



NEW CABLE COLOURS DEADLINE APPROACHES

By Geoff Cronshaw

Work commencing on site after 31 March 2006 will be required to comply with the harmonised cable colours and must not use the old colours

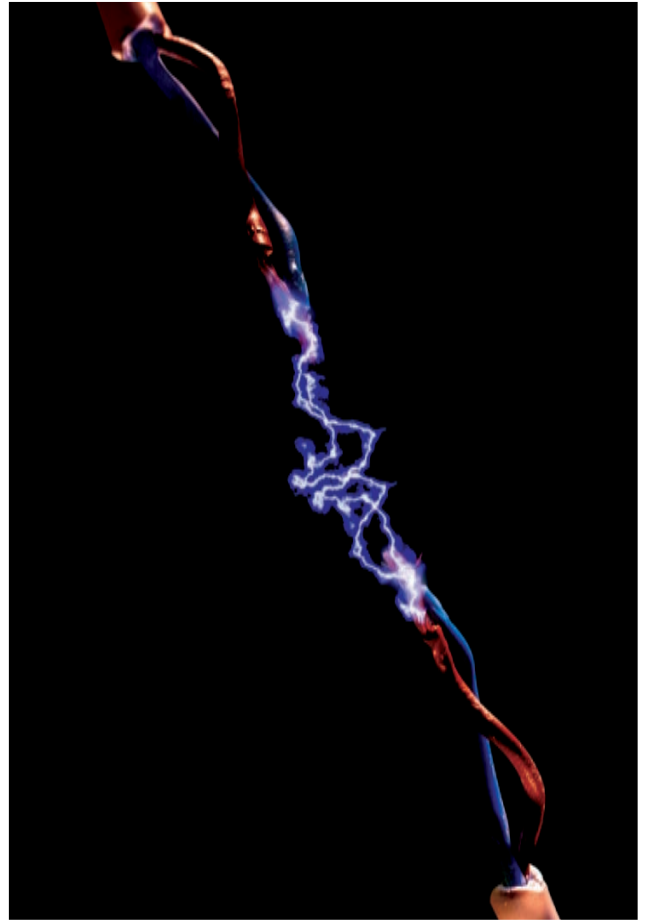
Background

The requirements of BS 7671 have been harmonised with the technical intent of CENELEC Standard HD 384.5.514: Identification, including 514.3: Identification of conductors.

The cable standards have been harmonised with CENELEC Harmonisation Document HD 308 S2: 2001 Identification of cores in cables and flexible cords. These standards specify the cable core marking including cable core colours to be implemented in the CENELEC countries.

British Standards for fixed and flexible cables have been harmonised with the colours in HD 308 S2. BS 7671 has been modified to align with these cable colours, but also allows other suitable methods of marking connections by colours (tapes, sleeves or discs), or by alphanumerics (letters and/or numbers).

Electrical installation work that commenced on site after the 31 March 2004 has been able to use the new harmonised colours or use the old colours, but not both. Work commencing on site after 31 March 2006 will be required to comply with the harmonised



cable colours and must not use the old colours.

For single phase installations the fixed installation colours of red phase and black neutral have been replaced by brown phase and blue neutral, respectively. The protective conductor is still identified by the colour combination green and yellow. For three phase installations the fixed installation colours of red, yellow and blue for the phases and black neutral have been replaced by brown, black and grey for the phases and blue neutral. The protective conductor is still identified by the colour combination green and yellow. Alternatively, all three of the phase conductor cores may be coloured brown and marked L1, L2, and L3 at the terminations.

Alteration or addition to an existing installation Single-phase

Alterations or additions to a single phase installation do not require marking at the interface between old and new cabling providing they are correctly coloured. (Old cabling coloured red for phase and black for neutral, and new cabling coloured brown for phase and blue for

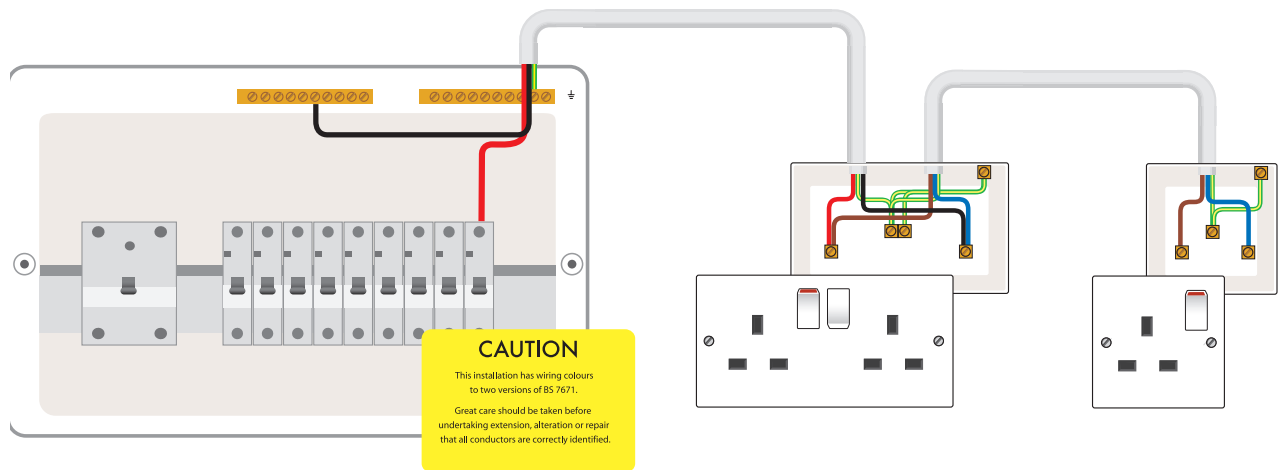


Fig 1: Extension to a single-phase installation

neutral.) A warning label must be provided at the consumer unit or distribution board.

Two- or three-phase installation

Where an alteration or an addition is made to a two- or a three-phase installation wired in the old core colours with cable to the new core colours, unambiguous identification is required at the interface. Cores should be marked as follows:

- Neutral conductors:
old and new conductors: N
- Phase conductors:
old and new conductors: L1, L2, And L3.

Further information

This article is only intended as a brief overview. For further information on the harmonised cable core colours such as lighting circuits and dc installations please refer to BS 7671:2001 incorporating Amendments No 1:2002 and No 2 2004. Also information on the harmonised cable core colours is given in the IEE Electricians Guide to the Building Regulations. ■

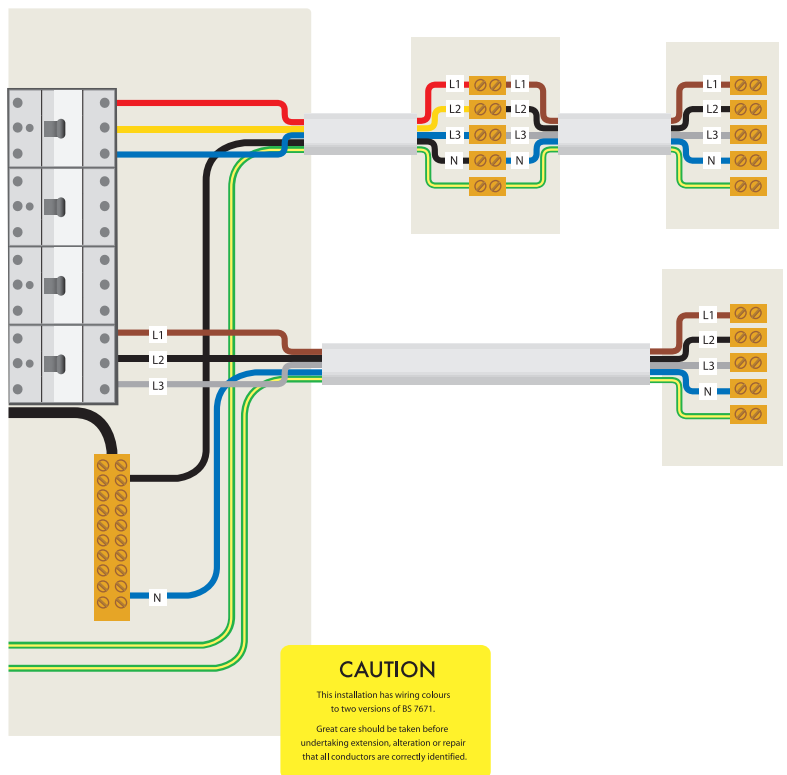


Fig 2: Addition to a three-phase installation