Adjustable rated output current per branch circuit, ranging from 2 to 10 A
Achievement for secure DC line protection when short circuit or over current state happen on DC 24 V line.

In accordance with the accelerating demand to the high power rating of the power supplies due to increased DC devices, you must meet a growing need for the safety design of each branch circuit and reliable protection to a circuit where abnormality occurs.

Advantages in using a DC Electronic Circuit Protector

- Simplified safety design of each branch circuit
- Settings of rated output current for each branch circuit
- Notification of an abnormal circuit by LED display

Our shared Value Design for Panel (herein after referred to as "Value Design") concept for the specifications of products used in control panels will create new value to our customer’s control panels. Combining multiple products that share the Value Design concept will further increase the value provided to control panels.
Easy wiring with the Push-In Plus Terminal Blocks

Protecting up to eight branch circuits in the 42-mm low profile design

Free from new parts arrangements or conversions for sudden design change of devices. One fits various current range

Setting the rated output current available for 2 A, 3 A, 4 A, 6 A, 8 A, and 10 A.

S8V-CP0424
S8V-CP0424S (UL Class 2 with a fixed rated output current 3.8 A)
S8V-CP0824

Push button with indicator

Just press the button to toggle ON/OFF for each branch circuit

3-step LED indication for easy indication of the status of each branch circuit

Green lit: Output ON
Yellow lit: Over current
Yellow blinking or red blinking: output tripping / alarm output

Constant monitoring of the current realizes tripping characteristic with less variations and errors.

DC Electronic Circuit Protector
S8V-CP

4ch S8V-CP0424
4ch S8V-CP0424S (UL Class 2 with a fixed rated output current 3.8 A)
8ch S8V-CP0824

Photo: S8V-CP0824
Facing any challenge in performing safety design of electric circuit?

Design

- Branch design and the design for securing the safety are complicated.
- Small diameter cables are preferable for easy wiring.

Selection

- The selection is difficult as the tripping characteristics of thermomagnetic circuit protectors may widely vary by the temperature and unit variations.

Assembly

- More branch circuits need more spaces.

Start-up and Maintenance

- If an abnormality occurred, the power supply activates its protection function to stop all circuits prior to the tripping function activation of the thermomagnetic circuit protectors.
S8V-CP allows you to:

**Design easily**
Simplify design of branches and safety securing with the one unit.

**Reliably protection**
The tripping characteristic of DC electronic circuit protector securely helps the defective circuit to cut off with less variation errors as designed.

**Space-saving design**
DC electronic circuit protector with low profile design reduces the spaces for installation.

**Quickly cut off only an abnormal circuit**
Easy to identify the troubled parts.
Replacement of the thermomagnetic circuit protector is easy

With maintaining the characteristics of the thermomagnetic circuit protector, make the variation errors less.

An alarm signal output enables to output an abnormal occurrence to an upstream controller.

Sequential start-up of branch circuits minimizes start-up troubles by the inrush current.
OMRON will help integrate both designs and wirings with peripheral devices, such as noise filters, power supplies.

- By adding devices in the newly available space, you can mount more devices in the same size of control panel to increase control panel functionality.
- We’ll help you downsize control panels by reducing the width between wiring ducts and dead space.

### Related Products

- **S8VK-S**: A small body for more compact control panels
- **S8VK-WA**: Three-phase 200V Power Supplies. Easy for balanced design
- **S8VK-X**: IoT Support for control panels. Compatible with EP, Power Supplies with the indicator.
- **S8V-NF**: Easy setting, Noise filter
- **XW6T**: Common terminal blocks with visible indicators
The processes and costs for the UL certificate can be reduced.

**UL Class2 [S8V-CP0424S]**

What is the UL Class 2 output?

It is the classification that indicates "power supplies and the related products with safety outputs of which voltage, current, and power are limited to a certain level, so that not to cause an electric shock or fire," and is evaluated by UL1310.

For the UL Class 2 output, the voltage, current, and power are provided as follows:

- DC 30 V or lower of output voltage
- 8 A or lower of output current
- 100 VA or lower of output power

Any loads and parts to be connected to this UL Class 2 output can be used without UL certificate.

What is S8V-CP0424S (UL Class 2 output type)?

To meet the conditions of this UL Class 2 output, the rated output current is fixed at 3.8 A.

- 24 V of output voltage → meets DC 30 V or lower
- 3.8 A of output current → meets 8 A or lower
- 24 V × 3.8 A of output power = 91.2 VA → meets 100 VA or lower

The processes and costs for applying to a safety standard for the devices can be reduced.

As S8V-CP0424S has already certified the UL Class 2 output, the UL evaluation of the circuit to be connected to this output is no need, meaning that helps reduce processes and costs for the UL certificate. Any loads and parts to be connected to this UL Class 2 output can be used without UL certificate.

Furthermore, that also helps for cost down and easy selection of the parts, because any wiring materials without UL certificate are usable in the control panel.

- DC 30 V or lower of output voltage
- 8 A or lower of output current
- 100 VA or lower of output power

Any loads and parts to be connected to this UL Class 2 output can be used without UL certificate.