



CYMTCC – Protective Device Coordination

CYMTCC addresses time over-current protection for industrial, commercial and distribution power systems. The program comes with an extensive database of over 15000 protective devices that are easily called to produce time-current curve plots and device settings reports. It also features a unique coordination wizard to suggest protective device settings/adjustments and ratings.

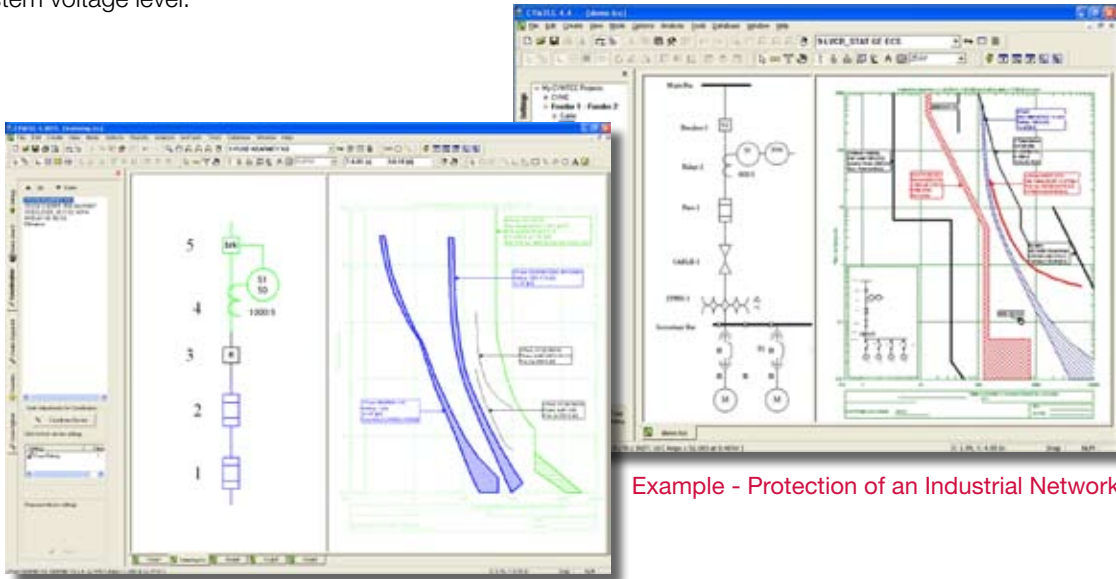
Program Features

CYMTCC provides a powerful “CAD-like” editor that allows building the network one-line diagram by simply clicking and dragging device symbols onto the drawing. The time-current characteristic curves for the protective devices can be visualized onscreen, plotted on standard log-log paper and routed to various printers. The one-line diagram and the time-current curve can be exported to files for inclusion in other reports as well. The program is capable of generating all the necessary study benchmarks such as cable and conductor damage curves, motor starting curves, transformer withstand curves, inrush and thermal points and offers comprehensive graphical and tabular means for verifying the curve clearances at any fault current or system voltage level.

Seamless Interface to CYME Analysis Modules

CYMDIST, the CYME distribution network analysis package, verifies the coordination of protective devices, the maximum permitted operating time («Reach») and the maximum permitted continuous load current.

CYMFAULT, the short circuit analysis module for industrial networks, allows the user to correct protective devices on the one-line diagram, change the coordination sequence of a branch, perform fault analysis and seamlessly interface to CYMTCC. The coordination settings as defined in CYMTCC can then be automatically exported back to CYMFAULT.

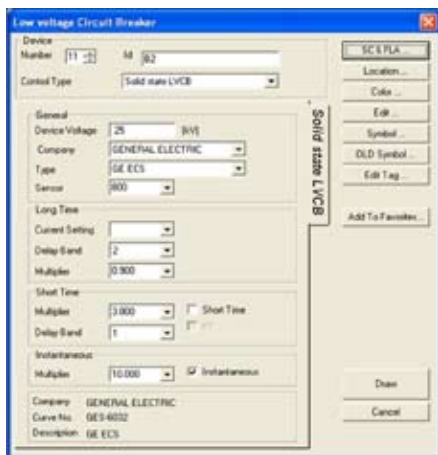


Example - Protection of a Distribution Feeder

Example - Protection of an Industrial Network

Analytical Capabilities

- Curve dragging option to adjust coordination.
- High quality graphic display and output.
- Printing on log-log paper (curves only) or on plain paper (curves and grid).
- Accounts for LL and LG through-faults on Δ -Y transformers.
- Automatic duration verification applying user-defined criteria.
- Interactive analysis reports.
- Coordination wizard to suggest protective device adjustments and ratings.
- Powerful tool to measure separation time between each pair of devices.
- Cooper Electronic reclosers: VXE, Form 4C, 5C, 6C, Type FX, FXA, etc.
- Control of current scale, colors, curve hatching, ID tag location, title block style, and more.
- Facility to import external graphic file (e.g., a company logo) to the curve plot.
- Facility to export the curve plot to AutoCAD® DWG/DXF, SVG (XML), and other formats.
- Ability to open two or more studies and copy curves from one to another.
- Automatic relay time dial selection based on desired operating time.
- Ability to enter numerical equations to model electronic relays.
- Enhanced search tool to find and create devices rapidly.



Device Library

CYMTCC includes an Integrated Device Library Manager program that allows the user to add new device characteristics to the database and to modify existing curves.

The devices are categorized and stored by manufacturer name and device type for easy retrieval. The database contains more than 15000 devices from North American, European and Asian manufacturers. It features Low Voltage Circuit Breakers (electromechanical, solid state and molded case), Fuses, Relays (electromechanical and electronic) and Reclosers (hydraulic and electronic).

The device library is updated regularly and you may update your own library "On-line" from the CYME web site.

