E-T-A®
ENGINEERING TECHNOLOGY

Power-D-Box®

Conventional power distribution systems for telecommunication technology

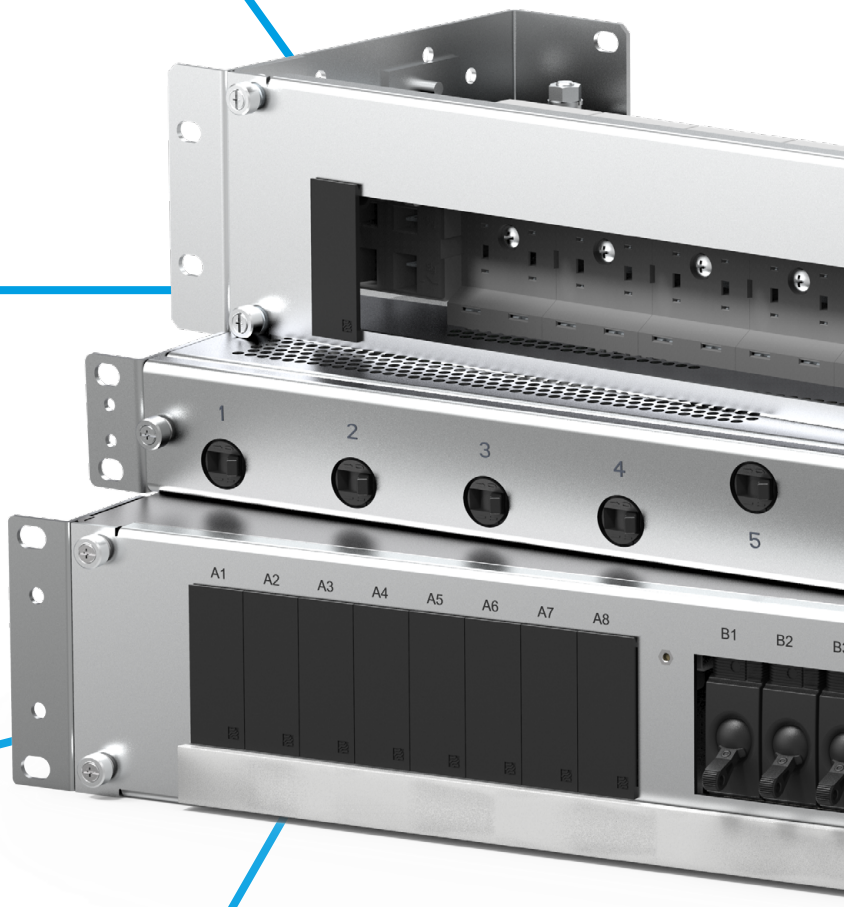
Power distributio

Easy installation

Time-consuming assembly and wiring times are eliminated. Only the power input and the load outputs must be connected and the power distribution system is ready for operation. Thanks to captive screws circuit breakers can be changed without tools.

Hot Swapping

The installed circuit breakers can be connected and replaced even under voltage. This allows artless extension and retrofit without costly downtimes.



Universally deployable

The compact design saves valuable space in the IT-cabinet. Thanks to reversible flanges the systems are deployable in 19” and in ETSI (21") cabinets.

ETSI
19"

Unrivalled system availability

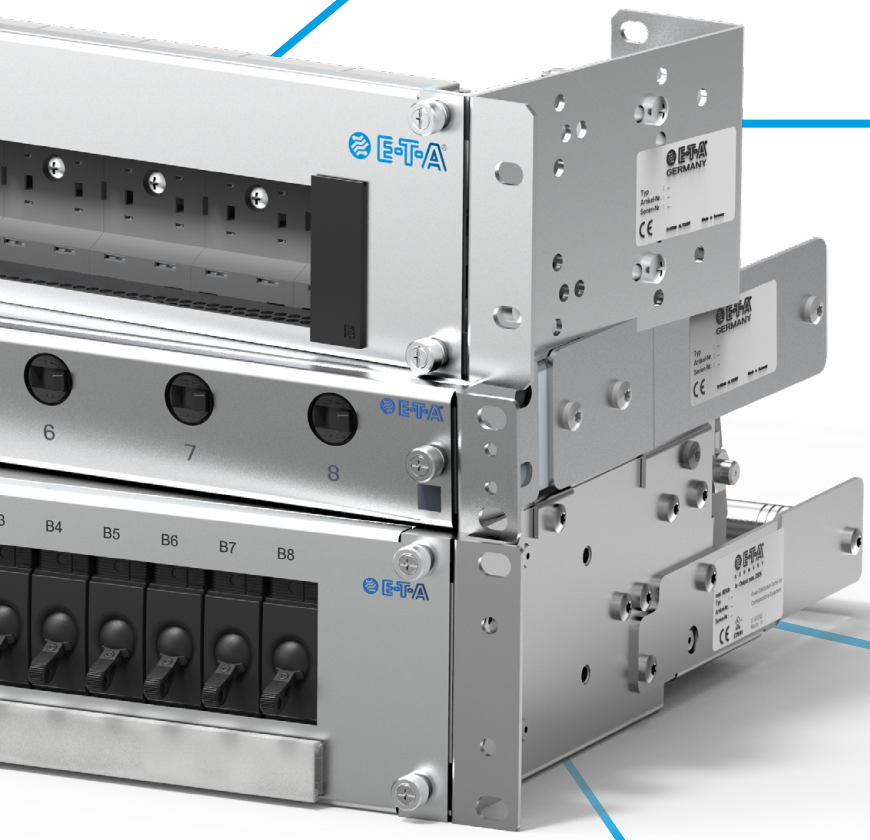
E-T-A’s power distribution systems ensure selective disconnection of loads in network cabinets. In the event of a short circuit, only the defective load will be disconnected and the remaining loads can continue operating without interruptions. This helps avoid downtimes and increase the availability of your IT and telecommunications infrastructure.

n with *Power-D-Box®*

Compact - flexible - reliable

Economic and flexibly expandable

The ***Power-D-Box®*** systems provide economic efficiency through a modular design. The number of slots can be selected according to the application and flexibly expanded even under voltage.



Temperature independent tripping

Thanks to circuit breakers with magnetic or hydraulic-magnetic tripping behaviour, ***Power-D-Box®*** switch off reliably even if the temperature in the system cabinet fluctuates.

Effective alarm management

Many ***Power-D-Box®*** versions have integral group signalling. This allows a convenient alarm management in the control room.

Save handling

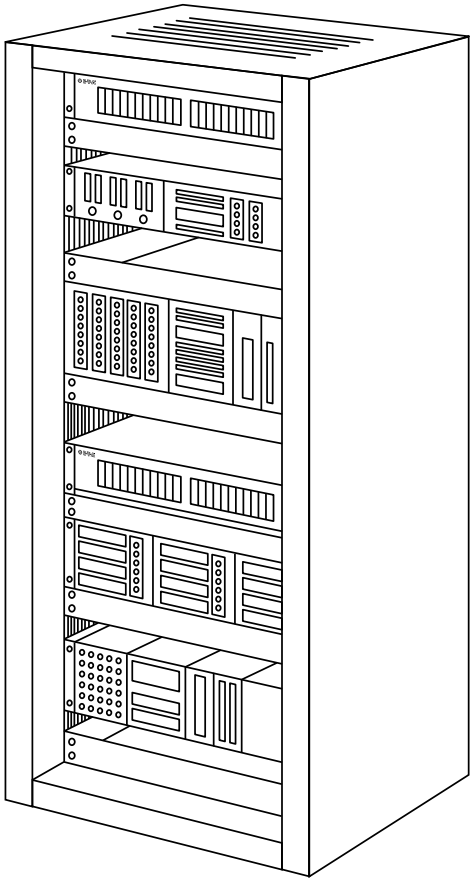
The completely isolated design ensures safe working under voltage. The busbars and the group signalling are protected against brush contact insulated in a housing.

E-T-A Power distribution systems
in the network control cabinet

Unrivalled system availability
E-T-A's power distribution systems ensure selective disconnection of loads in network cabinets. In the event of a short circuit, only the defective load will be disconnected and the remaining loads can continue operating without interruptions. This helps avoid downtimes and increase the availability of your IT and telecommunications infrastructure.

Economic efficiency
Thanks to their modular design, E-T-A power distribution systems can flexibly be extended and ensure an economic efficiency second-to-none through short mounting times and maintenance-friendly design. Due to plug-in type circuit protectors, the power distribution systems can be extended during operation which prevents a failure of the entire system.

Customer-specific solutions
E-T-A offers individual power distribution systems, perfectly matched to your application. The sophisticated E-T-A modular system ensures short development cycles. No matter if you wish to realise customer-specific small quantities or projects with a perennial runtime: you will always benefit from superior quality "made in Germany" with E-T-A products and from permanently harmonised standards.



Flexible and custom-designed -
E-T-A's power distribution systems

Your benefits

- **Minimal wiring complexity** – Only supply and load outputs have to be connected and the system is ready for action
- **Absolutely safe handling** – The completely isolated design ensures safe working under voltage

High *Power-D-Box®*
Up to 125 A per module

The High ***Power-D-Box®*** is a compact 19” solution for flexible power distribution and protection of up to 16 load circuits. The redundantly designed system can be populated with 8345 hydraulic-magnetic plug-in type circuit breakers. All live parts and the group signalisation are located in a metal housing protected against brush contact, so that no live parts are accessible. The loads can be connected via screw terminals on the front or on the rear, according to application.

High ***Power-D-Box®***

8345 circuit breaker

Main features

- 19"/ETSI power distribution system made of aluminium
- Rated voltage DC 48 V, 65 V, 80 V
- Negative pole protected
- Total current up to 232 A per power input
- Load up to 125 A per circuit breaker
- Under voltage pluggable, temperature independent circuit breakers

Compact *Power-D-Box®*
Space saving

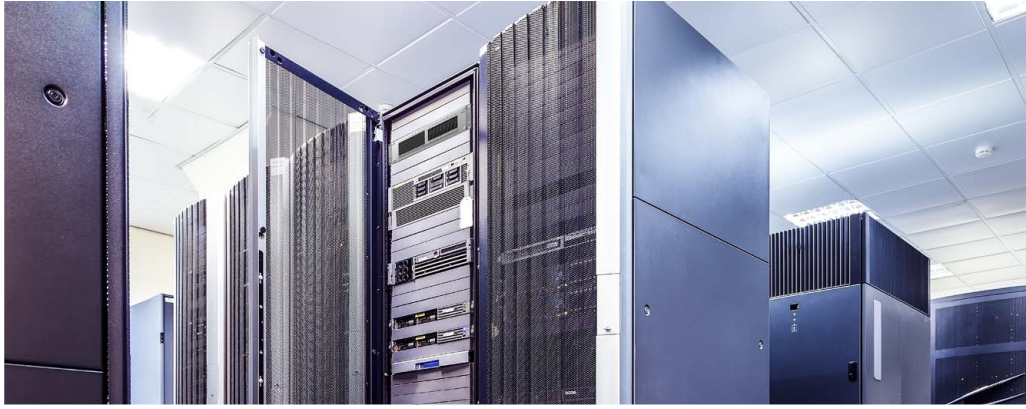
The Compact ***Power-D-Box®*** is the right choice when the component height is a challenge. It impresses with a height of only one rack unit (44mm). The different models allow the use of 8340-F and 8335 hydraulic-magnetic circuit breakers. In this way, you get maximum power distribution with minimum space requirement.

Compact ***Power-D-Box®***

8340-F circuit breaker

Main features

- 19"/ETSI power distribution system made of aluminium
- Rated voltage DC 48 V, 65 V
- Negative pole protected
- Total current up to 150 A per power input
- Load up to 30 A per circuit breaker
- Under voltage pluggable, temperature independent circuit breakers

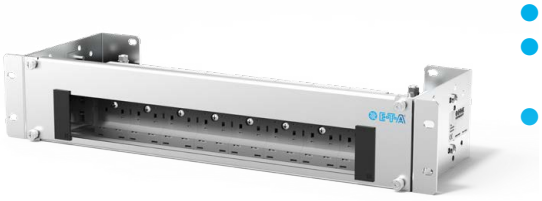


Economy *Power-D-Box®*
High modularity

The Economy ***Power-D-Box®*** is characterised by a high modularity. Industrially produced power distribution modules can be combined individually, application-specifically and cost-effectively. The redundantly designed system in 2HE can be populated with 8340-F and 8335 hydraulic-magnetic plug-in type circuit breakers. The busbar and the group signalisation are located in a plastic housing protected against brush contact, so that no live parts are accessible. The loads can be connected on the front via spade terminals safe against false polarization.

Economy ***Power-D-Box®***

8340-F circuit breaker



CE RoHS REACH

Main features

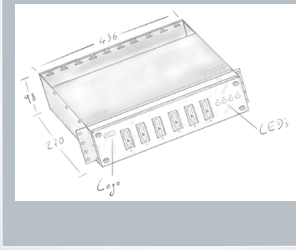
- 19"/ETSI power distribution system made of aluminium
- Rated voltage DC 48 V, 65 V, 80 V
- Negative pole protected
- Total current up to 132 A per power input
- Load up to 30 A per circuit breaker
- Under voltage pluggable, temperature independent circuit breakers
- Integral cable support rail

Flexible, space saving, economical -
Power-D-Box® by E-T-A

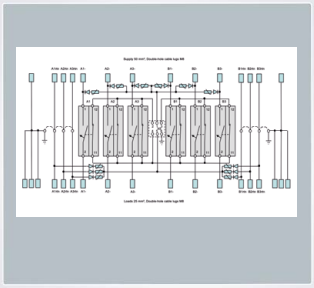
Your requirement - our solution:
Custom designed versions
Power-D-Box®

E-T-A supports customers throughout the entire process from the first design sketch to the production of the final solution. In close contact with the customer we work out product requirements and thanks to the E-T-A modular system an economic solution can be designed in a short time and produced in-house. In the accredited E-T-A test laboratory tests and certifications can be carried out. These »one-stop-shop« solutions guarantee customers technically best solutions and keep the coordination effort at a minimum.

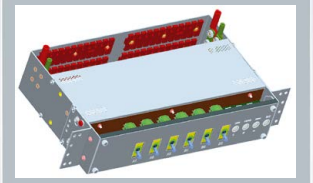
The development of your customer-specific solution:
This is how your ***Power-D-Box®*** is developed. From the design sketch to a schematic diagram and the 3D CAD design to the final product. During all these development steps, we are in close contact with you to ensure that the final product exactly meets your requirements.



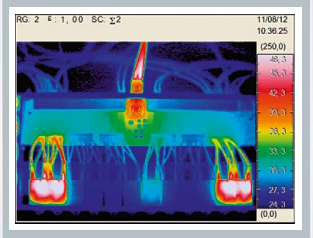
Design sketch



Schematic diagram



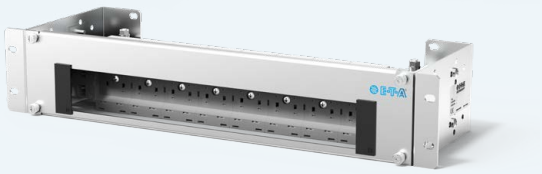
3D CAD design



Thermal consideration

Power-D-Box®
Technical data

Type	High *Power-D-Box®*	
		
Rated voltage	max. DC 80 V	
Protected pole	Negative pole	
Circuit breaker (magnetic-hydraulic)	8345	
Redundant operation	●	
Number of slots	Standard is a redundant design with 2 x 3, 2 x 4, 2 x 5, 2 x 6, 2 x 8 circuit breakers	
Housing		
Height	2HE	
Mounting method (Reversible flange)	19"/ETSI (21")	
Cable grip	optional	
Ground studs	2 x M8	
Supply		
Total current per power input	max. 232 A	
Cable connection	on the rear	
Terminal design	screw terminal	
Cable cross section	max. 95 mm^2	
Load channels		
Current rating per load channel	max. 125 A	
Cable connection	on the rear or on the front	
Terminal design	screw terminals	
Cable cross section	1.5...35 mm^2	
Signalling		
Cable connection	on the rear	
Terminal design	Screw terminal 1.25 mm^2	
Other		
Optional accessories	●	
Approvals	EN60950-1/UL 60950-1, EN62368-1, CSA C22.2 No.60950-1-07	

Economy *Power-D-Box*®	Compact *Power-D-Box*®
	
max. DC 80 V	max. DC 60 V
Negative pole	Negative pole
8335/ 8340-F	8335/ 8340-F
●	–
Standard is a redundant design with 2 x 6 or 2 x 8 circuit breakers	1 x 8 circuit breaker
2HE	1HE
19"/ETSI (21")	19"/ETSI (21")
integral	integral
2 x M6	8 x M5, 1 x M6
max. 132 A	max. 150 A
on top	on the rear
Screw terminal	Screw terminals
max. 35 mm^2	max. 50 mm^2
max. 30 A	max. 30 A
on the front	on the rear
load output connector safe against false polarization	plug-in type screw terminals
0.7...6.0 mm^2	0.2...6.0 mm^2
on the front	–
Blade terminals, DIN 46244-A 4.8x0.8 mm	–
●	●
upon request	upon request

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