



# Jargonbuster

A quick explanation of electrical terms.

## Do you speak sparky?

Whether your whole house is being rewired or you're just having some new sockets fitted, it helps to know the difference between a consumer unit and a circuit breaker. These technical terms flow from an electrician's mouth, but may sound like a foreign language to most homeowners. Knowing what they mean could avoid embarrassing misunderstandings.

Each of the 20,000 government-approved electricians registered with leading electrical body NICEIC, wants to deliver the best service to their clients. However, they understand that industry jargon can be barrier to a good working relationship.

To help you understand better and learn to 'speak sparky, we've put together a jargon buster to explain below some of the more common terms used by electricians.

## The A –Z of the electrical industry:

### **BS - British Standard**

British Standard BS 7671 – also known as the IEE (Institute of Electrical Engineering) wiring regulations. Details the requirements for electrical installations and is the standard against which all NICEIC contractors are assessed. To enrol with NICEIC all electricians, and anyone they employ, must meet this national safety standard.

### **Certificate**

Any electrician installing a new electrical installation (including a single circuit), altering, extending or adapting an existing circuit should issue the homeowner with electrical installation certificate or minor electrical installation works certificate to confirming the work complies with the requirements of BS 7671.

### **Circuit**

An assembly of electrical equipment (socket outlets, lighting points and switches) supplied from the same origin and protected against over current by the same protective device(s).

### **Circuit-breaker or RCD**

A device capable of making, carrying and breaking normal load currents and also making and automatically breaking, under pre-determined conditions, abnormal currents such as short-circuit currents. It is usually required to operate infrequently although some types are suitable for frequent operation.

### **Class I equipment**

Equipment in which protection against electric shock does not rely on basic insulation only, but which includes means for the connection of exposed-conductive-parts to a protective conductor in the fixed wiring of the installation. Class I equipment has exposed metallic parts, e.g. the metallic enclosure of washing machine.

**Class II equipment**

Class II equipment, such as music systems, television and video players, in which protection against electric shock does not rely on basic insulation only, but in which additional safety precautions such as supplementary insulation are provided, there being no provision for the connection of exposed metalwork of the equipment to a protective conductor, and no reliance upon precautions to be taken in the fixed wiring of the installation.

**Class III equipment**

Equipment, for example for medical use, in which protection against electric shock relies on supply at SELV (Safety extra low voltage) and in which voltages higher than those of SELV are not generated. Class III equipment must be supplied from a safety isolating transformer.

**Consumer unit**

Also known as a fusebox, consumer control unit or electricity control unit. A particular type of distribution board comprising a co-ordinated assembly for the control and distribution of electrical energy, principally in domestic premises, incorporating manual means of double-pole isolation on the incoming circuit(s) and an assembly of one or more fuses, circuit-breakers, residual current operated devices or signalling and other devices purposely manufactured for such use.

**Distribution board**

An assembly containing switching or protective devices (e.g. fuses, circuit-breakers, residual current operated devices) associated with one or more outgoing circuits fed from one or more incoming circuits, together with terminals for the neutral and protective circuit conductors. It may also include signalling and other control devices. Means of isolation may be included in the board or may be provided separately.

**Electrical installation**

Any assembly of electrical equipment supplied by a common source to fulfil a specific purpose.

**Electrical Safety Regulations**

NICEIC registered electricians have already helped to improve the standard of electrical work in the UK. A new electrical safety law, often referred to as Part P of the Building Regulations, has further enhanced the protection of homeowners and reduced the risk of electric shock when using electricity. The law, which applies to England and Wales aims to improve electrical safety in the home and prevent the number of accidents, which are caused by faulty electrical work. The law requires an electrician registered with a government-approved scheme, such as NICEIC, to carry out most electrical work in the home. After completion of any work your NICEIC registered electrician will issue you with a Building Regulations Compliance Certificate to prove it meets the required standards of Part P. You can only carry out electrical work yourself if you can inspect and test that it is safe for use. To comply with the law you must notify your local building control office before you begin any work and pay the appropriate fee for them to inspect the work.

**Extension leads**

An extension cable, also known as a power extender, extension cord or an extension lead, is a length of flexible electrical power cable or flex with a plug on one end and one or more sockets on the other end - usually of the same type as the plug. However use of extension leads should be avoided where possible, as there is a chance of overloading the circuit.

**LV**

Low Voltage

**mA**

Milliamp or 1/1000 part of an amp

**Overcurrent**

Electrical current (in amps) that exceeds the maximum limit of a circuit. May result in risk of fire or shock from insulation damaged from heat generated by overcurrent condition.

**Part P**

The specific section of the Building Regulations for England and Wales that relates to electrical installations in domestic properties. Part P provides safety regulations to protect householders, and requires most domestic electrical work to be carried out by government-registered electricians, or to be inspected by Building Control officers.

**PAT - Portable Appliance Testing**

Inspection and testing of electrical equipment including portable appliances, moveable equipment, hand held appliances, stationary equipment, fixed equipment/appliances, IT equipment and extension leads.

**PIR - Periodic Inspection Report**

An electrical survey, known as a Periodic Inspection Report (PIR) will reveal if electrical circuits are overloaded, find potential hazards in the installation, identify defective DIY work, highlight any lack of earthing or bonding and carry out tests on the fixed wiring of the installation. The cost of a typical PIR should start around £100, depending on the size of your property. The report will establish the overall condition of all the electrics and state whether it is satisfactory for continued use, and should detail any work that might need to be done.

**PLI - Public Liability Insurance**

Broad term for insurance which covers liability exposures for individuals and business owners. Homeowners should check that their electrician has public liability insurance, which covers them if someone is accidentally injured by them or their business operation. It will also cover them if they damage your property while on business. The cover should include any legal fees and expenses which result from any claim by you. Homeowners looking to employ trades people to undertake work on their homes should ensure the companies selected have suitable cover – minimum recommendation is £2 million.

**Portable equipment**

Electrical equipment which is less than 18 kg in mass and is intended to be moved while in operation or which can easily be moved from one place to another, such as a toaster, food mixer, vacuum cleaner, fan heater.

**Prospective fault current**

The value of overcurrent at a given point in a circuit resulting from a fault between live conductors.

**RCD - Residual current device**

Residual current device is a safety device that switches off the electricity automatically when it detects an earth fault, providing protection against electric shock.

**RCD - residual current device**

This is not just a manually operated isolating switch, but a very sensitive safety device which cuts off in fractions of a second if it senses an earth fault. RCDs can be bought in different current ratings and various sensitivities to current leakage.

**Ring final circuit/ring main/ ring**

A final circuit connected in the form of a ring and connected to a single point of supply.

**SELV**

Separated Extra-Low Voltage. An extra-low voltage system, which is electrically separated from Earth and from other systems in such a way that a single fault cannot give rise to the risk of electric shock.

**Voltage, extra-low**

Normally not exceeding 50 V a.c. or 120 V ripple-free d.c., whether between conductors or to earth.

## Where to go to find a reliable electrician?

NICEIC maintains a list of around 20,000 Approved Contractors and Domestic Installers.

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