



Modular three-phase UPS system

Conceptpower DPA
10–250 kVA

True modular UPS system
for critical applications

A UPS designed to meet the needs of today and tomorrow

The Conceptpower DPA is a high-power, modular UPS system designed for today's critical high-density computing environments. The UPS is built using true online double conversion technology and delivers high-quality power. When combined with complete network integration software and communication connectivity, the Conceptpower DPA provides a comprehensive, easy-to-integrate power protection for data centers and network environments.

The Conceptpower DPA is based on ABB's unique and proven Decentralized Parallel Architecture DPA™. DPA means that each UPS module contains all the hardware and software required for full system operation. They share no common components. The major benefit of a DPA system is very high power availability. Each UPS module has its own independent static switch, rectifier, inverter, logic control, control panel and battery charger. Even the batteries can be configured separately for each module if required. With all of the critical components duplicated and distributed between individual

units, potential single points of failure are eliminated. System uptime is further maximized by the true safe-swap modularity of the modules (easy replacement during system operation) which allows the simple addition or removal of modules without the need to bypass the UPS.

Conceptpower DPA modules can be connected in parallel configuration to provide redundancy or to increase the system's total capacity. The Conceptpower DPA delivers power protection from 10 to 250 kVA (one to five modules) in a single cabinet. Cabinets can operate in parallel configuration to build a system of up to 1.5 MVA.

Further Conceptpower DPA highlights

- Power density of up to 342 kW / m² saves floor space
- Near-unity input power factor and low input harmonic distortion reduce running costs
- Safe-swap modules maximize availability and minimize upgrade costs



Conceptpower DPA upgrade

96 %
AC-AC efficiency

Fully scalable
up to 1.5 MVA

“Six nines”
availability

Efficiency up – costs down

Lower your total cost of ownership

The Conceptpower DPA boasts the lowest cost of ownership of any UPS system by offering energy efficiency, scalable flexibility and ergonomic design to enable easy serviceability. The Conceptpower DPA allows the infrastructure size to be scaled to align more closely with the prevailing IT requirements. Scaling the infrastructure to meet present IT needs, with the ability to add on incrementally as IT needs grow, also means that you only power and cool what you need. The resulting savings in power usage are substantial over the service life of the UPS.

Simplify installation and service

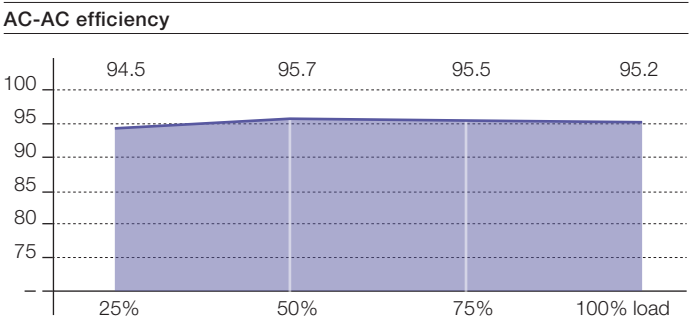
Its straightforward and understandable concept simplifies every step of the deployment process, from planning, through installation and commissioning to full use. Easy set-up and maintenance involve lower operating and maintenance costs. The Conceptpower DPA allows adding modules in a simple plug-and-play procedure.

Optimize your energy efficiency

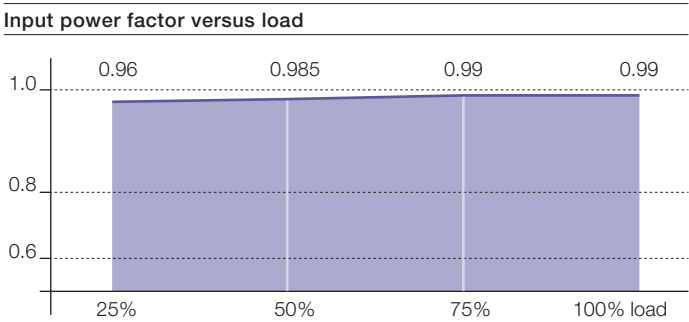
Class-leading energy efficiency significantly reduces system running costs and site air-conditioning costs.

Advanced scalable architecture

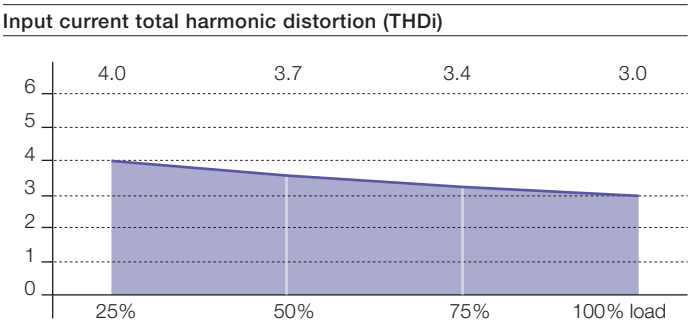
If additional capacity or redundancy is needed, up to 30 independent modules can operate in parallel configuration, achieving a total power capacity of up to 1.5 MVA.



The flat efficiency curve enables significant energy savings in every working condition.



The input power factor of DPA UPScale RI is near unity at partial and full load.



Class-leading THDi of <3 % virtually eliminates harmonic distortion of the mains supply.

Technical specifications

GENERAL DATA		Conceptpower DPA Classic		Conceptpower DPA Triple		Conceptpower DPA Upgrade	
Maximum output power (frame)	25 kVA	50 kVA	75 kVA	150 kVA	125 kVA	250 kVA	
Number of UPS modules	1	1	1 to 3	1 to 3	1 to 5	1 to 5	
Module type	MD	MX	MD	MX	MD	MX	
Output power modules	10, 15, 20, 25 kVA	30, 40, 50 kVA	10, 15, 20, 25 kVA	30, 40, 50 kVA	10, 15, 20, 25 kVA	30, 40, 50 kVA	
Weight (with modules / without batteries)	209–215 kg	305–309 kg	304–323 kg	368–379 kg	314–346 kg	420–439 kg	
Dimensions W × H × D (mm)	550 × 1650 × 780	730 × 1650 × 800	550 × 1975 × 780	730 × 1975 × 800	550 × 1975 × 780	730 × 1975 × 800	
Output power factor	0.8						
Topology	True online double conversion						
Parallel configuration	Up to 30 modules (up to 1.5 MVA)						
UPS type	Modular (DPA)						
Cable entry	Front access						
INPUT							
Nominal input voltage	3 × 380 / 220 V + N, 3 × 400 / 230 V + N, 3 × 415 / 240 V + N						
Voltage tolerance (Ref. to 3 × 400 / 230 V)	For loads < 100 % (–23 %, +15 %), < 80 % (–30 %, +15 %), < 60 % (–40 %, +15 %)						
Input distortion THDi	≤ 3 % at 100 %						
Frequency	35–70 Hz						
Power factor	0.99						
OUTPUT							
Rated output voltage	3 × 380 / 220 V + N, 3 × 400 / 230 V + N, 3 × 415 / 240 V + N						
Voltage distortion (Ref. to 3 × 400 / 230 V)	< 2 %						
Frequency	50 or 60 Hz						
Overload capability	10 min.: up to 125 % or 1 min.: up to 150 %						
Unbalanced load	100 % possible						
Crest factor	3 : 1						
EFFICIENCY							
Overall efficiency	Up to 96 %						
In eco-mode configuration	98 %						
ENVIRONMENT							
Storage temperature	–25 – +70 °C						
Operating temperature	0–40 °C						
Altitude	1000 m without derating						
BATTERY							
Battery capacity	Configurable up to several horus						
Internal batteries	Yes	Yes	Yes	Yes	–	–	
No. of internal batteries	Up to 200	Up to 280	Up to 180	Up to 240	–	–	
COMMUNICATIONS							
LCD display	Yes (per module)						
LEDs	LED for notification and alarm						
Communication ports	USB, RS-232, SNMP slot, potential-free contacts						
STANDARDS							
Safety	IEC / EN 62040-1-1, IEC / EN 60950-1						
Electromagnetic compatibility (EMC)	IEC / EN 61000-6-4 (IEC / EN 62040-2 limit A [C2 UPS]) IEC / EN 61000-6-2 (IEC / EN 62040-2 criterion A [C2 UPS]) IEC / EN 61000-4-2, IEC / EN 61000-4-3, IEC / EN 61000-4-4, IEC / EN 61000-4-5, IEC / EN 61000-4-6						
Performance	IEC / EN 62040-3						
Product certification	CE						
IP rating	IP 20						

Rightsize your system



PRODUCT TYPES	Conceptpower DPA Classic		Conceptpower DPA Triple		Conceptpower DPA Upgrade	
Output power	10–25 kVA	30–50 kVA	10–75 kVA	30–150 kVA	10–125 kVA	30–250 kVA
No. of UPS modules	1	1	1 to 3	1 to 3	1 to 5	1 to 5
Module type	MD	MX	MD	MX	MD	MX
Parallel configuration	Up to 30 modules	Up to 30 modules	Up to 30 modules	Up to 30 modules	Up to 30 modules	Up to 30 modules
Dimensions W × H × D (mm)	550 × 1650 × 780	730 × 1650 × 800	550 × 1975 × 780	730 × 1975 × 800	550 × 1975 × 780	730 × 1975 × 800

Conceptpower DPA – product range

To ensure the ultimate in flexibility, the Conceptpower DPA is available in various configurations. The lower power cabinets can accommodate batteries internally. External battery cabinets are available for all product types. All UPS cabinets are parallelable.

Conceptpower DPA – safe-swap modularity

True safe-swap modularity enables the safe removal and/or insertion of UPS modules into a Conceptpower DPA system without risk to the critical load and without the need to either transfer the critical load onto raw mains or remove power from the critical load. This unique feature directly addresses today’s requirement for continuous uptime. The ability to safe-swap modules in a Conceptpower DPA system significantly reduces its mean time to repair (MTTR) and simplifies system upgrades.

Independent safe-swap modules!



MODULES	MD
Maximum output power	10, 15, 20, 25 kVA
Weight	28.5, 31, 33, 35 kg
Dimensions W × H × D (mm)	483 × 225 × 700
MODULES	MX
Maximum output power	30, 40, 50 kVA
Weight	43.1, 45.3, 46.8 kg
Dimensions W × H × D (mm)	663 × 225 × 720

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