

# Phase Colour Codes in Electrical Supplies

## New colour coding from April 2006

The requirements for the colour coding of three phase and neutral conductors in electrical distribution systems was changed in April 2004 to harmonise the UK with the EC colour scheme, which dates back some 25 years. A 2 year changeover period was permitted from April 2004 to April 2006. From 1 April 2006 the "new" colour coding must be used on all new installations.

| Function    | Earth (CPC)    | Neutral | Line 1 | Line 2 | Line 3 |
|-------------|----------------|---------|--------|--------|--------|
| Old Colours | Green / Yellow | Black   | Red    | Yellow | Blue   |
| Function    | Earth (CPC)    | Neutral | Line 1 | Line 2 | Line 3 |
| NEW Colours | Green / Yellow | Blue    | Brown  | Black  | Grey   |

## Potential Hazards

Most likely problems are misconnections between the old colour black and new colour black causing a neutral to be connected to a circuit expecting a phase, and old colour blue to new colour blue causing a phase to be connected to a circuit expecting a neutral, and vice versa. This is effectively a phase - neutral swap for any load being supplied. It is also possible for 230V single phase equipment to have 400V applied. These are potentially dangerous circumstances.

There is an increased potential for confusion as a consequence of the new set of colours, and industry managers and workers need to appreciate the impact of the colour changes and be aware of resultant potential problems.