



**Product Facts**

- DC input delay on release timer offered in fixed (5600) and adjustable (5700) types
- Up to 10A loads
- Reverse polarity protection
- CMOS digital design
- Built to MIL-R-83726 environmental standards
- Many customizing options
  - Extended timing ranges
  - Tighter timing tolerances
  - Header and mounting
  - Different Aux. voltages
  - Different control line voltages
- Input either 115Vac, 60 Hz. or 400 Hz.



CII 5600/6700 series delay on release timers combine solid state timing circuits with electromechanical output relays in robust hermetically

sealed enclosures. The 5600 types are fixed timers, while the 5700 models are adjustable via an external resistor. Numerous output options include 2A, 5A

and 10A rated contacts in 1, and 2 form C (SPDT and DPDT) arrangements.

**Electrical Specifications**

**Timing Range:**

**5600 series (fixed):** 50 ms to 600 s.  
**5700 series (adjustable):** 50 ms to 240 s.

**Tolerance:** ±10% or ±15ms, whichever is less

**Recycle Time:** 10 ms.

**Reset Time:** 20 ms.

**Operate Time (Max.):** 10 ms (2A and 5A models), 20ms (10A models).

**Input Voltage:** 18 to 31Vdc.

**Control Voltage:** 10 to 31Vdc. Ground common to aux. power line. 10Vdc minimum must be applied for a minimum duration of 20ms to energize output and initiate the timing circuit.

**Current Drain (at 25°C, 28Vdc):**  
**Control Line:** 15mA typ., 25mA max.  
**Input Line De-energized (after completion of delay period):** 125 mA.

**Input Line Energized:**  
**1-pole, 2 & 5A models:** 100mA.  
**1-pole, 10A models:** 150mA.  
**2-pole, 2 & 5A models:** 150mA.  
**2-pole, 10A models:** 240mA.

**Contact Ratings:**  
**10A contacts:**  
10A resistive @ 30Vdc.  
5A inductive @ 30Vdc.  
5A resistive @ 115 Vrms, 400 Hz  
3A inductive @ 115 Vrms, 400 Hz

**5A contacts:**  
5A resistive @ 30Vdc.  
1.5A inductive @ 30Vdc.  
3A resistive @ 115 Vrms, 400 Hz  
1A inductive @ 115 Vrms, 400 Hz

**2A contacts:**  
2A resistive @ 30Vdc.  
1A inductive @ 30Vdc.  
1A resistive @ 115 Vrms, 400 Hz  
0.3A inductive @ 115 Vrms, 400 Hz

**Specifications by Model Number**

Fixed Timer Model Number	Adjustable Timer Model Number	Input Voltage	Temperature Range	Contact Rating	Contact Arrangement	Available Enclosures
5601	5701	DC	-55°C to +85°C	2 Amp	1 Form C (SPDT)	A - C - D - E
5602	5702	DC	-55°C to +85°C	2 Amp	2 Form C (DPDT)	A - C - D - E
5605	5705	DC	-55°C to +85°C	5 Amp	1 Form C (SPDT)	D - E
5606	5706	DC	-55°C to +85°C	5 Amp	2 Form C (DPDT)	D - E
5610	5710	DC	-55°C to +85°C	10 Amp	1 Form C (SPDT)	D - E
5611	5711	DC	-55°C to +85°C	10 Amp	2 Form C (DPDT)	D - E
5621	5721	DC	-55°C to +125°C	2 Amp	1 Form C (SPDT)	A - C - D - E
5622	5722	DC	-55°C to +125°C	2 Amp	2 Form C (DPDT)	A - C - D - E
5625	5725	DC	-55°C to +125°C	5 Amp	1 Form C (SPDT)	D - E
5626	5726	DC	-55°C to +125°C	5 Amp	2 Form C (DPDT)	D - E

See next page for complete ordering information and outline dimensions for the available enclosures.

**Environmental Specifications**

**Temperature Range:**  
-55°C to +85°C or -55°C to +125°C.

**Vibration:** 20 G's, 10 - 2,000 Hz.

**Shock:** 50 G's, 11 ± 1ms duration.

**Insulation Resistance:** 1,000 megohms, min., at 500Vdc.

**Dielectric Strength:** 1,000Vrms, 60 Hz., at sea level, all terminals to case.

**Sealing:** Hermetic, 1.3 in. (33.0mm) of mercury.

**Life:** 100,000 operations, min. (2A and 5A models); 50,000 operations, min. (10A models);

**Weight:** 8.5 oz (240g) max.

**Adjustable Timing Formula (4700 types)**

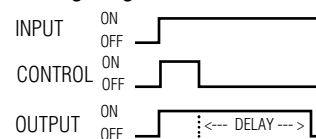
The resistance required to obtain timing within this range is determined by using the formula:

$$R_x = 400K (T/T_{max}) - 40K, \text{ where}$$

$R_x$  = External Resistance in Ohms,  
 $T$  - Desired Time in Seconds, and  
 $T_{max}$  = Maximum Time (Code).

A high quality deposited carbon ±1%, 0.1W (min.) resistor is recommended for external resistance.

**Timing Diagram**



Apply input power. Upon application of control power, the output will energize. Remove control power and initiate delay period.

**Special Notes**

10Vdc minimum must be applied for a minimum duration of 20ms to energize output and initiate timing.

Units rated 10A have a minimum time delay of 100ms.

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**5600/5700 Series Delay On Release Timers (Continued)**

**Part Numbering System**

<b>Typical Part Number</b>	<b>5722</b>	<b>-C</b>	<b>- 1102</b>
<b>Model Number:</b> Four digit code from table on the previous page.			
<b>Mounting (see outline dimension drawings):</b> A = Studs on bottom of 2.5 in tall case D = Studs on bottom of 1.812 in. tall case	C = Studs on side of 2.5 in. tall case E = Bracket on side of 1.812 in. tall case		

**Timing Code:**

Four-digit code for any value between 50ms and 600s for fixed (5600) timers and between 50ms and 240s for adjustable (5700) timers.

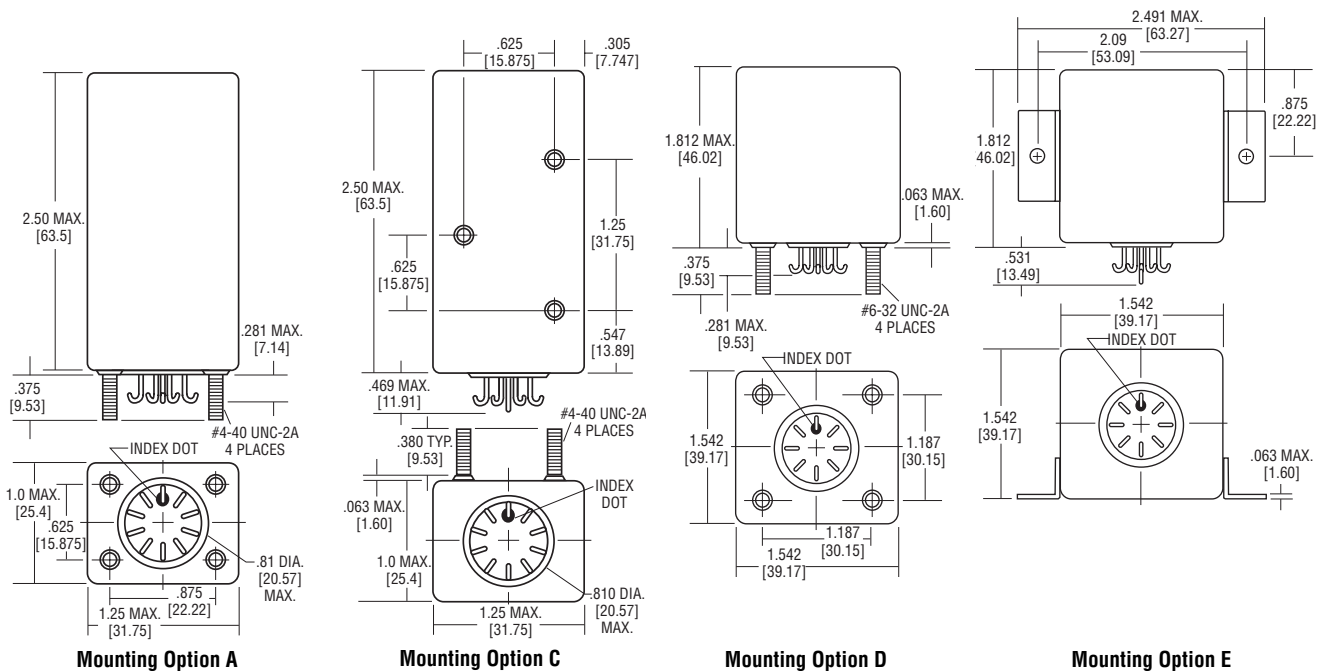
The timing code consists of four digits and gives the time in ms. The first three digits are the significant figures and the last digit is the number of zeros following the significant figures; thus 50 ms would be coded 0500, 1.1 s would read 1101, and 1 m (60 s) would be 6002.

Adjustable timers cover one decade, e.g., 62 ms to 620 ms. The upper decade limit is T<sub>max</sub> in the timing formula and is the value defined by the timing code in the part number.

Note: Units with 10A contacts have a minimum time delay of 100ms.

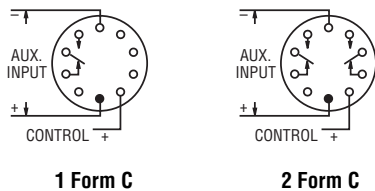
A typical part number for an adjustable timer would be 5722-C-1102. This DC unit is in the -55°C to +125°C temperature range with a 2 amp contacts in a 2 form C (DPDT) arrangement, enclosed in case with a style "C" mounting, with a maximum time delay of 11s.

**Outline Dimensions**



**Wiring Diagrams**

**5600 Series (Fixed)**



**5700 Series (Adjustable)**

