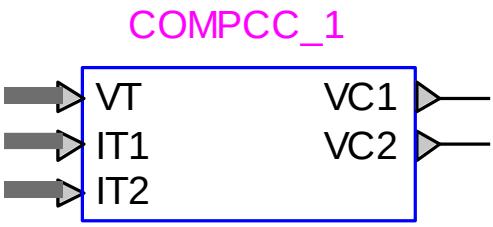
Exciters and Governors: Voltage Regulator COMPCC



Voltage Regulator COMPCC

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1 Description

This device is an implementation of the voltage regulator current compensating model for cross-compounds units COMPCC. This device is implemented as described in [1]. Implementation details can be viewed by inspecting the subcircuit of this device.

1.1 Pins

This device has 10 pins:

Pin name	Type	Description	Units
VT	Input, bundle	Terminal voltage (phasor) of synchronous machine (magnitude and phase)	pu
IT1	Input, bundle	Current (phasor) of synchronous machine 1 (magnitude and phase)	pu
IT2	Input, bundle	Current (phasor) of synchronous machine 2 (magnitude and phase)	pu
VC	Output	Voltage compensator signal	pu

1.2 Parameters

The default set of parameters can be found in [1].

1.2.1 Data tab

The parameters on the Data tab are:

1. **Resistance R_{C1}**: compensation resistance of synchronous machine 1

2. **Reactance X_{C1}**: compensation reactance of synchronous machine 1
3. **Resistance R_{C2}**: compensation resistance of synchronous machine 2
4. **Reactance X_{C2}**: compensation reactance of synchronous machine 2

2 References

[1] PSS®E MODEL LIBRARY PSS®E 32.0.5, Siemens Energy, Inc.