Modular Three-phase UPS system

Conceptpower DPA 10 – 250 kVA

True modular UPS system for critical applications.
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 centres and network environments.

The Conceptpower DPA is based on Newave’s unique and proven Decentralised 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 maximised 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 maximise availability and minimise upgrade costs

96% AC-AC Efficiency

Fully scalable up to 1.5 MVA

“Six nines“ Availability
Rightsize your system.

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.

<table>
<thead>
<tr>
<th>PRODUCT TYPES</th>
<th>Conceptpower DPA Classic</th>
<th>Conceptpower DPA Triple</th>
<th>Conceptpower DPA Upgrade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output power</td>
<td>10–25 kVA</td>
<td>30–50 kVA</td>
<td>10–125 kVA</td>
</tr>
<tr>
<td>Nr. of UPS modules</td>
<td>1</td>
<td>1 to 3</td>
<td>1 to 5</td>
</tr>
<tr>
<td>Module type</td>
<td>MD</td>
<td>MX</td>
<td>MD</td>
</tr>
<tr>
<td>Parallel configuration</td>
<td>Up to 30 modules</td>
<td>Up to 30 modules</td>
<td>Up to 30 modules</td>
</tr>
<tr>
<td>Dimensions W x H x D (mm)</td>
<td>550 x 1650 x 780</td>
<td>730 x 1650 x 800</td>
<td>550 x 1975 x 780</td>
</tr>
</tbody>
</table>

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.

MD MODULES
- Maximum output power: 10, 15, 20, 25 kVA
- Weight: 28.5 – 35 kg
- Dimensions W x H x D (mm): 483 x 225 x 700

MX MODULES
- Maximum output power: 30, 40, 50 kVA
- Weight: 43.1 – 46.8 kg
- Dimensions W x H x D (mm): 663 x 225 x 720
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.

Optimise 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.

Technical specifications are subject to change without notice.
# Technical specifications.

<table>
<thead>
<tr>
<th>GENERAL DATA</th>
<th>Conceptpower DPA Classic</th>
<th>Conceptpower DPA Triple</th>
<th>Conceptpower DPA Upgrade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum output power (frame)</td>
<td>25 kVA</td>
<td>50 kVA</td>
<td>75 kVA</td>
</tr>
<tr>
<td>Number of UPS modules</td>
<td>1</td>
<td>1 to 3</td>
<td>1 to 5</td>
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<tr>
<td>Module type</td>
<td>MD</td>
<td>MX</td>
<td>MD</td>
</tr>
<tr>
<td>Output power modules</td>
<td>10, 15, 20, 25 kVA</td>
<td>30, 40, 50 kVA</td>
<td>10, 15, 20, 25 kVA</td>
</tr>
<tr>
<td>Weight (with modules/ without batteries)</td>
<td>209 – 215 kg</td>
<td>305 – 309 kg</td>
<td>304 – 323 kg</td>
</tr>
<tr>
<td>Dimensions</td>
<td>W x H x D (mm)</td>
<td>550 x 1650 x 780</td>
<td>730 x 1650 x 800</td>
</tr>
<tr>
<td>Output power factor</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topology</td>
<td>True online double conversion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parallel configuration</td>
<td>Up to 30 modules (up to 1.5 MVA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UPS type</td>
<td>Modular (DPA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cable entry</td>
<td>Front access</td>
<td></td>
<td></td>
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## INPUT

<table>
<thead>
<tr>
<th></th>
<th>Conceptpower DPA Classic</th>
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<tbody>
<tr>
<td>Nominal input voltage</td>
<td>3 x 380/220 V + N, 3 x 400/230 V + N, 3 x 415/240 V + N</td>
</tr>
<tr>
<td>Voltage tolerance (Ref. to 3 x 400/230 V)</td>
<td>For loads &lt;100% (~23%, +15%), &lt;80% (~30%, +15%), &lt;60% (~40%, +15%)</td>
</tr>
<tr>
<td>Input distortion THDi</td>
<td>&lt;3% at 100%</td>
</tr>
<tr>
<td>Frequency</td>
<td>35–70 Hz</td>
</tr>
<tr>
<td>Power factor</td>
<td>0.99</td>
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## OUTPUT

<table>
<thead>
<tr>
<th></th>
<th>Conceptpower DPA Classic</th>
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<tbody>
<tr>
<td>Rated output voltage</td>
<td>3 x 380/220 V + N, 3 x 400/230 V + N, 3 x 415/240 V + N</td>
</tr>
<tr>
<td>Voltage distortion (Ref. to 3 x 400/230 V)</td>
<td>&lt;1.5%</td>
</tr>
<tr>
<td>Frequency</td>
<td>50 or 60 Hz</td>
</tr>
<tr>
<td>Overload capability</td>
<td>10 min.: up to 125% or 1 min.: up to 150%</td>
</tr>
<tr>
<td>Unbalanced load</td>
<td>100% possible</td>
</tr>
<tr>
<td>Crest factor</td>
<td>3 : 1</td>
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## EFFICIENCY

<table>
<thead>
<tr>
<th></th>
<th>Conceptpower DPA Classic</th>
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<tbody>
<tr>
<td>Overall efficiency</td>
<td>Up to 96%</td>
</tr>
<tr>
<td>In eco-mode configuration</td>
<td>98%</td>
</tr>
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</table>

## ENVIRONMENT

<table>
<thead>
<tr>
<th></th>
<th>Conceptpower DPA Classic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage temperature</td>
<td>~25 – +70°C</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0–40°C</td>
</tr>
<tr>
<td>Altitude</td>
<td>1000 m without derating</td>
</tr>
</tbody>
</table>

## BATTERY

<table>
<thead>
<tr>
<th></th>
<th>Conceptpower DPA Classic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery capacity</td>
<td>Configurable up to hours</td>
</tr>
<tr>
<td>Internal batteries</td>
<td>Yes</td>
</tr>
<tr>
<td>Nr. of internal batteries</td>
<td>Up to 200</td>
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</tbody>
</table>

## COMMUNICATIONS

<table>
<thead>
<tr>
<th></th>
<th>Conceptpower DPA Classic</th>
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</thead>
<tbody>
<tr>
<td>LEDs</td>
<td>Yes (per module)</td>
</tr>
<tr>
<td>Communication ports</td>
<td>USB, RS-232, SNMP slot, potential-free contacts</td>
</tr>
</tbody>
</table>

## STANDARDS

<table>
<thead>
<tr>
<th></th>
<th>Conceptpower DPA Classic</th>
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<tbody>
<tr>
<td>Safety</td>
<td>IEC/EN 62040-1-1, IEC/EN 60950-1</td>
</tr>
<tr>
<td>Electromagnetic compatibility (EMC)</td>
<td>IEC/EN 61000-6-4 (IEC/EN 62040-2 limit A [C2 UPS])</td>
</tr>
<tr>
<td>Performance</td>
<td>IEC/EN 62040-3</td>
</tr>
<tr>
<td>Product certification</td>
<td>CE/GOST by TÜV</td>
</tr>
<tr>
<td>Protection rating</td>
<td>IP 20</td>
</tr>
</tbody>
</table>
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