



Total Clearing Time-Current Characteristic Curves

Vista® Underground Distribution System Overcurrent Control— Tap Fault Interrupter—S&C “K” Speed (For use in place of conventional “-K” rated power fuses.)

BASIS—The total clearing time-current characteristic curves shown above are applicable to 60-Hz systems. For 50-Hz systems, add 4 milliseconds to the total clearing curve under consideration. This adjustment is not necessary when coordination with the source-side circuit breaker, recloser, or fuse is not particularly tight. In addition, these curves are applicable over the entire Vista Underground Distribution Switchgear operating temperature range of -40°C to +40°C (-40°F to +104°F). No adjustments must be made to these curves for ambient temperatures within this temperature range.

TOLERANCES—Curves are plotted to maximum test points; all variations are minus.

APPLICATION—The maximum continuous current-carrying capability of Vista switchgear is 1200 amperes. The overcurrent control is capable of sensing current in the range of 50 to 25,000 amperes RMS.

The total clearing time-current characteristic curves shown above represent the total time required for the Vista switchgear to both detect and interrupt the fault current. These curves should be followed for coordination problems where a tap fault interrupter is applied as a “protecting” device with respect to a main fault interrupter (if present) or with respect to a source-side relayed circuit breaker or recloser. Fault interrupter operating and clearing times are included in the curves; additional adjustments are not required.

Because the time-current characteristics are electronically derived, they are not subject to change because of aging, transient overcurrents, or fault currents.

It is, therefore, only necessary to reset the fault interrupters following a fault-clearing operation.

CONTROL SETTINGS—Curves are set using a laptop computer.

