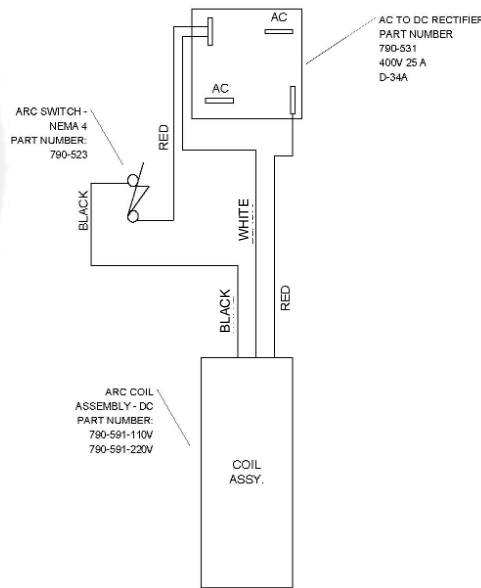


- FOR AC RETIRING CAMS VOLTAGE RECTIFIER - 790-531
- ARC MICRO SWITCH - NEMA 4 SMALL BLACK SWITCH - 790-523
- HAZARDOUS LOCATION SWITCH - 77820
- 110VDC COIL - 790-501-110V OR 220VDC COIL - 790-501-220V
- OPTIONAL ACCESSORIES: CAM PROTECTION TIMER - 790-501

## INTERNAL WIRING DIAGRAM



COMPLETE UNIT PART NUMBERS  
WATER RESISTANT, DUST TIGHT  
ITEM: 790-501-110VAC

ARC RETIRING CAM -110VAC

ITEM: 790-501-110VDC

ARC RETIRING CAM -110VDC

ITEM: 790-501-220VAC

ARC RETIRING CAM -220VAC

ITEM: 790-501-220VDC

ARC RETIRING CAM -220VDC

HAZARDOUS LOCATION  
CLASS 1, DIVISION 2

ITEM: 790-501P-110VAC

ARC RETIRING CAM -110VAC

ITEM: 790-501P-110VDC

ARC RETIRING CAM -110VDC

ITEM: 790-501P-220VAC

ARC RETIRING CAM -220VAC

ITEM: 790-501P-220VDC

ARC RETIRING CAM -220VDC

LUBRICATION POINTS - HINGES, COIL PLUNGER

## IMPORTANT WARNING

**Technical Assistance** - CJA staff personnel are available to answer any questions concerning the use or application of CJA products. However, any field changes made to the products are the sole responsibility of the user, unless authorized by CJA in the form of revised wiring diagrams or technical bulletins.

**Maintenance of Products** - All CJA products require scheduled periodic inspections, adjustments, lubrication and other routine maintenance actions. Non-performance of maintenance will nullify the product warranty.

**LIMITS OF LIABILITY** CJA's entire liability and the purchaser's exclusive remedy shall be as follows: In all situations, including performance or non-performance of the material ordered, the purchaser's remedy is that provided under the warranty provision. CJA's liability for loss of or damage to purchaser for any cause whatsoever and regardless of the form of action, contract or in tort, including negligence, shall be limited to the price of the part on which such liability is based. CJA will not be liable for any injury, special, direct or consequential damage, loss of time, profit or other losses, labor charges, repairs, expenses or other cost arising out of the incorrect use of, or the inability of the purchaser to use the product. Correction of any defects by repair or replacement by CJA shall constitute fulfillment of all obligations to the purchaser. In no event will CJA be responsible for any loss, damage or delay. In no event will CJA be liable for any damages caused by purchaser or for any lost profits or other special, incidental or consequential damages. CJA products are only warranted to function as designed and manufactured. If the product does not meet the purchasers' expectations or standards, the purchaser is still obligated to pay for the product in full.

**WARRANTY** - All CJA products are warranted to the original purchaser to be free from defects in material and workmanship for a period of one year from the date of shipment, provided they are (1) paid for, (2) installed as designed and (3) used for the purpose intended. This warranty will only be effective after notification from the purchaser of a product defect, return of the part freight prepaid, and after CJA inspection proves the part to be defective. CJA's total obligation under this warranty is to repair or replace free of charge defective products. If the product is determined to be out of warranty an estimate to repair will be sent to the purchaser.

Before using or furnishing to another for their use, the purchaser shall determine the suitability of the product for its intended use and purchaser assumes all risks and liabilities in connection therewith. Any unauthorized repairs or adjustments shall cancel this warranty and shall relieve the company from any further responsibility.

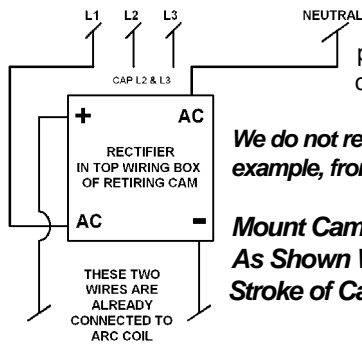
FOR A COMPLETE COPY OF OUR TERMS AND CONDITIONS PLEASE CALL 1-800-252-1910.

Item#: 790-501 Rev. C 5-09

# AC

## Standard AC Wiring - 110/220 VAC

When replacing a 3 Phase Motorized Cam, simply connect one "HOT" phase to the AC Side on the rectifier and the other AC to a common or neutral. If you are replacing a 220. To ensure that your retiring cam lasts as long as possible connect as shown! If you connect to of your "HOT" lines to the cam this will double the voltage and decrease the life of the cam.



**We do not recommend that two ARC Retiring Cams be wiring in tandem, for example, front and rear openings!**

### Mount Cam

**As Shown With Conduit Entrance At Top Of Unit, Do Not Modify Stroke of Cam. It will cause the unit to fail prematurely.**

ARC

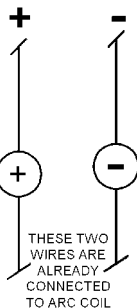
Control Box  
(where wires  
are  
terminated)



# DC

## Standard DC Wiring - 110/220 - VDC

Our ARC Retiring Cam is a coil operated cam, meaning it's already a DC circuit. Please note that the coils are dual wound, meaning that the secondary windings are cut out as soon as the cam reaches the energized position. This helps keep the temperature of the unit as low as possible.

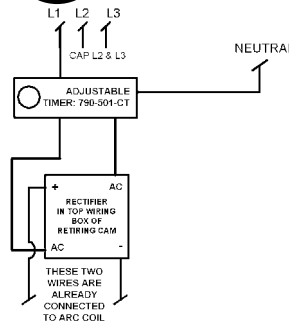


**We do not recommend that two ARC Retiring Cams be wiring in tandem, for example, front and rear openings!**

# !

## Optional Accessories - Cam Timer

Our ARC is designed to fail when it reaches a temperature of 105 degrees celsius. This is a safety feature required by UL in order to prevent a fire. If the elevator is stopped between levels for long periods of time the retiring cam will cook itself. The protection cam timer is designed to prevent this from happening. Simply wire it between your cam and controller circuit and you the unit will automatically de energize after a certain period of time. **Note AC Wiring Shown! Item: 790-501-CP**



# ?/s

## Trouble Shooting Your ARC

The ARC Retiring Cam has been an active product of C.J. Anderson & Company since 1980. It's one of the more simpler devices that we manufacture.

### Problem: ARC Does Not Energize

- Check Incoming Voltage to Unit, 10% over or under 110 or 220 will cause damage to the coil. - **Solution: Transform Voltage To Correct Setting**

- Check switch on side of unit for damage. This cuts out a portion of the coil windings which helps minimize heat. Switch can fail in closed position and the unit will continue to run. If it fails in the open position the cam will energize with some manual help.

**Solution: Replace Switch if this is the case.**

### Problem: Repeatedly Replacing Retiring Cams

If you have had to replace your retiring cam please verify the following.

- Where is the elevator when it shuts down? If it's stuck between floors the cam will stay energized and the coil is going to get hot and fail at 105 degrees celsius. It's designed to fail so that it doesn't start a fire. - **Solution: Purchase a Cam Protection Timer: - Part Number: 790-501-CP, New Retiring Cam or Coil Assembly.**

- Is the retiring cam located on a rear opening that's staggered? If so there's a good chance that the cam is staying energized more than it should. **Purchase a Cam Protection Timer: - Part Number: 790-501-CP, New Retiring Cam or Coil Assembly.**

- What's the voltage of the incoming voltage to the retiring cam? If it fluctuates or is 10% higher than what the retiring cam is rated for you're going to burn up the coil much quicker.

- **Running car on Inspection Service over long periods of time. This will cause the cam to overheat and will fail.**

**MAINTENANCE:** - As with all moving parts this operator may require maintenance. The design and construction is intended for wet and dusty locations. These location may require that lubrication to the moving hinge, plunger and other pivot points be performed on regular basis. It is up to the elevator technician to determine how often to lubricate the moving components based on the environmental conditions and how severe they are.



# C.J. ANDERSON

& COMPANY

Helping You One Floor At A Time. Since 1910!

**C.J. ANDERSON & COMPANY**

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