## Description

Sentry consumer units and enclosures are available in various surface metal, surface insulated and flush metal types, designed on a modular basis, with 2 to 21 module enclosures in the range, to accommodate the range of MK modular protection and control products. In addition 24, 32, 42 module surface metal and insulated dual rail consumer units can be assembled using a suitable stacking kit.

Surface insulated units provide an all insulated housing. Metal units provide a housing with facility for earthing the metal box.

The enclosures are provided with ample wiring space and cable entry points. The lids can be locked with a barrel lock & key (accessory K5593s)

### Colours/finishes

All insulated and metal consumer units have a textured magnolia cover and lid. The surface metal consumer unit bases are in magnolia (powder coated paint). The flush bases are of galvanized steel. All 2 and 4 module and Weatherproof enclosures are available in light grey.

### Features

- Attractive styling
- Modular design
- Suitable for most residential, commercial and light industrial applications
- Fully comply with British and European Harmonised Standards
- Available as an empty enclosure or pre-fitted with switch disconnector and RCD
- Factory built options available

## Standards and approvals

All Sentry consumer units are designed to fully comply with the requirements of BS EN 60439-3.

IP rating of consumer unit enclosures IP2X.

## PRODUCT RANGE

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<thead>
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### Technical Data Sheet

**Sentry**

**Consumer Units and Enclosures**

1:4

**Standards and approvals**

All Sentry consumer units are designed to comply with the requirements of BS EN 60439-3.

IP rating of consumer unit enclosures IP2X.
Dimensions (mm) – Consumer unit

**Surface Insulated**
- 4 module: 140, 70, 156
- 8 module: 234, 164, 156
- 12 module: 306, 236, 156
- 16 module: 378, 308, 156
- 21 module: 468, 398, 156

**Surface Metal**
- 4 module: 140, 75, 149
- 8 module: 234, 168, 147
- 12 module: 306, 240, 147
- 16 module: 378, 308, 147
- 21 module: 468, 400, 147

**Dual Rail (Insulated or Metal) using kit**
- K6061s to K6063s: 255, 219.5, 111

**Flush Metal**
- 8 module: 307, 276, 160
- 12 module: 379, 348, 230
- 16 module: 451, 420, 300
- 21 module: 541, 510, 390

**Flush-mount cavity dimensions, K6508s to K6521s**

<table>
<thead>
<tr>
<th>Height</th>
<th>Width</th>
<th>Depth*</th>
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<tbody>
<tr>
<td>8 module</td>
<td>236-246</td>
<td>242-252</td>
</tr>
<tr>
<td>12 module</td>
<td>236-246</td>
<td>314-324</td>
</tr>
<tr>
<td>16 module</td>
<td>236-246</td>
<td>386-396</td>
</tr>
<tr>
<td>21 module</td>
<td>236-246</td>
<td>476-486</td>
</tr>
</tbody>
</table>

*Depth does not apply if panel-mounted

*For K5504s –23mm

All dimensions ±0.5mm unless stated
**TECHNICAL SPECIFICATION**

**Electrical**

Maximum current rating:
- All Sentry consumer units have a maximum rating of 100A except K5504s, K5604s, which are rated at 63A

Terminal capacity:
- 16mm²

Rated frequency: 50Hz

Rated operational voltage:
- Consumer unit: 220-250V
- 2 module enclosure: 220-250V
- 4 module enclosure: 220-415V

Rated insulation voltage:
- Consumer unit: 300V
- 2 module enclosure: 300V
- 4 module enclosure: 660V

Short circuit withstand:
- 16kA rms (based on the use of a BS 1361 Type 2 fuse of rating not exceeding 100A)

Earthing system:
- Suitable for use with TN-S, TN-C-S and TT systems

**Split load**

Split load units are supplied with a pre-fitted switch, RCD and suitable cables.

The switch and RCD ratings.

The following versions are offered:

<table>
<thead>
<tr>
<th>Main Incomer RCD</th>
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<tbody>
<tr>
<td>K5682s 100A Switch 63A</td>
<td></td>
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<tr>
<td>K5662s 100A Switch 80A</td>
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<tr>
<td>K5632s 100A T/D RCD 63A</td>
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<tr>
<td>K5666s 100A Switch 63A</td>
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<tr>
<td>K5686s 100A Switch 80A</td>
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<tr>
<td>K5636s 100A T/D RCD 80A</td>
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<tr>
<td>K5681s 100A Switch 80A</td>
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</tr>
<tr>
<td>K5631s 100A T/D RCD 80A</td>
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</tr>
<tr>
<td>K5626s 100A T/D RCD 63A</td>
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<tr>
<td>K5582s 100A Switch 63A</td>
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<tr>
<td>K5566s 100A Switch 63A</td>
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<tr>
<td>K5586s 100A Switch 80A</td>
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<tr>
<td>K5581s 100A Switch 80A</td>
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</tr>
<tr>
<td>K5531s 100A T/D RCD 80A</td>
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</tbody>
</table>

**Physical**

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

IP ratings: (see also ‘Service Conditions’, below)
- Consumer unit: IP2XC
- 2 module enclosure 5502s: IP3X
- 2 module enclosure 5702s: IP6X
- 2 module enclosure K5592s: IP30
- 4 module enclosure 5504s: IP3X
- 4 module enclosure 5604s: IP3X
- 4 module enclosure 5704s: IP6X

Max. installation altitude: 2000 ft
**Sentry Consumer Units and Enclosures**

### Installation

**Consumer units**

The Consumer units are provided with internal busbar shields.

Front covers have lockable lid (using barrel lock & key accessory K5593s), which masks the front cover retaining screw. Removal of the front cover for internal access requires the use of tools.

Cover mounted blanks are provided with each Sentry Consumer unit to fill unused ways.

- 4,8 and 12 module – 2 off x 1
- 16 and 21 module – 2 off x 2

If additional unused ways are required the DIN rail mounted blank 5544s must be used to complete the installation.

**Two/four module enclosures**

Front covers require tools to enable removal and gain internal access.

5604s has provision for tamper-proofing.

**Note:** Only the K5592s enclosure will accept the one module RCBO’s.

### Service conditions

- Wiring of these products must comply with current IEE regulations.
- Consumer units and two and four module enclosures are intended for indoor use in dry conditions and are not suitable for locations where high humidity and/or high temperatures may be experienced.

It is important that during installation of any Sentry enclosure, steps are taken to ensure that the IP rating is maintained, e.g. correct use of cable glands and knockouts/cutouts.

**Testing**

Site assembled consumer units using MK components comply fully with BS EN 60439-3 so do not require further site testing other than normal routine installation tests.

**Split load and multi-incomer arrangements**

Such assemblies must utilise the relevant Sentry kit in order to comply with BS EN 60439-3 and to avoid the need for additional testing.

### Stacking kits

Accessory kits (stacking frame, fittings and earth cable) can be used to produce stacked dual rail units in the insulated and surface metal ranges for the 12, 16 and 21 module units.

- K6061s – for 12 module units to create 24 module dual rail consumer unit.
- K6062s – for 16 module units to create 32 module dual rail consumer unit.
- K6063s – for 21 module units to create 42 module dual rail consumer unit.

### Weatherproof enclosures

The weatherproof enclosures may be used for outdoor applications up to the level of the IP65 rating.

The cable entry position on the top and bottom of the enclosure is at the discretion of the installer and can be achieved with suitable tools. Knockouts/cutouts are provided for side entry.

Precautions must be taken to maintain the IP rating, e.g. correct use of cable glands and knockouts. The caps provided must be used to cover the mounting screws.

**Note:** IP65 rating only achieved with lid in the closed position.

These enclosures will not accept the one module RCBOs.

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**TECHNICAL SPECIFICATION**

**Electrical**

- Maximum current rating:
  - 5702s: 2 pole devices up to 100A
  - 5704s: 4 pole devices up to 63A

**Note:**

- 5702s – Can accept up to 4 module ways with removal of moulded blanks.
- 5704s – Can accept up to 8 module ways with removal of moulded blanks.

- Terminal capacity:
  - 5702s: 4 x 6mm² earth and neutral
  - 5704s: 2 x 6mm² and 6 x 4mm² earth and neutral

- Rated operational voltage: 220-415V
- Rated insulation voltage: 660V

**Standards**

Complies with EN 60670