

Certification Test

CT.MPIec.01.eLM.WebUI.CertificationTest



Taking the Test

- The test is open book. You may use any website, manuals, software, demo, etc. The test must be taken individually; you may not contact another person for help.
- Each question has only one correct answer unless otherwise noted. Please clearly record all answers on the answer sheet. All questions are equally weighted. A passing score is 90%.

Returning the Test

- Please return **only the first page** of the test (the answer sheet) with completed answers and contact information.

Option 1: Fax the answer sheet to **Yaskawa Technical Training Services** at **(847) 887-7185**.

Option 2: e-mail a scan, photo, or edited pdf of the answer sheet with all answers and contact information to training@yaskawa.com.

Receiving Your Score

You may review your answers only if a passing score is received. You will receive a system-generated email with your score. Please allow up to 5 business days.

Project Archive

1. What is the default Login / Password for the Web UI of the MP3300iec?
 - A. admin/password
 - B. admin/mp3300
 - C. Admin/MP3300
 - D. ADMIN/MP3300
 - E. admin/mp3300iec
 - F. Admin/MP3300iec
 - G. ADMIN/MP3300IEC
2. What components may be contained in the controller's Project Archive?
 - A. Servo parameters
 - B. Controller IP address
 - C. Cam Tables (CSV files)
 - D. Firmware
 - E. All of the above
 - F. Answers A & B only
 - G. Answers A & C only
 - H. Answers B & D only
3. In the Drive Parameters page, which selection sends the parameters from the archive to the servo drives?
 - A. Verify
 - B. Write
 - C. Write all Default Pns
 - D. Write all User Pns
4. A working MPiec/Sigma-7 prototype system with absolute encoders is built. A good archive is saved from the prototype controller. Then an identical system is built with new MPiec/Sigma-7 components. The archive is installed on the new MPiec controller using the Web UI. What steps are required in order to fully commission the new system?
 - A. Write servo parameters
 - B. Reset absolute encoders
 - C. Reboot
 - D. Set machine zero position
 - E. All of the above
 - F. Answers A & B only
 - G. Answers A & C only
 - H. Answers B & D only

Demo Operation

5. Which of the following operations can be programmed in the controller and executed through an HMI without the use of the Web UI?
 - A. Install Project Archive
 - B. Write servo parameters
 - C. Reset absolute encoders
 - D. Reboot
 - E. All of the above
 - F. Answers A, B & C only
 - G. Answers B, C & D only
 - H. Answers B & C only

6. A reboot is required after replacing which of the following components?
 - A. MPiec Controller
 - B. Sigma-7 Amplifier (Servopack)
 - C. Motor with Absolute Encoder
 - D. All of the above
 - E. A and B only
 - F. B and C only
 - G. A and C only

7. The zero position must be calibrated after replacing which of the following components?
 - A. MPiec Controller
 - B. Sigma-7 Amplifier (Servopack)
 - C. Motor with Absolute Encoder
 - D. All of the above
 - E. A and B only
 - F. B and C only
 - G. A and C only

8. The parameters must be written after replacing which of the following components?
 - A. MPiec Controller
 - B. Sigma-7 Amplifier (Servopack)
 - C. Motor with Absolute Encoder
 - D. All of the above
 - E. A and B only
 - F. B and C only
 - G. A and C only

Motion Control Panel

9. What software is required for the Motion Control Panel to operate?
 - A. Flash Player
 - B. Java
 - C. Internet Explorer
 - D. HTML5
 - E. All of the above

10. Which tab of the Motion Control Panel is required for clearing alarm A.810 within the Web UI?
 - A. Alarms
 - B. Data Log
 - C. Axis Params
 - D. Drive Pn
 - E. IO
 - F. Diagnostic

11. The Motion Control Panel is open and the feedback data is updating. But the Enable checkbox for the axes cannot be checked. What is the most likely cause of this behavior?
 - A. The controller is in RUN status
 - B. The servo is already enabled
 - C. Communication to the controller was lost
 - D. Communication to the servos was lost

12. What are the default units of motion in the Motion Control Panel (Upon reboot after the project archive has been deleted)?
 - A. Encoder Pulses
 - B. Degrees
 - C. Radians
 - D. Motor Rotations
 - E. Millimeters
 - F. Inches

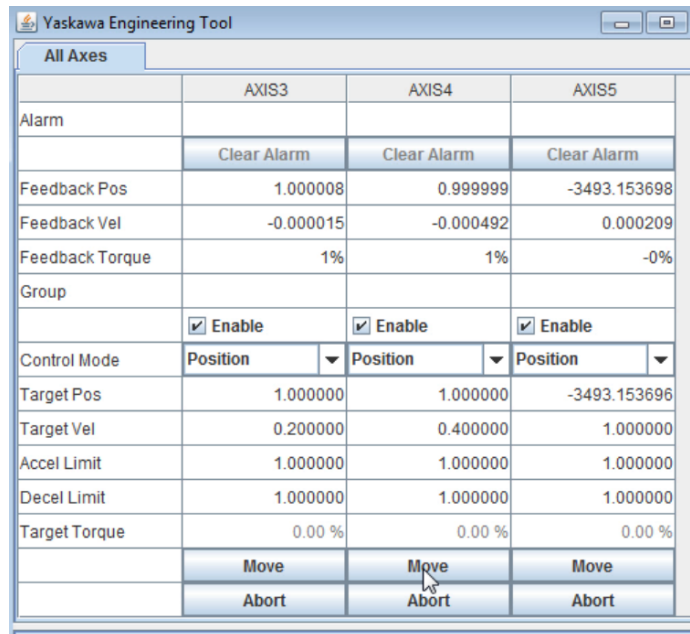
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13. The move button for Axis4 was pressed and the motor moved. Then it was pressed again but the motor did not move. Why not? Refer to the image.

- A. Servo is not enabled
- B. Control mode is set to position
- C. Target Pos matches Feedback Pos
- D. Target Vel is too low
- E. Accel Limit matches Decel Limit
- F. Target torque is too low
- G. Over-travel is active

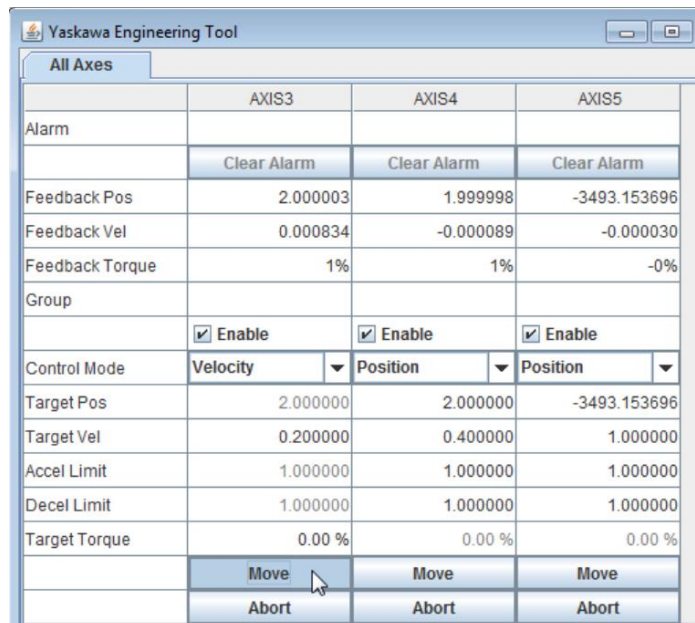


The screenshot shows the Yaskawa Engineering Tool interface. The 'All Axes' tab is selected. The table displays parameters for AXIS3, AXIS4, and AXIS5. For AXIS4, the 'Move' button is highlighted with a mouse cursor. The 'Control Mode' for all axes is set to 'Position'.

	AXIS3	AXIS4	AXIS5
Alarm			
	Clear Alarm	Clear Alarm	Clear Alarm
Feedback Pos	1.000008	0.999999	-3493.153698
Feedback Vel	-0.000015	-0.000492	0.000209
Feedback Torque	1%	1%	-0%
Group			
	☒ Enable	☒ Enable	☒ Enable
Control Mode	Position	Position	Position
Target Pos	1.000000	1.000000	-3493.153696
Target Vel	0.200000	0.400000	1.000000
Accel Limit	1.000000	1.000000	1.000000
Decel Limit	1.000000	1.000000	1.000000
Target Torque	0.00 %	0.00 %	0.00 %
	Move	Move	Move
	Abort	Abort	Abort

14. The move button for Axis3 was pressed but the motor did not move. Why not? Refer to the image.

- A. Servo is not enabled
- B. Control mode is set to Velocity
- C. Target Pos matches Feedback Pos
- D. Target Vel is too low
- E. Accel Limit matches Decel Limit
- F. Target torque is too low
- G. Over-travel is active



The screenshot shows the Yaskawa Engineering Tool interface. The 'All Axes' tab is selected. The table displays parameters for AXIS3, AXIS4, and AXIS5. For AXIS3, the 'Move' button is highlighted with a mouse cursor. The 'Control Mode' for AXIS3 is set to 'Velocity', while for AXIS4 and AXIS5, it is set to 'Position'.

	AXIS3	AXIS4	AXIS5
Alarm			
	Clear Alarm	Clear Alarm	Clear Alarm
Feedback Pos	2.000003	1.999998	-3493.153696
Feedback Vel	0.000834	-0.000089	-0.000030
Feedback Torque	1%	1%	-0%
Group			
	☒ Enable	☒ Enable	☒ Enable
Control Mode	Velocity	Position	Position
Target Pos	2.000000	2.000000	-3493.153696
Target Vel	0.200000	0.400000	1.000000
Accel Limit	1.000000	1.000000	1.000000
Decel Limit	1.000000	1.000000	1.000000
Target Torque	0.00 %	0.00 %	0.00 %
	Move	Move	Move
	Abort	Abort	Abort

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15. The move button for Axis5 was pressed but the motor did not move. Why not? Refer to the image.

- A. Servo is not enabled
- B. Control mode is set to position
- C. Target Pos matches Feedback Pos
- D. Target Vel is too low
- E. Accel Limit matches Decel Limit
- F. Target torque is too low
- G. Over-travel is active

