DPS 3000 Series

110V DC Power System



DPS 3000 110V Series is the industrial grade 110V DC power system delivering up to 15 kW of output power for power utility, railway and telecom applications. It is modular, expandable and can be easily installed in 19-inch enclosure, also with gorgeous efficiency all rolled into one, that is, your one-of-a-kind energy core.

To maintain all aspects of the power performance, working perfectly at extremely high efficiency up to 96.5% and keeping low consumption, not to mention the ultra-leading power density, makes DPS 3000 110V Series the extraordinary green design and the savior of reducing CO_2.

Relying on the advanced real time monitoring mechanism and comprehensive battery management, ensuring prevention before problems and lengthening the battery life can reach each component's full potential in a compact 5U shelf and generate savings in OPEX.

Key Features

- 110 Vdc Output, up to 15 kW
- Compact 5U 19-inch Design
- Simple Installation & Front Access
- Single / 3-Phase Wide AC Input
- Hot-Pluggable Rectifier Modules
- Leading Efficiency 96.5%
- LCD & Web UI, SNMP Remote
- Comprehensive Battery Management

Applications

- Power Utilities & Substations
- Railway & Metro
- Switchgear Control, Protection & Trip Power
- Industrial Backup DC Power

DPS 3000 Series

INPUT

Voltage (nominal)	Single phase: 220/230/240 Vac (L-N), 3W (L, N, PE); 3 phase Wye: 380/400/415 Vac (L-L), 4W+PE (L1, L2, L3, N, PE)
Voltage (range)	Single phase: 90–300 Vac (L-N); 3 phase Wye: 156–520 Vac (L-L)
Frequency	50/60 Hz
Connections	Cable / screw terminals

OUTPUT

Voltage (nominal)	110 Vdc
Voltage (default)	122.5 Vdc
Voltage (adjustable range)	89 to 171 Vdc
Maximum Power @ nominal input	15 kW
Power Distributions	Load: space for C60 type x7 Battery: 2P 80A x2
LVDS	Battery: 500 A

CONTROL AND MONITORING

Operating Voltage	18 – 60 Vdc
Input Power	Typical 5 W, Maximum 15 W
Security Access	Password Protected Levels
User Interface	LCD (128 x 96 dots) and Web UI
Remote Access	Ethernet (SNMP optional)
Alarm Output	Dry Contact x6 (programmable)
Event Logs	> 10,000
Basic Alarms	Mains Failure; Rectifier Module Failure; AC SPD Failure; Voltage Abnormal; Breaker Trip; Temperature Abnormal
Alarm Level	Urgent / Non Urgent
Rectifier Management	Soft Start; (Optional: Redundancy Check; Active Efficiency Management; Sequence Control; Remote On/Off)
Battery Management	Temp Compensation; Charge Current Limit; Capacity Setting Monitoring: Voltage/Current/Temperature; Boost Charge; Float/Equalized Charge; (Optional: Battery Test (auto/manual); Lifetime Prediction; Battery Stolen Alarm)

MECHANICAL

Dimensions (W x H x D)	483 x 222 x 393 mm (19" x 8.76" x 15.47")
Weight	19.8 kg (43.61 lb)

ENVIRONMENTAL

Operating Temperature	0 to +65°C (+32 to +149°F)
Storage Temperature	-40 to +75 °C (-40 to +167°F)
Altitude	-152 to +3048 m
Related Humidity	0 – 95% RH non-condensing
Acoustic Noise	≤ 65 dBA @ 1 M

STANDARDS

Safety	EN / IEC 62368
EMC	CE, TUV/UL (rectifier)
Environment	RoHS

ORDERING INFORMATION

DC Power System	PSPDR153D0001-S	15 kW front access DC power system with packing
DPR 3000B Rectifier	PMPDR302A0051-S	110V, 3,000W Single Phase Rectifier, 96.5% (Multi-packing)
DPR 3000B Rectifier	PMPDR302A0051-A	110V, 3,000W Single Phase Rectifier, 96.5% (Single-packing)

* All specifications are subject to change without prior notice.

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Delta Controller

Delta Controller is an intelligent controller for Telecom Power Solution. As a brain of all aspects of power chain with elegant battery management suitable for various types of batteries, ensuring with prevention before problems to enable cost reduction could not be even easier.

With comprehensive functionality, besides locally accessing the configuration and supervision unit, remote monitoring and alarming via web browser is also acceptable. With the powerful data-gathering function played as an IOT platform, improving site efficiency and ensuring the power always on-air is our promise, our insistence.



Delta Controller

GOACAS-01-ZL

INPUT	
Voltage (default)	-54V_{DC}
Voltage (adjustable range)	-18 to -60V_{DC}
Current	0.8A_{DC} (Max.)

MECHANICAL	
Dimensions (W x H x D)	83.4 x 42.0 x 203.1mm (3.3 x 1.6 x 7.9in)
Weight	0.6kg (1.32lb)

STANDARDS	
Safety	EN / IEC 60950, class I ; UL 60950; CAN / CSA-C22.2
EMC	EN 55022, class B
Cooling	Natural air flow
Operating Temperature	-40 to +70 °C (-40 to +158 °F)
Relative Humidity	95%, non-condensing

FEATURES	
Number of Rectifiers	Up to 128
Number of Relay Output	6
Remote Monitoring	- Web browser, REST, SNMP, Syslog, MODBUS, customer specific protocols via Ethernet , RS232, RS485 or modem - Remote alarming dry contacts / SNMP traps / SMS; dial-out together with modem

FUNCTIONS	
System	Site expansions using additional CANbus modules and additional I/O's and measurements
Battery	Temperature compensated float charge, boost and equalize charge
Rectifier	- Efficiency mode with advanced rectifier cycling - Individual rectifier information and control

USER INTERFACE	
Local User Interface	Color display; LCD display; touch panel; WLAN (option)
WEB	Web UI with configurable access rights, login control and user profiles
Languages	English, Traditional Chinese (option), Japanese (option)

ORDERING INFORMATION	
Delta Controller	TPS1020028A

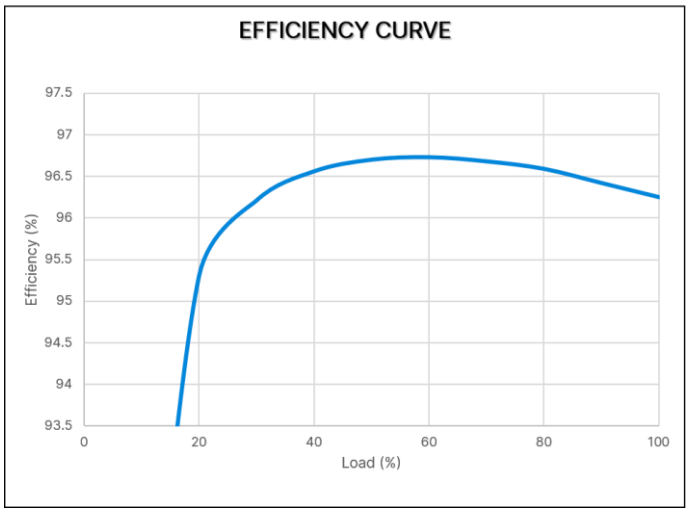
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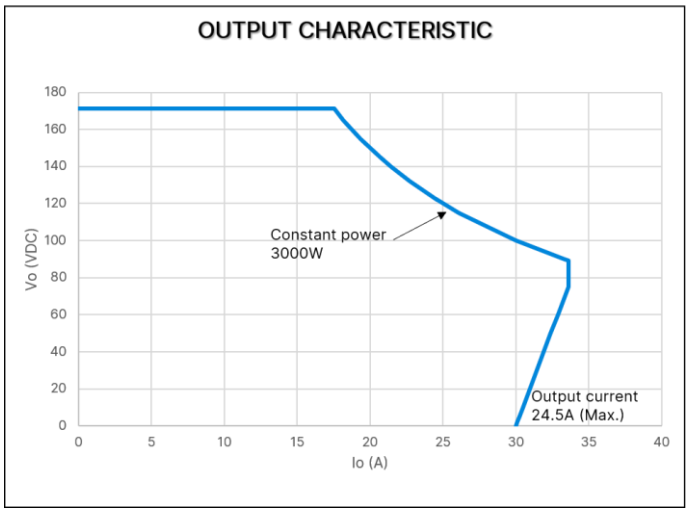
DPR 3000B-110

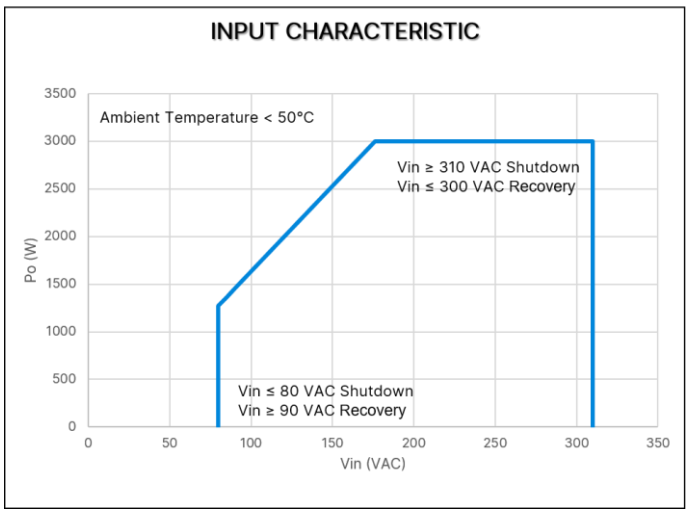
Delta's technology leading rectifier DPR 3000B-110 provides the industrial leading efficiency of 96.5%. The single phase, hot pluggable fan cooled rectifier provides the 53.5 W/in³ outstanding power density. Integrated with the high efficiency rectifier DPR 3000B-110, Delta power solution provides a reliable, energy saving solution for 110–125 V battery systems in railway and metro, power utilities, and demanding industries such as marine, oil and gas and process applications.

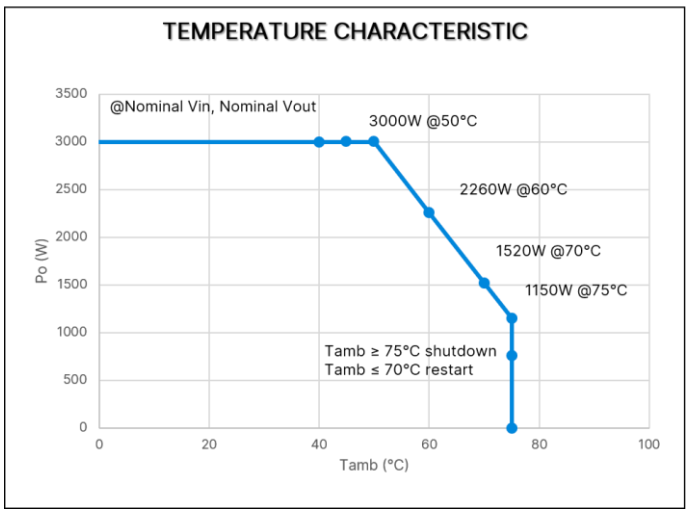


DPR 3000B-110









DPR 3000B-110

MODEL

DPR 3000B-110 ID:A1	PMPDR302A0051

INPUT

Voltage (nominal)	230 Vac / 230 Vdc
Voltage (range)	90 – 300 Vac; De-rating ≤ 176 Vac / 90 – 400 Vdc; De-rating ≤ 176 Vdc
Frequency	15 – 66 Hz; De-rating ≤ 45 Hz;
Power Factor	> 0.99
Total Harmonic Distortion	< 3.5% @ Full Load
Lightning Protection	EN 61000-4-5

OUTPUT

Voltage (default)	122.5 Vdc
Voltage (adjustable range)	89 to 171 Vdc
Maximum Output Current	24.5 A
Maximum Power @ nominal Input	3,000 W
Power Density	53.5 W/in^3
Peak Efficiency	96.5%
Load Regulation	± 0.5%
Ripple	≤ 500 mVp-p / ≤ 100 mVrms
Current Sharing	≤ ± 5% of maximum current
Lightning Protection	EN 61000-4-5

USER INTERFACE

Alarm and Signaling	CANbus to System Controller	
Indications	Green Orange Red	Normal operation Derating / Current limit Protective shutdown / module failure

MECHANICAL

Dimensions (W x H x D)	84 x 41 x 265 mm (3.30” x 1.61” x 10.43”)
Weight	2.0 kg (4.4 lb)

ENVIRONMENTAL

Operating Temperature	-40 to +75°C (-40 to +167°F); De-rating above 50°C (+122°F)
Storage Temperature	-40 to +80°C (-40 to +176°F)
Altitude	0 to 3,000m
Relative Humidity	0 – 95% RH non-condensing
Acoustic Noise	≤ 58 dBA
IP Protection	IP20

STANDARDS

Safety	TUV, CE, UL, UKCA
EMC	EN IEC 61000-6-1/-2/-3/-4/-5 EN 55032 AC Class B & DC output Class A
Railway	EN 50121-4, EN 50121-5
Marine	EN 60945, DNV-GL CG-0339
Environment	RoHS, WEEE
MTBF	100k hours @ 25°C (+77°F)

ORDERING INFORMATION

3,000W/110Vdc Single Phase Rectifier	PMPDR302A0051-S	Multi-packing
3,000W/110Vdc Single Phase Rectifier	PMPDR302A0051-A	Single-packing

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