

Description

The High **Power-D-Box®** is a compact 2RU power distribution system (two rack units). The redundant system accommodates 8345 hydraulic-magnetic circuit breakers. The entire circuitry and the group signalisation are placed in a metal enclosure protected against brush contact so that contact with live parts is reliably prevented. Depending on the application, the loads can be connected either on the front or on the rear by means of screw-type terminals. Besides various preferred types, we are able to design individual solutions, perfectly tailored to your application.



High Power-D-Box®

Features

- 19" power distribution system made of aluminium
- voltage ratings DC 24V, 48V, 65V, max. 80V
- protected negative pole
- loads up to 125A per circuit breaker
- optional accessories: cable clamps, grounding connectors, individual marking strips

Your benefits

- Compact and user-friendly design
- Ease of installation in 19" or ETSI control cabinets by means of reversible flanges
- Reliable alarm management by means of group signalisation
- Ease of system extension without shutdown due to plug-in type circuit breakers
- Redundant power input ensures unrivalled uptime of the system

Preferred types - for further details on all product versions please see ordering number code

Preferred types are those E-T-A products that are most frequently used by our customers. These preferred types are favourably priced and have shorter lead times than other product versions.

Preferred types	Short description
PDB-N-D06-RF	Load current max. 65 A with 2 x 3 load terminals on the front
PDB-N-D06-RR	Load current max. 125 A with 2 x 3 load terminals on the rear
PDB-N-D08-RF	Load current max. 65 A with 2 x 4 load terminals on the front
PDB-N-D08-RR	Load current max. 125 A with 2 x 4 load terminals on the rear
PDB-N-D10-RF	Load current max. 65 A with 2 x 5 load terminals on the front
PDB-N-D10-RR	Load current max. 85 A with 2 x 5 load terminals on the rear
PDB-N-D12-RF	Load current max. 65 A with 2 x 6 load terminals on the front
PDB-N-D12-RR	Load current max. 85 A with 2 x 6 load terminals on the rear
PDB-N-D16-RR	Load current max. 6 x 85 A + 10 x 30 A with 2 x 8 load terminals on the rear

Approval logos



Further information

The current data sheet is available on our website: www.e-t-a.de/d703

Technical data	
General data	
General data	Max. DC 80 V
Protected pole	Minus
Circuit breakers / Circuit protectors	8345 plug-in type circuit breaker (8345-.01A-W0..-DB1B2B-..)
8345 plug-in type circuit breaker	Dependent on version, 2 x 3, 2 x 4, 2 x 5, 2 x 6, 2 x 8
Redundancy	Redundant system
Conformity	CE marking to 2014/35/EU (EN 62368-1) and 2011/65/EU
Fire resistance (IEC 60695, Part 2-2)	self-extinguishing
Operating temperature range	-30 ... +60 °C UL /CSA -30...+50 °C
Mechanical data	
Dimensions	Width: 482.6 mm (19" mounting); Height: 89 mm (2 HE); Installation depth 288 mm
Material	Aluminium
Grounding of enclosure	2 x M8 for enclosure
Cable grip	optional
Total weight	7.5 kg

Technical data	
Total weight	
Total current per supply	Max. 232 A per supply at ambient temperature -30 ... +60 °C UL60950 -1/ CSA C22.2 No. 60950-1: 230 A total current at ambient temperature -30... +50 °C
Terminals/ Cable cross section	Screw terminals 25 ... 95 mm ² , flexible with wire end ferrule 35 ... 95 mm ² , flexible without wire end ferrule
Loads	
Current rating per load channel	Max. 125 A (when using a circuit breaker > 80 A, the directly adjacent slots may only be loaded with a total of 160 A).
Terminals/ Cable cross section	Screw terminals Load channels on the front 0.5 ... 10 mm ² flexible with wire end ferrule Load channels on the rear 1.5 – 35 mm ² flexible with wire end ferrule
Group signalling	Screw terminal 0,14 ... 1,5 mm ²

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PDB-N-D08-RF	Load current max. 65 A with 2 x 4 load terminals on the front
PDB-N-D08-RR	Load current max. 125 A with 2 x 4 load terminals on the rear
PDB-N-D10-RF	Load current max. 65 A with 2 x 5 load terminals on the front
PDB-N-D10-RR	Load current max. 85 A with 2 x 5 load terminals on the rear
PDB-N-D12-RF	Load current max. 65 A with 2 x 6 load terminals on the front
PDB-N-D12-RR	Load current max. 85 A with 2 x 6 load terminals on the rear
PDB-N-D16-RR	Load current max. 6 x 85 A + 10 x 30 A with 2 x 8 load terminals on the rear

Ordering information

PDB Standard **Power-D-Box®** 19" with interchangeable ETSI flange - 19"

Protected pole	
N negative pole protected	
Module	
D X8345-D01*	
xx Number of ways (total)	
Main terminals	
R on the rear	
Load terminals	
R on the rear	
F on the front	
PDB - N - D 08 - R F ordering example	

*technical data on www.e-t-a.de

Approvals

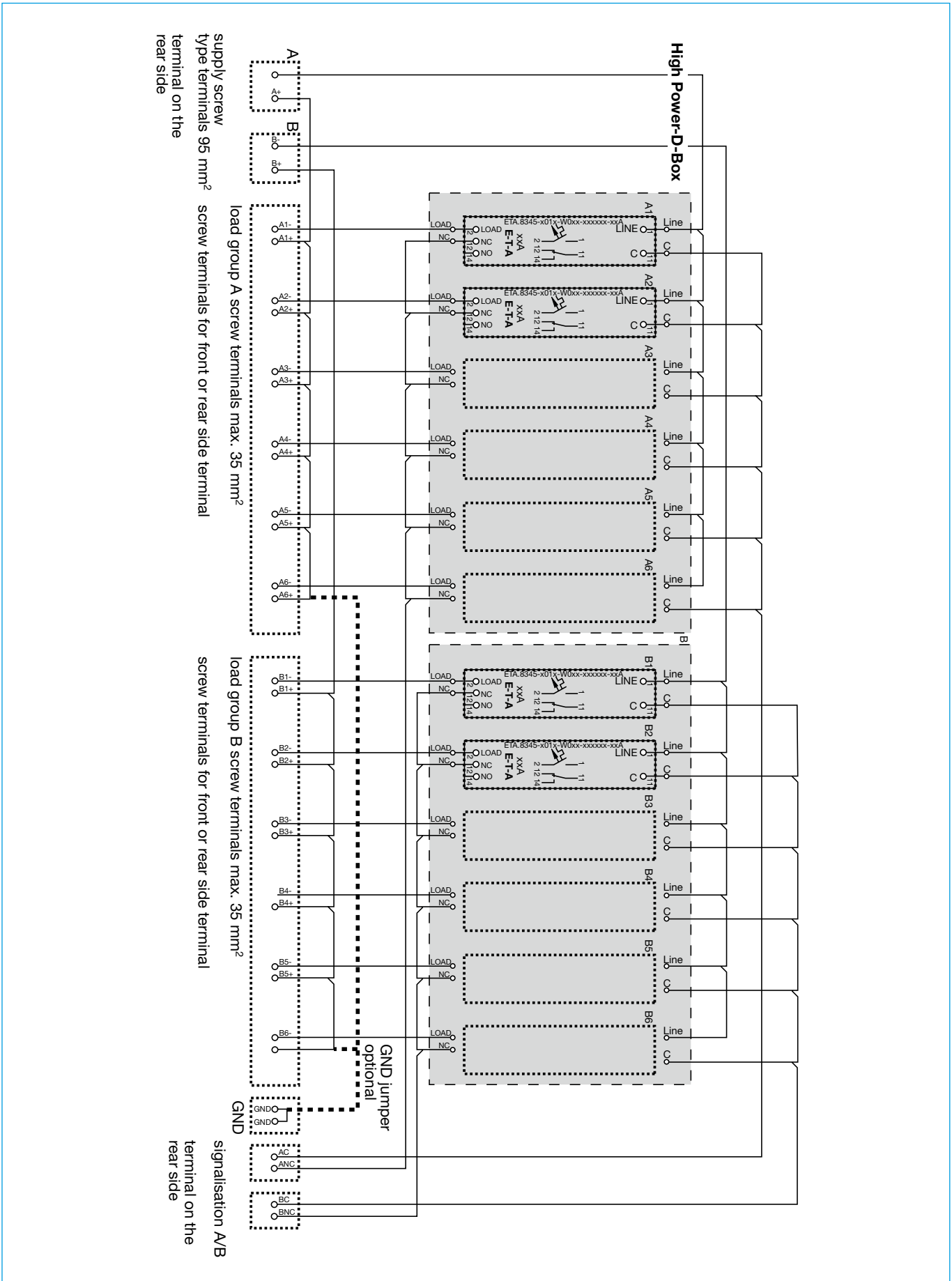
Authority	Standard	Rated voltage	Current ratings
UL	UL60950-1	max. DC 80 V	max. 125 A* per channel
	C22.2 No 60950-1-07	max. DC 80 V	max. 125 A* per channel

* depending on type, see preferred types
max. total current of neighbouring channels 160A

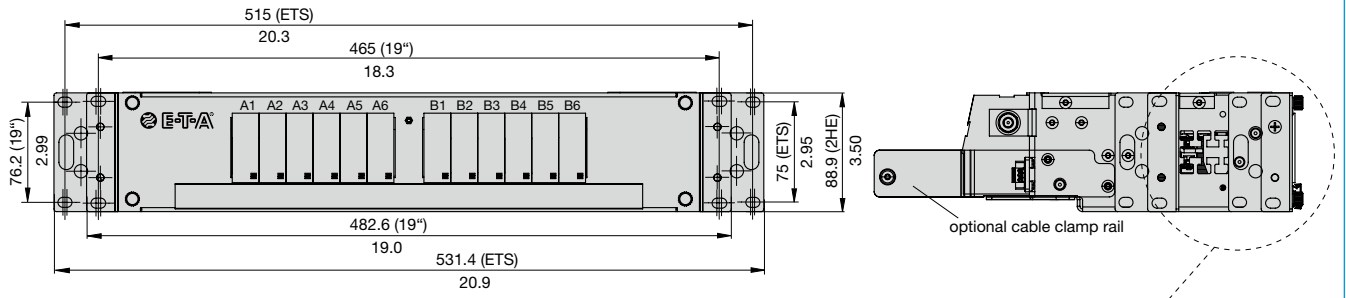
Custom designed versions

Looking for a version you cannot find in our ordering number code? Please get in touch. We will be pleased to find a solution for you.

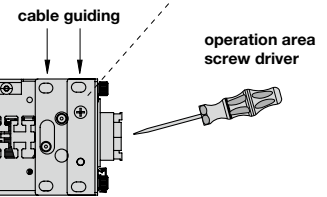
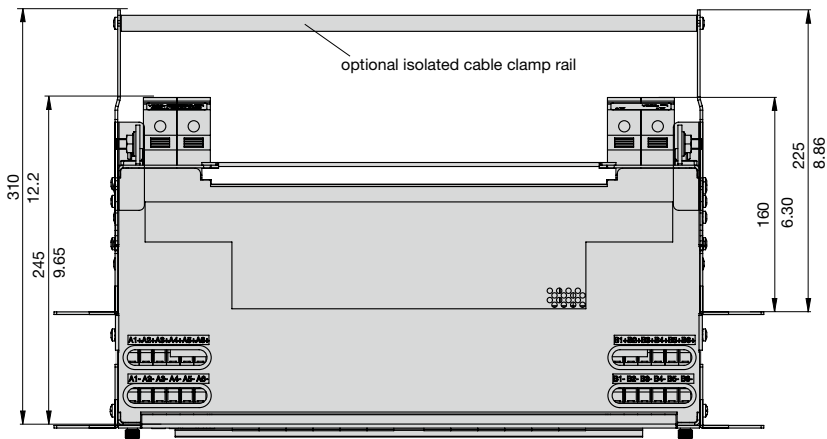
Schematic diagrams



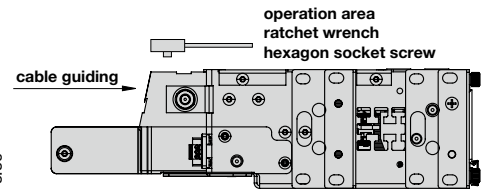
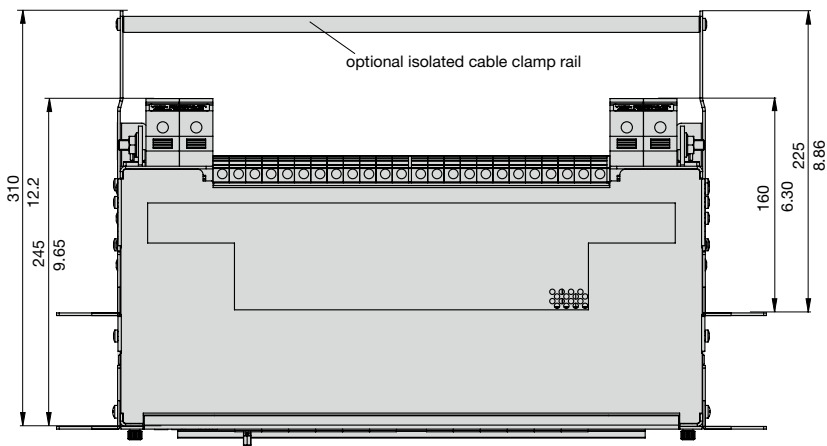
Dimensions



Load terminals front



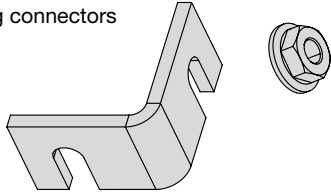
Load terminals rear



Accessories

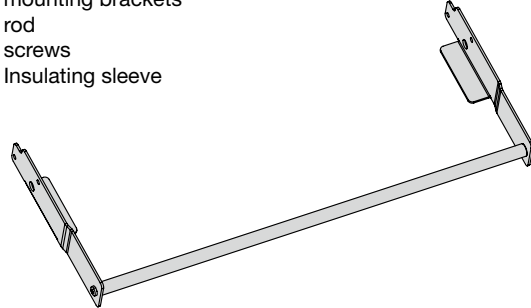
Grounding connector incl. mounting material
(connection plus to earth)

X 223 259 01
consisting of:
2 grounding connectors
4 nuts



Cable clamp rail

X 223 260 01
consisting of
2 mounting brackets
1 rod
6 screws
1 Insulating sleeve



	load terminals				supply feed
	terminals	max current load	rear	rear	terminal 95 mm ² 232 A
PDB - N - D 06 - RF	10 mm ²	65 A		1.5 to 1.8 Nm	10 to 12 Nm*
PDB - N - D 06 - RR	35 mm ²	125 A	3.2 to 3.7 Nm		10 to 12 Nm*
PDB - N - D 08 - RF	10 mm ²	65 A		1.5 to 1.8 Nm	10 to 12 Nm*
PDB - N - D 08 - RR	35 mm ²	125 A	3.2 to 3.7 Nm		10 to 12 Nm*
PDB - N - D 10 - RF	10 mm ²	65 A		1.5 to 1.8 Nm	10 to 12 Nm*
PDB - N - D 10 - RR	16 mm ²	85 A	2.5 to 3 Nm		10 to 12 Nm*
PDB - N - D 12 - RF	10 mm ²	65 A		1.5 to 1.8 Nm	10 to 12 Nm*
PDB - N - D 12 - RR	16 mm ²	85 A	2.5 to 3 Nm		10 to 12 Nm*
PDB - N - D 16 - RR	16 mm ² / 4 mm ²	6 x 85 A / 10 x 30 A	2,5 to 3 Nm (16 mm ²) 0,6 to 0,8 Nm (4 mm ²)		10 to 12 Nm*

* The current mounting instructions, which can be called up via the QR code on the product, are valid.

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.