

CabD 3000

Power system

Description

CabD is Delta's robust indoor cabinet developed for expandable telecom power systems. The number 3000 defines the maximum current carrying capacity of single cabinet bus bars. Total load current in parallel configurations may be from 1000 A to over 10000 A.

A complete system includes high efficiency rectifiers, AC and DC connections, battery connection and the advanced ORION controller. The system is typically organized in bulk power concept. The rectifiers are housed in a rectifier cabinet including the AC inputs. The battery connections locate in specific cabinet and load connections in distribution cabinet. Optionally the rectifiers, battery connection and even one load distribution row are possible to be configured in a single cabinet.

The multi cabinet CabD 3000 power system is easy to define with a table-based technical configuration file. Finally, Delta factory configures the cabinets to be individually packed for delivery.

Delta is known for quality and product reliability – in this solution that has been combined to optimize the total cost of ownership.

Main features

- Scalable power system up to 144 kW per cabinet and max 768 kW parallel
- Truly modular building blocks
- Mirroring the system built for top entry or bottom entry for cabling
- High efficiency rectifiers up to 95 %
- Enhanced monitoring and controlling with ORION controller

Applications

- Central offices
- Mobile telephone switching offices
- Data centers



CabD 3000

Power system

Technical specifications

Rectifier section	DPS 6000B-48-12 CabD 1500	DPS 6000B-48-24 CabD 3000	DPS 4000B-48-18 CabD 1500	DPS 4000B-48-36 CabD 3000
Rectifier module	DPR 6000B-48	DPR 6000B-48	DPR 4000B-48	DPR 4000B-48
Efficiency	95 %	95 %	95 %	95 %
Install power (max. per cabinet)	72 kW	144 kW	72 kW	144 kW
Input voltage range	320 (*) - 528 V _{RMS L-L} , (* linear power derating below until 266 V _{RMS L-L} (4500 W))	320 - 528 V _{RMS L-L} , (* linear power derating below until 266 V _{RMS L-L} (4500 W))	184 - 300 V _{RMS L-N} , (* linear power derating below until 88 V _{RMS L-L} (1500 W))	184 - 300 V _{RMS L-N} , (* linear power derating below until 88 V _{RMS L-L} (1500 W))
Input current (3 phase)	48 A _{RMS} (per rectifier shelf) 144 A _{RMS} (per cabinet)	48 A _{RMS} (per rectifier shelf) 288 A _{RMS} (per cabinet)	48 A _{RMS} (per rectifier shelf) 144 A _{RMS} (per cabinet)	48 A _{RMS} (per rectifier shelf) 288 A _{RMS} (per cabinet)
Input fuse (recom.)	3 x (3 x 50 A)	6 x (3 x 50 A)	3 x (3 x 50 A)	6 x (3 x 50 A)
Input protection	Internal OVP, Inbuilt fuses High input voltage	Internal OVP, Inbuilt fuses High input voltage	Internal OVP, Inbuilt fuses High input voltage	Internal OVP, Inbuilt fuses High input voltage
Output protection	Inbuilt fuses (all poles) High voltage Over-temperature protection	Inbuilt fuses (all poles) High voltage Over-temperature prot.	Inbuilt fuses (both poles) High voltage Over-temperature prot.	Inbuilt fuses (both poles) High voltage Over-temperature prot.

AC input	
Mains connection	Cable / Screw terminals
AC configuration	3L + PE (DPR 6000B-48 based), 3L + N + PE (DPR 4000B-48 ver)
Nominal input voltage	400 V _{RMS} (L-L), 230 V _{RMS} (L-N)
Frequency range	45 ... 66 Hz
Main switches	Optional
Individual rectifier fuses	Optional, only rectifier cabinet

DC interfaces	
Output voltage range	42-58 V _{DC} ; 53.5 V _{DC nom.}
Output current (max.)	1500 A or 3000 A per cabinet
Load distribution options	30 x MCB (1-6 per cabinet) 40 x MHCB (1-6 per cabinet) 13 x 22 x 58 (1-6 per cabinet) 14 x NH00 (1-5 per cabinet) 6 x NH03 (1-4 per cabinet)
Battery connection options	1-3 x TPS3 (up to 1600 A) 1-4 x TPS2 (up to 1200 A)
LVD (battery)	Optional

Control / Monitoring	
Controller	ORION
Local interface	Display, menu structure, keypads, LEDs
Remote monitoring	Alarm relays, modems, WEB Interface, SNMP protocol

Others	
Cabinet dimensions	2000x600x600 mm (HxWxD)
Weight	100 - 300 kg
Operating temperature	-25 - +45 °C
Humidity (relative)	95 % max, non cond.
Environment standard	ETSI EN 300 019-1-3
Safety standard	IEC 60950
EMC standard	EN 300 386
Packing	Vertical for truck transport Horizontal for shipping / air

Ordering	
System configurator	3791691700
Rectifier DPR 6000B-48	TPS1010006A
Rectifier DPR 4000B-48	TPS1010016C

Delta Energy Systems (Finland) Oy

Juvan teollisuuskatu 15, FIN-02921 Espoo

Phone: +358 9 849 660, Fax: +358 9 8496 6100

www.deltapowersolutions.com

FS_CabD_3000_en.docx / Rev. 03 / RPä

