4600/4700 Series Interval Timers

Product Facts

- **AC/DC input interval timer offered in fixed (4600) and adjustable (4700) types**
- **Up to 10A loads**
- **Reverse polarity protection**
- **Hermetic package**
- **Built to MIL-R-83726 environmentals**
- **Many customizing options**
  - **Extended timing ranges**
  - **Tighter timing tolerances**
  - **Header and mounting**
  - **115Vac, 60 Hz. input types**

Electrical Specifications

Timing Range —
4600 series (fixed) — 100 ms to 600 s
4700 series (adjustable) — 100 ms to 240 s

Tolerance — ±10%

Recycle Time — 10 ms (DC input), 50ms (AC input)

Operate Time (Max.) — 10 ms (4A models), 20ms (10A models)

Input Voltage — 18 to 31Vdc, 105 to 125Vac, 400 Hz

Current Drain (at 25°C, 28Vdc) —
DC Coil, 10A contacts —
1- and 2-pole — 135mA maximum

AC or DC Coil, 4A contacts —
1-pole — 100mA maximum
2-pole — 150mA maximum
3- and 4-pole — 200mA maximum

Contact Ratings —
DC Coil, 10A contacts —
10A resistive @ 30Vdc
5A inductive @ 30Vdc
5A resistive @ 115 Vrms, 400 Hz
3A inductive @ 115 Vrms, 400 Hz

AC or DC Coil, 4A contacts —
4A resistive @ 30Vdc
1A inductive @ 30Vdc
2A resistive @ 115 Vrms, 400 Hz
1A inductive @ 115 Vrms, 400 Hz

Environmental Specifications

Temperature Range —
-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. (4A models); 50,000 operations, min. (10A models);

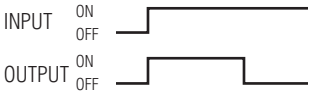
Weight —
4A units — 4.5 oz (127.6g) max.
10A units — 8.5 oz (240g) max.

KILOVAC 4600/4700 series interval timers combine solid state timing circuits with electromechanical output relays in robust hermetically sealed enclosures. The 4600 types are fixed timers, while the 4700 models are adjustable via an external resistor. Numerous output options include 4A rated contacts in 1, 2 and 4 form C (SPDT, DPDT and 4PDT) arrangements and 10A rated contacts in 1-2 form C (SPDT-DPDT) arrangements.

Specifications by Model Number – 4 Amp Contact Versions

Fixed Timer Model Number	Adjustable Timer Model Number	Input Voltage	Temperature Range	Contact Rating	Contact Arrangement
4610	4710	DC	-55°C to +125°C	10 Amp	1 Form C (SPDT)
4611	4711	DC	-55°C to +125°C	10 Amp	2 Form C (DPDT)
4621	4721	DC	-55°C to +125°C	4 Amp	1 Form C (1PDT)
4622	4722	DC	-55°C to +125°C	4 Amp	2 Form C (DPDT)
4624	4724	DC	-55°C to +125°C	4 Amp	4 Form C (4PDT)
4671	4771	AC	-55°C to +125°C	4 Amp	1 Form C (SPDT)
4672	4772	AC	-55°C to +125°C	4 Amp	2 Form C (DPDT)
4674	4774	AC	-55°C to +125°C	4 Amp	4 Form C (4PDT)

Timing Diagram



Apply power and the output will energize. After time-out, the output will revert to de-energized state. Remove and reapply input to cycle.

Adjustable Timing Formula (4700 types)

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

Rx = 400K (T/Tmax.) – 40K, where

Rx = External Resistance in Ohms,
T - Desired Time in Seconds, and
Tmax. = Maximum Time (Code).

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

Part Numbering System

Typical Part Number	4722	–C	– 1102

Model Number:
Four digit code from table above.

Mounting (see outline dimension drawings):
A = Studs on bottom B = Studs on top C = Studs on side

Timing Code:
Four-digit code for any value between 100ms and 600s for fixed (4600) timers, and 100ms and 240s for adjustable (4700) 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.

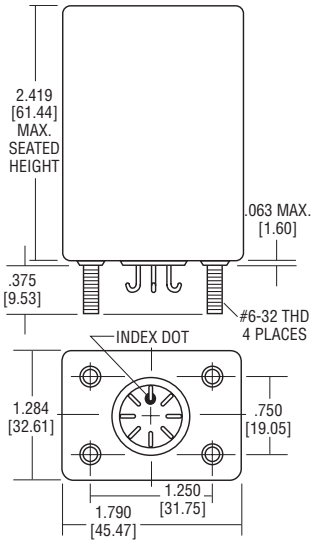
Adjustable timers cover one decade, e.g., 62 ms to 620 ms. The upper decade limit is Tmax. in the timing formula and is the the value defined by the timing code in the part number.

A typical part number for an adjustable timer would be 4722–C–1102. This is a DC unit in the -55°C to +125°C temperature range with a 2 form C (DPDT) contact arrangement in a style "C" mounting, with a maximum time delay of 11s.

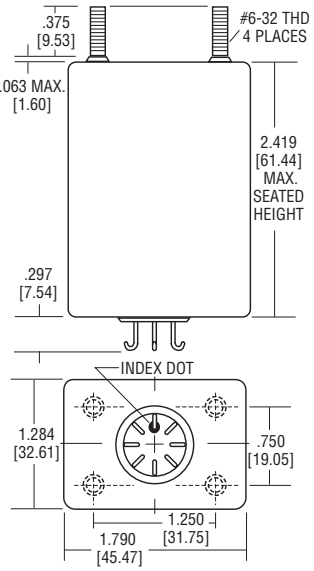
4600/4700 Series Interval Timers (Continued)

Outline Dimensions

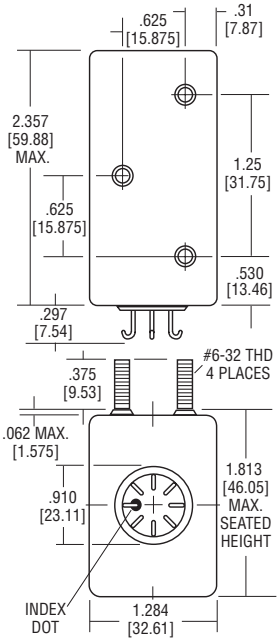
10 Amp Units



Mounting Option A

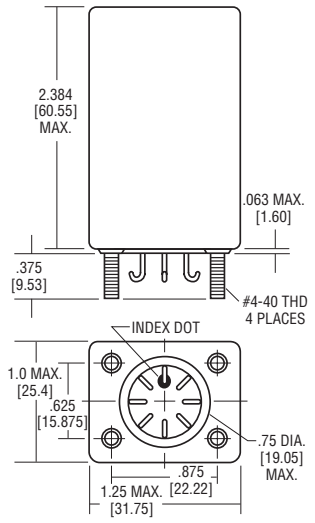


Mounting Option B

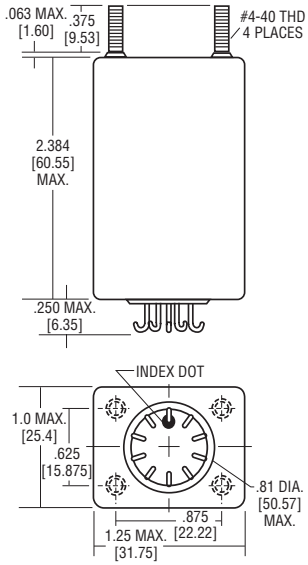


Mounting Option C

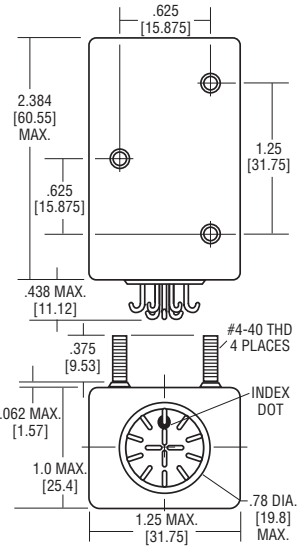
4 Amp Units



Mounting Option A



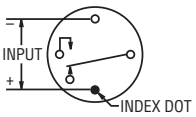
Mounting Option B



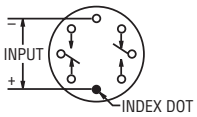
Mounting Option C

Wiring Diagrams

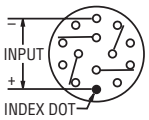
4600 Series (Fixed)



1 Form C

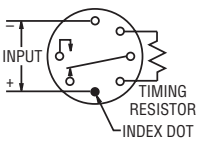


2 Form C



3 Form C

4700 Series (Adjustable)



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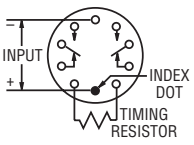
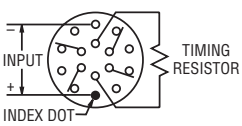


2 Form C



3 Form C