# **Battery Powered**

## Features

- Multi-Resolution Time Ranges: Sec., Min. & Sec, Hrs & Min. or Hrs & 1/100ths
- Battery Powered
- 8 Digit LCD Display
- Remote & Front Panel Reset
- NEMA 4X / IP65 Front Panel

## **Applications:**

For timing industrial processes, machine down time / on time indicator, event timing, monitor testing time.

## **Description:**

The KAL-DTIME1 and KAL-DTIME2 are 8 year, lithium battery powered, elapsed timers with the following resolutions: minutes and seconds (KAL-DTIME1) or, hours and minutes, or hours and 1/100ths (KAL-DTIME2). The front panel meets NEMA 4X/IP65 standards. The display has 8 large digits each 0.276" high.

### Specifications:

Power: Internal Lithium Battery (life 8 years calculated). Display: 8 digit, LCD, 0.276" high.

- Accuracy: ±.003 % @ 25°C Temperature Drift: .035 PPM/°C<sup>2</sup>
- Aging: 3 PPM/Year max. Temperature Range: 14 to 140°F (-10 to 60°C)

## **Signal Inputs:**

- Pin 4 Contact Closure Time; Negative level active Low: <0.7 VDC, High: open or 3 to 18 VDC
- Pin 3 Reset-Contact closure to common resets, level triggered, min. pulse width 12mS.
- Pin 2 Reset Enable; link to common (Pin 1) to enable front reset.
- Pin 5 Timing Mode Select;
  - KAL-DTIME1 Min. & Sec. KAL-DTIME2 - Hours & 100ths

LEFT OPEN

- **KAL-DTIME1 Seconds**
- KAL-DTIME2 Hours & Minutes
- Approvals: UL File: E135458, CSA File: LR96702, CE Approved

Material: ABS Plastic

- Weight: 1.7 oz.
- Battery Life: 8 years (calculated)
- Connection: 5 pin, plug in connector with 9" leads supplied with timer.
- Sealing: Front Panel sealed to NEMA 4X/IP65

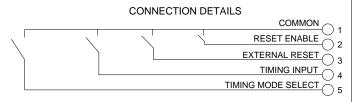
Mounting: Spring clip mount provided. Optional two screw mounting and/or competitor retro-fit available.

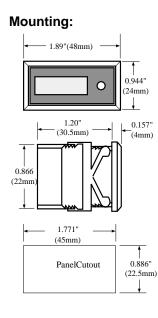
Note- A 5-240 VAC or DC pulsing module is available as "KAL-DTIME AC/DC."



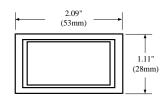
## Hookup:

**Time Indicator** 

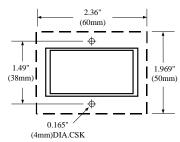




## Adaptors (included) KAL-DP1X2







## NOTE: KAL-DP1x2 and KAL-DP1 panels are included

#### TERMINAL BLOCK MODULE

#### **Description -- KAL-D TB**

(For screw terminal connection with standard pulse characteristics) Pin numbers shown on terminal block correspond to wire lead

numbers. Two Pins #1 are internally connected.

DO NOT CONNECT KAL-D TB TO AC VOLTAGE

#### **5-240 VOLT INPUT MODULES**

Description -- KAL-D AC/DC (Counter) KAL-DTIME AC/DC (Timer) The KALD AC/DC Module enables the KALD to accept 5-240 VAC/DC input signals. (The KAL-DTime AC/DC is used for the KAL-DTIME series). The module snaps into the back of the counter. The circuitry allows various voltage pulses to be used for counting and provides optoisolation of 2500V.

#### KAL-D AC/DC (Counter) SPECIFICATIONS:

#### **Signal Inputs:**

18 Hz max. (15 msec. pulse width min.)
5 to 48 VAC/DC Low: < 1.5 VAC/DC or open High: 5 to 55 VAC/DC
48 to 240 VAC/DC Low: <15 VAC/DC or open High: 48 to 264 VAC/DC

#### Input Impedance:

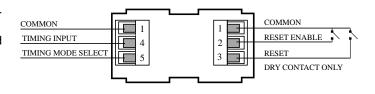
5 to 48 VAC/DC - 10K ohms 48 to 240 VAC/DC - 58.5K ohms

#### **Reset:**

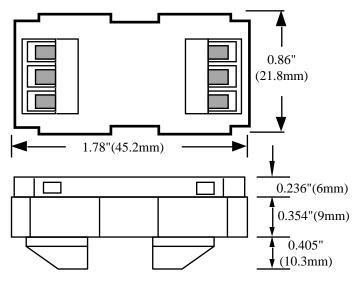
Dry contact closure only. 15msec. min. pulse.

#### **Temperature Range:**

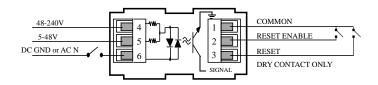
Same as KAL-D series



#### **Dimensions for AC/DC Adaptor and Terminal Block**



#### **AC/DC Adaptor Connections**



**NOTE:** Jumper terminal 5 to terminal 6 to raise the low threshold to 25V for triac inputs or when low voltage does not reach 0V. Connect input to terminals 4 & 6.

It may be necessary to place a 10 k $\Omega$  7W resistor across terminals 4 & 6 to bring voltage below 25V.

#### How To Order:

Part Number	Description
KAL-DTIME1	Sec., or Min. & Sec. Timer
KAL-DTIME2	. Hours & 100ths or Hrs. & Min. Timer
KAL-DTIMEAC/DC	5-240V AC/DC input module
KAL-DTB	Terminal block adaptor

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