

# *User-Defined Dynamic Models*

**Flexible  
Accurate  
Consistent**

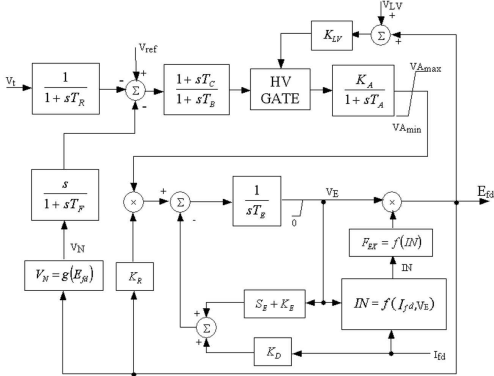
User-Defined Dynamic Models (UDM) builds and compiles the control block diagrams used by the Transient Stability and Generator Start-Up modules of ETAP . UDM models can be used in multiple machines with independent settings within unlimited projects. UDM provides independent self-testing via load rejection, load acceptance, and terminal bus faults for validation of models and their dynamic behavior.

# Run-Time Compile within Dynamic Studies

user-defined dynamic models

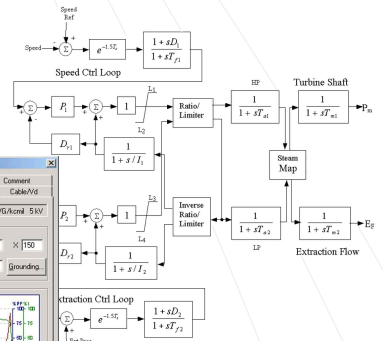
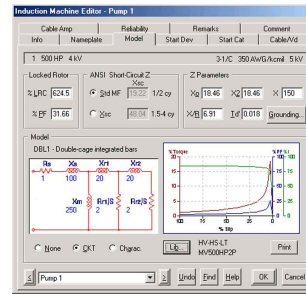
## Key Features

- Library of Pre-Built Models
- Customize Existing UDM Models
- Wide Variety of Blocks for Building Models
- Import Simulink® Models
- Various Model Testing Methods
- Real-Time Compiling & Linking of Models



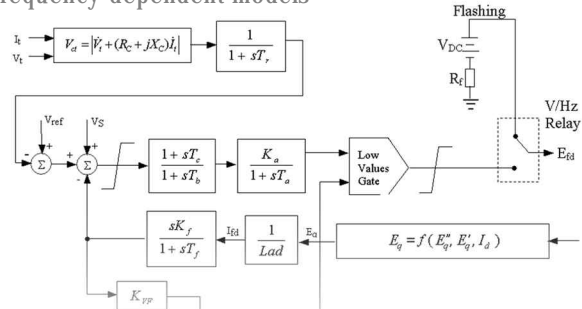
## Flexible Operation

- Transient stability analysis
- Generator start-up analysis
- Motor acceleration analysis
- Frequency-dependent models



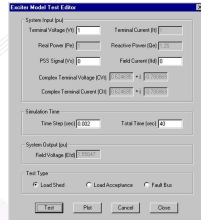
## Pre-Built Control Block Diagrams

- IEEE type exciter models
- IEEE type governor models
- IEEE type PSS models
- Manufacturer specific models
- Frequency-dependent models



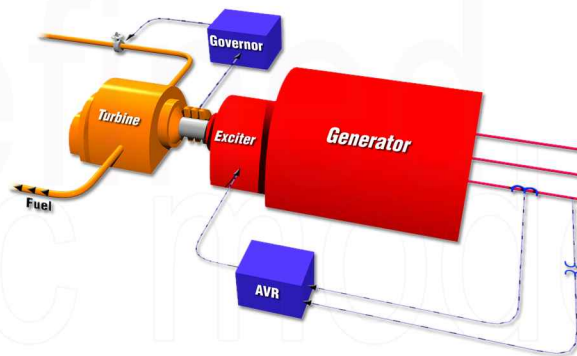
## Create Custom Block Diagrams

- Automatic Voltage Regulators (AVR)
- Power System Stabilizers (PSS)
- Exciters
- Turbines
- Governors



## Independent Self-Testing

- Terminal bus faults
- Load rejection
- Load acceptance



## Create and Test Dynamic Models

- Unlimited Elements
- No Voltage Limitations
- Multi-Looped Control Systems
- Customizable Libraries
- Graphical Display Results on One-Line Diagrams
- Customize Font Types, Sizes, Styles, & Colors
- Automatic Error Checking
- Set Exciter/AVR Parameters
- Set PSS Parameters
- Set Turbine or Engine Parameters
- Set Speed Governor Parameters
- Test Models Independently



10 CFR 50 Appendix B • 10 CFR 21 • ANSI/ASME N45.2-1977 • ASME NQA-1  
ISO 9001 • ANSI/IEEE Std 730.1-1989 • CAN/CSA-Q396.1.2-89

