

# Exciters and Governors: Over Excitation Limiter MAXEX2



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Tshibain Tshibungu, Jean Mahseredjian, 8/15/2018 12:23 PM

## 1 Description

This device is an implementation of the MAXEX2 summation point over excitation limiter model (see also [1]). Implementation details can be viewed by inspecting the subcircuit of this device.

### 1.1 Pins

This device has 2 pins:

Pin name	Type	Description	Units
IFD or EFD	Input	Field current or voltage	pu
VOEL	Output	Over Excitation Limiter 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. **Gain  $K_{MX}$ :** OEL integral gain
2. **Rated field  $I_{FD\text{rated}}$  or  $E_{FD\text{rated}}$ :** rated field current or voltage
3. **Desired field  $I_{FD\text{desired}}$  or  $E_{FD\text{desired}}$ :** desired field current or voltage
4. **Minimum OEL output  $V_{\text{LOW}}$ :** OEL minimum output

## 2 Initial conditions

The OEL is supposed to be inactive during the steady-state conditions.

### **3 References**

- [1] "Siemens Power Technologies International, PSS/E 33.1.1, Program Application Guide Volume 2, May 2012.