T" Auxiliary switch kit. The switch is factory adjusted to give instant transfer operation, but may be easily adjusted in the field to provide two step timing. The first delay is independently adjustable, up to 30% of the overall delay (recommended maximum 100 seconds).

FOR 7012 & 7012-X MODELS (T.D. on pull-in); This Auxiliary switch provides two form C contacts for instantaneous transfer, use model code "LL" Auxiliary switch.