



# CASE STUDY

## THE YORK BUILDING, LONDON

London's West End is renowned architecturally, for its style and sophistication and the York Building is no different.

The development, which occupies an island site close to Marble Arch, is a mix of commercial, retail and residential use. The 22 high quality residential apartments feature the latest and best in hi-tech services and MK was asked to design bespoke combination plates to provide a neat outlet for power and data applications.

The Design team came up with specially-designed in-line combination plates that met both the aesthetic and service requirements for these state of the art living spaces. Available on a worldwide basis, the MK Design Service is supported by a dedicated team to ensure the seamless delivery of your chosen products.

To find out more visit [www.mkelectric.co.uk](http://www.mkelectric.co.uk)



# Sentrysocket®

## Technical

mkelectric.co.uk



## Sentrysocket

### Compliance with EC Directives, Standards and approvals

All Sentrysockets comply with the following EC Directives and are CE marked:

Low Voltage Directive

Electromagnetic Compatibility Directive (89/336/EEC)

Sentrysocket RCD DP Single Sockets comply with the requirements of the following standards:

BS 7288:1990

BS EN 50082-1:1998

Sentrysocket RCD SP Double Sockets also comply with the requirements of BS EN 61543:1996.

#### TECHNICAL SPECIFICATION

##### ELECTRICAL

**RATED VOLTAGE**  
240V a.c.

##### CURRENT RATING

13A resistive  
Rated tripping current 10mA/30mA

##### TERMINAL CAPACITY

3 x 4mm<sup>2</sup> for 1 gang  
2 x 4mm<sup>2</sup> for 2 gang

##### PHYSICAL

**AMBIENT OPERATING TEMPERATURE**  
-5°C to +40°C

##### IP RATING

IP2XD  
IP66 (K56301/K56231/K56233)

##### MAX. INSTALLATION ALTITUDE

2000 metres

Sentrysockets are not suitable for connection across two lines of a 127V line to Neutral Voltage System

### Cable management

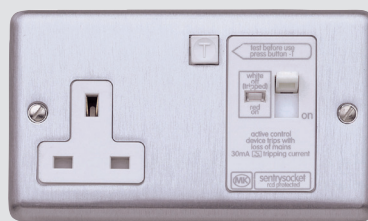
Logic Plus™, Albany Plus™ and Metalclad Plus™ Sentrysockets can be mounted in a variety of MK trunking systems.

### Installation

#### Flush mounting steel wall box

It should be noted that some of the conduit entries may be restricted, depending upon their positions and the depth of box used.

For a full range of corresponding products, see pages 288-289 in the product selector.



### Description

Sentrysocket provides a high level of protection against electrocution and gives further protection when used with appliances vulnerable to insulation damage, particularly when they are in damp environments or outdoors. The Sentrysocket units are not suitable for mounting in damp environments or outdoors.

Sentrysocket, incorporating an RCD, is part of a complete range of fixed and portable wiring devices and circuit protection devices suitable for use in domestic, commercial and light industrial applications.

#### Active control circuits

Incorporate a 'Re-set' mechanism and are mains failure sensitive, i.e. they will function under all the normal conditions expected of an RCD, but will also trip in the event of a power cut or a sudden, dramatic reduction in mains voltage. This makes them ideal for use where it would be hazardous for equipment to suddenly energise after return of mains power, such as use with rotating machinery and heat developing apparatus.

#### Passive control circuits

Incorporate a 'Stay-set' mechanism and is mains failure proof, i.e. it will function under all the normal conditions expected of an RCD and will not trip in the event of a power cut. This makes it suitable for use with freezers or in inaccessible or unmanned locations.

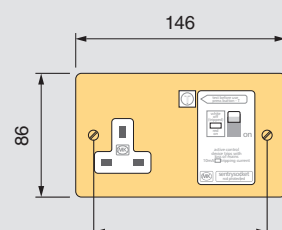
#### FEATURES

- Suitable for most residential, commercial and light industrial applications
- Active and passive control circuit applications
- Flexible and versatile in use
- Single Sockets have double pole switching, double sockets are single pole switching
- Masterseal Plus products are ideal for use with equipment subject to wet weather or high humidity
- Part of a complete range of MK circuit protection devices
- They are a.c. and pulsating d.c. sensitive for residual current
- Double Socket products have an enhanced RF Immunity performance

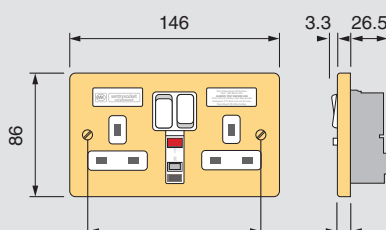
Sentrysockets products can be wall or bench mounted. Do not mount or use as a trailing socket or where they may be subject to excessive moisture or dampness.

### Dimensions (mm)

#### Single socket



#### Double socket



## Sentrysocket

### Installation

#### Flush mounting steel wall box

It should be noted that some of the conduit entries may be restricted, depending upon their positions and the depth of box used.

### Socket Testing

#### Single Socket Testing

After installation, turn the mains electricity supply on.

To test that the Sentrysocket is functioning correctly:

1. Ensure that no appliance is connected to the Sentrysocket.  
**Switch Sentrysocket on:** The switch should remain closed and the red flag will appear in the window. If the switch fails to remain closed, check that the Supply L and N connections are not reversed or the Supply N connection is not open circuit. If the Sentrysocket is correctly connected and still trips after being switched on, the Sentrysocket is faulty and should not be used.
2. If the Sentrysocket stays on, **press the test button:** The switch will open and the white flag will appear in the window. If the Sentrysocket does not trip and there is mains voltage present at the socket outlet, Sentrysocket is faulty and should not be used.
3. **Switch Sentrysocket on:** Connect an RCD tester and ensure that the Sentrysocket trips within the specified time:  
**≤ 200 ms AT RATED TRIP CURRENT**  
**≤ 40 ms AT 5 x RATED TRIP CURRENT**  
  
If the Sentrysocket does not trip within the specified times then the product is faulty and should not be used (If more than one RCD is in series then there is no guarantee as to which device will trip first).
4. **Reset all tripped RCD's including the Sentrysocket.**
5. **Switch off the mains supply switch disconnecter.** On mains failure, a Sentrysocket with Active Control Circuit will trip, whilst a Sentrysocket with Passive Control Circuit will not trip. If the Active Control device does not trip, it is faulty and should not be used – see note below. If no faults have been found then installation testing has been completed successfully.

Note: If a fault is identified at any stage of installation testing procedure do not use Sentrysocket, and contact your local electrician, or your local MK stockist.

### Double Socket Testing

After installation, turn the mains electricity supply on.

To test that the Sentrysocket is functioning correctly follow the steps 1 to 4 below:

1. Ensure that no appliance is connected to the Sentrysocket.
2. **Reset** – Press the button marked R (for Reset) – the contact status indicator should show red, indicating that the socket outlets are now live (if the switches are in the ON positions).
3. **Test** – Press the TEST button marked T (for Test), the product should trip with the contact status indicator showing black. In this state the socket outlets are disconnected from the supply.
4. **Reset** – Press the button marked R again, the contact status indicator should show red.
5. Connect an RCD Tester to either socket outlet and ensure that the Sentrysocket trips with the specified times below:  
**≤ 200 ms AT RATED TRIP CURRENT**  
**≤ 40 ms AT 5 x RATED TRIP CURRENT**
6. Reset the Sentrysocket as in step 2 above.
7. Switch off the Mains Supply Switch Disconnecter.
8. A Sentrysocket with Active Control Circuit should trip while a Sentrysocket with Passive Control Circuit should not trip.

If all the operations in steps 2 to 8 above give correct results, the Sentrysocket RCD socket outlet is safe to use.

**If the procedures in steps 2 to 8 above are not completed correctly, do not use the Sentrysocket product and seek professional advice or contact the MK Technical Sales and Service department on +44 (0)1268 563720.**