Später bezahlen mit **Klarna** Mehr erfahren

Shelly Pro Cbs

Shelly Pro 1CB

Device image



Device identification

- Device name: **Shelly Pro 1CB**
- Device model: **SPCB-01VENEU**
- Device SSID: **ShellyPro1CB-XXXXXXXXXXXX**
- Device Bluetooth ID: **0x2013**

Short description

Shelly Pro 1CB (the Device) is 1-pole smart miniature circuit breaker (MCB) featuring overvoltage and undervoltage protection as well as remote connection and disconnection.

Shelly Pro 2CB

Device image



Device identification

- Device name: **Shelly Pro 2CB**
- Device model: **SPCB-02VENEU**
- Device SSID: **ShellyPro2CB-XXXXXXXXXXXX**
- Device Bluetooth ID: **0x2014**

Short description

Shelly Pro 2CB (the Device) is 2-pole smart miniature circuit breaker (MCB) featuring overvoltage and undervoltage protection as well as remote connection and disconnection.

Shelly Pro 3CB

Device image



Device identification

- Device name: **Shelly Pro 3CB**
- Device model: **SPCB-03VENEU**
- Device SSID: **ShellyPro3CB-XXXXXXXXXXXX**
- Device Bluetooth ID: **0x2015**

Short description

Shelly Pro 3CB (the Device) is 3-pole smart miniature circuit breaker (MCB) featuring overvoltage and undervoltage protection as well as remote connection and disconnection.

Shelly Pro 4CB

Device image



Device identification

- Device name: **Shelly Pro 4CB**
- Device model: **SPCB-04VENEU**
- Device SSID: **ShellyPro4CB-XXXXXXXXXXXX**
- Device Bluetooth ID: **0x2016**

Short description

Shelly Pro 4CB (the Device) is 4-pole smart miniature circuit breaker (MCB) featuring overvoltage and undervoltage protection as well as remote connection and disconnection.

About Shelly Pro CB products

A circuit breaker is an electrical safety device that automatically interrupts current when a circuit is overloaded or develops a short circuit. A smart circuit breaker adds monitoring and remote control features, letting users track breaker status and input voltage, and manually trip the breaker when needed to protect connected equipment.

Shelly smart miniature circuit breakers (MCBs) are especially useful in maintenance and control applications where early notification of a faulty circuit is essential. Power to equipment can be interrupted remotely, either in an emergency or as part of planned maintenance.

With flexible firmware and LAN connectivity, Shelly MCBs give professional integrators more options for tailored end-customer solutions. They can operate standalone on a local LAN and/or Wi-Fi network, and also integrate with cloud-based home automation services via MQTT, HTTP, and WebSocket. All inbound connections support TLS for secure communication.

Each Device has an embedded web interface for real-time monitoring and control, as well as configuration of settings.

Main features

- **Protect electrical installation from overload.** The Device breaks the circuit in the event of short circuit or overcurrent.
- **Remote control with safety switch.** Turn the Device on or off remotely. The function can be disabled through a mechanical safety switch on the front panel of the Device.
- **Remote turning on** is only possible if the Device was previously turned off remotely. This feature is disabled if the circuit breaker has tripped or if the device has been manually turned off.
- **Monitor line voltage:** The Device prevents overvoltage or undervoltage conditions for downstream equipment.
- **Audit log:** All on or off events and their sources (manual, remote, or tripping) are persisted in device memory with a timestamp and can be reviewed.

- **DIN rail mountable.**
- **Ethernet**: Provides professional integrators with increased reliability and security.
- **Bluetooth:** The Device complies with the Bluetooth standard and can be controlled over Bluetooth.
- **BLE Gateway:** Facilitates communication between BLE and Wi-Fi-enabled devices.
- **Wi-Fi:** The Device can connect to a wireless network.
- **Wi-Fi Range extender:** Repeats the Wi-Fi signal to extend its range.
- **Scripting:** Allows creating automation scenarios through scripts.
- **Basic Schedules:** Supports weekly schedules and routines.
- **Advanced Schedules:** Supports detailed schedules and routines throughout the year with a broad range of time adjustments from seconds to months.
- **Webhooks:** Supports automation through lightweight, event-driven communication with other devices in the same network or local actions.
- **Compatibility:** Highly compatible with 3rd party home automation systems.
- **No need for hub:** Ready for use locally or remotely via Shelly Smart Control or 3rd Party systems.
- **KVS (Key-value storage):** The KVS service provides a basic persistent storage of key-value pairs.
- **Virtual components:** A special set of components that do not exist in the device initially and are created dynamically by the user.

Use cases

- **Electrical safety of homes and business:** Protect appliances and property by reducing risk of malfunctions and fires due to system overloads or over/under voltage.
- **Proactive response:** Get notified immediately if a circuit fails. Shelly integration options and cloud notifications allow for solutions for fast and reliable notifications.
- **Safety improvements**: Remotely disconnect power to affected areas in cases of floods, fires, earthquakes, etc.

Integrations

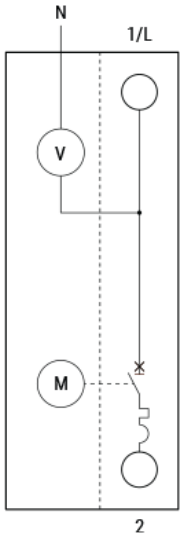
Amazon Alexa supported capabilities

Google Smart Home supported traits

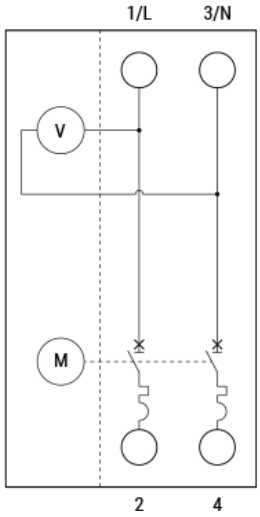
Samsung SmartThings supported capabilities

Simplified internal schematics

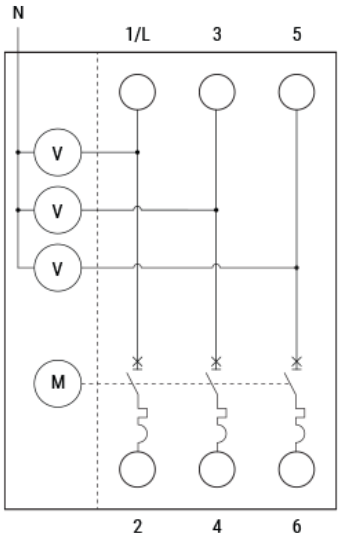
Shelly Pro 1CB



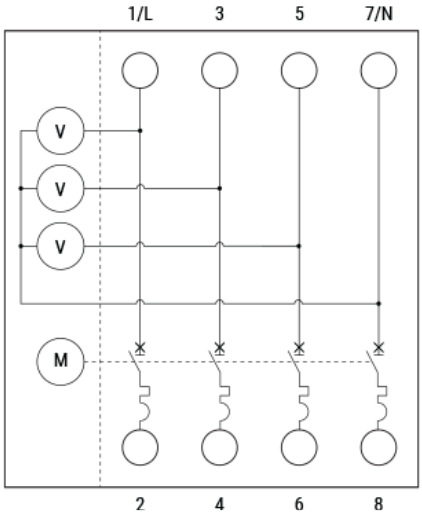
Shelly Pro 2CB



Shelly Pro 3CB



Shelly Pro 4CB



Device electrical interfaces

Shelly Pro 1CB

Inputs

- 2 inputs on screw terminals: **1/L** and **N** (through wire)

Outputs

- 1 outputs on screw terminals: **2**

Ethernet port

- 1 RJ45 connector

⚠**CAUTION!** Plug in or unplug the LAN cable only when the Device is powered off! The LAN cable connector must not be metallic in the parts touched by the user to plug in or unplug the cable.

Shelly Pro 2CB

Inputs

- 2 inputs on screw terminals: **1/L** and **3/N**

Outputs

- 2 outputs on screw terminals: **2** and **4**

Ethernet port

- 1 RJ45 connector

⚠**CAUTION!** Plug in or unplug the LAN cable only when the Device is powered off! The LAN cable connector must not be metallic in the parts touched by the user to plug in or unplug the cable.

Shelly Pro 3CB

Inputs

- 4 inputs on screw terminals: **1/L**, **3**, **5** and **N** (through wire)

Outputs

- 3 outputs on screw terminals: **2**, **4**, and **6**

Ethernet port

- 1 RJ45 connector

⚠**CAUTION!** Plug in or unplug the LAN cable only when the Device is powered off! The LAN cable connector must not be metallic in the parts touched by the user to plug in or unplug the cable.

Shelly Pro 4CB

Inputs

- 4 inputs on screw terminals: **1/L**, **3**, **5** and **7/N**

Outputs

- 4 outputs on screw terminals: **2**, **4**, **6** and **8**

Ethernet port

- 1 RJ45 connector

⚠**CAUTION!** Plug in or unplug the LAN cable only when the Device is powered off! The LAN cable connector must not be metallic in the parts touched by the user to plug in or unplug the cable.

Connectivity

- Ethernet
- Wi-Fi
- Bluetooth

Safety function

- Overcurrent protection
  - Magnetic and temperature triggered
  - Type C disconnection curve

- Overvoltage and undervoltage protection (disabled by a safety switch)
  - MCU controlled
  - User customizable

Supported load types

Any up to the rated current of the circuit breaker.

User interface

Inputs

- Lever to manually connect or disconnect the circuit breaker.
- Reset button
  - Press and hold for 5 seconds to enable Device access point and Bluetooth connection.
  - Press and hold for 10 seconds to factory reset the Device.
- Safety switch to disable the MCU control over the circuit breaker.

Outputs

- Front LED (varies)
  - Blue light indicator will be on if in AP mode.
  - Red light indicator will be on if in STA mode and not connected to a Wi-Fi network.
  - Yellow light indicator will be on if in STA mode and connected to a Wi-Fi network. Not connected to Shelly Cloud or Shelly Cloud disabled.
  - Green light indicator will be on if in STA mode and connected to a Wi-Fi network and to the Shelly Cloud.
  - The light indicator will be flashing Red/Blue if OTA update is in progress.
- LAN LED (green): Green light indicator will be on if LAN is connected.
- Mechanical state indicator
  - Red color indicates connected state (lever is up)
  - Green color indicates disconnected state (lever is down)

Specifications

Quantity	Value
Physical	
Size (HxWxD):	• 93x36x74 mm / 3.66x1.42x2.91 in (Shelly Pro 1CB) • 93x54x76 mm / 3.66x2.13x3.00 in (Shelly Pro 2CB) • 93x72x76 mm / 3.66x2.83x3.00 in (Shelly Pro 3CB) • 93x90x76 mm / 3.66x3.54x3.00 in (Shelly Pro 4CB)
Weight:	• 212 g / 7.5 oz (Shelly Pro 1CB) • 335 g / 11.8 oz (Shelly Pro 2CB) • 465 g / 16.4 oz (Shelly Pro 3CB) • 575 g / 20.3 oz (Shelly Pro 4CB)
Screw terminals max torque:	2.5 Nm / 22 lbin

Conductor cross section:	• Max. 6 mm² / 10 AWG (Solid) • Max. 25 mm² / 3 AWG (Stranded) • Max. 16 mm² / 5 AWG (Flexible)
Conductor stripped length:	15 mm / 0.6 in
Mounting:	DIN rail
Shell material:	Plastic
Shell color:	RAL 7035 (Light gray)
Environmental	
Ambient working temperature:	-5°C to 40°C / 23°F to 105°F
Humidity:	30% to 70% RH
Max. altitude:	2000 m / 6562 ft
Pollution degree:	2
Electrical	
Power supply:	230 V~ 50 Hz
Power consumption:	< 3 W
Poles:	1, 2, 3, or 4
Circuit breaker tripping curve:	B, C
Circuit breaker rated current:	10 A, 16 A, 25 A, 32 A, 40 A, 63 A
Short circuit breaking capacity:	6 kA
Energy limiting class:	3
Min. operating voltage:	160 V~ 50 Hz
Insulation voltage:	500 V
Rated impulse withstand voltage:	4 kV
Applicable standards:	IEC 60898-1

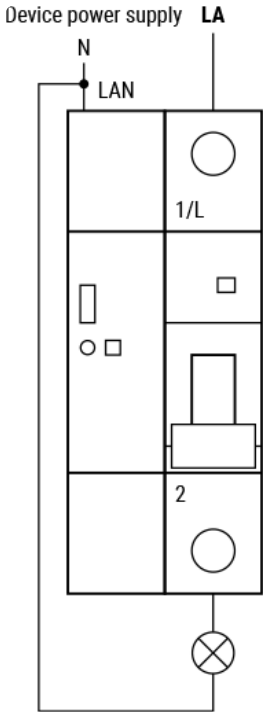
Power loss:	• 1.13 W (Shelly Pro 1CB C10) • 2.00 W (Shelly Pro 1CB C16) • 1.85 W (Shelly Pro 1CB C25) • 2.10 W (Shelly Pro 1CB C32) • 2.76 W (Shelly Pro 1CB C40) • 5.60 W (Shelly Pro 1CB C63) • 2.26 W (Shelly Pro 2CB C10) • 4.00 W (Shelly Pro 2CB C16) • 3.70 W (Shelly Pro 2CB C25) • 4.20 W (Shelly Pro 2CB C32) • 5.52 W (Shelly Pro 2CB C40) • 11.20 W (Shelly Pro 2CB C63) • 3.39 W (Shelly Pro 3CB C10) • 6.00 W (Shelly Pro 3CB C16) • 5.55 W (Shelly Pro 3CB C25) • 6.30 W (Shelly Pro 3CB C32) • 8.28 W (Shelly Pro 3CB C40) • 16.80 W (Shelly Pro 3CB C64) • 4.52 W (Shelly Pro 4CB C10) • 8.00 W (Shelly Pro 4CB C16) • 7.40 W (Shelly Pro 4CB C25) • 8.40 W (Shelly Pro 4CB C32) • 11.00 W (Shelly Pro 4CB C40) • 22.40 W (Shelly Pro 4CB C63)
Endurance	
Electrical:	> 6000 cycles
Mechanical:	• > 20000 cycles (Shelly Pro 1CB, Shelly Pro 2CB) • > 10000 cycles (Shelly Pro 3CB, Shelly Pro 4CB)
Remote toggles:	< 1/min
Sensors, meters	
Voltmeter (AC):	Yes
Voltmeter accuracy:	±5 %
Internal-temperature sensor:	Yes
Radio	

Wi-Fi	
Protocol:	802.11 b/g/n
RF band:	2412 - 2483 MHz
Max. RF power:	< 20 dBm
Range:	Up to 30 m / 100 ft indoors and 50 m / 160 ft outdoors (Depends on local conditions)
Bluetooth	
Protocol:	4.2
RF band:	2402 - 2480 MHz
Max. RF power:	< 4 dBm
Range:	Up to 10 m / 33 ft indoors and 30 m / 100 ft outdoors (Depends on local conditions)
Microcontroller unit	
CPU:	ESP32-D0WDQ6
Flash:	8 MB
Firmware capabilities	
Event logging:	100 events
Data export:	• CSV for PQ recorded values • JSON format export through RPC
Schedules:	Yes
Webhooks (URL actions):	20 with 5 URLs per hook...
Wi-Fi range extender:	Yes
BLE Gateway:	Yes
Scripting:	Yes
MQTT:	Yes

Encryption:	Yes

Basic wiring diagrams

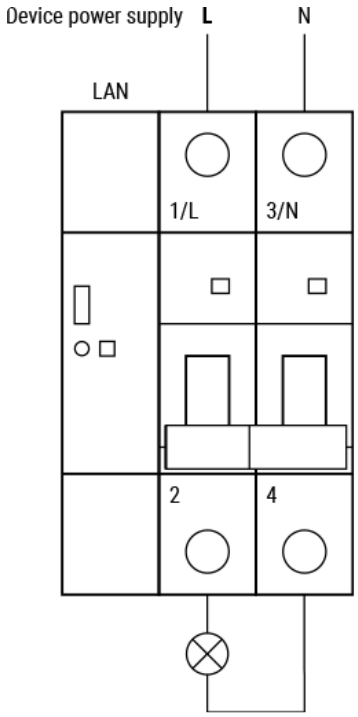
Shelly Pro 1CB



Legend

Terminals		Wires	
1/L	Input terminal (**1/L** and the **N** wire provide the Device power supply)	**L**	Live wire
2	Output terminal	**N**	Neutral wire
LAN	Local Area Network RJ 45 connector		

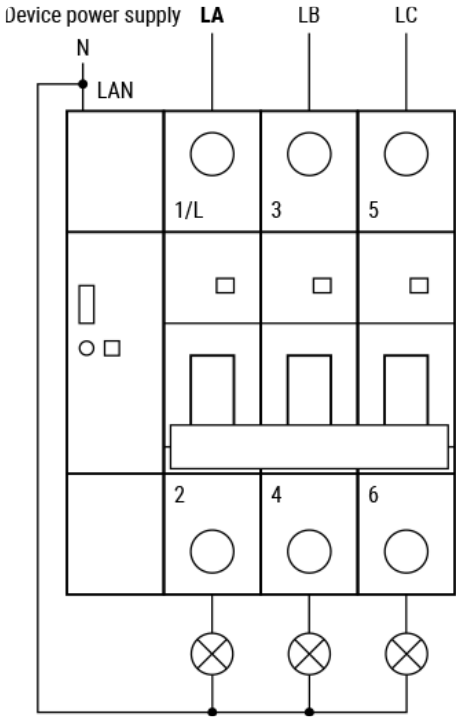
Shelly Pro 2CB



Legend

Terminals		Wires	
1/L, 3/N	Input terminals (1/L and 3/N provide the Device power supply)	L	Live wire
2, 4	Output terminals	N	Neutral wire
LAN	Local Area Network RJ 45 connector		

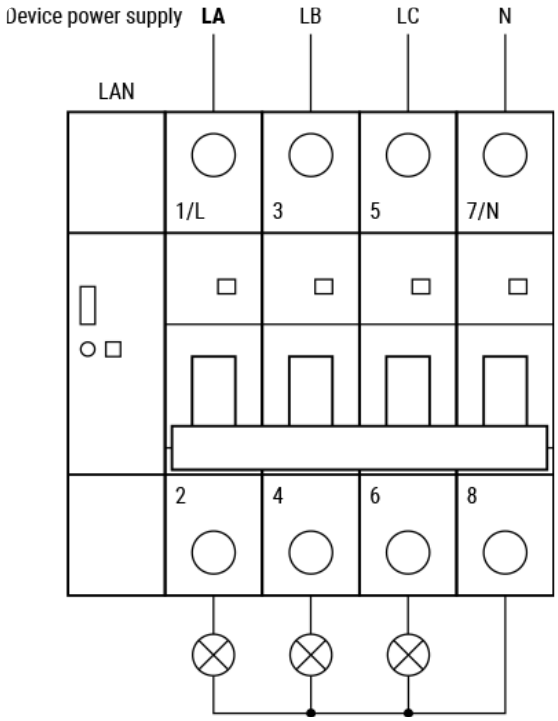
Shelly Pro 3CB



Legend

Terminals		Wires	
1/L, 3, 5	Input terminals (1/L and the N wire provide the Device power supply)	LA	Phase 1 live wire
2, 4, 6	Output terminals	LB	Phase 2 live wire
LAN	Local Area Network RJ 45 connector	LC	Phase 3 live wire
		N	Neutral wire

Shelly Pro 4CB



Legend

Terminals		Wires	
1/L, 3, 5, 7/N	Input terminals (1/L and 7/N provide the Device power supply)	LA	Phase 1 live wire
2, 4, 6, 8	Output terminals	LB	Phase 2 live wire
LAN	Local Area Network RJ 45 connector	LC	Phase 3 live wire
		N	Neutral wire

Components and APIs

- This device