Design Features
- Available in on-delay, true off-delay, and on/off-delay.
- Timing from 0.1 seconds to 60 minutes, in linear increments.
- Oversize time-calibrated adjustment knobs, serrated with high-resolution markings visible from all angles makes the timer easy to set timers.
- Inherent transient immunity.
- Standard voltages from 6-550VAC and 12-550VDC (special voltages available.)
- Available in 2-pole or 4-pole models.
- Numerous enclosure options: explosion proof, watertight, dust tight, hermetically-sealed, NEMA 1.
- Auxiliary timed and instantaneous switches can be added for greater switching flexibility.
- Many mounting options: Surface mount, Panel mount, Octal plug-in mounting.
- Options: quick-connect terminals, dial stops, and transient protection module.

Design & 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 resets the unit, readying it for another full delay period on re-energization.

In "Off-Delay" models the switch transfers the load 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 resets the timing, readying it for another full delay period on de-energization. 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. With the addition of auxiliary switches the basic models provide two-step timing, pulse actuation for interlock circuits, or added circuit capacity.

**NOTE:** Seismic & radiation tested E7000 models are available. Consult factory for detailed information.

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**7000 series**

**Industrial Electropneumatic Timing Relay**

**On-delay model 7012 (delay on pickup)**

Applying continuous voltage to the coil (L1-L2) begins 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 deenergized, 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 50 msec. 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 dropout)**

Applying voltage to the coil (for at least 50 msec) 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.

Re-energizing 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.

To increase the versatility of the basic timer models, auxiliary switches may be added to either on-delay or off-delay types. They 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, by any competent mechanic. All auxiliary switches are SPDT with UL listings of 10A @ 125, 250, or 480 VAC. A maximum of one Code T or two Code L auxiliary switches may be added to each relay. The L or LL switch is available with on-delay relays only. The T switch is available with both the on-delay and off-delay relays.

Auxiliary Switch Options for On-Delay Instant Transfer (Auxiliary Switch Code L, maximum of 2 per relay):
1. Energizing coil begins time delay and transfers auxiliary switch.
2. Main switch transfers after full preset delay.
3. De-energizing coil resets both switches instantly.

Auxiliary switch is nonadjustable.

Two-Step Timing (Auxiliary Switch Code T, maximum of 1 per relay):
Auxiliary switch options

To increase the versatility of the basic timer models, auxiliary switches may be added to either on-delay or off-delay types. They 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, by any competent mechanic. All auxiliary switches are SPDT with UL listings of 10A @ 125, 250, or 480 VAC. A maximum of one Code T or two Code L auxiliary switches may be added to each relay. The L or LL switch is available with on-delay relays only. The T switch is available with both the on-delay and off-delay relays.

**Auxiliary Switch Options for On-Delay**

- **Instant Transfer (Auxiliary Switch Code L, maximum of 1 per relay):**
  1. Energizing coil begins time delay and transfers auxiliary switch.
  2. Main switch transfers after total preset delay.
  3. De-energizing coil resets both switches instantly.

- **Two-Step Timing (Auxiliary Switch Code T, maximum of 1 per relay):**
  1. Energizing coil begins time delay.
  2. After first delay auxiliary switch transfers.
  3. Main switch transfers after total preset delay.

**Auxiliary Switch Options for Off-Delay**

- **Instant Transfer (Auxiliary Switch Code L, maximum of 1 per relay):**
  1. Energizing coil transfers main and auxiliary switches instantly.
  2. De-energizing coil resets auxiliary switch and begins time delay.
  3. Main switch transfers after total preset delay.
  4. De-energizing coil resets both switches instantly. First delay is independently adjustable, up to 30% of overall delay. (Recommended maximum 100 seconds.)

- **Two-Step Timing (Auxiliary Switch Code T, maximum of 1 per relay):**
  1. Energizing coil transfers main and auxiliary switches instantly.
  2. De-energizing coil begins time delay.
  3. After first delay auxiliary switch transfers.
  4. Main switch transfers after total preset delay. First delay is independently adjustable, up to 30% of overall delay. (Recommended maximum 100 seconds.)

**On-delay, off-delay model 7032 (double head)**

![Image of 7032 model](image)

- The Double Head model provides delayed switch transfer on energization of its coil, followed by delayed resetting upon coil de-energization. Each delay period is independently adjustable.
- Its compact design saves precious panel space, while the simplified wiring reduces costly interconnection.

**Four pole model 7014. 7024**

![Image of 7014/7024 model](image)

- With the addition of an extra switch block at the bottom of the basic unit, this version of the Series 7000 offers four pole switch capacity with simultaneous timing or two-step timing. The two-step operation is achieved by factory adjustment to your specifications.
- For two-step operation, a maximum timing ratio between upper and lower switches of 5:2 is recommended. Once adjusted at the factory, this ratio remains constant regardless of changes in dial settings. (Ex: If upper switch transfer is set on dial at 60 sec., minimum time on lower switch should be 40 sec.)
- This Series 7000 unit offers many of the performance features found in basic models - voltage ranges, timing and switch capacities are virtually identical.
- Four pole models add approximately 1-1/4" to the maximum height of the basic model, approximately 1/8" to the depth. They are designed for vertical operation only.

**Surge/transient protection option**

**Features**

- Protect electronic control circuits from voltage transients generated by the timer coil.
- Fast response to the rapidly rising back E.M.F.
- High performance clamping voltage characteristics.
- UL recognized, (except varistor and coil together).
- Timer NOT polarity sensitive.

![Image of Surge Suppressor](image)

The Surge/Transient Protection Option protects electronic control circuits from transients and surges which are generated when the timer coil is activated. Built with a minimum of moving parts, the unit provides a fast response to rapidly rising voltage transients. The accurate, precision-made device is not polarity sensitive and permits the user to initiate, delay, sequence and program equipment actions over a wide range of applications under the most severe operating conditions.

- It consists of a specially modified coil case, varistor, varistor cover, terminal extensions and cup washers so that normal terminations can be used. The varistor will not affect the operating characteristics of the 7000 Timer. The varistor has bilateral and symmetrical voltage and current characteristics and therefore can be used in place of the back-to-back zener diodes. This characteristic also means that the coil will not be polarity sensitive.
**Timing Specifications**  (All values shown are at nominal voltage and 25°C unless otherwise specified).

**Operating Modes:**
- **Model 7012/7014:** On-delay (delay on pick-up).
- **Model 7022/7024:** Off-delay (delay on drop-out).
- **Model 7032:** On-delay, off-delay (double head).

**Timing Adjustment:** Timing is set by simply turning the dial to the desired time value. In the zone of approximately 25° separating the high and low end 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.

Models 7014 and 7032 are available with letter-calibrated dials only. The upper end of the time ranges in these models may be twice the values shown.

<table>
<thead>
<tr>
<th>Linear Timing Ranges: Code</th>
<th>Models 7012, 7022, 7024</th>
<th>Models 7014, 7032</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>.1 to 1 Sec.</td>
<td>.2 to 2 Sec.</td>
</tr>
<tr>
<td>B</td>
<td>.5 to 5 Sec.</td>
<td>7 to 7 Sec.</td>
</tr>
<tr>
<td>C</td>
<td>1.5 to 15 Sec.</td>
<td>2 to 20 Sec.</td>
</tr>
<tr>
<td>D</td>
<td>5 to 50 Sec.</td>
<td>10 to 100 Sec.</td>
</tr>
<tr>
<td>E</td>
<td>20 to 200 Sec.</td>
<td>30 to 300 Sec.</td>
</tr>
<tr>
<td>F</td>
<td>1 to 10 Min.</td>
<td>1.5 to 15 Min.</td>
</tr>
<tr>
<td>H</td>
<td>3 to 30 Min.</td>
<td>3 to 30 Min.</td>
</tr>
<tr>
<td>I</td>
<td>6 to 60 Min.</td>
<td>Not Avail.</td>
</tr>
<tr>
<td>J</td>
<td>3 to 120 Cyc.</td>
<td>Not Avail.</td>
</tr>
<tr>
<td>K</td>
<td>1 to 300 Sec.</td>
<td>Not Avail.</td>
</tr>
</tbody>
</table>

**Repeat Accuracy:**
For delays of 200 seconds or less: 7012*, 7022, 7024: ±5%
7014*, 7032: ±10%
7032: ±15%

For delays greater than 200 seconds: 7012*, 7022, 7014*, 7024: ±5%
7032: ±15%

* The first time delay afforded by Model 7012 with H (3 to 30 min.) and I (6 to 60 min.) time ranges or Model 7014 with H time range will be approx. 15% longer than subsequent delays due to coil temperature rise.

**Reset Time:** 50 msc. (except model 7032)

**Relay Release Time:** 50 msc. for on-delay models (7012/7014)

**Relay Operate Time:** 50 msc. for off-delay models (7022/7024)

### Operating Voltage Coil Data (for DPDT)

<table>
<thead>
<tr>
<th>Coil Part #</th>
<th>Code Letter</th>
<th>Rated Voltage</th>
<th>Operating Voltage Range @ 60Hz</th>
<th>Rated Voltage</th>
<th>Operating Voltage Range @50Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>7000</td>
<td>A</td>
<td>120</td>
<td>102-132</td>
<td>110</td>
<td>93.5-121</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>240</td>
<td>204-264</td>
<td>220</td>
<td>187-242</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>480</td>
<td>408-528</td>
<td>500</td>
<td>458-570</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>550</td>
<td>468-605</td>
<td>600</td>
<td>508-650</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>24</td>
<td>20.5-26.5</td>
<td>24</td>
<td>20.5-26.5</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>12</td>
<td>12.0-13.2</td>
<td>12</td>
<td>10.2-14.0</td>
</tr>
<tr>
<td></td>
<td>G</td>
<td>6</td>
<td>5.1-6.6</td>
<td>6</td>
<td>5.1-6.6</td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>208</td>
<td>178-229</td>
<td>208</td>
<td>178-229</td>
</tr>
<tr>
<td></td>
<td>K</td>
<td>Dual Voltage Coil</td>
<td>(Combines A&amp;B)</td>
<td>208</td>
<td>178-229</td>
</tr>
<tr>
<td></td>
<td>L</td>
<td>Special AC Coils</td>
<td>(L1, L2, etc.)</td>
<td>208</td>
<td>178-229</td>
</tr>
</tbody>
</table>

| DC          | M           | 28            | 22.4-30.8                       | 28            | 22.4-30.8                     |
|             | N           | 48            | 38.4-52.8                       | 48            | 38.4-52.8                     |
|             | O           | 24            | 19.2-26.4                       | 24            | 19.2-26.4                     |
|             | P           | 125           | 100-137.5                       | 125           | 100-137.5                     |
|             | Q           | 12            | 9.8-13.2                        | 12            | 9.8-13.2                      |
|             | R           | 60            | 48-62                           | 60            | 48-62                         |
|             | S           | 60            | 200-275                         | 60            | 200-275                       |
|             | T           | 550           | 440-605                         | 550           | 440-605                       |
|             | U           | 16            | 12.8-17.6                       | 16            | 12.8-17.6                     |
|             | V           | 32            | 25.8-35.2                       | 32            | 25.8-35.2                     |
|             | W           | 96            | 76.8-105.6                      | 96            | 76.8-105.6                    |
|             | Y           | 6             | 4.8-6.6                         | 6             | 4.8-6.6                       |
|             | Z           | 220           | 176-242                         | 220           | 176-242                       |
|             | X           | Special DC Coils | (X1, X2, etc.) | 220 | 176-242                       |

* Four pole Models: Operational voltage range 90% to 110% for AC units; 85% to 110% for DC units.

See next column for more coil data.

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**Surge/Transient Protection Option Characteristics (DC Timers Only)**

<table>
<thead>
<tr>
<th>Coil Voltage Nominal (DC)</th>
<th>Max Excess Energy Capacity (Joule)</th>
<th>Max De-energization Transient Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 V</td>
<td>0.4 J</td>
<td>48 V</td>
</tr>
<tr>
<td>24 V</td>
<td>1.8 J</td>
<td>93 V</td>
</tr>
<tr>
<td>48 V</td>
<td>3.57 J</td>
<td>145 V</td>
</tr>
<tr>
<td>60 V</td>
<td>6 J</td>
<td>250 V</td>
</tr>
<tr>
<td>96 V</td>
<td>10 J</td>
<td>340 V</td>
</tr>
<tr>
<td>110 V</td>
<td>10 J</td>
<td>340 V</td>
</tr>
<tr>
<td>125 V</td>
<td>10 J</td>
<td>340 V</td>
</tr>
<tr>
<td>220 V</td>
<td>17 J</td>
<td>366 V</td>
</tr>
<tr>
<td>250 V</td>
<td>17 J</td>
<td>366 V</td>
</tr>
</tbody>
</table>

**Surge Life**
Applied 100,000 times continuously with the interval of 10 seconds at room temperature. Below 68 VAC: 12A; Above 68 VAC: 35A

**Temperature Range**
Operating: -22°F to +167°F (-30°C to +75°C)
Storage: -40°F to +167°F (-40°C to +75°C)

**Output/Contact Ratings:**
- **Contact Capacity:** Contact Capacity in Amps (Resistive Load)
  - 30 VDC: 15.0 A
  - 110 VDC: 1.0 A
  - 120 V 60Hz: 20.0 A
  - 240 V 60Hz: 15.0 A
  - 480 V 60Hz: 12.0 A
  - 10 Amps, Resistive, 240 VAC: 1/4 Horsepower, 120 VAC/240VAC (per pole)
  - 15 Amps 30 VDC (per pole)

- **Dielectric:** Withstands 1500 volts RMS 60Hz between terminals and ground. 1,000 volts RMS 60 Hz between non-connected terminals. For dielectric specification on hermetically sealed models consult factory.
- **Insulation Resistance:** 500 Megohms with 500VDC applied.
- **Temperature Range:** Operating: -20°F to +165°F (-29°C to 74°C)
  Storage: -67°F to +165°F (-55°C to 74°C)

**Mounting/Terminals:** Normal mounting of the basic unit is in a vertical position, from the back of the panel. A front mounting bracket is also supplied with each basic unit, for installation from the front of the panel.

All units are calibrated for vertical operation. Basic models (7012, 7022) may also be horizontally mounted, and will be adjusted accordingly when accessory Y1 is specified in your order.

Standard screw terminals (8-32 truss head screws supplied) are located on the front of the unit, with permanent schematic markings. Barrier isolation is designed to accommodate spade or ring tongue terminals, with spacing to meet all industrial control specifications.

The basic Series 7000 may also be panel mounted with the addition of a panelmount kit that includes all necessary hardware and faceplate. This offers the convenience of "out-front" adjustment, with large calibrated dial skirt knob. The faceplate and knob blend with advanced equipment and console designs, while the body of the unit and its wiring are protected behind the panel.

Other mounting options include plug-in styles and special configurations to meet unusual installation requirements. Contact factory for details.

**Power Consumption:** Approximately 8 watts power at rated voltage.

**Approximate Weights:**
- Models 7012, 7022: 2 lbs. 4 ozs.
- 7014, 7024: 2 lbs. 10 ozs.
- 7032: 3 lbs. 5 ozs.

Weight may vary slightly with coil voltage.

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* Specifications and availability subject to change. www.tycoelectronics.com Technical support: Refer to inside back cover.*
Outline Dimensions (Dimensions in inches).

**Models 7012, 7022**

- Panel mount Option "X" Surge/Transient Protection Option

- Can be mounted with terminals on bottom or top side
- Auxiliary Switch (Optional)

**Models 7014, 7024**

- .199 Dia. Mounting Holes
- #8-32 (4) Mfg. Holes
- 2.57 Max.

**Model 7032**

- .199 dia. Mounting Holes (4)
- 2.57 Max.
- 3.09 Max.

Dimensions are shown for reference purposes only. Dimensions are in inches over (millimeters) unless otherwise specified. Specifications and availability subject to change.
### Ordering Information

<table>
<thead>
<tr>
<th>Typical Part No.</th>
<th>70</th>
<th>1</th>
<th>2</th>
<th>A</th>
<th>D</th>
<th>GZ</th>
</tr>
</thead>
</table>

#### 1. Basic Series:
- 70 = 7000 series electropneumatic timing relay

#### 2. Operation:
- 1 = On-delay
- 2 = Off-delay
- 3 = On-delay, off-delay (double head)

#### 3. Contact Arrangement:
- 2 = 2PDT (2 form C)
- 4 = 4PDT (4 form C)

#### 4. Coil Voltage:

<table>
<thead>
<tr>
<th>AC Coils</th>
<th>DC Coils</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = 120VAC, 60 Hz.; 110VAC, 50Hz.</td>
<td>M = 28VDC</td>
</tr>
<tr>
<td>B = 240VAC, 60 Hz.; 220VAC, 50Hz.</td>
<td>N = 48VDC</td>
</tr>
<tr>
<td>C = 480VAC, 60 Hz.</td>
<td>O = 24VDC</td>
</tr>
<tr>
<td>D = 550VAC, 60 Hz.</td>
<td>P = 125VDC</td>
</tr>
<tr>
<td>E = 24VAC, 60 Hz.</td>
<td>Q = 12VDC</td>
</tr>
<tr>
<td>F = 127VAC, 50 Hz.</td>
<td>R = 60VDC</td>
</tr>
<tr>
<td>G = 240VAC, 50Hz.</td>
<td>S = 250VDC</td>
</tr>
<tr>
<td>H = 12VAC, 60 Hz.</td>
<td>T = 550VDC</td>
</tr>
<tr>
<td>K = Dual voltage (combines A &amp; B)</td>
<td>U = 16VDC</td>
</tr>
<tr>
<td>L = Special AC coils (L1, L2, etc.)</td>
<td>V = 32VDC</td>
</tr>
<tr>
<td><strong>4 = 4PDT (4 form C)</strong></td>
<td>W = 96VDC</td>
</tr>
<tr>
<td></td>
<td>Y = 6VDC</td>
</tr>
<tr>
<td></td>
<td>Z = 220VDC</td>
</tr>
<tr>
<td></td>
<td>X = Special DC coils (X1, X2, etc.)</td>
</tr>
</tbody>
</table>

#### 5. Timing Range:

<table>
<thead>
<tr>
<th>Models 7012, 7022 &amp; 7024</th>
<th>Models 7014 &amp; 7032</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = .1 to 1 sec.</td>
<td>A = .1 to 1 sec.</td>
</tr>
<tr>
<td>B = 5 to 5 sec.</td>
<td>B = 5 to 5 sec.</td>
</tr>
<tr>
<td>C = 1.5 to 15 sec.</td>
<td>C = 1.5 to 15 sec.</td>
</tr>
<tr>
<td>D = 5 to 50 sec.</td>
<td>D = 5 to 50 sec.</td>
</tr>
<tr>
<td>E = 20 to 200 sec.</td>
<td>E = 20 to 200 sec.</td>
</tr>
<tr>
<td>F = 1 to 10 min.</td>
<td>F = 1 to 10 min.</td>
</tr>
<tr>
<td>H = 3 to 30 min.</td>
<td>H = 3 to 30 min.</td>
</tr>
<tr>
<td>I = 6 to 60 min.</td>
<td>I = 6 to 60 min.</td>
</tr>
<tr>
<td>J = 3 to 120 cyc.</td>
<td>J = 3 to 120 cyc.</td>
</tr>
<tr>
<td>K = 1 to 300 sec.</td>
<td>K = 1 to 300 sec.</td>
</tr>
</tbody>
</table>

#### 6. Options:
- A1 = Single quick-connect terminals (note 4).
- A2 = Double quick-connect terminals (note 4).
- B = Plug-in connectors (note 4).
- GZ = Enclosure with bottom knockouts (note 1).
- H2 = Hermetically sealed enclosure, 8 pin solder (notes 1 & 4).
- H3 = Hermetically sealed enclosure, 8 pin octal (notes 1 & 4).
- H4 = Hermetically sealed enclosure, 8 screw terminal block (notes 1 & 4).
- *H6 = Hermetically sealed enclosure, 11 pin solder (notes 1 & 4).
- *H7 = Hermetically sealed enclosure, 11 pin octal (notes 1 & 4).
- *H8 = Hermetically sealed enclosure, 11 screw terminal block (notes 1 & 4).
- H1 = Tamper-proof Cap, opaque black (Cannot be combined with Option X).
- H2 = Tamper-proof Cap, transparent (Cannot be combined with Option X).
- **K = Explosion-proof Enclosure (note 1).**
- L = Auxiliary Switch, instant transfer. 7012 only (notes 2 & 6).
- LL = Two Aux. Switches, instant transfer. On Model 7014 Factory Installed Only. (notes 2 & 6)
- M = Dust-tight Gasketing (notes 4 & 5).
- P = Octal Plug Adapter. Can be combined only with options H1, H2, M, S, X, or Y1. (note 4).
- S = Dial Stops.
- T = Auxiliary Switch, two-step timing (notes 2 & 6).
- V = Transient/Surge Protection for DC coil voltage only.
- W = Watertight Enclosure (note 1).
- X = Panelmount includes hardware and adjustment for horizontal operation (note 4). Y = Watertight Enclosure (note 1).
- Y1 = Horizontal calibration, for horizontal operation without panelmounting (note 4).
- Y2 = Horizontal calibration, with Compensating Spring for vertical operation (note 4).

#### Notes:
1. Cannot be combined with B, P or X Options
2. Cannot be combined with B, P or Y2 Options
3. Cannot be combined with GZ, H, I, I2, K, W or Y1 Options
4. Not Avail. on 4-Pole Models
5. Not Available with L, T or LL options.
6. Not Available on hermetically sealed units.
* Sized to accommodate one L or T Auxiliary Switch
** Not available on On-Delay, Off-Delay (Double Head) model.
† Available with letter calibrated dials only. Upper end of time range may be twice the value shown
†† 120 cycles = 2 sec.

### Our authorized distributors are more likely to maintain the following items in stock for immediate delivery:

- 7012AA
- 7012AB
- 7012AC
- 7012AD
- 7012AE
- 7012AF
- 7012AH
- 7012AK
- 7012ACL
- 7012BC
- 7012NC
- 7012PA
- 7012PB
- 7012PC
- 7012PD
- 7012PF
- 7012PJ
- 7012PK
- 7012PKX
- 7012PJKX
- 7022AI
- 7022AJ
- 7022AKT
- 7022AB
- 7022AC
- 7022BK
- 7022AD
- 7022FA
- 7022AE
- 7022PC
- 7022PK
Ordering options – can only be ordered as factory installed options [Dimensions, where shown, are in inches.]

A1 – Single Quick-Connect Terminals

A2 – Double Quick-Connect Terminals

B – Plug-In Connectors

Use with Accessory “C” or “D” below.

GZ – Total Enclosure

With knockouts for bottom connection.
3.16” W x 3.84” D x 7.63” H

H – Hermetically Sealed Enclosure

I – Tamper-Proof Cover

K – Explosion proof Enclosure

(Meets requirements for Class I, Groups C&D locations).
7.50” W x 6.00” D x 10.38” H

L – Auxiliary Switch

M – Dustight

Gasket
Gasket

P – Octal Plug Adapter

S – Dial Stops

T – Auxiliary Switch

V – Transient/ Surge Protection

W – Watertight Enclosure (NEMA-4)

4.75” W x 4.44” D x 9.75” H

X – Panelmount Kit

Mounting hardware included.

Accessories (Not available for 7032 models)

Plug-In Receptacle (Accessory C)

Screw Terminals Catalog No. 700137. For use with “B” Option

Plug-In Receptacle (Accessory D)

Quick Connect Terminals Catalog No. 700141. For use with “B” Option.

Ordering options can only be ordered as factory installed options.
TE Connectivity:

7012ACI2 7012NCL 7012BCLLM 7012BDM 7012CCM 7012CI 7012JI 7012L10AN 7012L9K 7012MCV
7012MDT 7012CDY1 7012ABX 7012ACH4 7012ACI2L 7012AHTY1 7012ADGZ 7012ADM 7012ADT 7012ADY1
7012AFLL 7022TDA2 7022RC 7022RCA2T 7022RCC546 7022RFC697 7022RHM 7022RKC697 7022VK
7024ADI2 7024AH 7022NI 7022OCT 7022ODN 7022OET 7022OFT 7022RB 7022PBT 7022PET 7024MCN
7024BB 7032RCC 7032PEA 7032PDD 7032ADB 7024NA 7024PI 7032ADD 7032AE 7032GF 7032AFF
7032CDD 7032NCC 7032PCC 7032PDB 7032ACA 7012VB 7012QF 7012QKM 7012RC 7012REJ2 7012SBL
7012SCL 7012SCM 7012SCX 7012SD 7012UB 7012PEX 7012VCM 7012VDA2I2LLM 7012VI 7012WB
7012X10D 7012X10DL 7012X11B 7012X11D 7012X1II2 7012X3C 7012TBA2II2M 7012NELL 7012NH 7012NKL
7012PKL 7012PFLS 7012PGA 7012PDLL 7012PDNO 7012PFL 7014ACL2 7012OI 7022CDY2
7012YCX 7022BDTX 7022L10BN 7022L26H 7022L8IN 7022L8KN 7014EB 7014EBLL