

## Description

The flexible *Power-D-Box*® system is a sophisticatedly designed power distribution system for AC applications in a 19" rack with only 2 HE. Thanks to its many configuration options, the respective version can be perfectly matched to your application. The pluggable, 1-pole 2210 thermal-magnetic circuit breakers can be used 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.



**Flexible *Power-D-Box*® for AC**

## Features

- 19" power distribution system, made of aluminium
- For 30 or 2 x 15 pluggable 2210 circuit breakers, more upon request
- Redundant or non-redundant set-up
- Supply current up to 2 x 75 A
- Rated voltage up to AC 230 V
- Max. load current up to 16 A
- Terminals with spring force or push-in 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 additional terminals on the back of the DIN rail for more convenient connection and transparency
- No additional installation space for min. bending radius of the connection cables required

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

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

Preferred types	Short description
PDB-AC-2210-30E-B2	2210, 1-pole, non-redundant, series/parallel connection signalling, no additional terminals
PDB-AC-2210-30R-B2	2210, 1-pole, redundant, series/parallel connection signalling, no additional terminals
PDB-AC-2210-30E-B2-Z	2210, 1-pole, non-redundant, series/parallel connection signalling, additional terminals
PDB-AC-2210-30R-B2-Z	2210, 1-pole, redundant, series/parallel connection signalling, additional terminals

## Compliance



## Instructions

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

**Technical data**

<b>General data</b>	
Voltage ratings	AC 230 V (AC 10...250 V depending on version)
Protected pole	L phase
Circuit breakers/ circuit protectors	Plug-in type 2210-S circuit breakers (1 pole), more upon request
Number of loads	Up to 30
Redundancy	Optional according to ordering number code
Compliance	According to EN 62368-1
Operating temperature range	0 ... 50 °C
<b>Mechanical data</b>	
Dimensions	Width: 482.6 mm (19" mounting) Height: 88.90 mm (2 HE) Depth: 205 mm – 261 mm
Material	Aluminium
Grounded housing	Available for each supply input
Cable grip	Pre-mounted
Total weight	3.44 kg – 5.09 kg You can find more details in the installation instructions
<b>Supply</b>	
Total current per supply	max. 75 A
Terminals / Terminals on PCB / Cable cross section	Spring-loaded terminal / up to 25 mm <sup>2</sup>
Terminals / Additional terminals on DIN rail / Cable cross section	Push-in terminals / up to 25 mm <sup>2</sup>
<b>Loads</b>	
Current rating per load channel	max. 16 A
Terminals / Terminals on PCB / Cable cross section	Spring-loaded terminals / up to 4 mm <sup>2</sup>
Terminals / Additional terminals on DIN rail / Cable cross section	Push-in terminals / up to 4 mm <sup>2</sup>
<b>Group signalling</b>	
Series connection	Make contacts of the auxiliary contacts are connected in series. Max. 0.5 A, max. 1.5 mm <sup>2</sup>
Parallel connection	Break contacts of the auxiliary contacts are connected in parallel via decoupling relay. Max. 0.5 A, max. 1.5 mm <sup>2</sup>

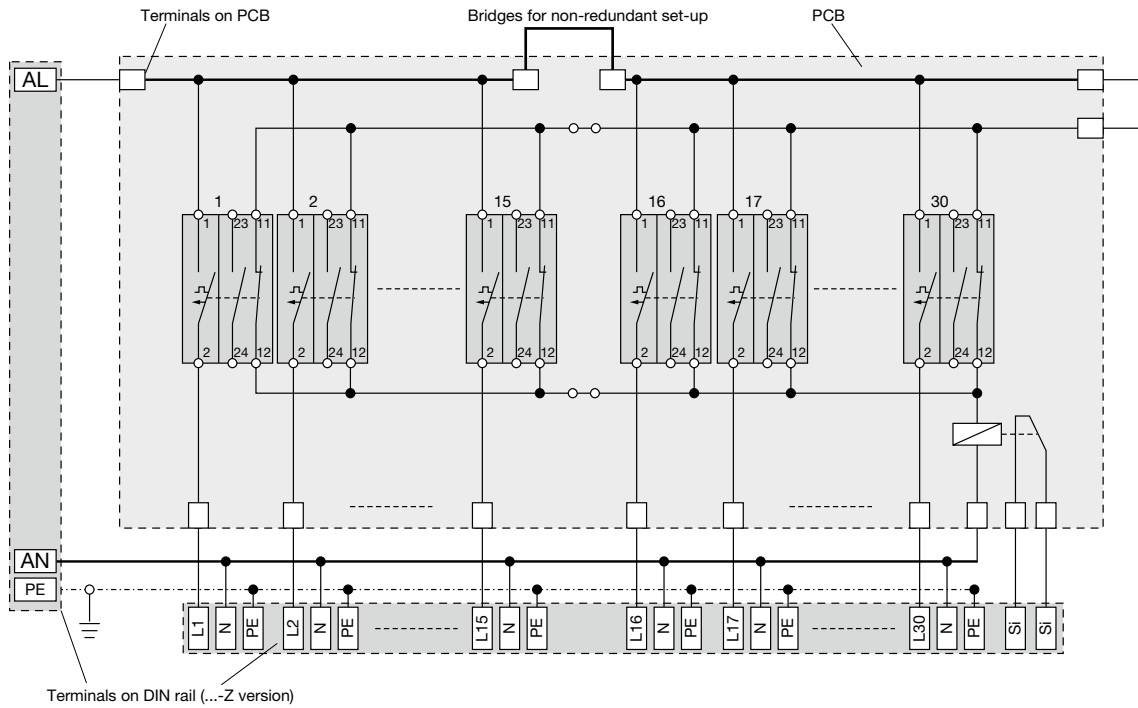
**Ordering number code**

<b>PDB Power Distribution Box</b>	
<b>AC</b>	
<b>2210</b>	Circuit breaker, 1-pole
<b>30E</b>	Non-redundant 1 x 30 loads
<b>30R</b>	Redundant 2 x 15 loads
<b>B1</b>	Group signalling, series connection per group
<b>B2</b>	Group signalling, parallel connection per group via relay (only AC 230 V)
<b>Z</b>	With screw terminals on mounting rail
<b>PDB - AC - 2210 - 30R - B2 - Z</b> Ordering example	

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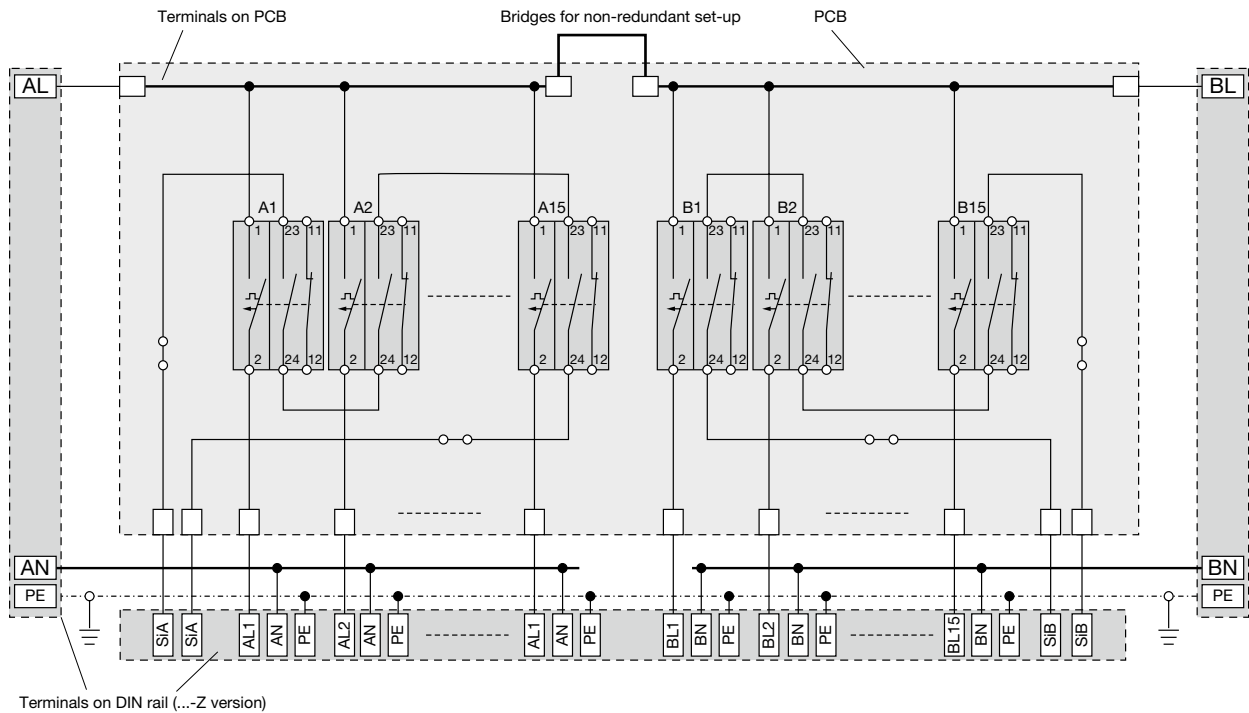
Schematic diagrams

**Flexible *Power-D-Box*<sup>®</sup> AC schematic diagram (signalling B2)**



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.

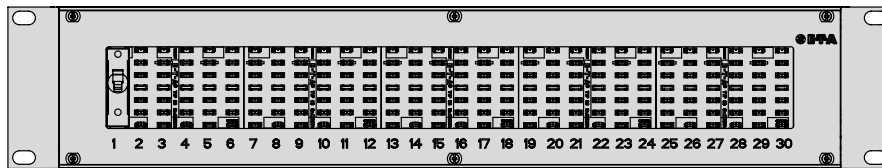
**Flexible *Power-D-Box*<sup>®</sup> AC schematic diagram (signalling B1)**



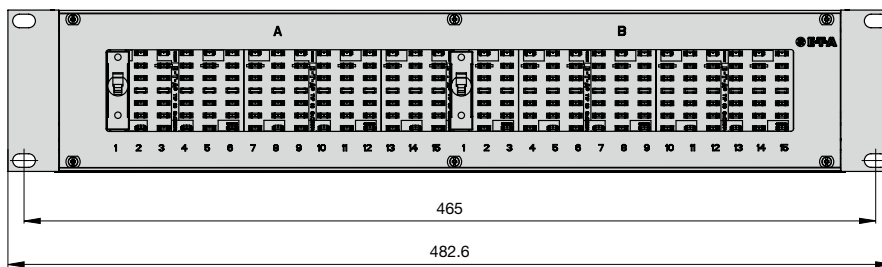
Note: Depending on the version, the schematic diagram may vary in detail. This diagram shows the general options. You can find further information for version-specific installation instructions at the end of the document.

**Dimensions**

**Front view/example: 2210, non-redundant**



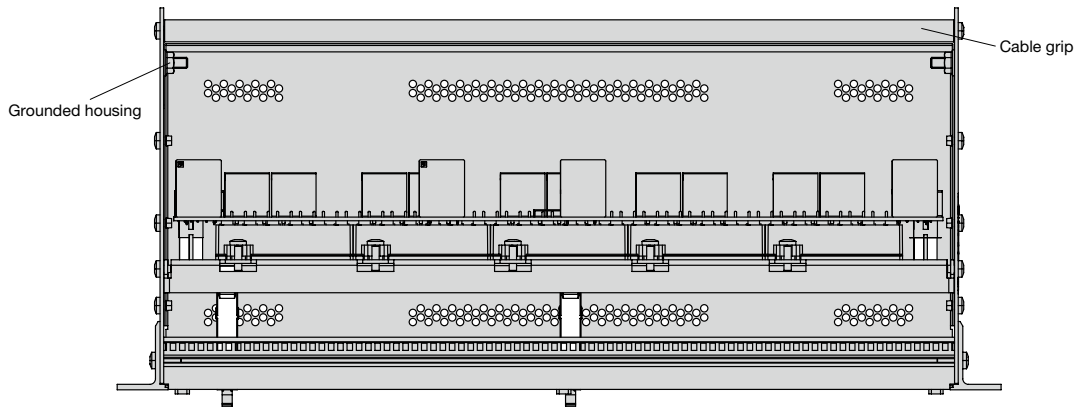
**Front view/example: 2210, redundant**



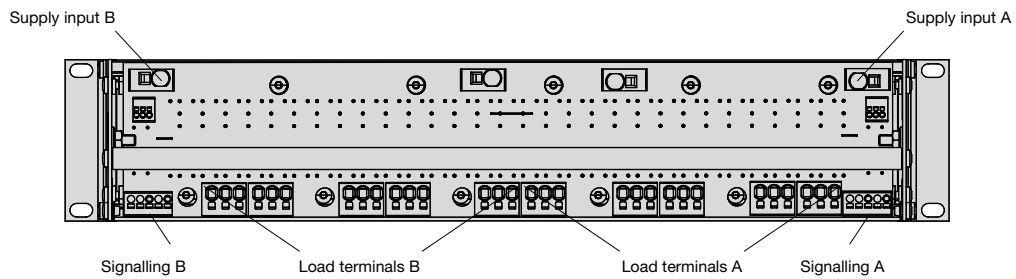
**Dimensions**

Example: PDB-AC-2210-30E-B2

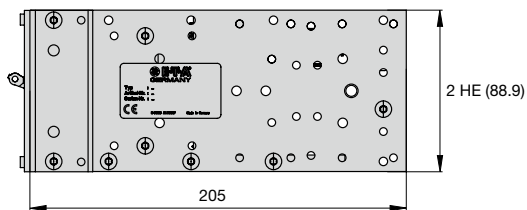
**Top view (open cover)/example: no additional terminals on DIN rail, supply terminals on PCB**



**Rear view/example: no additional terminals on DIN rail, supply terminals on PCB**



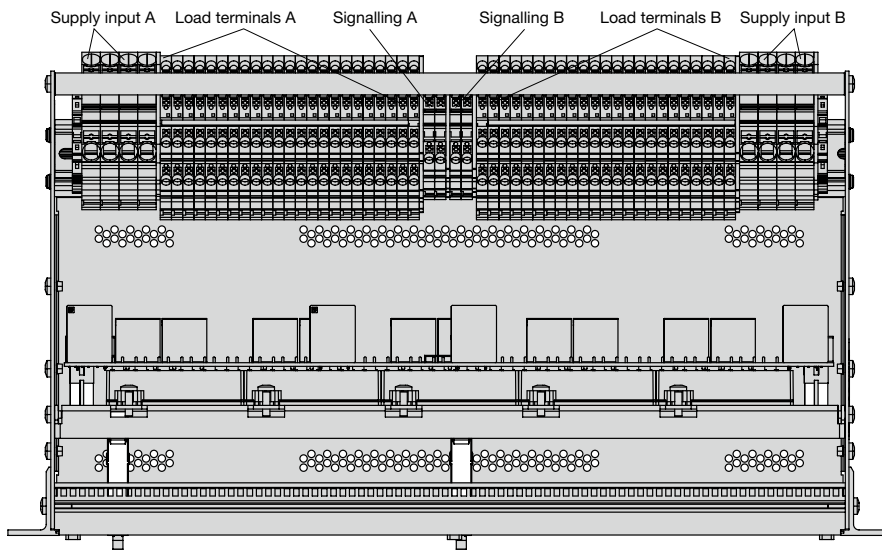
**Side view/example: no additional terminals on DIN rail, supply terminals on PCB**



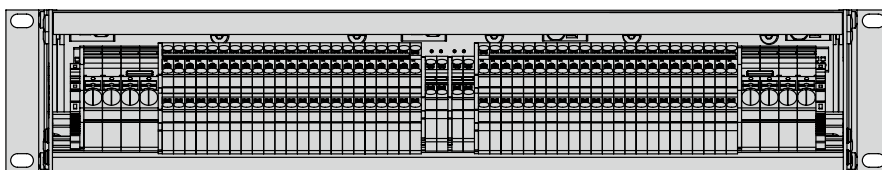
**Dimensions**

Example: PDB-AC-2210-30R-B2-Z

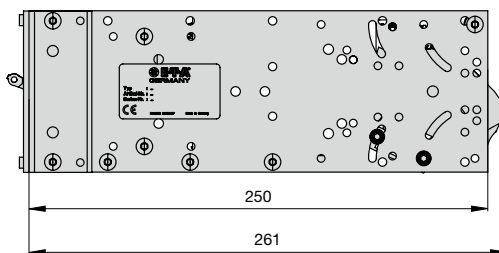
**Top view (open cover, no wiring)/example: with additional terminals on DIN rail**



**Rear view/example: additional terminals on DIN rail**



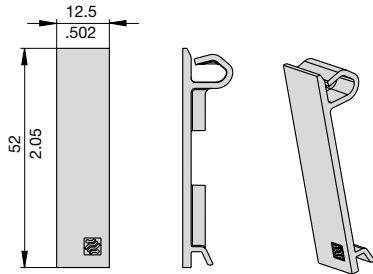
**Side view/example: additional terminals on DIN rail**



## Accessories

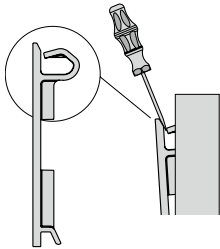
2210 circuit breakers

**Blind cover for Power-D-Box**  
(circuit breaker types 3600/3900, 2210)  
**Y 308 563 01**



### Removal of the blind cover:

Use the screw driver to snap off at the lever edge

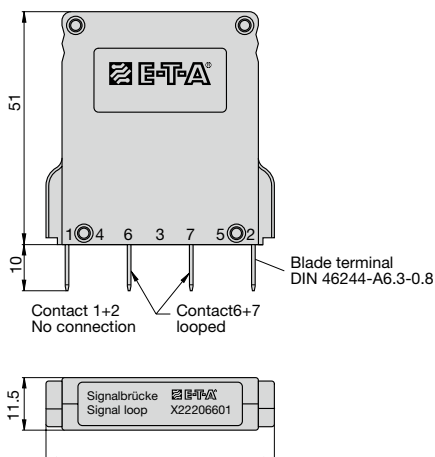


2210 circuit breakers

### 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



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.

## Installation instruction

### For more details:

Follow the QR code for the current installation instruction of your „Flexible **Power-D-Box**®“. You will find detailed information using the selected ordering number code.

### Installation instruction:

**Flexible Power-D-Box® AC**  
**for 2210 (positive pole protected)**  
**mechanical circuit breakers**

