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# Electrical Safety - safe isolation of electrical equipment

This guide explains how you should safely isolate electrical equipment prior to working. It is essential you follow a safe procedure to prevent both electric shock and injuries due to equipment starting up unexpectedly.

The Electricity at Work Regulations 1989

Regulation 13 Precautions for work on equipment made dead:

Adequate precautions shall be taken to prevent **electrical equipment**, which has been made dead in order to prevent **danger** while work is carried out on or near that equipment, from becoming electrically charged during that work if **danger** may thereby arise.

#### 1. Equipment Required

You need the following equipment to be able to safely isolate and lock off a supply:

- Isolation padlock & key
- Multiple worker isolation padlock tag
- Isolation devices to suit different isolators / MCBs etc
- Warning notices
- Voltage tester
- Voltage proving unit

#### 2. Safe Isolation procedure

- 1. Identify the circuit or equipment to be worked on
- 2. Check condition of voltage tester and operation against a known voltage supply
- 3. Isolate supply and secure isolation lock off (multi lock off if multiple workers)
- 4. Prove circuit dead use voltage tester and re check against a known voltage supply
- 5. Retain key and post 'caution' and 'danger' notices
- 6. Take precautions against adjacent live circuits / equipment if any
- 7. Issue permit to work
- 8. Work dead

Continues overleaf







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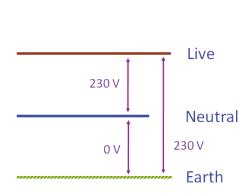
### 3. Reinstating Supply

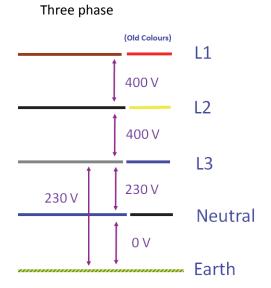
- 1. Ensure all work is complete
- 2. Ensure all covers and lids are replaced
- 3. Remove lock off and warning notices (multi unlock if multiple workers)
- 4. Reinstate supply

Single phase

- 5. Turn on equipment locally if possible
- 6. Sign off permit to work

## 4. Voltages and Cable colours





#### 5. More Information

http://www.hse.gov.uk/pubns/priced/hsg85.pdf

http://www.hse.gov.uk/pubns/priced/hsr25.pdf

http://www.electricalsafetyfirst.org.uk/mediafile/100117573/Best-Practice-Guide-2.pdf

https://www.youtube.com/watch?v=ZOeQHz67iD8

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