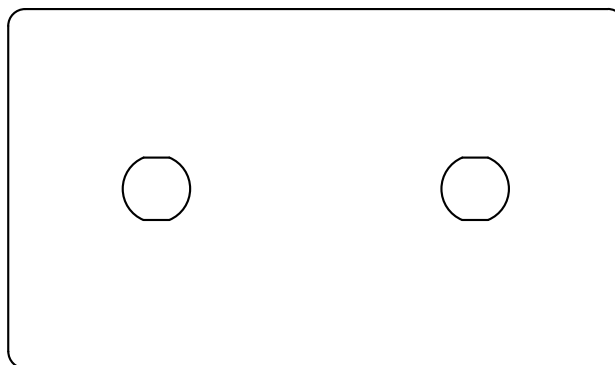
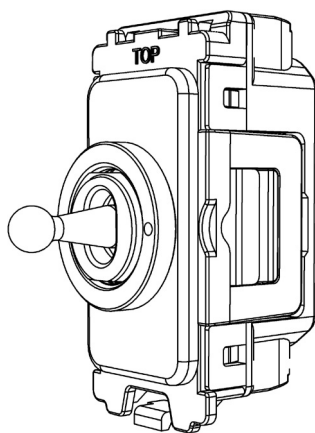


20-LTS352

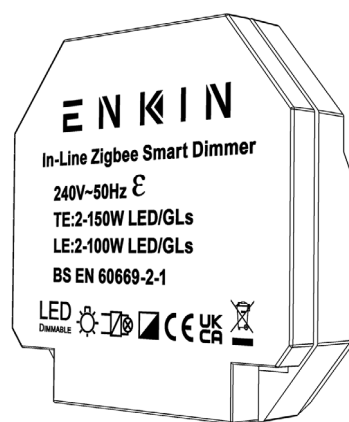
## 2 Gang 150W Smart Toggle Switch - Traditional



20-GRD134



SGP315



ZDM150

### IMPORTANT

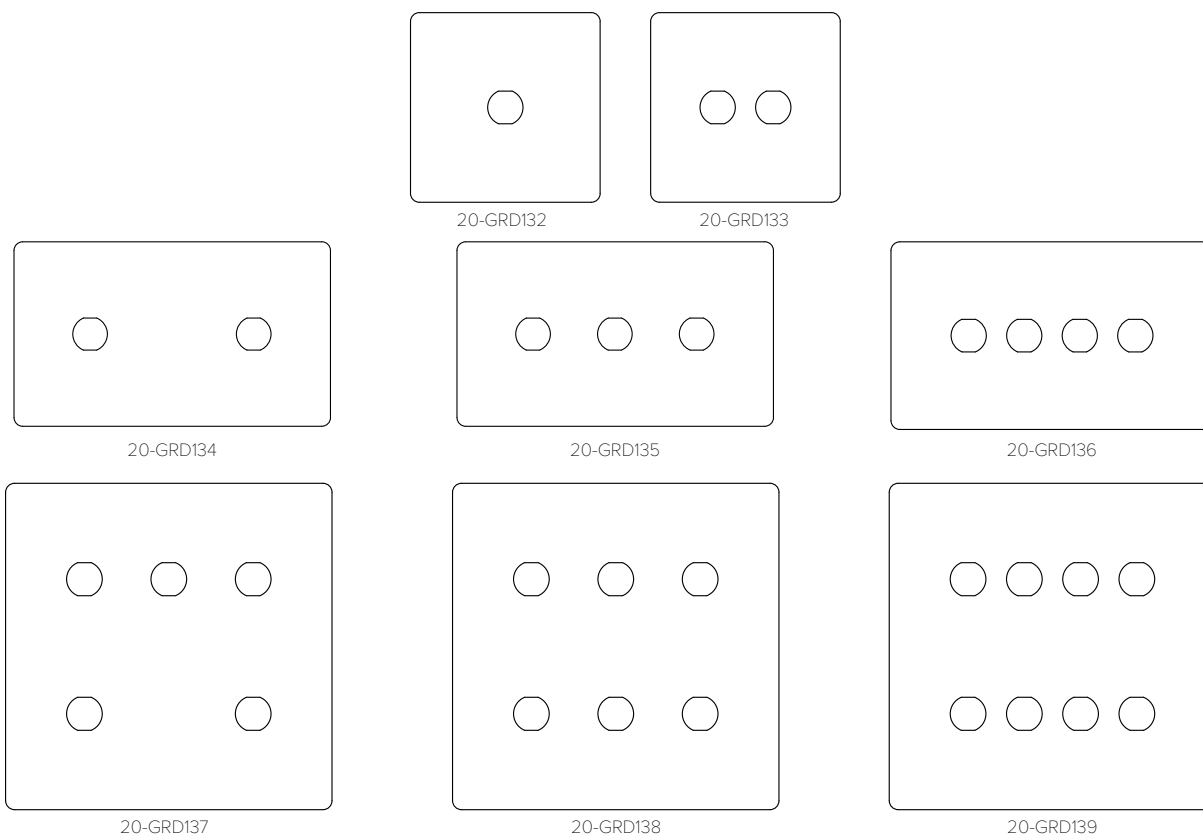
This product is built from multiple components. The tech sheet for each component is provided for completeness. However, use only the Mounting Box depth provided on this page for the overall complete product.

### Contents & Additional Information

|                           |   |
|---------------------------|---|
| <b>20-GRD134</b>          | 2 Gang Circular Hole Grid Plate - Traditional   |
|                           | <ul style="list-style-type: none"> <li>— 20-PLT134 2 Gang Circular Hole Traditional Grid Plate</li> <li>— 20-EDG008 Double Traditional Type Gasket</li> <li>— SGPYLK-34 Double Grid Frame (Yoke)</li> </ul> |
| <b>SGP315</b>             | 20A 2 Way & Off Retractive CM-Grid Toggle Switch - Grid Module X 2  |
| <b>Enkin ZDM150</b>       | 150W LED Zigbee Module X 2  |
| <b>Mounting Box Depth</b> | 47mm  |
| <b>Trademarks</b>         | The Soho Lighting Company is a registered trade mark number: UK00003313349, EU017906396, Date: 25 May 2018  |



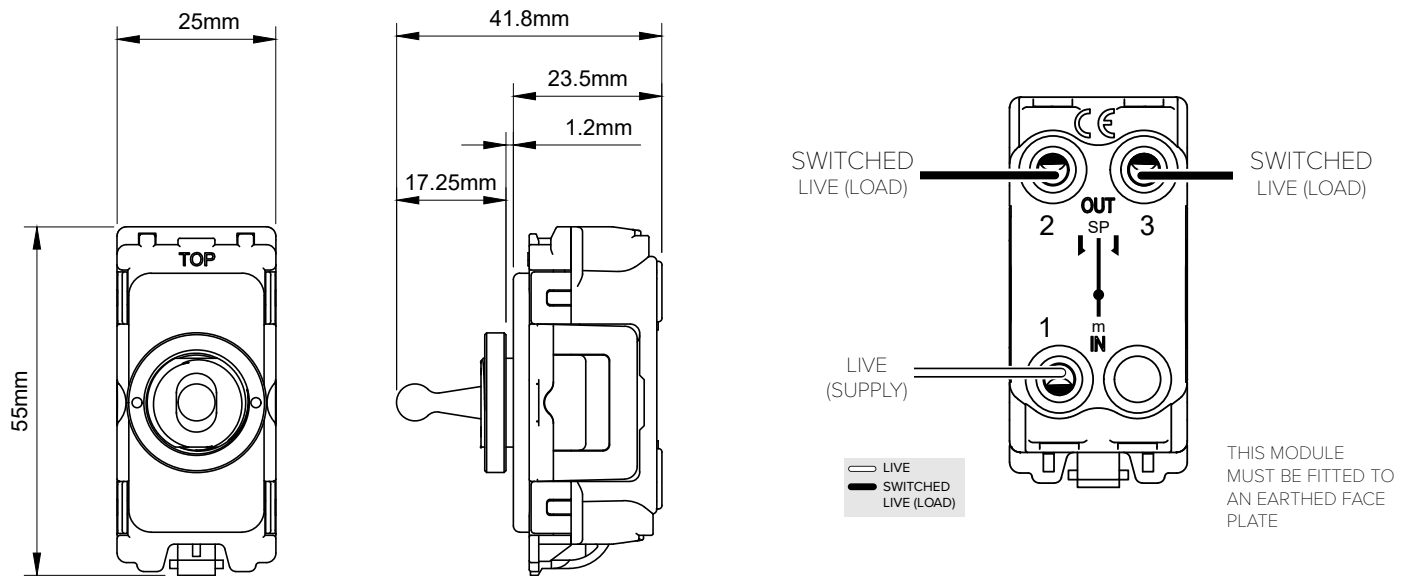
# 20-GRD132-139



## TECHNICAL SPECIFICATION

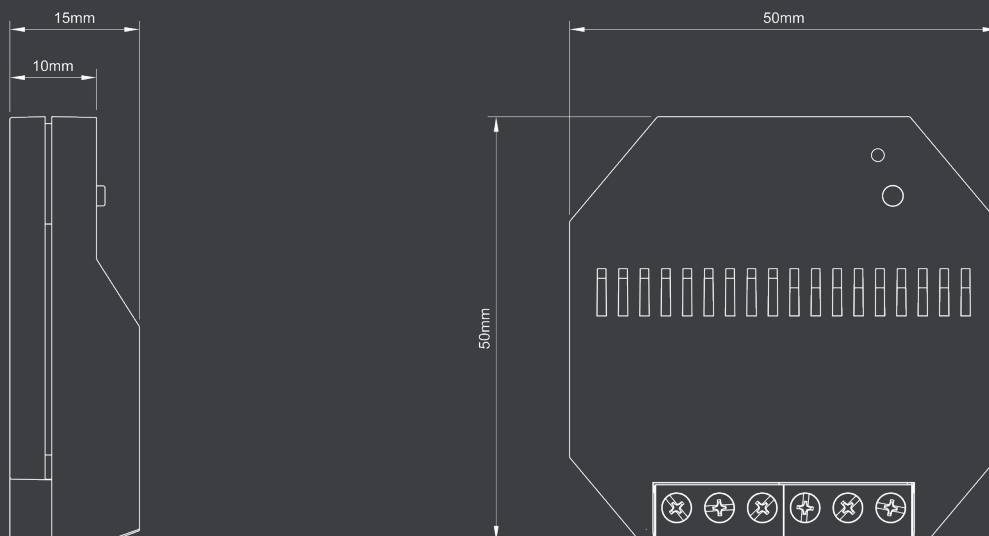
|                                  |  |
|----------------------------------|--|
| Standard(s)                      | BS 5733 (Where Applicable)   |
| Mounting Box Depth (Recommended) | 47mm   |
| Earth Terminal Capacity          | 3 x 2.5mm <sup>2</sup> , 2 x 4.0mm <sup>2</sup> , 1 x 6.0mm <sup>2</sup> (EARTH)                           |
| Fixing Centres                   | 60.3mm (Single width) 120.6mm (Double Width)   |
| Size - (1 Gang) 20-GRD132        | 86mm x 86mm x 4.5mm (Plate Thickness Inc. Gasket)  |
| Size - (2 Gang) 20-GRD133        | 86mm x 86mm x 4.5mm (Plate Thickness Inc. Gasket)  |
| Size - (2 Gang) 20-GRD134        | 86mm x 146mm x 4.5mm (Plate Thickness Inc. Gasket)   |
| Size - (3 Gang) 20-GRD135        | 86mm x 146mm x 4.5mm (Plate Thickness Inc. Gasket)   |
| Size - (4 Gang) 20-GRD136        | 86mm x 146mm x 4.5mm (Plate Thickness Inc. Gasket)   |
| Size - (5 Gang) 20-GRD137        | 146mm x 146mm x 4.5mm (Plate Thickness Inc. Gasket)  |
| Size - (6 Gang) 20-GRD138        | 146mm x 146mm x 4.5mm (Plate Thickness Inc. Gasket)  |
| Size - (8 Gang) 20-GRD139        | 146mm x 146mm x 4.5mm (Plate Thickness Inc. Gasket)  |
| Product Class 1                  | Face plate must be earthed   |
| Ambient Operating Temperature    | -5° to +40°C   |
| Recommended Location             | Internal Use Only  |
| Maximum Installation Altitude    | 2000m  |
| IP Rating                        | IP2XD  |
| Trademarks                       | The Soho Lighting Company is a registered trade mark number: UK00003313349, EU017906396, Date: 25 May 2018 |

## 20A 2 Way & Off Retractive CM - Grid Toggle Switch Module



### TECHNICAL SPECIFICATION

|                               |  |
|-------------------------------|--|
| Standard(s)                   | BS EN 60669-1  |
| Voltage Rating                | 20 Amp, 250V~ (20AX – no derating for inductive or fluorescent loads)                                      |
| Contact Gap                   | Mini-gap   |
| Mounting Box Depth (Min)      | Ref. page 1  |
| Terminal Capacity             | 4x 1.5mm <sup>2</sup> , 2x 2.5mm <sup>2</sup> & 1x 4.0mm <sup>2</sup>                                      |
| Size                          | 55mm x 25mm x 41.8mm   |
| Product Class 1               | Face plate must be earthed   |
| Ambient Operating Temperature | -5° to +40°C   |
| Recommended Location          | Internal Use Only  |
| Maximum Installation Altitude | 2000m  |
| IP Rating                     | IP2XD  |
| Switched Poles                | Single   |
| Mains Frequency               | 50hz - 60hz  |
| Contact Gap Minimum           | 3mm  |
| Trademarks                    | The Soho Lighting Company is a registered trade mark number: UK00003313349, EU017906396, Date: 25 May 2018 |



|  |   |
|--|---|
| <b>Markings &amp; Standard(s)</b>      | CE, UKCA, BS EN 60669-2-1   |
| <b>Zigbee Protocol</b>                 | 3.0   |
| <b>Operating Voltage</b>               | 220-240V AC   |
| <b>Main Frequency</b>                  | 50Hz  |
| <b>Minimum Load</b>                    | 2W LED (2W Incandescent / Halogen)  |
| <b>Maximum Load</b>                    | 150W LED (150W Incandescent / Halogen)  |
| <b>Switch Type</b>                     | Multi way (retractive switch), (2way up/down retractive switch)   |
| <b>Dimming Protocol</b>                | Trailing edge & leading edge phase control  |
| <b>Mounting Box Depth (Min)</b>        | Ref. page 1   |
| <b>Terminal Capacity</b>               | 1 x 4mm <sup>2</sup> / 1 x 2.5mm <sup>2</sup> / 3 x 1.5mm <sup>2</sup> / 4 x 1mm <sup>2</sup>               |
| <b>Terminal Markings</b>               | 2 x 'C' (live), '1' x L (load), '1' x for one way push retractive switch, '2' x for 2 way retractive switch |
| <b>Neutral Required</b>                | No  |
| <b>Short Circuit Protection</b>        | Yes   |
| <b>Overload/Overcurrent Protection</b> | Yes   |
| <b>Thermal Protection</b>              | Yes - Thermal resettable fuse   |
| <b>Soft Start</b>                      | Yes   |
| <b>Power Failure</b>                   | Previous state recall   |
| <b>Memory</b>                          | Yes, non volatile   |
| <b>Min/Max Level Setting</b>           | Yes - Following a defined procedure   |
| <b>Driving Mode</b>                    | Yes - TE & LE mode change following a defined procedure   |
| <b>Product Dimensions</b>              | 50mm x 49.5mm x 15.1mm  |
| <b>Climate Range</b>                   | 0°C to 40°C, Humidity 0% to 95% non-condensing  |
| <b>Recommended Location</b>            | Indoor use only   |
| <b>Maximum Installation Altitude</b>   | 2000m   |
| <b>IP Rating</b>                       | IP2XD   |
| <b>Trademarks</b>                      | Enkin is a registered trademark number: UK00003707694, Date: 07 May 2021                                    |



|                                |                                       |
|--------------------------------|---------------------------------------|
| <b>Operating Voltage</b>       | 240V ac                               |
| <b>Nominal Operating Freq.</b> | 50 Hz                                 |
| <b>Dimming Technique</b>       | Trailing & Leading Edge Phase Control |
| <b>Compliance</b>              | BS EN 60669-2-1                       |

| Load Symbol | Compatible Loads                                  | Max Load           | Min Load |
|-------------|---|--------------------|----------|
|             | Dimmable LED lighting                             | 150W TE<br>100W LE | 2W       |
|             | 240V Incandescent & Halogen lamps                 | 150W TE<br>100W LE | 2W       |
|             | Low voltage lighting with electronic transformers | 150W TE<br>100W LE | 2W       |

| Multi-Gang Switch De-Rating Chart |        |        |        |        |
|-----------------------------------|--------|--------|--------|--------|
| 1 Gang                            | 2 Gang | 3 Gang | 4 Gang | 5 Gang |
| 150W                              | 127W   | 105W   | 82W    | 60W    |

### IMPORTANT NOTE:

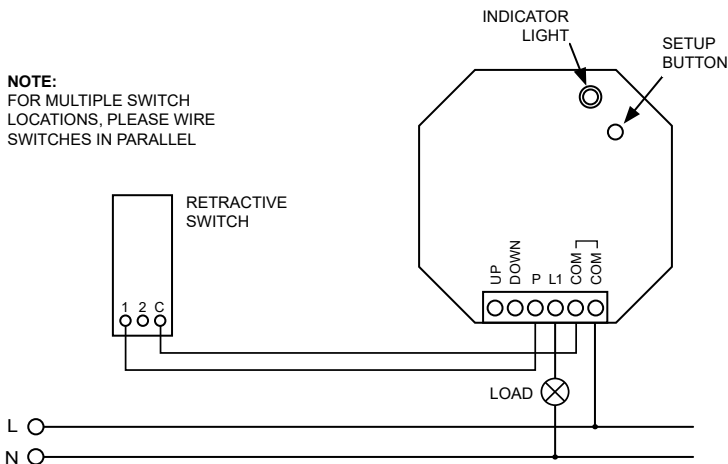
Some driverless products can still operate with a small amount of residual current present, such as LED strip lighting etc, it may be necessary to fit a bypass device to allow this product to dim completely to off.



### WIRING EXAMPLES

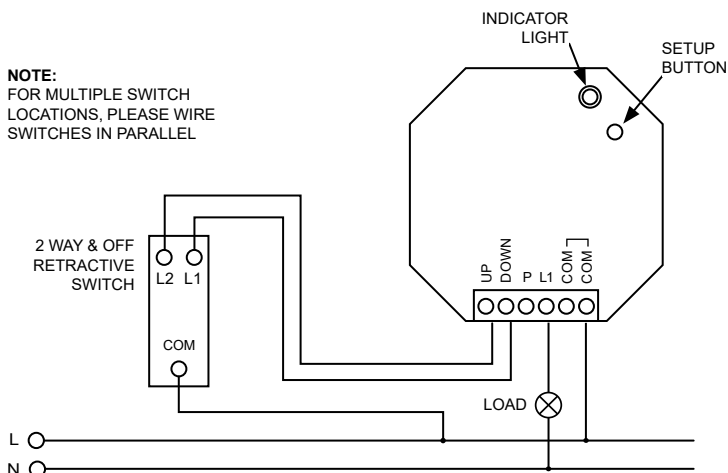
#### ONE-WAY PUSH RETRACTIVE SWITCH WIRING OPTION

**NOTE:**  
FOR MULTIPLE SWITCH LOCATIONS, PLEASE WIRE SWITCHES IN PARALLEL



#### TWO-WAY & OFF PUSH RETRACTIVE SWITCH WIRING OPTION

**NOTE:**  
FOR MULTIPLE SWITCH LOCATIONS, PLEASE WIRE SWITCHES IN PARALLEL



### DIMMER SETUP

**NOTE:** Manual control of the On/Off function and dimming up and down can also be achieved with a connected Retractive Switch, or multiple (parallel) Retractive Switches. Please refer to example circuit diagrams to the right of this text for some connection examples of this option.

A fast click of the retractive switch will turn the lamp (or Load) on and off, holding the switch will alternately dim the lamp up or down, release the switch when desired lamp brightness has been achieved.

The minimum/maximum level and dimming mode can be manually adjusted by following the procedures below.

**NOTE:** This product is supplied with a minimum level already set, if this does not work well with your situation, please perform a Factory Reset before setting a minimum level to suit your setup.

#### SETTING THE MINIMUM LEVEL

1. Whilst on, adjust dimmer to your desired minimum brightness.
2. Push the rear setup button 3 times within 2 seconds.
3. The LEDs will step up and down in brightness once to confirm the setting has been saved.

#### SETTING THE MAXIMUM LEVEL

1. Whilst on, adjust dimmer to your desired maximum brightness.
2. Push the rear setup button 5 times within 3 seconds.
3. The LEDs will step up and down in brightness once to confirm the setting has been saved.

#### FACTORY RESET FOR MIN/MAX BRIGHTNESS

1. Please note this factory reset will reset all the min and max brightness settings.
2. Whilst on, push the rear setup button 7 times within 5 seconds.
3. The LEDs will step up and down in brightness three times to confirm that the min/max setting has been cleared.

#### CHANGING THE DIMMING MODE

The default mode of the dimmer is Trailing Edge, but it can be put into Leading Edge if required. Please ensure that you know the correct mode for your lamp.

1. Whilst on, push the rear setup button 9 times within 5 seconds.
2. The LEDs will step up and down in brightness twice to confirm the setting has been changed to Leading Edge mode.

#### NOTE:

To switch back to Trailing Edge mode, just repeat the process again, the LEDs will step up and down once to show the dimmer is back in Trailing Edge mode.