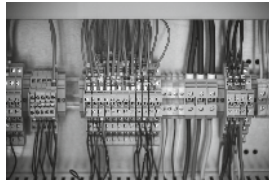
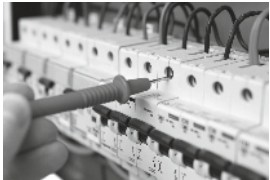


# ELECTRICAL MAINTENANCE MODULE 3

## Interrogation of PLCs and Inverter Drives to aid Fault Finding and Adjustment



### WHO SHOULD PARTICIPATE?

Electrical Maintenance – Technicians / Engineers / Supervisors who are required or wish to develop their electrical maintenance competencies. Delegates must have an understanding of electrical principles and be computer literate.

### PREREQUISITES

All delegates must have the below experience/knowledge to attend this course:

- Understanding of relay logic
- Use of test equipment for fault finding
- Ability to read drawings to trace I/O connections to the card

We recommended that delegates who do not meet the above criteria attend our Electrical Maintenance Module 2 course.

### PROGRAMME BENEFITS

By the end of the programme participants will be able to:

- Work safely on modern industrial electrical/electronic control equipment
- Systematically interrogate a range of commonly used Programmable Logical Controllers [PLCs]
- Understand how PLCs are incorporated into modern electrical circuits
- Interpret basic levels of ladder diagrams to facilitate change
- Gain a basic understanding of variable frequency drivers [inverters]
- Carry out basic checks on variable speed drives
- Identify, understand and deal with faults involving PLCs and variable speed drives

### THE PROGRAMME WILL COVER:

- Introduction to industrial electrical/electronic control equipment on state of the art industrial process simulators
- Introduction to generic ladder diagrams
- PLCs in electrical and electro-pneumatic instrument controlled circuits
- Interrogation of a range of commonly used PLCs
- Fault finding approaches on PLCs and variable speed drives
- Setting and adjusting process on PLCs and variable speed drives
- Practical fault finding on PLC controlled motor test exercises
- Fault finding without laptop versus fault finding with laptop to observe program running
- Practical fault finding on PLC controlled process rig

### ASSESSMENT

Internal written and practical assessment.

Upon achievement delegates will receive an EAL certificate of verified achievement.



### DURATION

5 Days

### PROGRESSION

Automation & Controls - Motion and process control within automation.

## OUR SERVICE LEVEL COMMITMENT

MGTS will ensure that:

- Your training and assessment programmes are delivered by Tutors highly experienced in the relevant subject matter and your industry
- The delivery of training and assessment will focus on your training objectives supported by up to date programmes and learning materials
- Your employees will receive training designed to meet their personal learning needs with additional support where appropriate
- Training programmes are delivered with your requirements as the focus ensuring total flexibility and on time delivery
- Your employees benefit from a healthy, safe and secure learning environment ensuring equality of opportunity and diversity of contribution to enhance the learning experience
- You and your employees are given support to achieve high quality personal learning and successful learning transfer to the workplace
- The confidentiality of your business development needs is maintained throughout

## BOOKINGS & PAYMENTS

Bookings must be confirmed with either a purchase order or full payment to secure the booking.

New customers will be required to complete a new customer application form to open a credit account. Credit account customers will be invoiced upon booking; our standard payment terms are 30 days unless otherwise agreed in advance.

Payment can be made by credit card or BACS/ bank transfer.

Payment must be received 7 days in advance of the course start date (for non- account customers).

## CANCELLATION POLICY

Where courses are under subscribed MGTS may cancel or re-arrange a course at their discretion. Customers will be notified no later than 10 working days prior to the planned commencement date.

MGTS accepts customer cancellations without charge up to 7 days prior to commencement of training. Cancellation less than 7 days will incur a 50% course fee. Cancellations with less than 24 hours' notice will incur a 100% course fee.

Transfers to alternative course dates will not incur any additional charge to the customer if the transfer is made up to 7 days prior to commencement of training.



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