CONVENTIONAL POWER DISTRIBUTION SYSTEMS
High *Power-D-Box®*

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The High ***Power-D-Box®*** is a compact power distribution system with 2 height units (HU). The redundantly designed system accommodates 8345 hydraulic-magnetic plug-in type circuit breakers. The entire circuitry as well as the group signalisation are placed in a metal enclosure, protected against brush contact, so that live parts cannot be touched. Depending on the application, the loads can be connected on the rear or on the front by means of screw terminals. Besides various preferred types, we can offer individual solutions, perfectly tailored to your application. To conserve resources, the High Power-D-Box® is designed to be disassembled. Sustainability meets innovation.

TYPICAL FEATURES

- 19" power distribution system, made of aluminium
- Rated voltage DC 24 V, 48 V, 65 V, max. 80 V
- Minus-pole protected
- Load up to 125 A per circuit breaker
- Optional accessories: Cable strain relief, ground to positive pole current bridge, individual labelling strips

YOUR BENEFITS

- Compact and service-friendly design
- Easy mounting in 19” and ETSI system cabinets by means of reversible flanges
- Reliable alarm management by means of group signalling
- Easy system expansion without system downtime, thanks to pluggable circuit protectors
- Redundant power supply ensures unrivalled system uptime

PREFERRED TYPES

Preferred types are E-T-A products, which are most frequently used by our customers. We manufacture these preferred types in substantial quantities. You can find an overview of our preferred types here (Page 3).

TYPICAL APPLICATIONS

Telecommunications and datacom, network infrastructures

APPROVALS / CERTIFICATIONS

c UL us LISTED

WEB LINKS

Further information, Installation instruction, REACH, RoHS, Contact

COMPLIANCE

REACH RoHS CE UKCA

GENERAL INFORMATION

FURTHER INFORMATION

Installation instruction
https://www.e-t-a.com/datei/13809

TECHNICAL DATA

ELECTRICAL DATA

Rated voltage U_n	DC 24 V; DC 48 V; DC 65 V; max. DC 80 V
Protected pole	1-pole minus
Circuit breakers / circuit protectors	8345 (8345-.01 A-W0..-DB1B2B-..) plug-in type circuit breaker
Number of loads	Depending on version, 2 x 3, 2 x 4, 2 x 5, 2 x 6, 2 x 8
Redundancy	Redundant system
Fire resistance (IEC 60695, section 2-2)	Self-extinguishing

MECHANICAL DATA

Mounting dimensions (WxHxD)	Width: 482.6 mm (19" mounting) x Height: 89 mm (2 HU) x Installation depth: 288 mm
Mass	Approx. 7.5 kg
Material	Aluminium
Enclosure grounding	2 x M8 for enclosure
Cable strain relief	Optional

SUPPLY

Total current per supply	Max. 232 A per supply at -30…+60 °C ambient temperature 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

Rated current per load channel	Max. 125 A (when using a circuit breaker for equipment protection > 80 A the directly neighbouring slots may only be loaded up to 160 A in total.)
Terminals / Cable cross section	Screw terminals Load channels at the front: 0.5...10 mm^2 flexible with wire end ferrule Load channels at the back: 1.5...35 mm^2, flexible with wire end ferrule

GROUP SIGNALLING

Parallel connection	Screw terminals 0.14…1.5 mm^2

AMBIENT CONDITIONS

Ambient temperature	-30...+60 °C (UL /CSA -30...+50 °C)

ORDERING NUMBER CODE

P	D	B	-	N	-	D	0	8	-	R	F
1				2		3	4			5	6

1 TYPE NUMBER

PDB	***Power-D-Box***® 19“ (condition as delivered), with ETSI reversible flange – 19“

2 PROTECTED POLE

N	Minus pole protected

3 2

D	X8345-D01

4 LOAD CHANNELS

xx	Number of load channels (total)

5 MAIN TERMINALS

R	At the back

6 LOAD TERMINALS

R	At the back
F	On the front

Looking for a customer-specific version you cannot find in our ordering number code? Please get in touch with us.
Circuit protectors are not included in the delivery scope.

PREFERRED TYPES

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

APPROVALS

APPROVALS

Approval authority	Test standard	Rated voltage [V]	Rated current range [A]	Certified temperature range [°C]
UL	UL60950-1	Max. DC 80	Max. 125 A * per channel	-30…+50
	C22.2 No 60950-1-07	Max. DC 80	Max. 125 A * per channel	-

*depending on version, see preferred types
Max. total current neighbouring channels 160 A

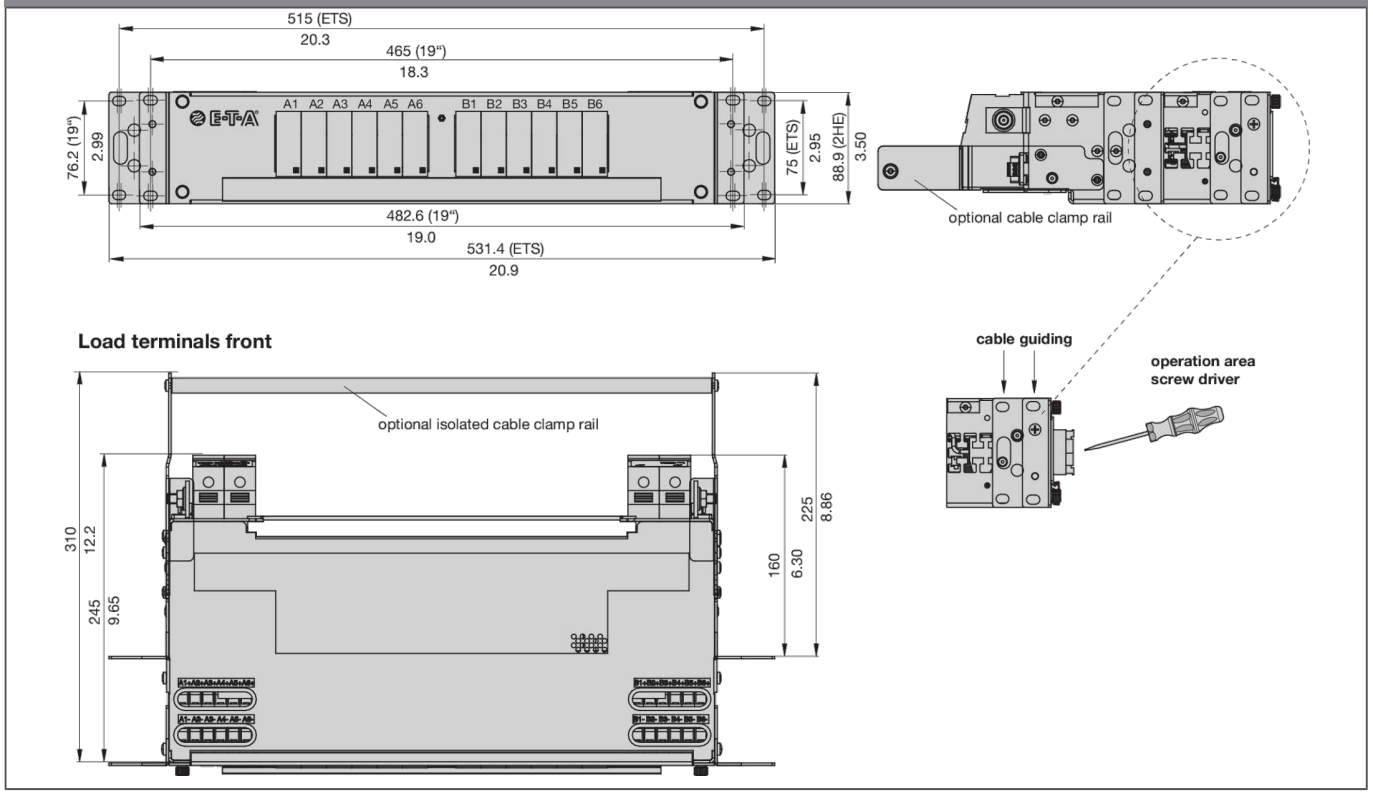
COMPLIANCE

According to 2014/35/EU (EN62368-1) and 2011/65/EU

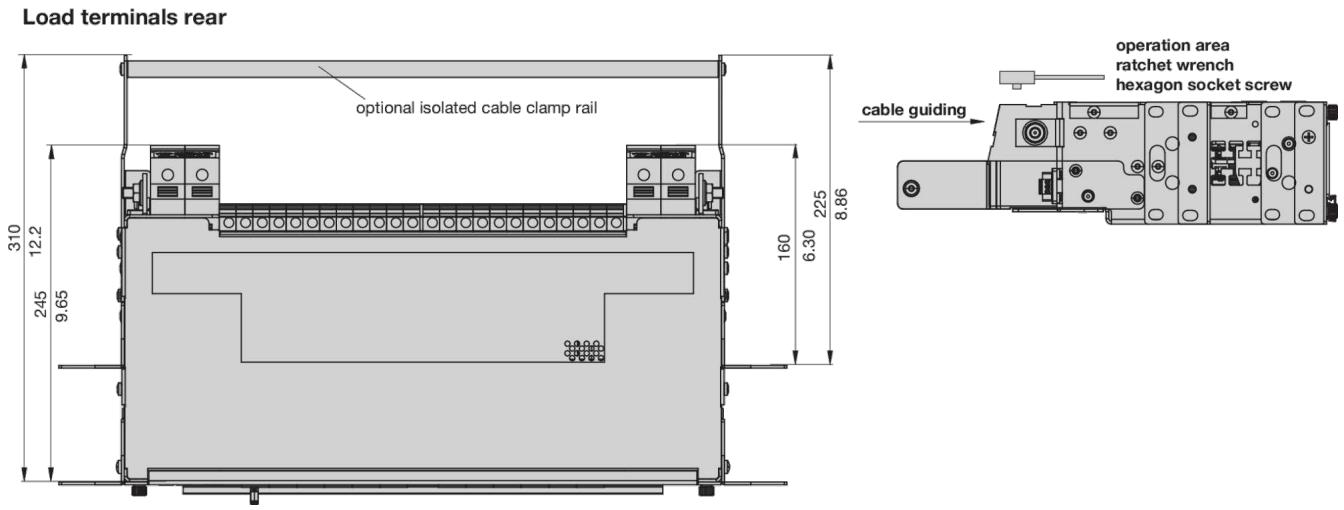
Environmental labels according to EN ISO 14021:2016 + A1:2021
The product is designed to be disassembled.

DIMENSIONS

DIMENSIONS

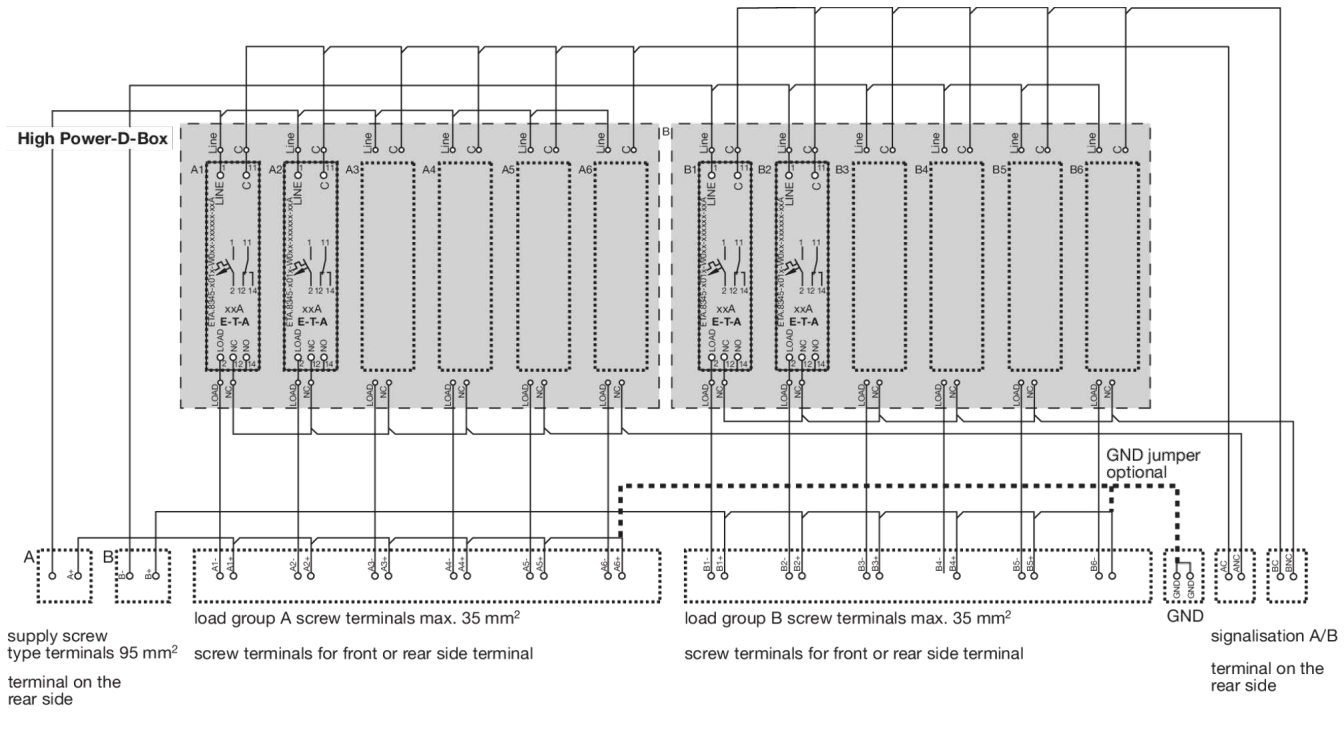


DIMENSIONS



SCHEMATIC DIAGRAMS

SCHEMATIC DIAGRAM



TERMINALS

Preferred types	Load terminals				Supply cable
-	Terminal [mm²]	Max. current load [A]	At the back [Nm]	On the front [Nm]	Terminal 95 mm² [Nm]
PDB-N-D06-RF	10	65	-	1.5...1.8	10...12*
PDB-N-D06-RR	35	125	3.2...3.7	-	10...12*
PDB-N-D08-RF	10	65	-	1.5...1.8	10...12*
PDB-N-D08-RR	35	125	3.2...3.7	-	10...12*
PDB-N-D10-RF	10	65	-	1.5...1.8	10...12*
PDB-N-D10-RR	16	85	2.5...3	-	10...12*
PDB-N-D12-RF	10	65	-	1.5...1.8	10...12*
PDB-N-D12-RR	16	85	2.5...3	-	10...12*
PDB-N-D16-RR	16/ 4	6 x 85/ 10 x 30	2.5...3 (16mm²)/ 0.6...0.8 (4mm²)	-	10...12*

*The latest issue of the mounting instruction, which is available via QR code on the product, takes precedence.

ACCESSORIES

OPTIONAL ACCESSORIES

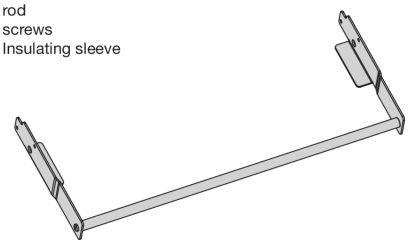
X22326001	Cable strain relief including: • 2 mounting brackets • 1 rod • 6 screws • 1 insulating tube	
X22325901	Grounding connector incl. mounting material (plus connection to ground) including: • 2 grounding connectors • 4 nuts	

FURTHER INFORMATION ABOUT ACCESSORIES (DRAWINGS)

ACCESSORIES

Cable clamp rail

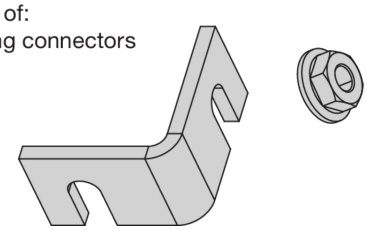
X 223 260 01
consisting of
2 mounting brackets
1 rod
6 screws
1 Insulating sleeve



ACCESSORIES

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

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



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 technical improvement. 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 part numbers may differ from the device marking.