

# Logic Plus™ Technical

technical hotline +44 (0)1268 563720

white | wiring devices

## Filtered Switchsocket Outlets

### Standards and approvals

Logic Plus™ Filtered Switch Socket Outlets comply with BS 5733: 2010.

#### Technical specification

#### Electrical

Current rating:

13A maximum total for 2 sockets

Voltage rating:

250V a.c. 50Hz

Earth leakage:

0.5 mA Suppression:

150 kHz - 30 MHz (transients)

Maximum energy absorption:

140 Joules L - N

140 Joules L - E

Terminal capacity:

K1826 and K1816, 2 x 6mm2

3 x 4mm<sup>2</sup>, 3 x 2.5mm<sup>2</sup>, 3 x 1.5mm<sup>2</sup>

#### Physical

Operating temperature:

-5°C to +40°C (not to exceed an average of more than 25°C in any 24 hour period)

#### Thermal overload:

The K1826 filter socket incorporates a thermal overload device in the RFI filter section. Overload current causes temperature rise, resulting in automatic 'trip out'. The overload device will re-set as the temperature falls.

IP rating: IP2XD

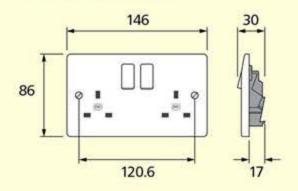
Max. installation altitude:

2000 metres

#### Cable management

Logic Plus™ socket outlets can be mounted in a variety of MK trunking systems.

### Dimensions (mm)





#### Description

A range of sockets in the Logic Plus™ style, designed to combat interference to or data losses on sensitive electrical products and systems due to mains borne voltage spikes and RFI.

Such systems include:

- Computer or microprocessor based equipment
- Telecommunications systems
- Electronic measurement equipment
- Cash registers
- Audio visual and hi-fi equipment

These products can be quickly installed as replacements for existing twin 13 amp sockets or in a new installation.

Two earth terminals on each product provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671: 2008.

#### Filter cassettes

Filter cassettes are supplied with sockets and have an LED which shows green under normal conditions but will turn red or extinguish when a replacement cassette (K1800) is required. An alarm will also beep at 5 second intervals to indicate replacement necessity. It can be de-activated if required.

#### Features

- Moulded 'on' indicator flash on switches will not rub off - totally safe
- 3 pin operated safety shutter
- Printed terminal markings on grey rear mouldings for clearer identification
- Reduces risk of damage to equipment and down time
- Reduces risk of data loss
- 2 way filtering into appliance and back into mains supply

- Double pole switches
- Dual earth terminals for high integrity earthing
- Clearly visible LED on filter cassette, changes from green to red when replacement required
- Simple replacement of cassettes
- 10 year guarantee (except filter cassette)
- 3mm minimum switch contact gap
- Backed out and captive terminal screws

# Logic Plus™ Technical



wiring devices | white

www.mkelectric.co.uk

## Filtered Switchsocket Outlets

#### **Product features**

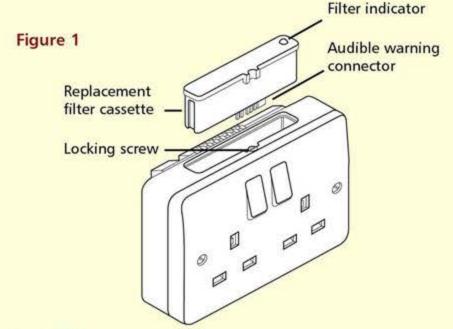
Ensure that the connecting pins protruding from the bottom of the replacement Filter Cassette are not damaged or bent before installation. If in doubt, contact MK Technical Sales Service Department on +44 (0) 1268 563720.

1. The MK Filtered Switchsocket, in common with many other filters uses Voltage Dependant Resistors for spike suppression purposes. The performance of these devices will eventually degrade with use to a level where they will no longer provide adequate protection.

When this occurs the spike filer performance of the MK Filtered Switchsocket outlet can be restored by replacing the filter cassette.

When the filter cassette needs replacing, the green indicator on the Replacement Filer Cassette will glow red or go out, an audible beep every five seconds may also be heard.

Note: As with all filters, these Filter Sockets will reduce the magnitude of RFI and spikes and consequently their ability to interfere with connected equipment. They will not completely remove the interference from the supply.



#### Installation

### Replaceable Spike Filter Cassette

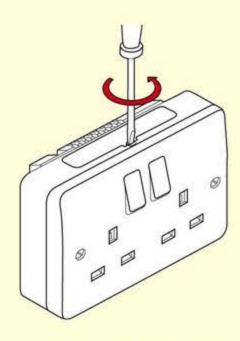
Note: To ensure a safe installation;

- this product should be installed by a competent person.
- it is important that all connections are made as instructed.
- 1. The filter cassette can be removed and replaced without switching off the mains or removing any plugs from the filter socket.
- 2. Remove the filter cassette by turning the jacking screw anti-clockwise to partially eject it (see Figure 2), and then gently pulling the cassette upwards, (see Figure 2a).

#### Only fit the MK Replacement Filter Cassette (K1800WHI).

Unpack the new filer cassette and check that the pins along the bottom edge are not bent or broken. If these pins are damaged, do not fit the replacement cassette. The audible sound indicating that the filter cassette needs replacing, is optional. It may be prevented by removing the small connector on the two end pins, (see Figure 2b), before fitting it into the socket.

Figure 2



4. Fit the new filter cassette by carefully sliding it into the aperture and gently pushing it down while turning the screw clockwise until the filter cassette is flush with the surface. Do not turn the screw any further as this will cause distortion of the plastic mouldings.

Product and packaging can safely be disposed of via standard refuse facilities at the end of its useful life.

Figure 2a

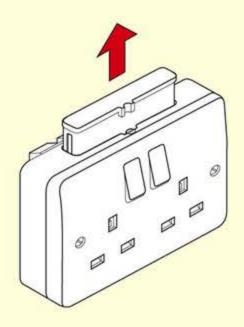


Figure 2b

