# **RELAYS & CONTACTORS**

## **DELAY ON MAKE / INTERVAL TIMERS**

438USA, 438USA-INT



### **DESCRIPTION**

The Artisan Controls Model 438USA universal switch-adjustable time capsule is an all solid state timer that provides delay on make (ON-Delay) control of a load device operating from 19-288 VAC/DC. The Model 438USA controls up to a 1A load, such as a relay or solenoid.

The **Model 438USA-INT** universal switch-adjustable time capsule is an all solid-state timer that provides interval timing control of a load device operating from 24 to 240 VAC. The **438USA-INT** controls up to a 1A load, such as a relay or solenoid.

#### **FEATURES**

- · Encapsulated digital-timing circuitry
- · Switch-selectable delay
- Low cost
- Transient protected
- 1A output rating



#### **OPERATION**

#### General

Timing is set via a binary-coded DIP switch and is adjustable from 1 to 1024 seconds. With all switches closed, there is an internal, one-second delay; with all switches open, there is a 1024-second delay time. Prior to applying power to the timer, set the switches to the correct position for the desired time.

### 438USA - Delay-on-Make (ON-Delay)

When power is applied, the **Model 438USA** remains in the off state, allowing only leakage current to flow. Once the preset time period elapses, the unit switches on, allowing full current

to flow and the load to energize. The load remains energized as long as power is applied. When power is removed, the unit resets and is ready for another timing period.

#### 438USA-INT - Interval

When voltage is applied, the **Model 438USA-INT** turns on, permitting full load current to flow. At the end of the preset timing period, the unit turns off and permits only leakage current to flow through the load. To recycle, the operating voltage must be removed and reapplied.

SPECIFICATIONS			
Coil Rating	24-240 VAC (50/60 Hz), 19-288 VAC (50/60 Hz) or VDC	Recycle Time	100 ms, 50 ms after timing cycle, 200 ms during timing cycle
Leakage Current	,	Repeatability	±1% nominal
438USA-INT	Off State: 1 mA maximum @ 240V,	Timing	Interval timer, Delay on make
438USA	Off State: 0.6 mA @ 24V, 1.8 mA	14	(ON-Delay)
	@ 48 V, 5.4 mA @ 120V, 11.4 mA	Operating Temperature	-4° to 185°F (-20° to 85°C)
	@240 V	Storage Humidity	95% non-condensing
Output	10 mA to 1A inductive; inrush current to 25A for 8 ms	Approvals	UL-recognized component, File #E47858; CSA certified, File
Range	1 to 1024 seconds, 1-second		#LR31931-3
12	increments	Weight	0.2 lb (0.091 Kg)
Transient Protection	6000V for 8.3 ms	Warranty	1 year
Voltage Drop	4V maximum, ON state	_	-
Accuracy	±10% of setpoint		1

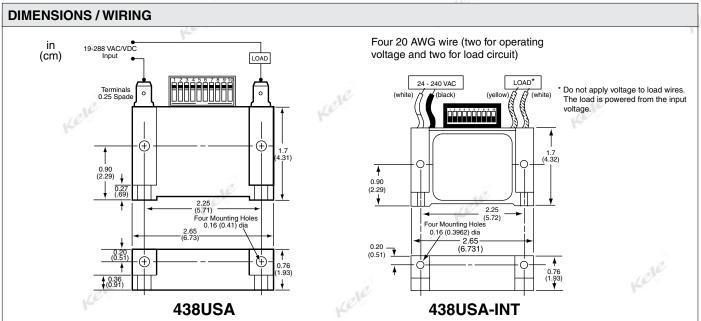
**Adjustments** 

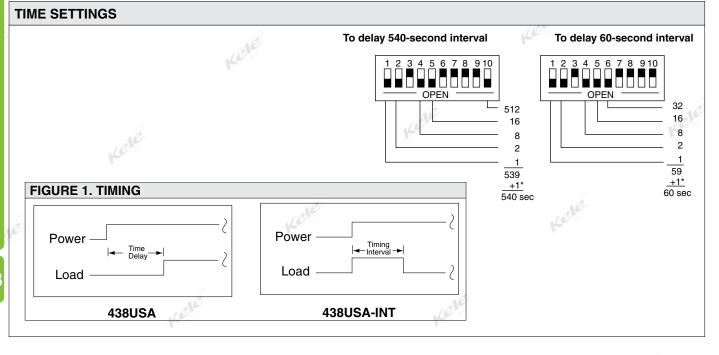
10-position DIP switch

# **RELAYS & CONTACTORS**

## **DELAY ON MAKE / INTERVAL TIMERS**

438USA, 438USA-INT





## ORDERING INFORMATION **MODEL DESCRIPTION** 438USA-INT Universal switch-adjustable time capsule, interval timer 438USA Universal switch-adjustable time capsule, delay on make (ON-delay) timer