

DIFFERENT TYPES OF ELECTRICITY METER

All of the meters we sell are classed a sub-meters and are installed after the mains incoming supply meter owned by the utility supplier. If you buy a sub-meter from us you are the owner of the meter.

Charging for the electricity on a sub-metered supply can be done in two ways, either by taking a meter reading and billing the user after the units have been used, or via a prepayment meter where electricity is paid for by the user before being used.

Electricity is supplied as either single phase, which most domestic electricity to our homes is, or three phasewhich is for larger users in industrial/commercial properties.

DOMESTIC SINGLE PHASE METERS

Also known as credit meters, kilowatt hour reading meters, watt hour meters or sub-meters. These read the kilowatt hours (kWh) which is the number of units of electricity you use in one hour ie 1 kilowatt = one unit of electricity. The meter can either be an old electromechanical type with a disk (see A below) or the newer LCD display type (see B below)

Α



В



These meters may be a single rate meter, that is they read the total number of kilowatt hours 24 hours a day, or they may be a multi rate meter and read kilowatt hour used on different registers at different times of the day, for example a dual rate meter would read kilowatt hour usage on a day rate and a night rate if the dwelling has night store heaters.

To see how to wire in one of these meters see HERE. To see how to read one of these meter click HERE



PREPAYMENT SINGLE PHASE METERS

Also known as prepaid or pay as you go meters. There are two types of prepayment meters that we sell, a coin meter or a card meter.

Coin Meter

We can supply two models of coin meter as follows:-

SMITHS



FERRANTI



Both of these meters do the same job, it's just their shape that's different, the Smiths has an A4 landscape footprint whereas the Ferranti has an A4 portrait footprint. To see how to set the unit per coin rate on these meters click HERE.

Card Meter





This type of prepayment meter works with a card that has a magnetic strip which holds the value of credit you want to put on the meter, for example £1.00, £5.00, £10.00 or £20.00. Once the card has been inserted into the meter it takes the credit off the card and the card is then disposed of. For a spec sheet on this meter click HERE



THREE PHASE METERS

This type of meter is commonly found in industrial or commercial premises and used to power large motors and other heavy loads. For supplies with a current (load) up to 100 amps you can connect the cable directly into the meter, this is called a direct current or direct wire three phase meter. For loads rated in excess of 100 amps the meter will need to be connected via current transformers which will step the current down to a secondary current, most commonly of 5 amps, to the meter. These meters are called to 5 meters (shown as /5), for example if the primary current is 200 amps it will be a 200/5 meter. Current transformers are available as either solid core, also known as ring transformers and the cable goes through the centre of the current transformer or split core, where the current transformer can be fitted around the cable in situ, this type are most commonly used for retro-fit situations.

THREE PHASE DIRECT CONNECT OR CURRENT TRANSFORMER OPERATED METERS









DISC DRIVEN LCD
THREE PHASE METERS

SOLID CORE SPLIT CORE
CURRENT TRANSFORMERS