

'A' Grade Refresher Training

After completing your 'A' Grade licensing exams, there are many things you need to know to keep you safe and competent as an 'A' Grade Electrician. **The A Grade Refresher Training**, refines your basic training, during your experience as an 'A' Grade Electrician. The subjects are practical hands on sessions, trained by experienced electricians, with significant industry knowledge and safety awareness.

The subjects include:

- 1) **Fault finding with**
 - RCD's
 - Control circuit faults
 - Earth faults
 - Advanced fault loop impedance
- 2) **Testing for Live**
 - Ensuring equipment is de-energised
 - Safely working on energised equipment
 - Live testing for safety
 - Earthing of de-energised equipment
- 3) **Lock out & tag for safety**
 - Compliance training for locking out equipment & tagging out for safety
- 4) **Understanding electric motors**
 - Basic motor connections & starting
- 5) **Motor control with variable speed drives (DANFOSS, ABB, SEW, DELTA VSD's)**
- 6) **Understanding programmed logic controllers**
- 7) **Understanding cables**
 - Cable types & colour codes
 - Insulation types & heat shrinking
 - Environmental hazards for cable insulation
 - Cable tying for fault current conditions
 - Cable loading & ventilation
 - Correct selection of cables
 - Cable tying for increased current carrying capacity
 - Cable arrangement for reduced magnetic interference
- 8) **Understanding the reality of voltage drop and power factor correction**
- 9) **Synchronising power generation sets**
 - Synchronising to the grid
 - Synchronising between generator sets
- 10) **Advanced electrical installation test**
 - Actual demonstration of on-site testing
 - Testing a domestic installation
 - Testing a commercial installation
 - Testing an industrial installation

Once all 10 subjects are completed, you are refreshed as an 'A' Grade Electrician.

**This training provides you with the necessary skills to be
a safe, reputable & reliable 'A' Grade Electrician**