

# Examples

The following examples are installed with the Power Electronics Add-On. Select each example for a detailed description of its configuration parameters.

By default, the examples are located in this directory:

<Public Documents>National Instruments\<NI VeriStand 20xx>\Examples\OPAL-RT\Power Electronics Add-On

## 1. Three Phase Rectifier

- 1.0 Opening the Example
- 1.1 Configuring the Real-Time Controller
- 1.2 Selecting a Hardware Configuration
- 1.3 Updating the Circuit Model
- 1.4 Configuring the Sources of the Model
- 1.5 Configuring the Switches of the Model
- 1.6 Setting Default Values for the Sinewave Generators
- 1.7 Configuring the Waveforms of the Simulation
- 1.8 Deploying and Running the Simulation
- 1.9 Controlling and Monitoring the Simulation

## 2. Two Level Inverter

- 2.0 Opening the Example
- 2.1 Configuring the Real-Time Controller
- 2.2 Selecting a Hardware Configuration
- 2.3 Updating the Circuit Model
- 2.4 Configuring the Sources of the Model
- 2.5 Configuring the Switches of the Model
- 2.6 Setting Default Values for the SPWM Generators
- 2.7 Configuring the Waveforms of the Simulation
- 2.8 Deploying and Running the Simulation
- 2.9 Controlling and Monitoring the Simulation

## 3. Dual PMSM Vdq Local Control

- 3.0 Opening the Example
- 3.1 Configuring the Real-Time Controller
- 3.2 Selecting the Hardware Configuration
- 3.3 Configuring the Electrical Models
- 3.4 Configuring the Sources of the Model
- 3.5 Configuring the Switches of the Model
- 3.6 Setting Default Values for the Signal Generators
- 3.7 Configuring the Waveforms of the Simulation
- 3.8 Configuring the Local Controller
- 3.9 Deploying and Running the Simulation
- 3.10 Controlling and Monitoring the Simulation

## 4. Dual PMSM SH Local Control

- 4.0 Opening the Example
- 4.1 Configuring the Real-Time Controller
- 4.2 Selecting the Hardware Configuration
- 4.3 Configuring the Electrical Models
- 4.4 Configuring the Sources of the Model
- 4.5 Configuring the Switches of the Model
- 4.6 Setting Default Values for the Signal Generators
- 4.7 Configuring the Waveforms of the Simulation
- 4.8 Configuring the Local Controller
- 4.9 Deploying and Running the Simulation
- 4.10 Controlling and Monitoring the Simulation

## 5. Quad SCIM Constant Local Control

- 5.0 Opening the Example
- 5.1 Configuring the Real-Time Controller
- 5.2 Selecting the Hardware Configuration
- 5.3 Configuring the Electrical Models
- 5.4 Configuring the Sources of the Model
- 5.5 Configuring the Switches of the Model
- 5.6 Setting Default Values for the SPWM Generators
- 5.7 Configuring the Waveforms of the Simulation
- 5.8 Configuring the Local Controller
- 5.9 Deploying and Running the Simulation
- 5.10 Controlling and Monitoring the Simulation

## 6. 6-Phase PMSM Vdq Local Control

- 6.0 Opening the Example
- 6.1 Configuring the Real-Time Controller

- 6.2 Selecting the Hardware Configuration
- 6.3 Configuring the Electrical Models
- 6.4 Configuring the Sources of the Model
- 6.5 Configuring the Switches of the Model
- 6.6 Setting Default Values for the Signal Generators
- 6.7 Configuring the Waveforms of the Simulation
- 6.8 Configuring the Local Controller
- 6.9 Deploying and Running the Simulation
- 6.10 Controlling and Monitoring the Simulation