



## GENERAL INFORMATION

MDI Mercury Contactors Are Hermetically Sealed With High Quality Glass To Metal Seals. The Stainless Steel Tube Is Totally Encapsulated In High Grade UL Approved Epoxy To Prevent Moisture Damage And Voltage Breakdown Through The Protective Coating. The Coils Are Wound On Compact Nylon Bobbins And Molded Onto The Metal Tube To Provide Minimum Power Loss. This Allows For Low Coil Power Required To Actuate The Contactor. This Also Enables The Units To Handle High Loads With Minimum De-rating Due To Higher Ambient Temperatures. Inert Gases Internally Prevent Excessive Arcing Between The Mercury And The Electrodes Which Enables The Unit To Function For Millions Of Cycles With Very Low Contact Resistance, And Minimum Deterioration Of The Internal Parts. Available In All Standard Coil Voltages, In Single, Two And Three Pole Arrangements. Other Coil Voltages Available Upon Request. In Multiple Pole Units Each Tube Is Actuated By Its Own Coil. This Eliminates Pull-In Variation Between Contact Tubes, Assuring Consistent Switching.

### Proper Fusing is Required

- While MDIs contactors handle high inrush, such as lamp loads, very well, mercury contactors are susceptible to damage by short circuit currents, and should be fused to minimize short circuit fault currents. Fast acting UL class RK-1 and class J fuses and semiconductor I2t fuses more effectively protect relays than other fuses. These are low-peak fuses designed to limit short circuit currents. Regardless, when there is a short circuit, relay operations should be closely monitored afterward because of the possibility of concealed damage that could cause the relays to behave inconsistently.

### RECOMMENDED

#### 250VOLT

A2K-R MERSEN  
A3T MERSEN

#### 600VOLT

A6K-R MERSEN  
A6T MERSEN  
A4J MERSEN  
ATMR MERSEN

- Mercury Displacement relays must mount vertically +/- 10 degrees.
- Control line can be protected with metal oxide varistor (MOV).
- Disconnect power before installing or servicing.
- Observe all electrical and safety codes and ordinances such as National Electrical Code(NEC) and the Occupational Safety and Health Act (OSHA).