

Description

The flexible **Power-D-Module** is a sophisticatedly designed power distribution system for DC applications in a 19" aluminium rack with 3 HE for installation on the mounting plate in the control cabinet. Thanks to its many configuration options, the respective version can be perfectly matched to your application. You can choose between the pluggable 2210 thermal-magnetic 2210 circuit breaker as 1-pole or 2-pole version or ESS30 electronic circuit protector as fuse element. For optimum utilisation of the available installation space, different group signalling and terminal connection options are available, as well as an optional, freely configurable system redundancy. The terminals are at the front. Optionally, a cable organizer (1 HE) can be added below the terminals.



Flexible Power-D-Module DC

Features

- Power distribution with reversible flanges
- For 24 or 2 x 12 pluggable 2210 circuit breakers 1-pole or ESS30, alternatively 12 or 2 x 6 2210 circuit breakers 2-poles
- Optional 2-pole protection
- Redundant or non-redundant set-up
- Supply current up to 2 x 50 A
- Rated voltage up to DC 65 V
- Max. load current up to 16 A
- Connection via spring loaded terminals
- Group signalling

Your benefits

- Compact, space-saving, clear design through efficient utilisation of installation space and PCB technology
- Increased machine uptime through resettable circuit breakers
- Increased operational availability through group signalling
- Significantly reduced number of individual components through pre-assembly
- Facilitated system extension through pluggable circuit protectors even during operation
- Optional cable organizer below the terminals for more convenient connection and transparency

Preferred types – for details regarding all product versions please see ordering number code

Preferred types are E-T-A products that are most frequently used by our customers. They feature a beneficial price and shorter lead times.

Preferred types	Short description
PDM-P-2210-24E-B2-K	2210, 1-pole protected, non-redundant, DC 24 V, with cable organizer
PDM-P-2210-2P-24E-B2-K	2210, 2-pole protected, non-redundant, DC 24 V, with cable organizer
PDM-P-2210-2P-24R-B1-K	2210, 2-pole protected, redundant, with cable organizer
PDM-P-ESS30-24E-B2-K	ESS30, 1-pole protected, non-redundant, DC 24 V, with cable organizer

Compliance



Instructions

You will find the current installation instructions for each possible version via QR code on the last page.

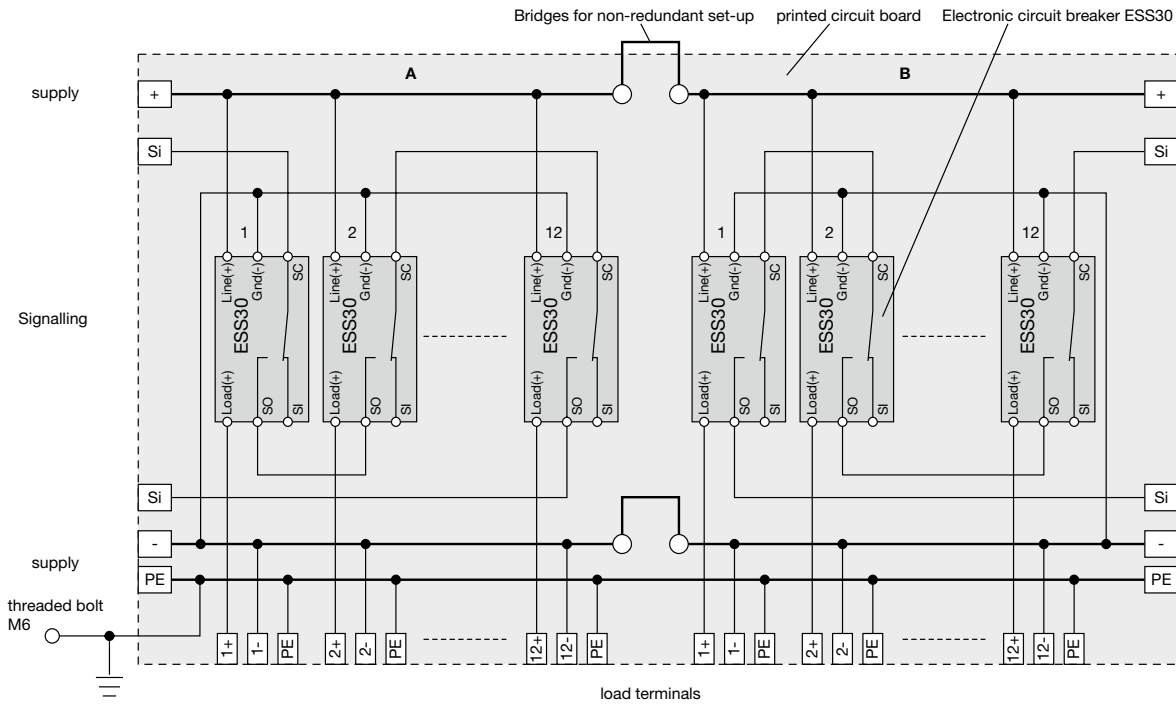
Technical data	
General data	
Rated voltage	DC 24V (DC 10...65 V depending on version)
Protected pole	1-pole, plus 2-poles plus and minus
Plug-in type circuit breakers	2210-S (1 & 2-pole) electronic circuit breaker Further options upon request
Redundancy	Optional according to ordering number code
Compliance	According to EN 62368-1
Ambient Temperature range	0 ... 50 °C
Mechanical data	
Dimensions	Width: 84 HP (426.72 mm) Height: 3 HE (133.35 mm) / 4 HE (177.90 mm) Depth: 146 mm
Material	Aluminium
Grounded housing	Available for each supply input
Cable organizer (1 HE)	Optional, pre-mounted
Total weight	3.09 kg – 3.75 kg
Supply	
Total current per supply	max. 50 A
Terminals / cable cross section	Spring-loaded terminals / up to 10 mm ²
Loads	
Load current per channel	max. 16 A
Terminals / cable cross section	Spring-loaded terminals / up to 2.5 mm ²
Group signalling	
Series connection	Make contacts of the auxiliary contacts are connected in series Max. 0.5 A, max. 2.5 mm ²
Parallel connection	Break contacts of the auxiliary contacts are connected in parallel via decoupling relay Max. 0.5 A, max. 2.5 mm ²

Ordering number code	
PDM Power Distribution Module	
P	Max. DC 65 V (2210 only, B1 signalling), plus protected
ESS30	ESS30 or ESX10 circuit breakers, 1-pole (DC +24 V only)
2210	Thermal-magnetic 2210 or 3600 circuit breakers, 1-pole
2210-2P	Thermal-magnetic 2210 circuit breaker, 2-poles, plus and minus protected
24E	non-redundant, 1 x 24 channels 1pole / 1 x 12 channels 2pole protected
24R	redundant, 2 x 12 channels 1-pole / 2 x 6 channels 2-pole protected
B1	Group signalling series connection
B2	Group signalling parallel connection (DC 24 V only)
K	with cable organizer (1 HE)
PDM - P - 2210-2P - 24E - B2 - K Ordering example	

All information and data given on our products are accurate and reliable to the best of our knowledge, but E-T-A does not accept any responsibility for the use in applications which are not in accordance with the present specification. E-T-A reserves the right to change specifications at any time in the interest of improved design, performance and cost effectiveness. Dimensions are subject to change without notice. Please enquire for the latest dimensional drawing with tolerances if required. All dimensions, data, pictures and descriptions are for information only and are not binding. Amendments, errors and omissions excepted. Ordering codes of the products may differ from their marking.

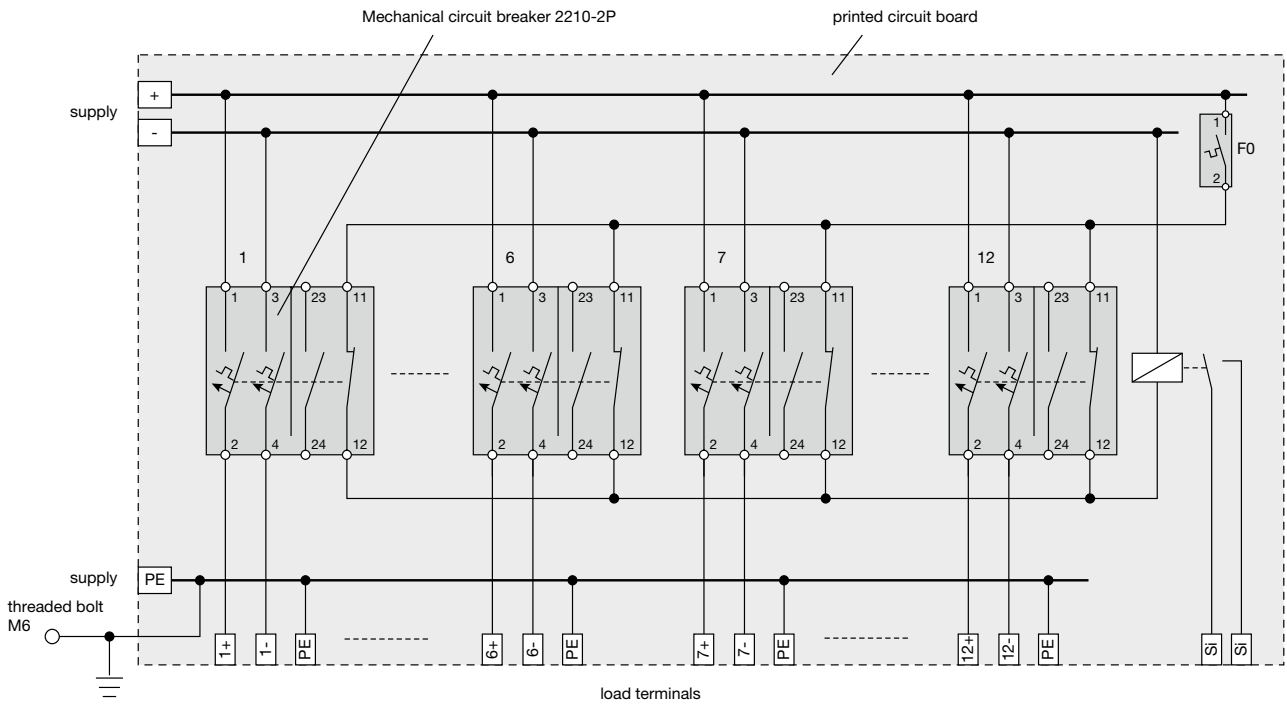
Schematic diagrams

Power-Distribution-Modul DC schematic diagram (ESS30, redundant)



Note: Depending on the version, the schematic diagram may vary in detail. This diagram shows the general options. You can find further information for version-specific installation instructions at the end of the document.

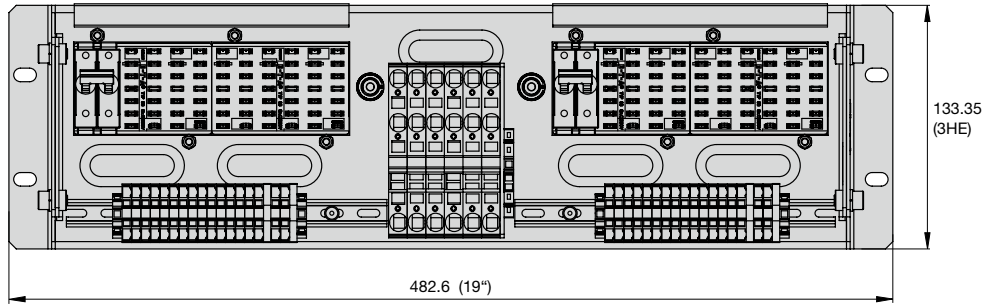
Power-Distribution-Modul DC schematic diagram (2210 2 pole)



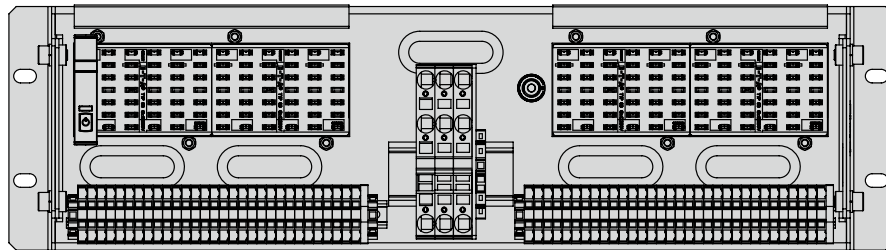
Note: Depending on the version, the schematic diagram may vary in detail. This diagram shows the general options. You can find further information for version-specific installation instructions at the end of the document.

Dimensions

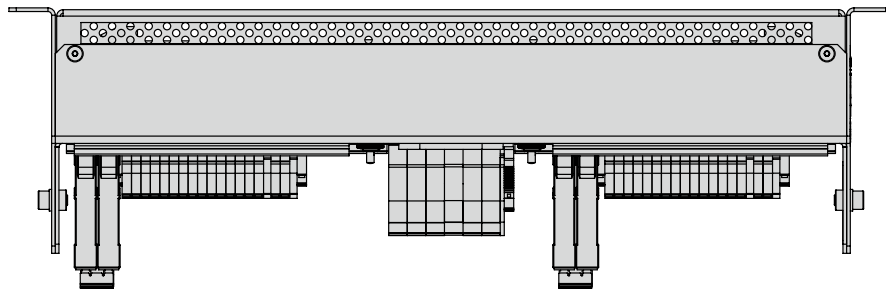
Front view/example: 2210, 2 pole, redundant



Front view/example: ESS30, 1 pole, redundant



Top view (open cover)/example: 2210, 2 pole, redundant



Side view/version: PDM-P-2210-2P-24R-B2-K

Example, redundant, 2-pole-protected, with optional cable organizer (... -K)

Figure for mounting plate installation
(snap-on fixture at the back)

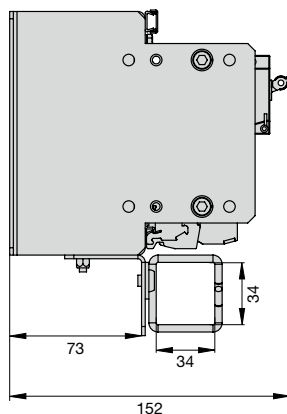
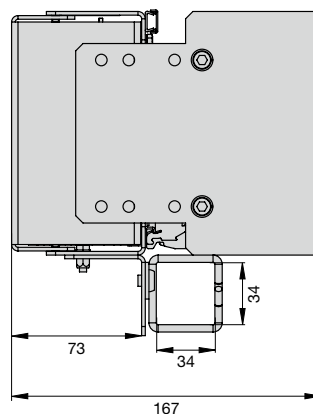


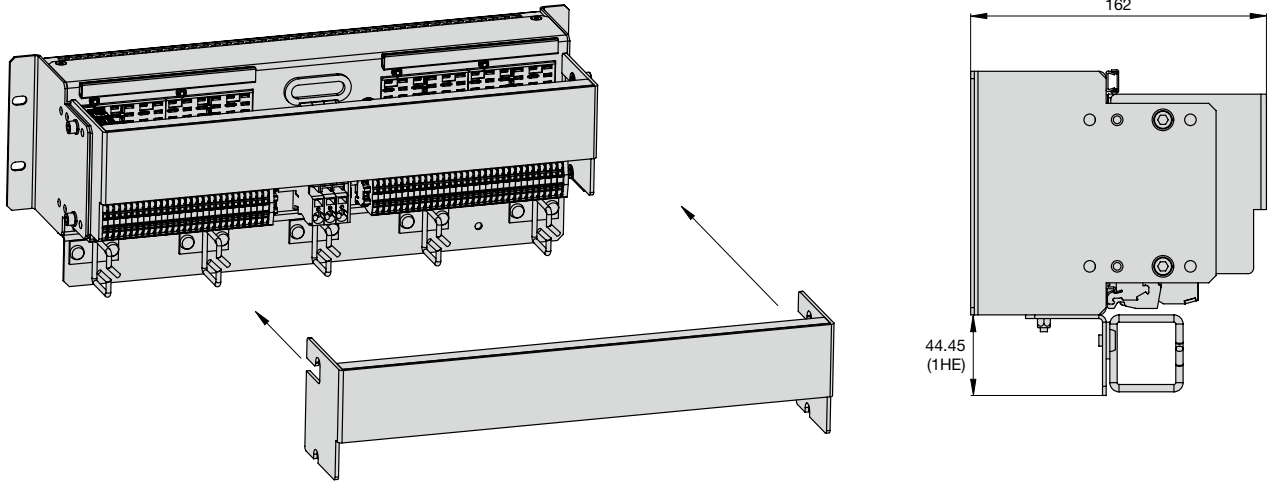
Figure for 19" rack installation
(snap-on fixtures at the front)



Accessories

Acrylic glass and signal loop

PDM-P-ESS30-24E-B2-K with acrylic glass cover (Ordering no. Y31283501) for retrofit mounting as actuation protection

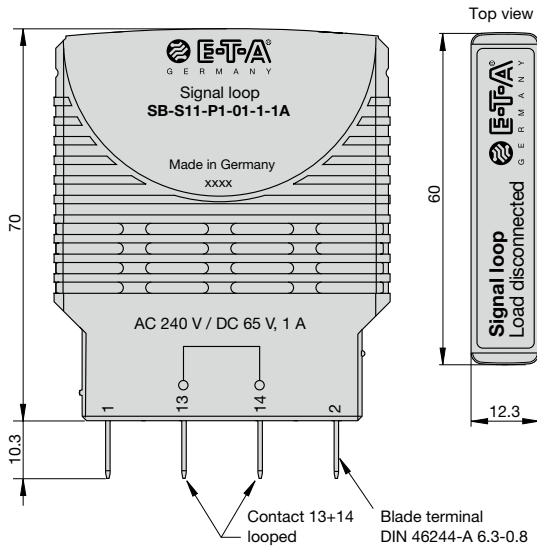


ESS30 / ESX10 circuit breakers

2210 circuit breakers

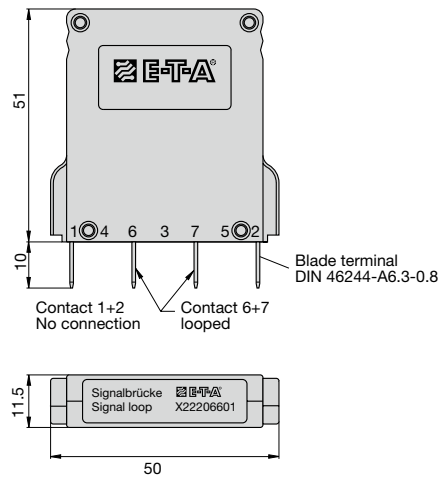
Signal loop

Ordering No. **SB-S11-P1-01-1-1A**



Signal loop

Plug-in module for circuit breakers to bridge the looped auxiliary contacts (series connection)
Part no. X 222 066 01
for 2210 and 3600



Installation instruction

For more details:

Follow the QR code for the current installation instruction of your „Power Distribution Module“. You will find detailed information using the selected ordering number code.

Installation instruction:

DC Power Distribution Module for ESS30 electronic circuit breakers



Installation instruction:

DC Power Distribution Module for 2210 mechanical circuit breakers

