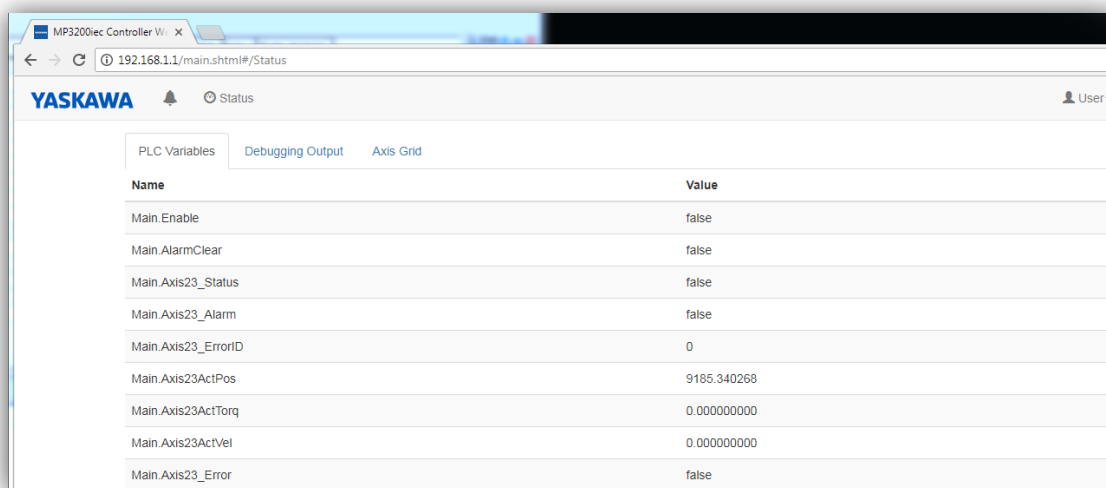


**Title:** How to View PDD Variables**Product(s):** MP3200iec, MP2300iec, MP2600iec,  
MP3300iec, MotionWorks IEC Version 3 Pro**Doc. No.** AN.MPIEC.23

## Application Overview

A Process Data Directory (PDD) variable is a variable that is written onto the PLC and can be accessed through the Web User Interface (WebUI). Please see Figure 1 below.



The screenshot shows a web browser window displaying the YASKAWA WebUI Status page. The page has a navigation bar with the YASKAWA logo, a status indicator, and a user profile. Below the navigation bar, there are three tabs: 'PLC Variables', 'Debugging Output', and 'Axis Grid'. The 'PLC Variables' tab is active, showing a table of PDD variables. The table has two columns: 'Name' and 'Value'. The variables listed are:

Name	Value
Main_Enable	false
Main_AlarmClear	false
Main_Axis23_Status	false
Main_Axis23_Alarm	false
Main_Axis23_ErrorID	0
Main_Axis23ActPos	9185.340268
Main_Axis23ActTorq	0.000000000
Main_Axis23ActVel	0.000000000
Main_Axis23_Error	false

Figure 1: WebUI with PDD Variables

## Application Highlights

A PDD variable list (CSV) file is now downloaded to the controller when a project is downloaded and PDD variables are defined. Variables selected as PDD can be watched at the controller's WebUI Status page in the PLC Variables tab. The watch list will only include up to the first 50 PDD variables defined. Only PDD variables of basic data types may be monitored, not user defined datatypes.

*Note: If downloading PDD variables for the very first time, the variables will be displayed on the controller's WebUI Status page as soon as the download is complete. All further downloads will require a reboot of the controller as the PDD.csv file is read on power up.*

**Title:** How to View PDD Variables

**Product(s):** MP3200iec, MP2300iec, MP2600iec,  
MP3300iec, MotionWorks IEC Version 3 Pro

**Doc. No.** AN.MPIEC.23

**Products Used**

Component	Product and Model Number
Servopack	Sigma-5 and Sigma-7 Series
Motor	Sigma-5 and Sigma-7 Series
Controller	MPiec Series
Software	MotionWorks IEC 3.2.0.197 and higher

**Application Requirements**

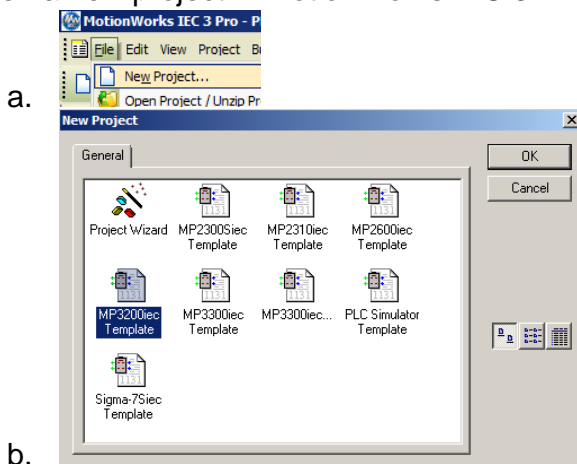
MotionWorks IEC Version 3.2.0.197 and higher

Firmware version 3.2.0.197 and higher

MPiec Series Controller

**Implementation**

1. Open a new project in MotionWorks IEC 3

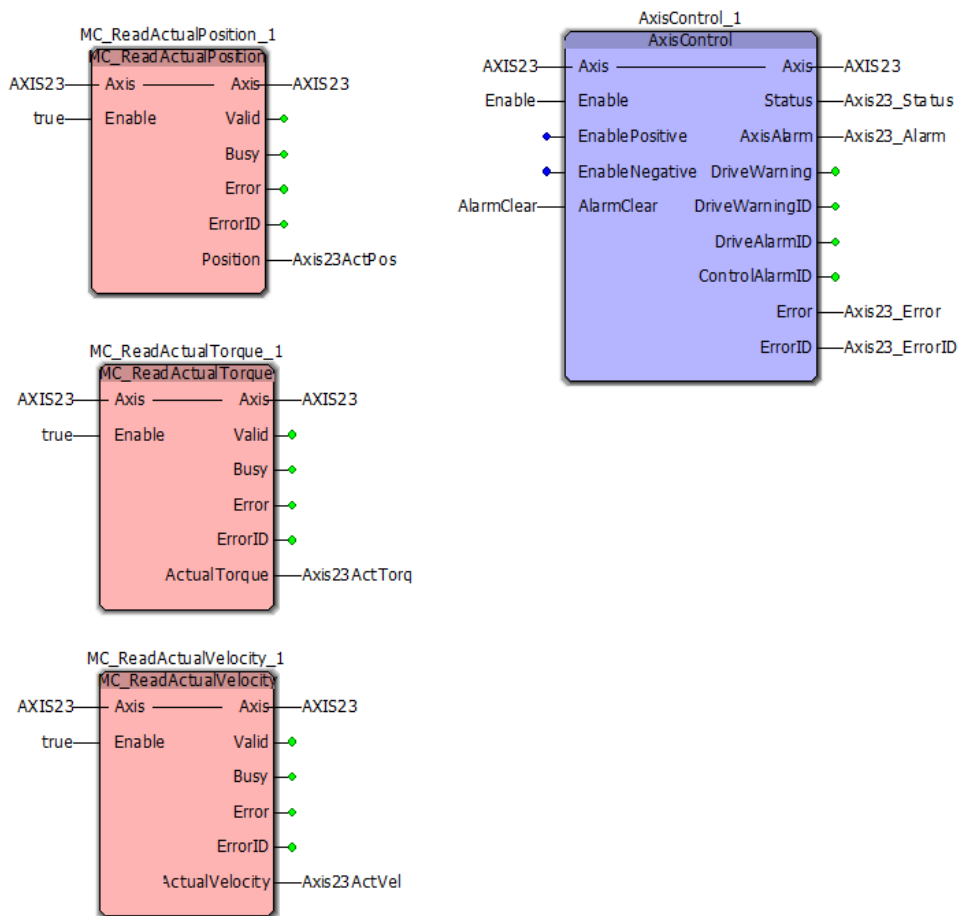


## Title: How to View PDD Variables

**Product(s):** MP3200iec, MP2300iec, MP2600iec,  
MP3300iec, MotionWorks IEC Version 3 Pro

**Doc. No.** AN.MPIEC.23

2. If needed, connect to the Hardware Configuration to allocate axes and utilize actual positions, torques, velocities, etc.
  - a. See video: [Basic Concepts \(MotionWorks IEC Hardware Configuration\)](#)
3. Open any POU and create local or global variables
  - a. *Example in 'Main' POU using MC\_ReadActualTorque, MC\_ReadActualPosition, MC\_ReadActualVelocity and AxisControl function blocks*



i.

## Title: How to View PDD Variables

**Product(s):** MP3200iec, MP2300iec, MP2600iec,  
MP3300iec, MotionWorks IEC Version 3 Pro

**Doc. No.** AN.MPIEC.23

4. Open the variables list for the 'Main' POU and check the 'PDD' checkbox for specific variables to monitor

Name	Type	Usage	Description	Address	Init	Retain	PDD
<b>Default</b>							
AlarmClear	BOOL	VAR				<input type="checkbox"/>	<input type="checkbox"/>
AXIS23	AXIS_REF	VAR_EXTER...	SGDV Rotary - 23 (* Do Not Modify!! *)			<input type="checkbox"/>	<input type="checkbox"/>
Axis23_Alarm	BOOL	VAR				<input type="checkbox"/>	<input type="checkbox"/>
Axis23_Error	BOOL	VAR				<input type="checkbox"/>	<input checked="" type="checkbox"/>
Axis23_ErrorID	UINT	VAR				<input type="checkbox"/>	<input checked="" type="checkbox"/>
Axis23_Status	BOOL	VAR				<input type="checkbox"/>	<input checked="" type="checkbox"/>
Axis23ActPos	LREAL	VAR				<input type="checkbox"/>	<input checked="" type="checkbox"/>
Axis23ActTorq	LREAL	VAR				<input type="checkbox"/>	<input checked="" type="checkbox"/>
Axis23ActVel	LREAL	VAR				<input type="checkbox"/>	<input checked="" type="checkbox"/>
AxisControl_1	AxisControl	VAR				<input type="checkbox"/>	<input checked="" type="checkbox"/>
Enable	BOOL	VAR				<input type="checkbox"/>	<input type="checkbox"/>
MC_ReadActualPosition_1	MC_ReadActualPosition	VAR				<input type="checkbox"/>	<input type="checkbox"/>
MC_ReadActualTorque_1	MC_ReadActualTorque	VAR				<input type="checkbox"/>	<input type="checkbox"/>
MC_ReadActualVelocity_1	MC_ReadActualVelocity	VAR				<input type="checkbox"/>	<input type="checkbox"/>

- a.
5. Compile and download project to the controller
6. Reboot the controller
7. Connect to the MPiec Series Controller's WebUI (IP Address)
  - a. View the WebUI Status Page

The screenshot shows a web browser window titled 'MP3200iec Controller W...' with the address bar displaying '192.168.1.1/main.shtml#/Status'. The page features the YASKAWA logo and a 'Status' notification. Below the navigation tabs (PLC Variables, Debugging Output, Axis Grid), there is a table with the following data:

Name	Value
Main.Axis23_Status	false
Main.Axis23_ErrorID	0
Main.Axis23ActPos	9185.340266
Main.Axis23ActTorq	0.000000000
Main.Axis23ActVel	-0.000238418
Main.Axis23_Error	false

b.