



# Selective protection of 24 V DC load circuits

EPD24 individually protects loads with the lowest power loss, and an impressive performance in severe conditions.



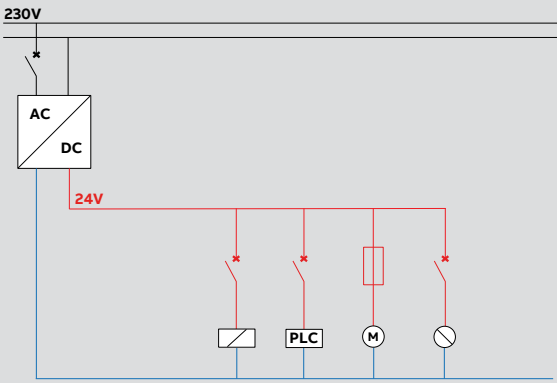
- Reliable protection
- Compact size
- Highly flexible and scalable
- Energy efficient
- Minimized wiring effort

# Application insights

## Increase machines uptime

### The difference between a protected and unprotected application.

The EPD24 offer selective overcurrent protection for the loads connected and react to short circuit or overload more rapidly than the supplying switch mode power supply; they then selectively switch off the electrical circuit affected. In this way straightforward, quick troubleshooting is made possible.

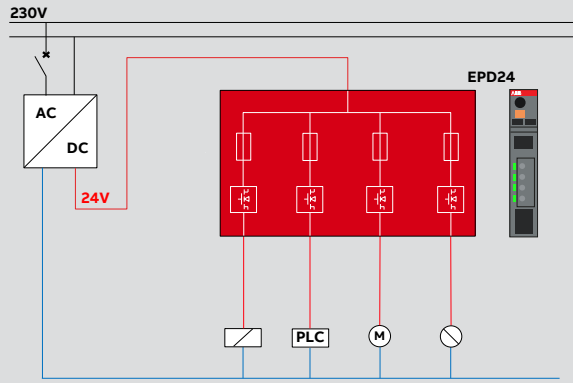


Circuit drawing for explanatory purposes only.

**Unprotected systems**

A downtime within a production plant signifies not only a loss of money but also a disruptive occurrence, which adds complexity to the already numerous processes of any business.

Unprotected systems might look like a saving, but a system failure is not a matter of probability: for managers or business owners, it is important to be prepared since it will happen.



Circuit drawing for explanatory purposes only.

**Protected systems**

The Electronic Protection Device makes it possible to protect the equipments' multiple sub-systems: each load circuit is controlled separately, and only the eventual failure is intercepted, allowing a continuing service to other systems as well as a faster resolution time.

This ensures an higher uptime percentage and a more productive environment for any business.

### The EPD24 ensures 2 main functionalities:



#### Protection of 24V DC load circuit

- Each load is protected individually
- Each load is operated individually
- In case of overload, only one circuit trips
- Easy and fast troubleshooting

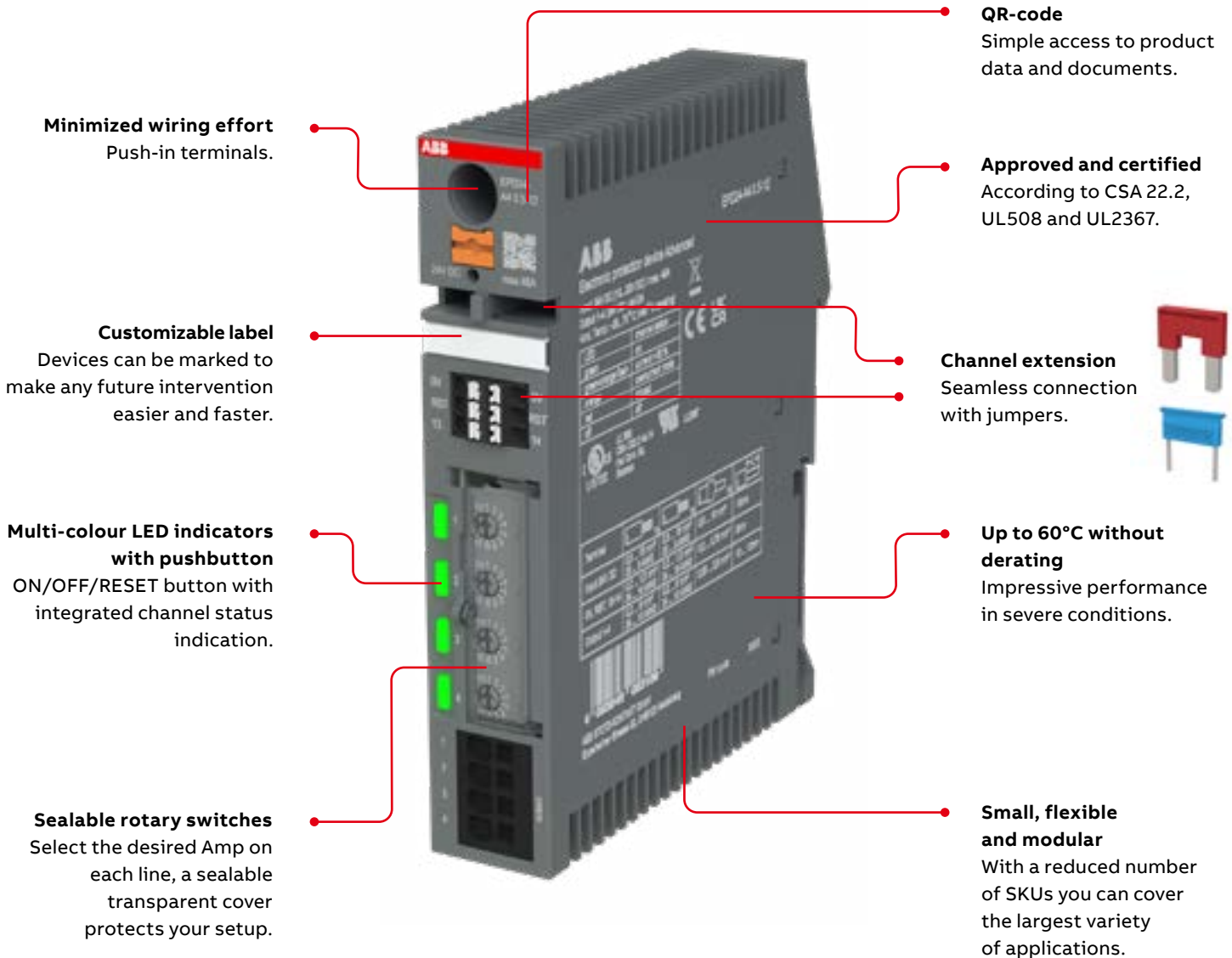


#### Protection of the power supply

- In case of overload, voltage collapses
- The main goal is to keep currents within limits to maintain voltage

# EPD24

## The reliable protection



### Space saving

30% smaller

Only 25mm width, up to 4 channels, compatible with most of ABB devices formfactor.



### Flexibility

Quickest expandability

Seamless connection with power and signal jumpers.



### Energy efficiency

40% less power loss

High quality components reduce power losses to a minimum.



### Extreme reliability

No derating up to 60°C

Smooth integration within any systems and long-lasting life span.



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ABB products are used all over the world, from small production lines to heavy industrial field, such as pharmaceutical, food processing, mining and power tools. Our mission is to provide customers with quality and state-of-the-art technology, every day.

**Reliable  
solutions** }

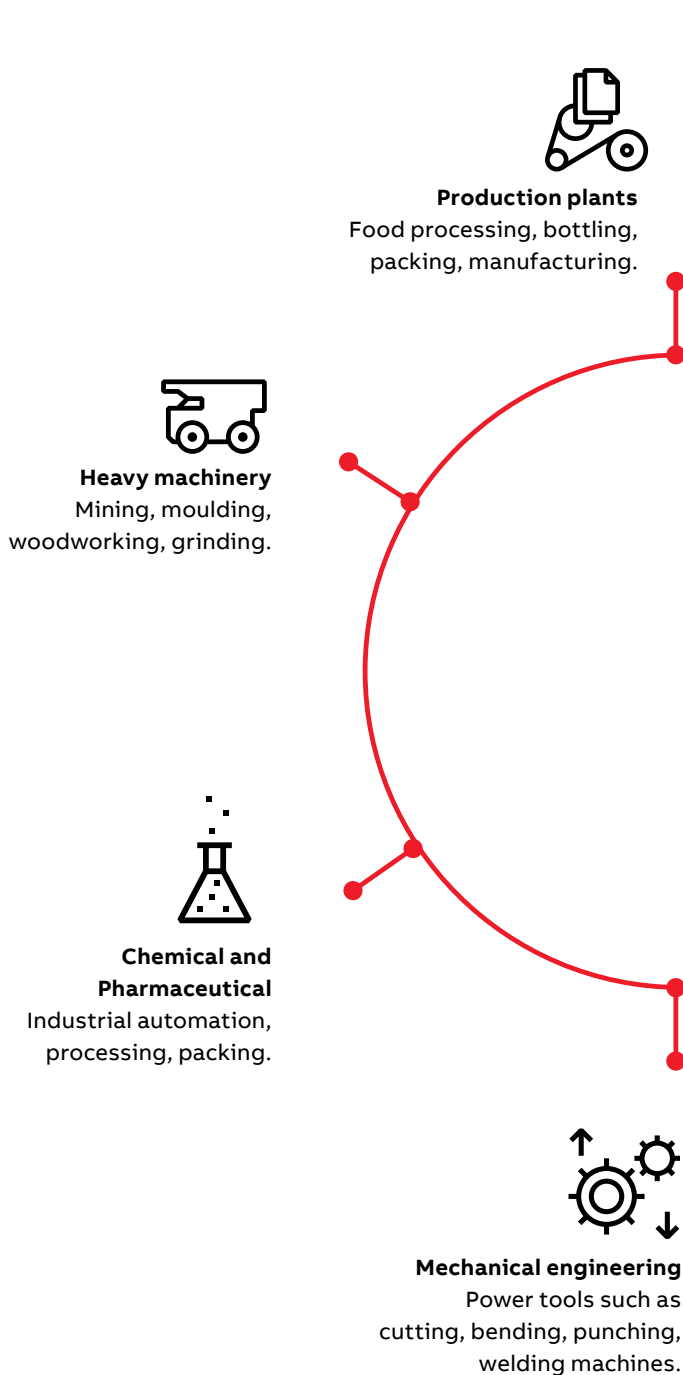
{ **For consistent  
process uptime**

# EPD24

## Machines and panel builder requirements tailor made solutions

**Global availability and highly scalable design ensure an affordable, powerful and reliable coverage of the widest application fields.**

From 0.5 to 12 A in a 25mm device, seamless expandability, front-top wiring, and easy integration with most ABB devices for a consistent and affordable portfolio.



# EPD24

## Seamless integration with ABB power supplies

### EPD24 is a perfect companion for CP-S.1 power supplies range.

Both designed for a huge variety of applications they perfectly fit thanks to a series of common features. Their frontal top wiring position and thin width fits perfectly into any enclosure. Plus, both devices feature the lowest power loss on the market and the same derating behavior, allowing an unparalleled integration.



#### Global availability

- Certified product
- Reduced number of SKUs for a better portfolio management



#### Flexible

- Quickest expandability with jumper connection
- Adjustable current rating from 0.5 to 12 A



#### Perfect fit

- Built with a formfactor that allows a seamless integration with most ABB devices



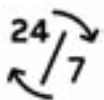
#### One stop shop

- Comprehensive range that covers practically all application demands
- No need to look for different suppliers





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ABB Electronic Protection Devices are the best solution to ensure the control of distributed power in every OEM, for an increased productivity and a minimized downtime in case of fault or overloads.



#### Continuous operation

- 'OUTPUT OK' alarm relay contact to initiate counter-measures
- 'L-' terminal to prevent ground fault
- Power reserve functionality



#### Energy efficient

- Reduced operating cost due to 'wear and tear' of other devices
- High efficiency up to 94% and minimized losses



#### Space saving

- Very compact design to reduce required space in cabinets
- Durable metal housing
- Complete 24 VDC offering not only for OEM machine building segment



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[new.abb.com/low-voltage](http://new.abb.com/low-voltage)

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