



Total Clearing Time-Current Characteristic Curves

Vista® Underground Distribution System Overcurrent Control— Main Fault Interrupter

BASIS— The total clearing time-current characteristic (TCC) curves shown above are applicable to both 50-Hz and 60-Hz systems. 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 TCC curves shown above represent the total time required for Vista switchgear to both detect and interrupt a fault current. These curves should be followed for coordination problems where the main fault interrupter is applied as a “protecting” device 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 TCCs 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.

COORDINATION— Phase- and ground-overcurrent curves are set independently using a computer. These curves can be uniquely tailored to the application by enabling instantaneous and/or definite-time-delay settings. Refer to S&CTCC Nos. 695-9-2 (Instantaneous), 696-9-2 (Definite-Time Delay), and 697-9-2 (Instantaneous and Definite-Time Delay), as required.

