### **Certification Test**

eLM.E7.04.BypassStartup



#### **Taking the Certification Test**

Each question has **only one correct answer**. Please record all answers on this answer sheet. The order of the questions in the test roughly follows the order of topics covered in class. All questions are equally weighted. A passing score is 90%.

#### **Returning the Certification Test**

- **Option 1:** Fax the answer sheet (following page) to **Yaskawa Technical Training Services** at (847) 887-7185.
- **Option 2:** E-mail the answers to all questions to **training@yaskawa.com**. Be sure to Include all of the contact information listed on the answer sheet.
- **Option 3:** Mail the answer sheet to **Yaskawa Technical Training Services** at the address shown on the bottom of this page.

#### **Receiving Your Score**

When the test is taken during the training class, you will receive your score in class as soon as it can be graded. When taken as a CLEP test, receive your score from Technical Training Services by sending an email to **training@yaskawa.com** or by calling Karen Kolacki at 847-887-7228. In either case, you may review your answers only if a passing score is received.

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Answer Sheet:			
1	6	11	
2.	7.	12.	

3. \_\_\_\_\_ 8. \_\_\_\_ 13. \_\_\_\_

4. \_\_\_\_\_ 9. \_\_\_\_ 14. \_\_\_\_

5. \_\_\_\_\_ 10. \_\_\_\_

#### **Contact Information:**

Name:	Title:
Company:	Email:
Address:	
Phone Number:	Fax number:
Supervisor's Name/ Title:	
Test Date:	

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### eLM.E7.04.BypassStartup



#### **Ouestions**

- 1. Which of the following could stop the bypass from working properly?
  - a. Dip Switch Settings

d. All of the above

b. Improper Wiring

- 2. The startup information in this eLM applies to:
  - a. E7L only
  - b. E7B only

c. All E7B and some E7L

c. Drive Parameter Settings

d. All E7L and Some E7B

- 3. After shutting down input power:
  - a. Tighten screw terminals
  - b. Set input current Breaker

- c. Check Motor direction
- d. Check with meter
- 4. It is unnecessary to check the voltage on all 3 phases before working on the bypass.
  - a. True

- b. False
- 5. The thermal OLR is always located on:?
  - a. The just before the motor on the output side of the bypass
  - b. The right side of the cabinet
  - c. The just after the power switch on the input side of the Bypass.
  - d. Contactor K1.
- 6. Set the Thermal OLR to match?
  - a. Input current rating of drive
  - b. Motor Full load amps
  - c. In rush current of motor
  - d. Output current rating of drive
- 7. E7B (three contactor) bypasses come standard with a input motor circuit protector
  - a. True

- b. False
- 8. The procedure for setting the input MCP found in chapter four of the manual is:
  - a. Question doesn't make sense; Chapter four is not the chapter in the manual where the startup procedure is found.
  - b. Calculation method
  - c. Trial and error method
  - d. There is no procedure found in the manual for this setting
- 9. Programmable relay #3 is a:
  - a. Digital Input
  - b. Digital Output
  - c. Analog Input
  - d. Analog Output

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- 10. If your BAS uses a contact closure to signal a run command, use control terminals:
  - a. TB5-1 and TB1-9
  - b. TB1-2 and TB1-9
  - c. TB2-1 and TB5-1
  - d. TB3-1 and TB5-1
- 11. Analog output FM can be set for:
  - a. 0-10VDC only
  - b. 4-20 mA only
  - c. Both 0-10VDC or 4-20mA set using a dip switch.
  - d. Both 0-10VDC or 4-20mA set using a Jumper.
- 12. Keypad operation is explained in chapter \_\_\_\_ of the technical manual.
  - a. Chapter 2
  - b. Chapter 3
  - c. Chapter 4
  - d. Chapter 5
- 13. If the bypass is in drive mode, and you want to make the bypass run in drive mode, push:
  - a. Drive Select then Hand
  - b. Hand only
  - c. Bypass Select then Hand
  - d. Bypass Select only
- 14. If your motor spins the wrong way in drive mode, the component that needs to be serviced is the:
  - a. Input disconnect
  - b. Output OLR
  - c. Both
  - d. Niether