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 acceptence, and terminal bus faults for validation of models and their dynamic behavior.
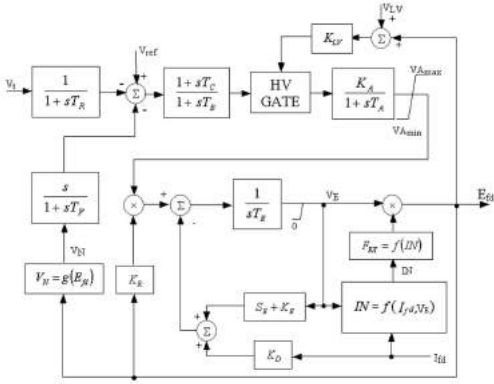
etap
Thinking Power
for Power Engineers

Run-Time Compile within Dynamic Studies

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**

Create Custom Block Diagrams

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

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
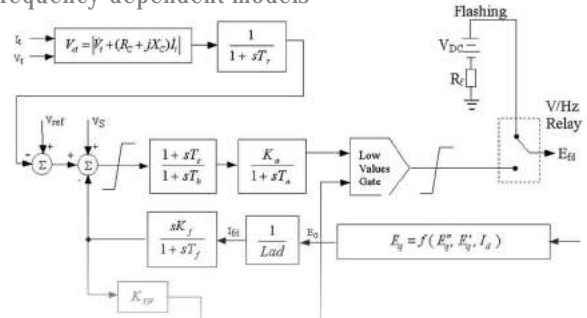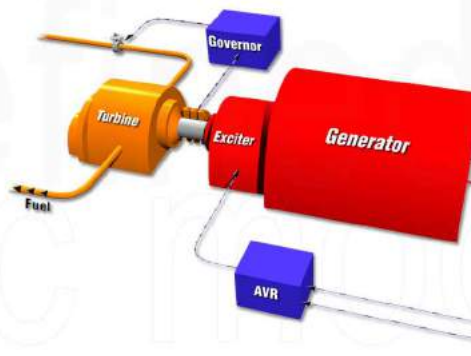Set Speed Governor Parameters
Test Models Independently

Flexible Operation

- Transient stability analysis
- Generator start-up analysis
- Motor acceleration analysis
- Frequency-dependent models
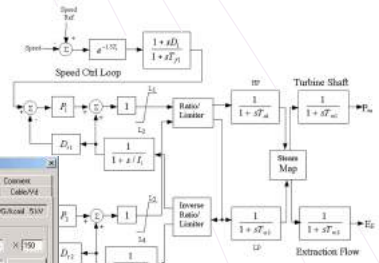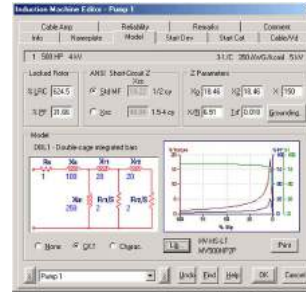
Pre-Built Control Block Diagrams

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

Independent Self-Testing

- Terminal bus faults
- Load rejection
- Load acceptance