

This document must be retained for future reference.

It is the responsibility of the person installing the electrical equipment to ensure that the installation meets the requirements of the IET wiring regulations and is therefore 'fit for purpose'. Factors such as correct selection of components, cable sizing, protective devices and Earth bonding are all critical and should be checked prior to full testing and power-up. Any other regulations applicable to the equipment being installed such as the Machinery Directive and current health and safety legislation must also be adhered to.

All connections (including factory made) must be checked for the correct tightness prior to commissioning of the electrical installation. All connections should also be inspected periodically to ensure correct tightness.

**DO NOT USE POWER TOOLS ON THESE PRODUCTS**

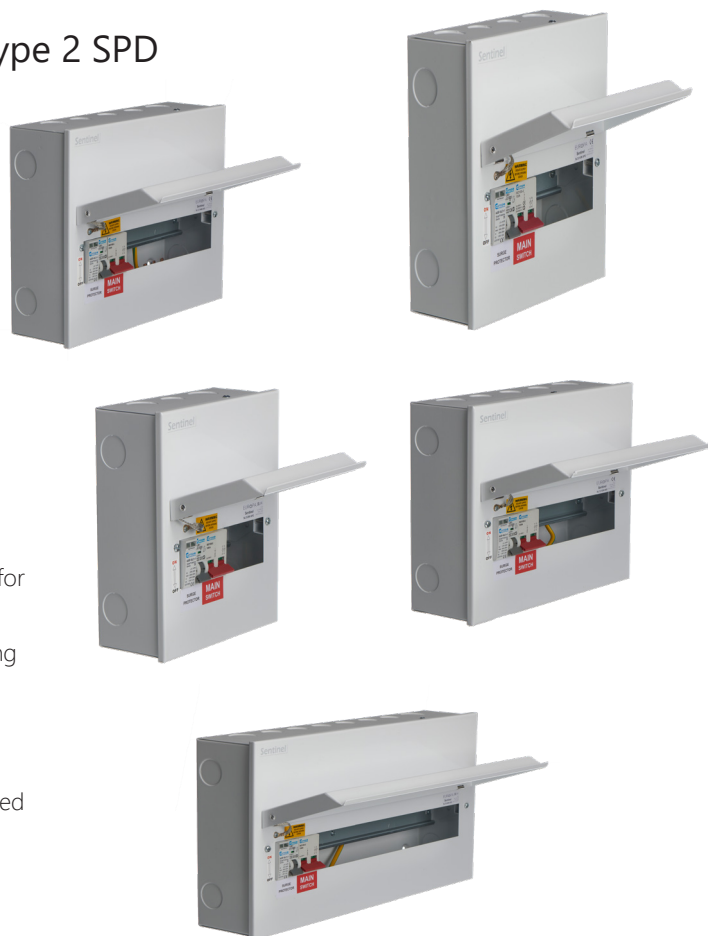


## Sentinel Range Consumer Units

### Metal-Clad Single-Phase Boards IP20 with Type 2 SPD

#### Description

The distribution equipment and circuit protection range of metal consumer units by Europa Components are designed to fully comply with the requirements of BS EN 61439-3 and the requirements of the 18th Edition of BS 7671 IET Wiring Regulations. With multiple configurations available, the range offers flexible versatile solutions for installations.



#### Features & Benefits

- Clearly labelled earth and neutral bars positioned at the top of the enclosure
- Din rail position allows a generous wiring space
- Top, bottom and side knockouts for cable entries- multiple entries for consumer unit tails on all sides
- Retain-screws for lid included, prevent screws from being lost during installation
- Busbar with cover and fingertip protection provided
- Type 2 SPD included
- Multiple configurations from main-switched boards to SPD-protected fully loaded circuits available to suit a wide range of applications

| Part Number | Description                |
|-------------|----------------------------|
| SLCU6M-SPD  | 6 Module   2 usable ways   |
| SLCU8M-SPD  | 8 Module   4 usable ways   |
| SLCU10M-SPD | 10 Module   6 usable ways  |
| SLCU12M-SPD | 12 Module   8 usable ways  |
| SLCU14M-SPD | 14 Module   10 usable ways |
| SLCU16M-SPD | 16 Module   14 usable ways |
| SLCU18M-SPD | 18 Module   12 usable ways |
| SLCU20M-SPD | 20 Module   16 usable ways |

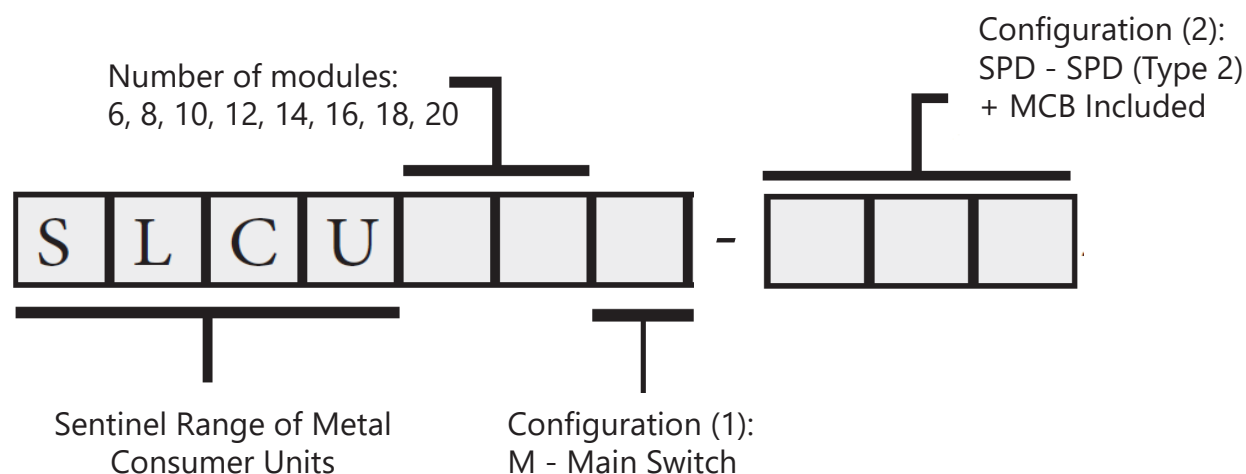
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Unit Dimensions

| Part Number | W   | W1  | H   | H1  |
|-------------|-----|-----|-----|-----|
| SLCU6M-SPD  | 161 | 111 | 235 | 165 |
| SLCU8M-SPD  | 197 | 132 |     |     |
| SLCU10M-SPD | 233 | 168 |     |     |
| SLCU12M-SPD | 279 | 203 |     |     |
| SLCU14M-SPD | 305 | 240 |     |     |
| SLCU16M-SPD | 341 | 276 |     |     |
| SLCU18M-SPD | 377 | 312 |     |     |
| SLCU20M-SPD | 431 | 366 |     |     |

Part Number Breakdown

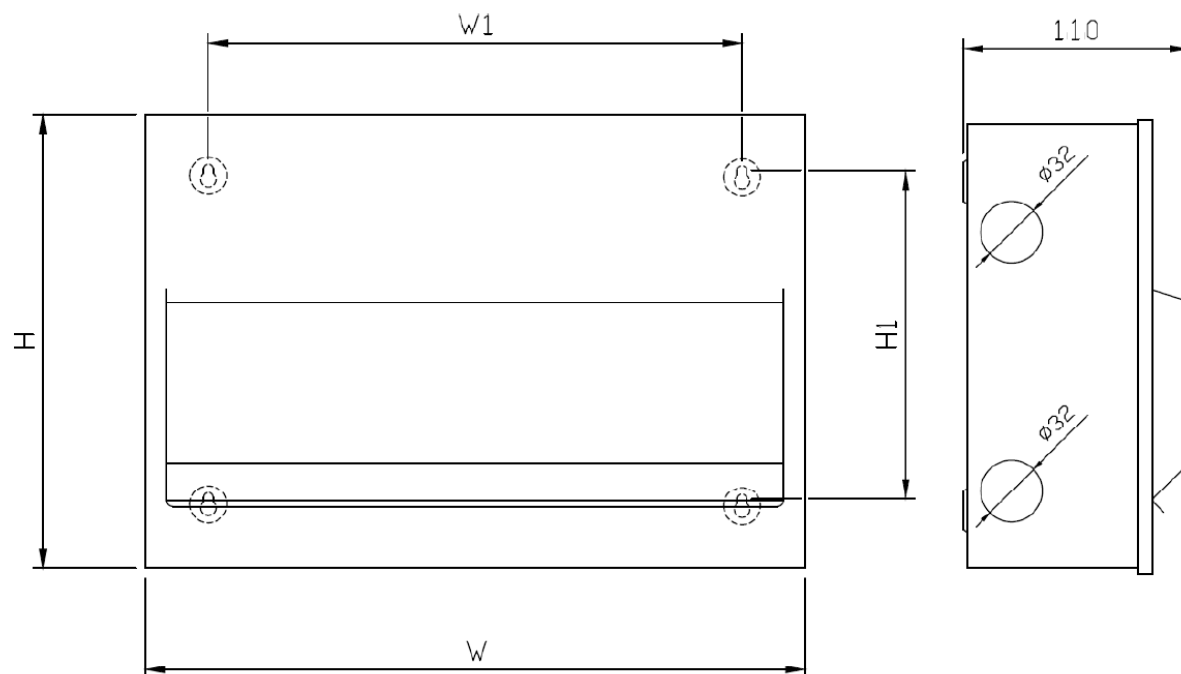


Notes

This unit must be installed by a skilled or instructed person in accordance with the current BS 7671 IET Wiring Regulations  
 The product must be tested by skilled persons competent for verification after installation and before being put to service  
 Please ensure these instructions are available to the end user for future reference  
 Total load not to exceed the rating of the incoming main switch or RCCB  
 The total sum of the individual MCB ratings may exceed this value where there is an appropriate diversity factor on the installation (see diversity factor table below)  
 It is important to ensure that all connections, including factory-made, must be checked for the correct installation and tightness, prior to the commissioning of the electrical installation  
 This product is only suitable for indoor installation

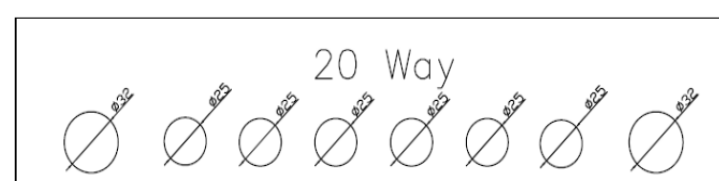
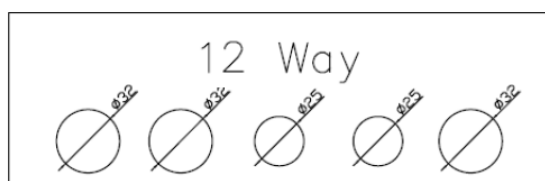
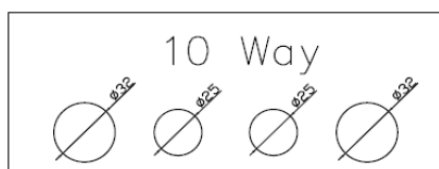
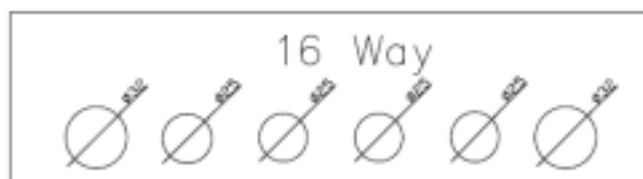
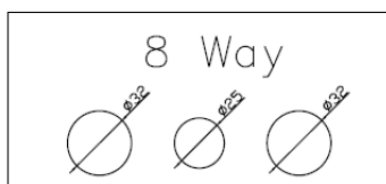
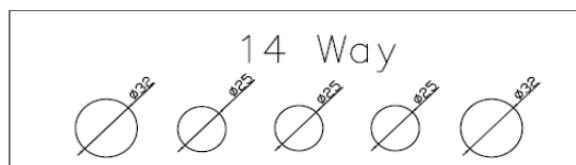
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#### Notes:

Knockout placements are symmetrical between top and bottom / left and right sides.



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Unit Characteristics

|                                                                                                     |                 |
|-----------------------------------------------------------------------------------------------------|-----------------|
| Rated and operational voltage (Un / Ue)                                                             | 230V AC at 50Hz |
| Rated impulse withstand voltage (Uimp)                                                              | 4kV             |
| Rated current of Assembly (InA)                                                                     | 100A            |
| Rated frequency (fn)                                                                                | 50Hz            |
| Degree of Protection                                                                                | IP20            |
| Mechanical Impact Protection                                                                        | IK05            |
| Note: Rated diversity factor (RDF) only applies to continuously and simultaneously loaded circuits. |                 |
| Type A Distribution Board for use by ordinary persons.                                              |                 |

SPD Specification

|                                            |                                                  |
|--------------------------------------------|--------------------------------------------------|
| BS / EN Standard                           | BS EN 61643-11                                   |
| Type                                       | Type 2                                           |
| Earthing System                            | TT/TN                                            |
| System Voltage                             | 230V                                             |
| Max. Continuous Operation AC Voltage       | 275V (L-N)   255V (N-PE)                         |
| Nominal Discharge Current In               | 20kA                                             |
| Maximum Discharge Current I <sub>max</sub> | 40kA                                             |
| Voltage Protection Level U <sub>p</sub>    | 1.5kV (L-N)   1.2kV                              |
| Status Indicator                           | Green (Normal State)   Red (Failure State)       |
| Mounting                                   | 35mm DIN Rail                                    |
| Terminal Capacity                          | 2.5mm <sup>2</sup> (L/N)   4mm <sup>2</sup> (PE) |
| Operating Temperature                      | ~40 to ~80 °C                                    |
| Degree of Protection                       | IP20                                             |

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Standards

| Device        | Standard      |
|---------------|---------------|
| Consumer Unit | BS EN 61439-3 |
| Main Switch   | BS EN 60947-3 |
| RCCB          | BS EN 61008-1 |
| MCB           | BS EN 60898-1 |
| RCBO          | BS EN 61009-1 |

Diversity Factors

as per BS EN 61439-3

| Number of Outgoing Ways | Assumed loading factor |
|-------------------------|------------------------|
| 2 & 3                   | 0.8                    |
| 4 & 5                   | 0.7                    |
| 6 to 9                  | 0.6                    |
| 10+                     | 0.5                    |

Cable and Torque Settings

| Device                      | Max Cable Capacity (mm2) | Recommended Tightening Torque (Nm) |
|-----------------------------|--------------------------|------------------------------------|
| Main Switch / RCCBs         | 35                       | 2.5                                |
| MCBs                        | 16                       | 2.0                                |
| 1 Pole RCBO                 | 16                       | In 2.0   Out 1.2                   |
| Earth and Neutral Terminals | 25                       | 2.0                                |