

Datasheet SLC-RC Switch203-C

The Smart Replacement for Ring Control

The SLC-RC Switch203-C replaces conventional ring control receivers and enables the independent switching of up to three phases. Switching can be controlled automatically based on ambient light levels, configurable schedules, external inputs or the integrated astronomical clock. An optional smart meter can be connected for detailed monitoring of current, voltage, power and energy consumption for each phase, with all measurement data visualised graphically in SL-Control.



Remote Management

Provides real-time monitoring, management, and remote control of lighting networks via the SL-Control web platform.



On-Site Management

Enables on-site configuration of lighting parameters, including dimming levels, for individual luminaires or luminaire groups.



Mesh Network

Uses a self-organising 2.4 GHz mesh network for reliable communication between luminaires within range.



Global Cellular Connectivity

An integrated eSIM provides worldwide cellular connectivity via LTE Cat M1, NB-IoT NB2 and EGPRS networks.



Gateway Function

Enables remote monitoring and management of up to 100 connected luminaires via a single cellular controller.



Over-The-Air Updates

Supports remote firmware updates for connected controllers via the SL-Control web platform.



Automatic Positioning

The integrated GNSS receiver provides precise positioning and time synchronisation for automated lighting control.



AstroDim

Automatically adjusts lighting profiles based on precise sunrise and sunset times at the installation location.



Temperature Sensor

Integrated temperature sensor supports predictive maintenance by detecting abnormal operating conditions.



Built-In Relays

Three integrated relay outputs can be controlled via SL-Control and respond instantly to data from connected devices.



Optional Smart Meter

The smart meter measures current, voltage, power and energy consumption for each phase, with all data visualised in SL-Control.



Optional Voltage Buffer

An optional voltage buffer can be connected via the DC connector to detect mains voltage interruptions or voltage drops.

Maximum Ratings

Supply Voltage	85 – 305 V AC
Current Input	70 mA
Storage Temperature	-40...+90 °C

Operating Parameters

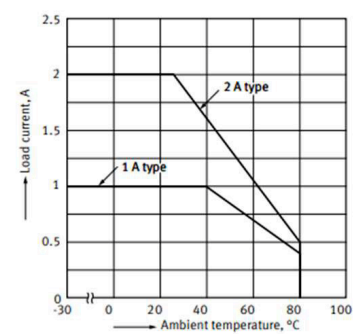
Supply Voltage Range	110 – 240 V AC typ. 230 V AC
Power Usage (230 V AC eMTC)	0.8 W 1.3 W
Digital Signal Input	V _{High Level} : 10.5 – 12 V V _{Low Level} : 0.0 – 4 V
Operating Temperature	-30...+80 °C
Protection Class	IP20

Relays Output Characteristics

Load Voltage	70 – 240 V AC typ. 230 V AC
Frequency	45 – 65 Hz typ. 50 Hz
Load Current	0.02 – 2 A*

*Note: Depending on the ambient temperature

1. Load current vs. ambient temperature characteristics



Mesh Characteristics

RF Frequency Range	2.420 – 2.480 GHz
RF Nominal Output Power	+8 dBm
Receiver Sensitivity	-100 dBm

Cellular Characteristics

Protocols	LTE Cat M1, NB-IoT NB2, EGPRS
Frequency Bands (MHz)	CAT M1: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B25/B26/B27/B28/B66/B8 NB-IoT NB2: B1/B2/B3/B4/B5/B8/B12/B13/B18/ B19/B20/B25/B28/B66/B71/B8 EGPRS: 850/900/1800/1900 MHz

Standards

Safety Rating	IEC 62368-1
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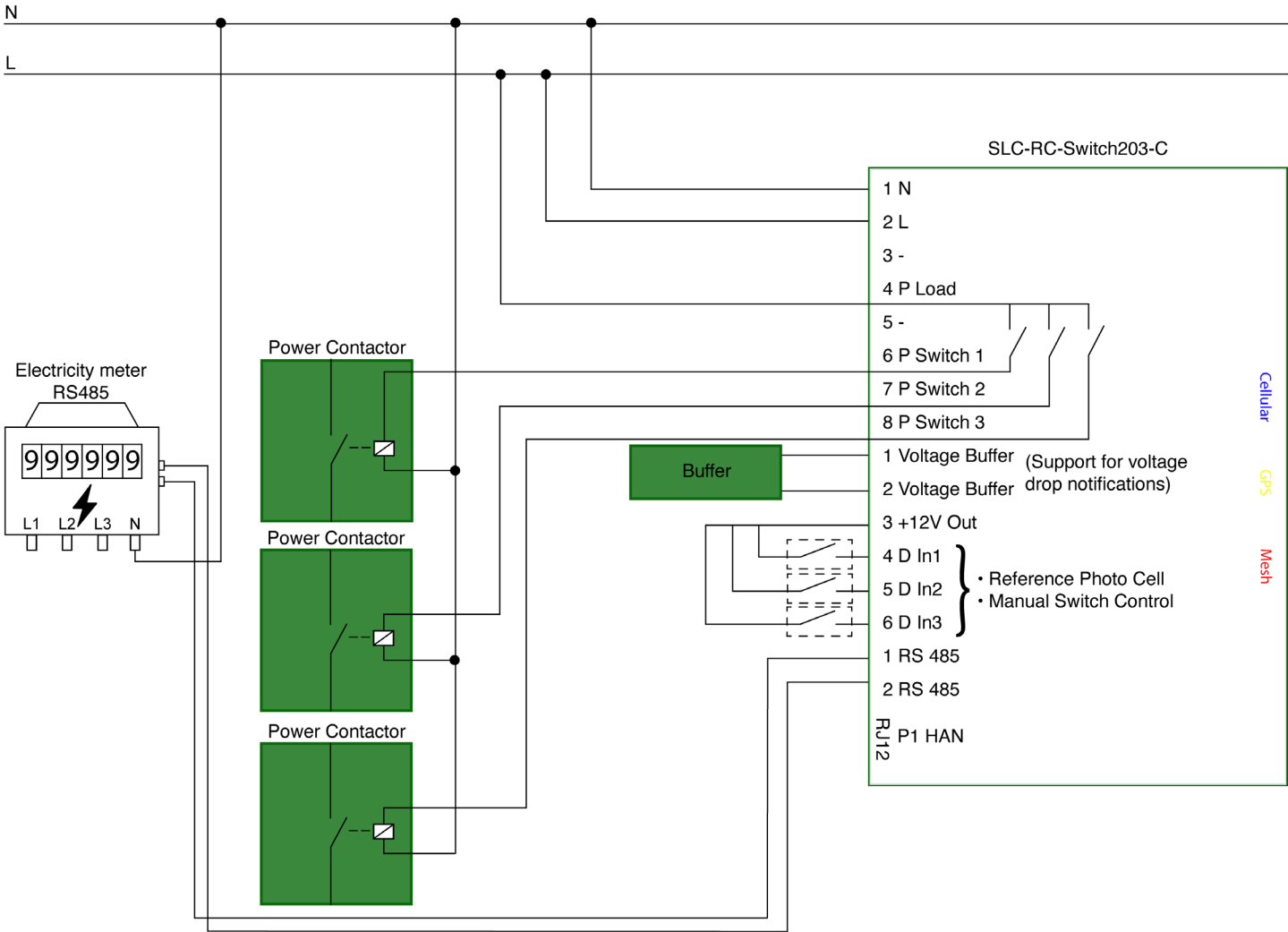
Mounting Control Cabinet



Mounting on Walls



Wiring

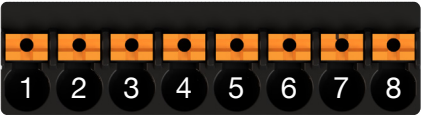


Terminal Block Options

AC-Plug

1 N	Neutral Conductor
2 L	Line
3 -	n. c.
4 P Load	Relay Load Pin
5 -	n. c.
6 P Switch 1	Relay Switch 1 Pin
7 P Switch 2	Relay Switch 2 Pin
8 P Switch 3	Relay Switch 3 Pin

2EDGKN-5.0-08P



2EDGK-5.0-08P



DC-Plug

1 VBuf	Voltage Buffer for voltage drop notification (+)
2 GND	Ground (-)
3 +12V Out	+12V Output Power
4 D In1	Digital Input 1
5 D In2	Digital Input 2
6 D In3	Digital Input 3

15EDGKN-3.5-06P



15EDGK-3.5-06P



Smart Meter Plug

1 A	RS485 Connection to Smart Meter
2 B	RS485 Connection to Smart Meter

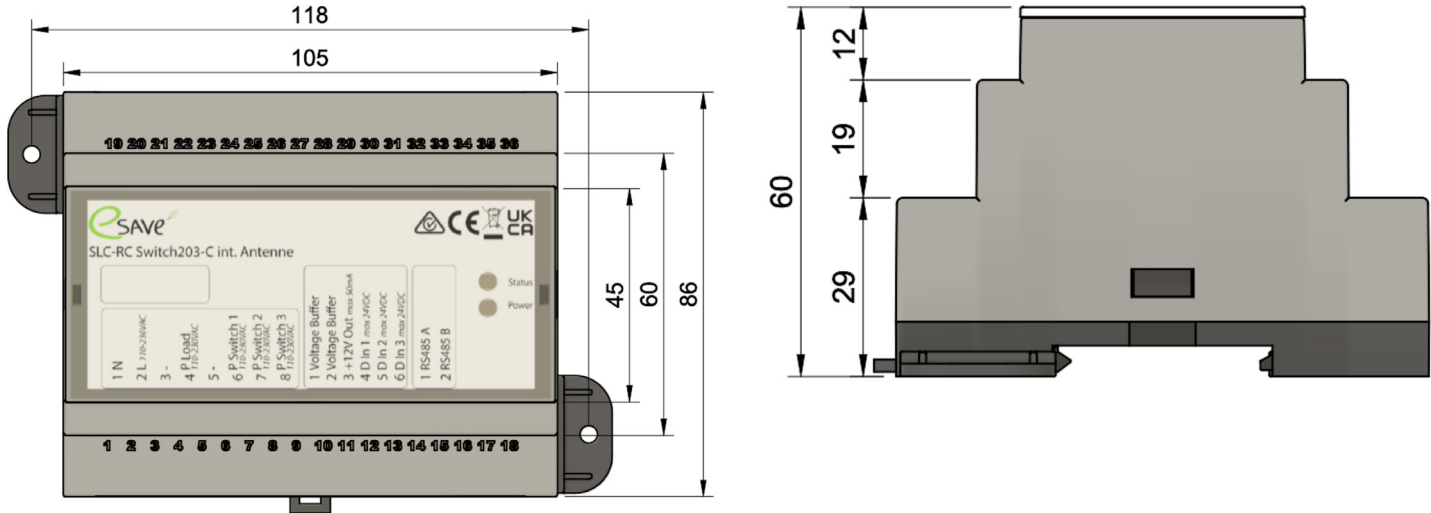
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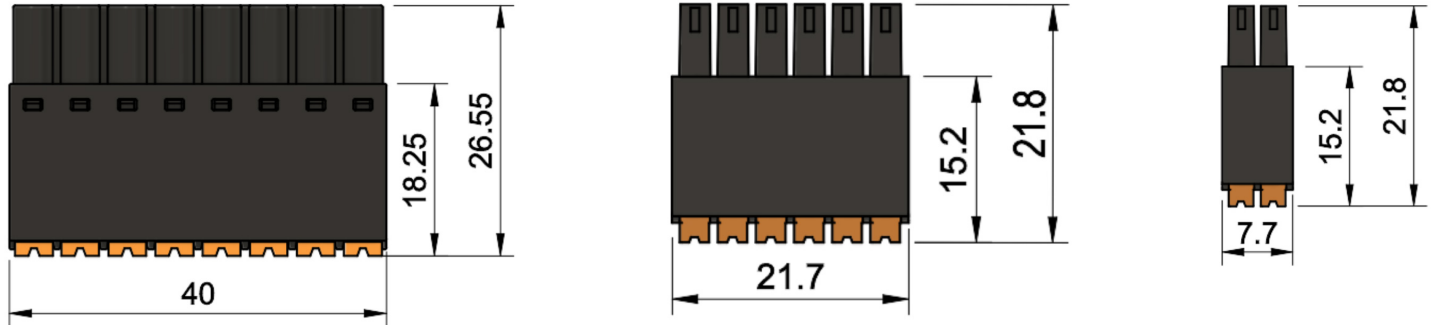
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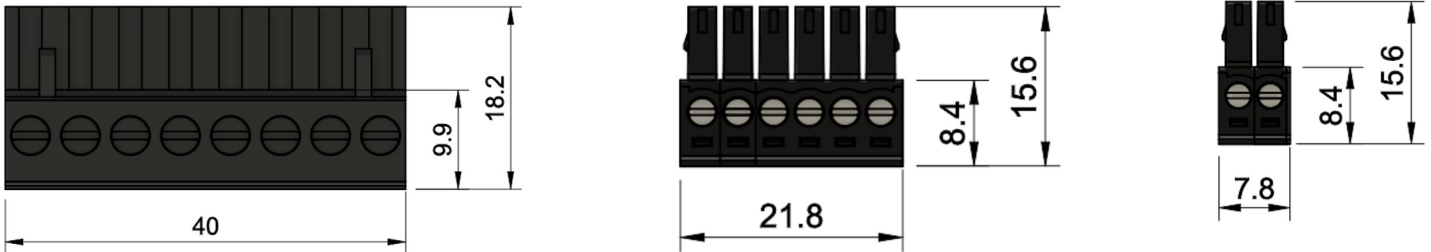
Dimensions SLC-RC Switch203-C



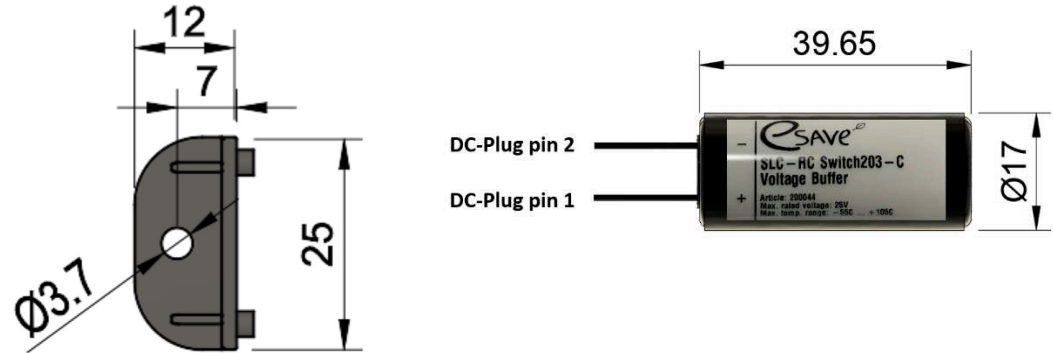
Dimensions Spring Terminal Block



Dimensions Screw Terminal Block



Dimensions Wall Mounting Bracket and optional Voltage Buffer



Variants Spring Terminal Block

802945: SLC-RC Switch203-C RS485 int.

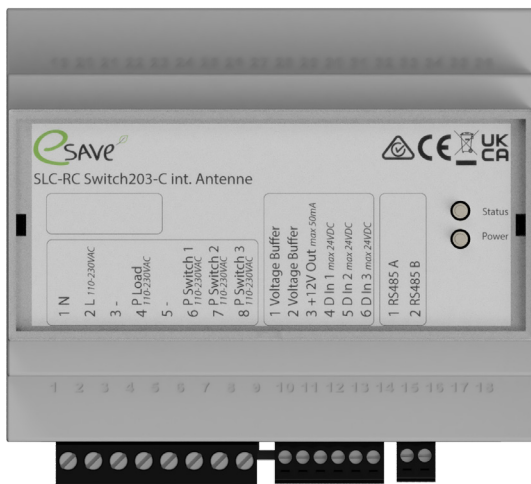


802946: SLC-RC Switch203-C RS485 ext.



Variants Screw Terminal Block

802961: SLC-RC Switch203-C RS485 int.

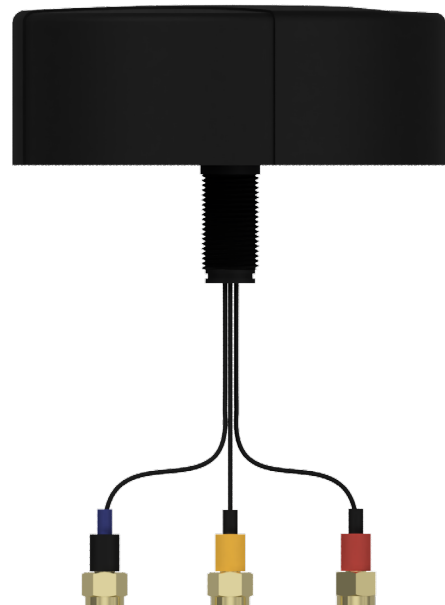


802962: SLC-RC Switch203-C RS485 ext.



External 3-in-1 Puck Antenna

- 802834: Puck Antenna incl. 0.5m Cable
- 802835: Puck Antenna incl. 5m Cable
- 802913: Puck Antenna incl. 2m Cable



All information has been carefully checked; however, errors and technical changes are reserved.