

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.



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

19" Power-D-Box ®	length 84 modules (426.72 mm) height 2 U (88.90 mm) material: aluminium
Plug-in type circuit breakers 8345-.01A-W0..-DB1B2B-..	
with and without auxiliary contact module	X8345-S01KW102-M
Rated voltage	DC 48 V, DC 65 V, DC 80 V (other voltage ratings upon request)
Load	125 A per plug-in unit (when using circuit breakers rated 80 A plus, total load of the neighbouring slots must not exceed 160 A)
Total current per supply	232 A total current at ambient temperature -30...60 °C (-22 °F...140 °F) UL/CSA: 230 A total current at ambient temperature -30...+50 °C

Technical data

Fire resistance (IEC 60695, Part 2-2)	self-extinguishing
Terminal design*	
Supply feed	35...95 mm ² , flexible, screw-type terminal 25...95 mm ² with wire end ferrule
Loads	1,5...35 mm ² , flexible, screw-type terminal 1,5...35 mm ² with wire end ferrule
Signalling	screw-type terminal 1,5 mm ²
Ground	bolt (M8)
Weight	approx. 7,5 Kg
Conformity	CE to EN60950-1

*(detailed values on page 4)

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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"

P	Protected pole
N	negative pole protected
D	Module
08	X8345-D01*
08	xx Number of ways (total)
-R	Main terminals
F	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

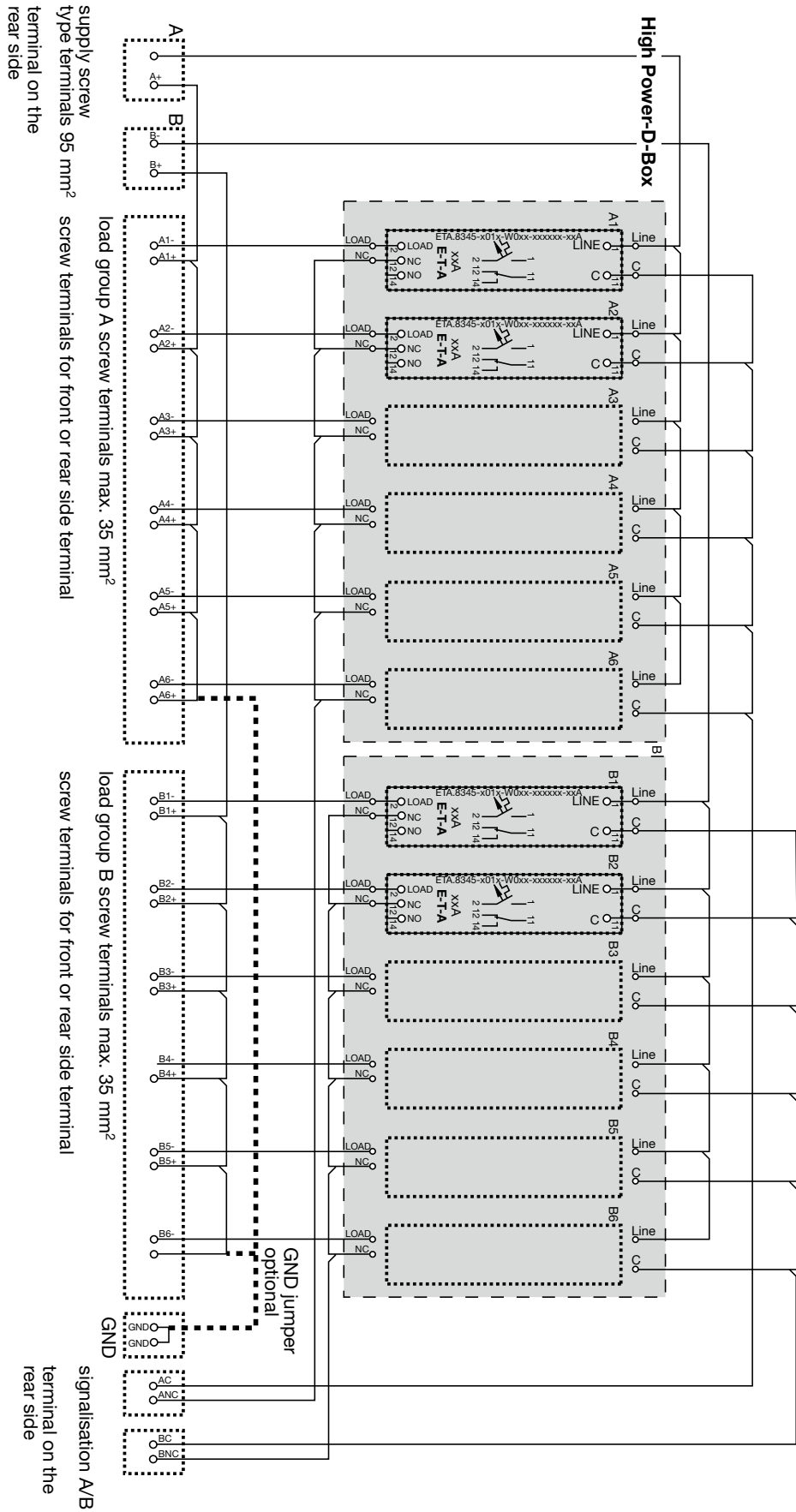
Authority	Standard	Rated voltage	Current ratings
UL	UL60950-1	max. DC 80 V	max. 125 A* per channel
CSA	C22.2 No 60950-1-07	max. DC 80 V	max. 125 A* per channel

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

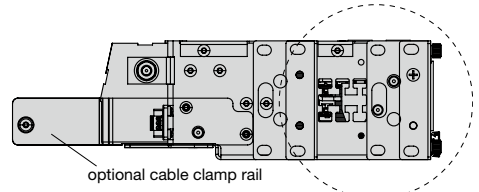
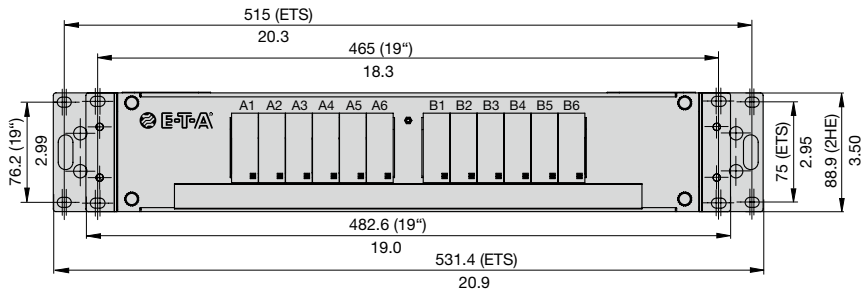
Custom designed versions

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.

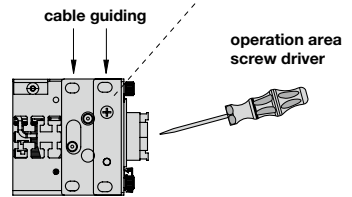
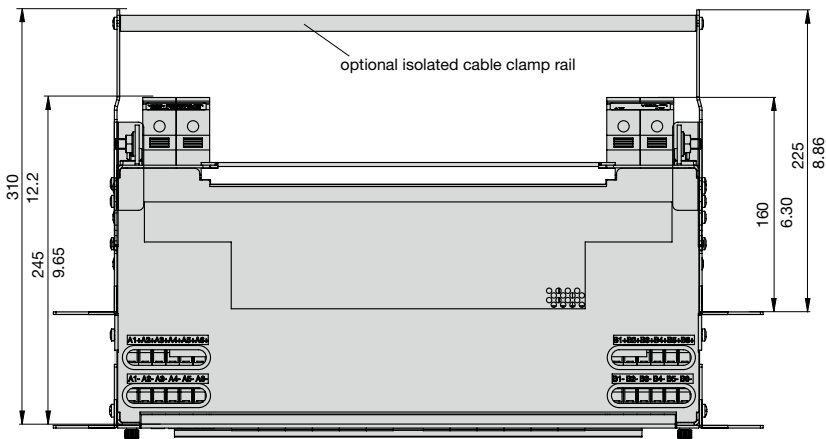
Schematic diagrams



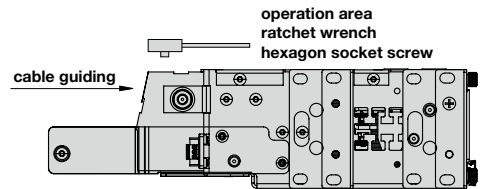
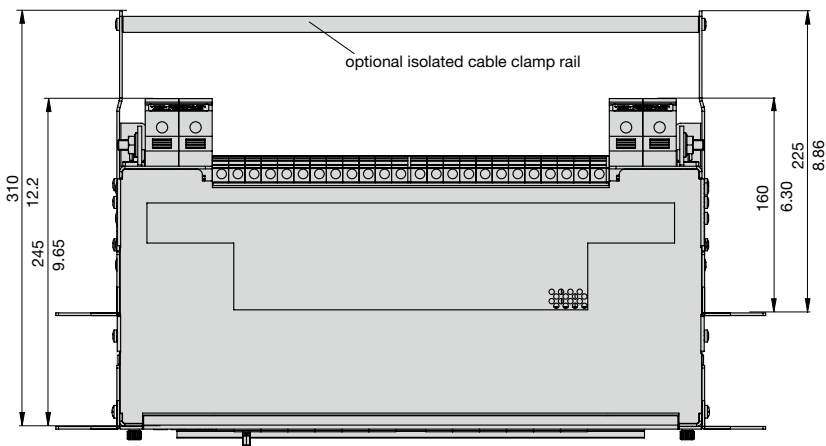
Dimensions



Load terminals front



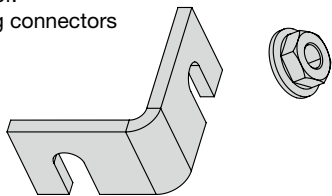
Load terminals rear



Accessories

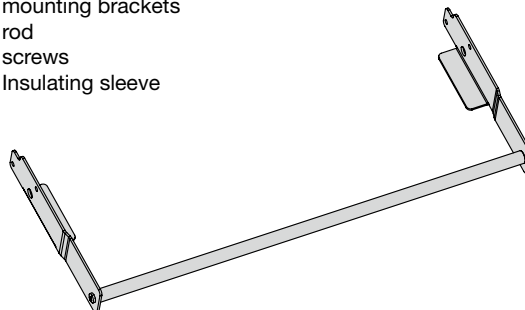
Grounding connector incl. mounting material
(connection plus to earth)

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	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.

Grounding M8 - 12-15 Nm
Terminal group signalisation 1.5 mm² - 0.22 bis 0.25 Nm

All dimensions without tolerances are for reference only. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved. Product markings may not be exactly as the ordering codes. Errors and omissions excepted.