



ELECTRICAL AC/DC MOTOR CONTROL & MAINTENANCE

COURSE OVERVIEW

Control systems for electric motors are vital to the proper performance and protection of modern equipments. They are essentially the link in every complete industrial process. These systems may range from the simple starting and stopping of an electric motor to directing energy flow in a completely automated factory.

This programme starts with the basic fundamentals, and proceeds step by step through various types of controls and faults the participants will encounter in the industry. It explains WHAT kinds of controls are available, HOW they operate, WHERE they are used and WHY they are used in a particular application.

WHO SHOULD ATTEND

Maintenance Personnel, Supervisors, Line Leaders, Technicians and Electricians working with AC/DC Motors and others with general technical knowledge who wish to enhance their knowledge in handling Electrical Motors.

COURSE OUTLINE

Fundamentals of Motors

- Principles of Electrical Motors
- Electrical Motors Classification
- Motor Maintenance

Motor Controls Pilot Devices

- Motor Starters
- Operation of Protective Devices
- Operation of Push Button and Pilot Lights
- Operation of Relays and Contactors
- Operation of Timing Relays and Switches

Selection of Starting Methods

- Direct On Line Starting
- Star-Delta Starting
- Starting by Elimination of Starter Resistance
- Starting by Auto transformer
- Electronics Starter
- Various Starting Methods

Control Circuits

- Types of Timers
- Timers Construction using Timers and Switches
- Circuit Layout Connections and Symbols
- Symbols Abbreviation and Circuit Diagrams

DC Motor Controls

- Direct Current Controllers
- Across-the-line Starting
- Across-the-line Control Circuit
- Definite-Time Motor Starter
- Drum Controller
- Series Starting Resistance
- Three-Point / Four-Point DC Manual Starters
- Counter EMF / Motor Driven Time Controller

AC Motor Controls

- Abbreviation and Connections
- Symbols, Wiring and Elementary Diagrams
- Troubleshoot Two / Three Wire Control Circuit
- Operation of Separate Control Circuits
- Hands-Off Automatic Control Circuits Operation
- Troubleshoot Multiple Push Button Control Circuit
- Reversing Control Circuit with Mechanical / Push Button Interlock
- Reversing Control Circuit using Drum Switch
- AC Reduced Voltage Starters
- Part-Winding Motor Starter
- Starter for Wye-Delta Motors
- Three-phase and multi-speed controller
- Two speed two winding motor controller
- Two speed Starter with Reversing Controls

TRAINER

PESDC has a panel of professionally qualified, well-trained and industrially experienced technical trainers.

COURSE FEE (TECH-19)

RM450.00 per pax (member)
RM550.00 per pax (non-member)
(Inclusive of course materials, lunch and refreshment)

Certificate of Achievement will be awarded upon successful completion of the course.

SBL
claimable

COURSE DETAILS

Duration : 3 Days

Date : Flexible

Time : 9.00am to 5.00pm

Venue : PESDC Training Complex

For Further Enquiries, please contact:

Mr Thillai or Mr Jeremy Lai

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