

**Before installing the ABC Electronic Motor Brake thoroughly read the user manual. To download scan the QR Code to the right or visit [motortronics.com](http://motortronics.com) (Mobile device friendly).**



## Time Adjustment Procedures

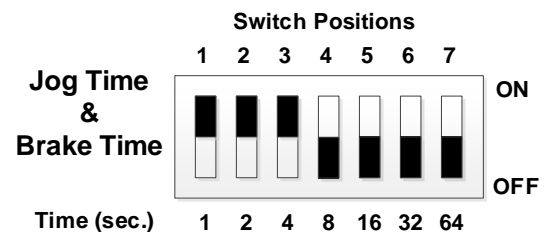
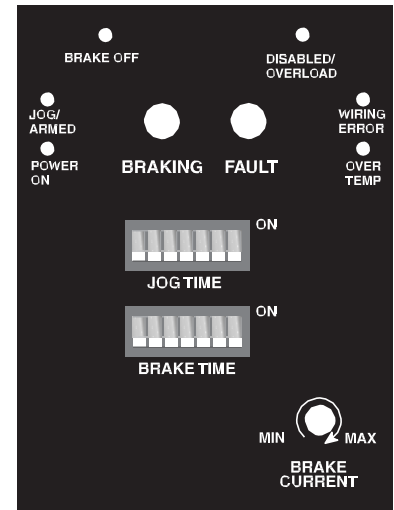
Time settings for "Jog Time" and "Brake Time" are adjusted by use of dip switches on the front mounted Operator Interface Module. Time settings are in seconds (set in binary code). Each switch denotes a binary digit, totaling 127 seconds maximum when all are switched to the "On" position.

### Jog Time Adjustment: Factory Setting: 7 seconds

The Jog time is adjustable from 0-127 seconds and is made using the 7-position dip switch, labeled "Jog Time". Set the switches according to the Jog Time required. Setting all the switches to the "Off" position (Jog Time = 0) will disable this function.

### Brake Time Adjustment: Factory Setting: 7 seconds

The brake time is programmable from 1 to 127 seconds. Set the switches marked "Brake Time" to the brake time required. Typical brake time settings should be 1/2 of the load's coast-to-stop time or less, as necessary. Each dip switch represents a binary time value. Add the times together for the final brake time setting



**Example:** Setting dip switch positions 1, 2, and 3 to "ON" = 1+2+4 = 7 sec.

**NOTE:** Stop times shorter than 4 seconds will not allow enough time for the Zero Speed Sensing circuit to accurately sense that the motor has stopped. The Brake Time settings must be used in applications that require brake times less than 4 seconds.



### CAUTION!

Damage to the motor, equipment, brake and/or electrical circuit may occur if this adjustment is not correct. Setting this switch to less than the factory setting may involve risk to the equipment and affect normal operations. Setting the jog time too long may result in equipment operating without the benefit of the DC injection brake. The Jog Time should typically be set equal to the time it takes the motor to accelerate the load to full speed plus approximately 2 seconds.

### Brake Current Adjustment: Factory Setting: 50% of Unit Rating

It is strongly recommended that you try the factory settings first before making and adjustments. If adjustments are necessary a "true" RMS AC current clamp on meter should be used to monitor the current supplied to the motor during braking. To adjust the brake current, turn the adjustment potentiometer located on the display clockwise to increase or counter clockwise to decrease the current. Always adjust the brake current while the brake is in the brake on mode. The braking current should be set such that the motor stops at the same time the brake time expires. Start and brake the motor several times to ensure your settings are correct.



### WARNING!

Never exceed the RMS full load current rating of the motor without first checking with the motor manufacturer for the maximum allowable amount of DC current that can be supplied to the motor during braking application.

## Start-up Check List

- Verify the supply voltage matches the supply voltage of the ABC Series brake.
- Confirm the power lines are attached to the input terminals.
- Verify the output leads are connected to the output terminals.
- Complete the appropriate control and interlock connections.
- Clear the area of people and extra parts before start up.

**NOTE:** For 50 Hz operation, be sure that jumper X1 on the Power Board is removed.

## Equipment

The following equipment will be needed for start-up:

- A "true" RMS AC clamp-on ammeter to check braking current.
- A small screw driver to adjust braking torque (if necessary).
- Stop watch or other means of measuring time.

## Check Normal Sequence of Operation

- Apply power to the system.
- Both the "Power On" and the "Brake Off" LED should be illuminated.
- Start the motor by energizing the motor starter.
- Start the motor. The "Jog / Armed" LED should flash once per second to indicate programmed Jog Time.
- Allow the programmed jog time to expire (Factory set for 7 sec.) and the brake to arm.
- Monitor the input current to the ABC Series unit on any one of its input leads with the "true" RMS AC clamp-on ammeter.
- Initiate the motor stop command. The "Brake Off" LED should go out and the "Brake On" LED should illuminate. The unit should continue braking until the motor comes to a stop or the programmed brake time expires.
- Adjust the brake time if necessary.
- If the brake times out before the motor stops, increase the value of the brake time switch, or increase the brake current (**NOTE:** Never exceed the RMS rating of the motor without checking with the motor manufacturer).
- If the Zero Speed Sense option engages and turns off the brake before the programmed brake time expires, adjust the brake time dip switch for approximately two (2) seconds longer than the actual stop time.

### California Customers:

#### California Proposition 65 Warning

WARNING: this product and associated accessories may contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. For more information visit <https://p65warnings.ca.gov>