

A photograph of a train at sunset. The sky is filled with vibrant orange and red clouds. In the foreground, a signal light pole stands on the right side of the tracks, with two red lights illuminated. The train is moving from left to right, creating a blurred effect. The text "Microchron® II Vital Timer" is overlaid in white on the image.

# Microchron® II Vital Timer

## **Modern, Flexible Replacement for Legacy DC Motor Timers**

The AREMA-compliant Microchron® II Vital Timer DC Relay delivers a modern, drop-in replacement for legacy DC motor timers, offering enhanced flexibility in vital time-delay applications. Utilizing solid-state components and a vitally programmed microprocessor, it electronically energizes a vital neutral relay for the precise interval specified by signal engineers – combining proven safety with advanced timing control.



**KB SIGNALING™**

# Microchron® II Vital Timer

## Key Benefits

- Highly accurate timing mechanism delivers accuracy within  $\pm 0.1\%$  of the time setting plus a maximum delay of 0.5 seconds.
- Allows input voltages ranging from 8 VDC to 31.5 VDC, while providing protection from reverse input polarity. At a nominal input voltage of 15 VDC, the relays draw 0.100 Amperes.

## Customer Benefits

### Cost-Effective, Reliable Solution

The Microchron II Vital Timer is a highly reliable, cost-effective solution for vital applications requiring a time delay. With wide voltage and selection time ranges, there is no need to stock multiple motor timer relay models. This highly-reliable timer has a Mean Time Between Failures (MTBF) greater than 300,000 hours, ensuring reliable operation.

### LED Indicators

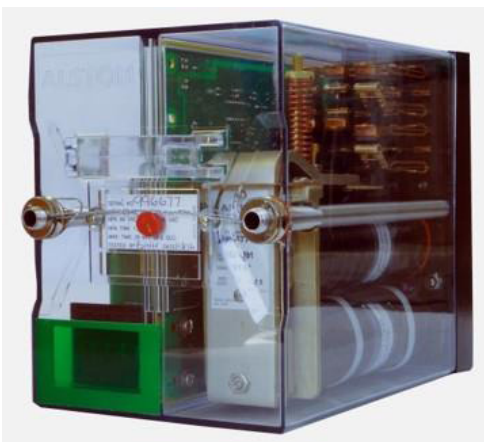
Red and green LED indicators confirm timer and relay operation, as well as support troubleshooting.

## General Description

The Microchron® II Vital Timer DC Relay's superior design delivers the accuracy of a microprocessor and the output characteristics of a mechanical relay. It is designed to prevent contacts from picking up until the set time interval has expired. This time interval begins from the moment power is applied and runs at least as long as the duration set on the thumbwheel switch. This allows the timer to exhibit a longer than "set" time delay in failure mode and prohibit a shorter than "set" time delay. When power is removed, gravity causes the front contacts to open, ensuring safe operation.

### Tamper-Evident Time Seal

The Microchron II Vital Timer DC Relay is available in two models, which are identical except for the types of tamper-evident seals used to protect changes to the thumbwheel setting. Both types protect the time setting and provide indications of seal removal. One tamper-evident seal type uses thumbnuts and wire to secure clear plastic cover. Changing the timer relay setting requires cutting the wire seal to remove the cover. The other tamper-evident seal type uses either red or green translucent adhesive seals. Changing the timer relay setting requires removal of and damage to the onetime-use color seal.



Tamper-evident Seal Options

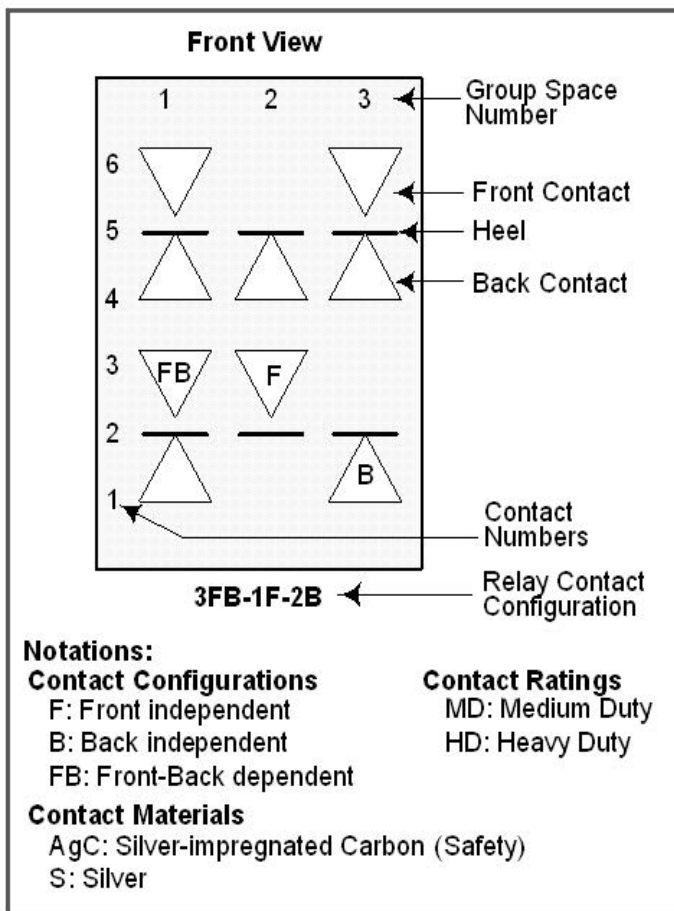
Note: Clear plastic cover option is shown without wire seal

# Microchron® II Vital Timer

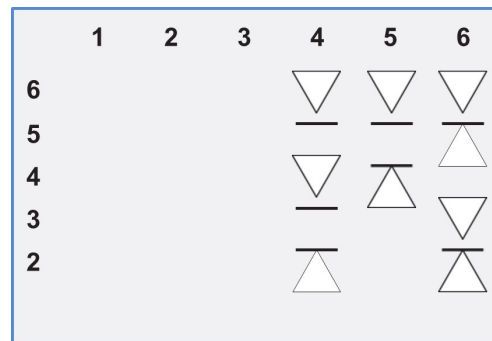
## Ordering Information

Relay Contact Config*	Ordering Information		Replacement Ordering Information				
	Relay Catalog No.	Relay Part No.	Contact Group 4 Part Number*	Contact Group 5 Part Number*	Contact Group 6 Part Number*	Tamper-Evident Tag	B2 Plugboards w/ mounting hardware
2FB-3F-2B	A62-691	50800-101-01	56012-108-322F-1B AgC-S(MD), S-AgC(MD)	56012-108-391F-1B AgC-S(MD), S-AgC(MD)	56012-108-062FB AgC-S(MD), S-S (HD)	Green Adhesive Seal: 37947-059-00  Red Adhesive Seal: 37947-058-00	w/Solder Terminals: 59686-007-12  w/16-20 AWG Crimp Terminals: 59686-007-14
2FB-3F-2B	A62-744	50800-101-02	56012-108-322F-1B AgC-S(MD), S-AgC(MD)	56012-108-391F-1B AgC-S(MD), S-AgC(MD)	56012-108-062FB AgC-S(MD), S-S (HD)	Wire-Cloth-Lead: 32585-001-00	

### \*Relay Reference

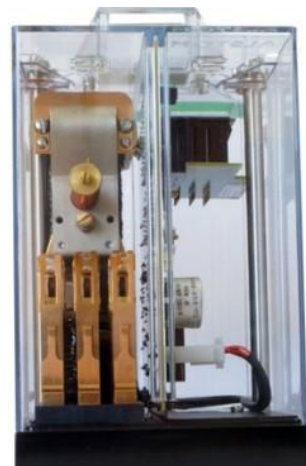


### Relay Contact Arrangement



#### Notes:

Contact groups 4 and 5 use Safety Front-Back contacts.  
 Contact Group 6 uses Safety Front contacts only.



Contact your KB Signaling Business Development Manager  
 Call 1-800-825-7090, or Email us at [aso.techsupport-kb@alstomgroup.com](mailto:aso.techsupport-kb@alstomgroup.com) for more information today.

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