

CONTACT PRINCIPLES

MODEL FI AND NI VACUUM INTERRUPTER MECHANISM PRINCIPLE

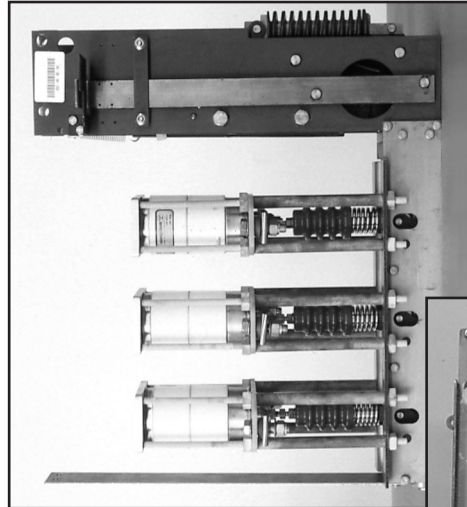
Add to appropriate switch specifications.

Ratings for FI modules available through 25kV, with 12.5kA symmetric interrupting. Ratings for NI modules available through 35kV, with 12.5kA, 20kA and 25kA symmetric interrupting.

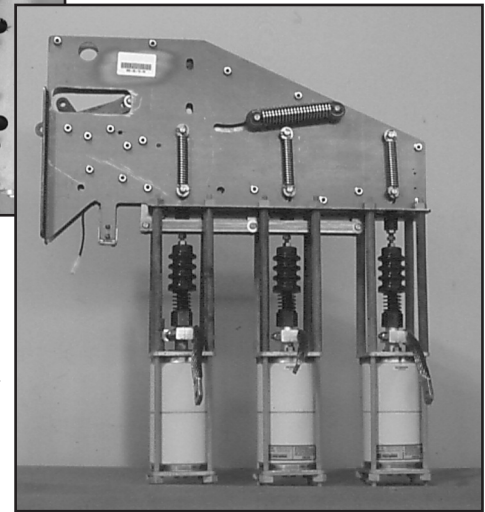
The model FI and NI vacuum interrupters consist of three vacuum bottles mechanically linked to a single spring-assisted operating mechanism. Once initiated, the interrupting time of the vacuum bottles is approximately 3 cycles (50 millisecc). A position indicator (open-green, closed-red) driven by the operating mechanism and is visible through a viewing window for positive contact position. The mechanical linkage assembly provides a "trip-free" operation permitting the vacuum interrupter to interrupt independent of the operating handle if closing into a faulted circuit.

The control monitors the current on each phase and activates a trip solenoid to open the three vacuum bottles if an overcurrent on any phase is sensed. The control is self-powered by current transformers mounted inside the sealed switch tank. No external power source is required. Load current is required for the control to be activated unless the optional remote power feature is specified. The trip selector is used to select the time-current response curve for the tap circuits. The time-current response curves are chosen with the phase selector switches on the face plate of the control. Selection of time-current characteristics may be made under load or no-load conditions with continuous current ranges in twelve selectable levels.

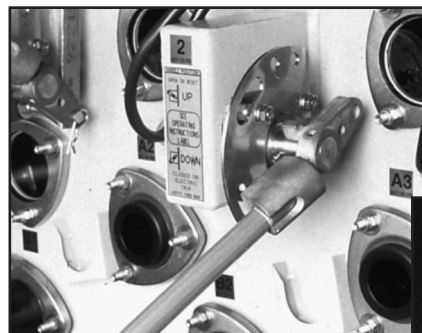
The manual trip and reset of the vacuum interrupter is accomplished through a single handle operating all three phases simultaneously.



◀ Model FI three phase mechanism.

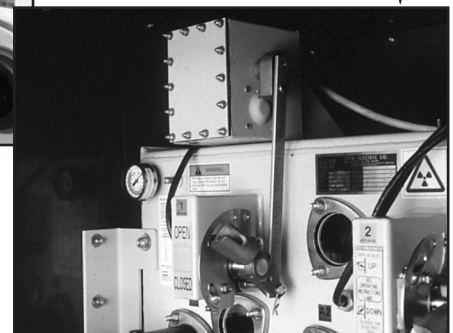


Model NI three phase mechanism ▶



◀ Three phase interrupter operating handle for manual three phase operation and reset.

Motor actuators (below) can be added for remote operation. ▼



▲ Position indicators provide visible verification of contact position through viewing windows. ▶



Motor actuators can be provided. Optional push-button on the controls also permit manual tripping.