**DELPHYS MP Elite+**

Resilient transformer-based power protection from 80 to 200 kVA

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### Advantages

- **High quality power supply**
  - Permanent operation in VFI mode (online double conversion).
  - Output voltage precision under all load conditions.
  - High overload capability to withstand abnormal load conditions.
  - A very high short-circuit current capacity which facilitates the selection of protective devices for selectivity in the downstream distribution.
  - An isolation transformer installed on the inverter output to ensure complete galvanic isolation between DC circuit and load output. This insulation also provides a separation between the two inputs when they are supplied by different sources.
  - Sinusoidal ThdU output voltage < 2 % with linear loads and < 4 % with non-linear loads.

- **Cost-effective equipment**
  - The “clean” IGBT rectifier allows:
    - a high efficiency,
    - a high and constant input power factor,
    - a low THDI.
  - These characteristics help to limit the dimensions of upstream network infrastructure.
  - Possibility to create new neutral system without additional losses (extra transformer required on by-pass line only).
  - High short-circuit capability simplifies downstream protective devices.
  - High power density: its small footprint saves space on your premises.
  - Mains connection of the rectifier requires only 3 cables (no neutral).
  - Battery connection to UPS requires only 2 cables.

- **User-friendly operation**
  - A control panel with graphic display for more ergonomic operation.
  - An array of “com-slot” plug-in communication interfaces, for upgrading your operating requirements evolution.

- **Simplified maintenance**
  - An advanced diagnostic system.
  - A remote access device connected to the remote maintenance centre.
  - Easy access to subassemblies and components, facilitating tests and reducing maintenance time (MTTR)

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### The solution for

- Industry
- Processes
- Infrastructure
- Healthcare
- Service sector
- Telecommunications

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### Technical data

- **Standard electrical features**
  - Slots for 3 communication cards.
  - Redundant systems (“1+1” and “n+1”).
  - Distributed or centralized bypass.

- **Distributed power supply**
  - 4 outputs (general alarm, back-up, bypass, battery protection),
  - 3 inputs (emergency stop, generating set, EBS (Expert Battery System)(2).
  - Long back up time rectifier.
  - ACS synchronisation system for 2n systems.

- **Electrical performances**
  - Absolute output voltage: total output voltage distortion - non-linear load ThdU < 4%.
  - Total output voltage distortion - linear load ThdU < 2%.
  - ± 2% in 5 ms (dynamic load conditions from 0 to 100%)
  - Total output voltage distortion - non-linear load ThdU < 4%.

- **Environmental performances**
  - Acoustic level at 1 m (ISO 3746): 65 dBA 67 dBA.
  - Relative humidity: 0% - 95% without condensation (other IP as option).
  - Maximum altitude: 1000 m without derating (max. 3000 m).
  - Operating ambient temperature: from 0 °C up to +40 °C.

- **Power performances**
  - High power density: its small footprint saves space on your premises.
  - Possibility to create new neutral system.
  - Total output voltage distortion - non-linear load ThdU < 4%.
  - Total output voltage distortion - linear load ThdU < 2%.

- **Technical features**
  - Eco Mode: 98%.
  - Online mode.
  - Frequency tolerance: ± 0.2%.
  - Rated frequency: 50/60 Hz.
  - Voltage tolerance: ± 10% (selectable).
  - Rated voltage: 380 V - 400 V - 415 V.
  - Power factor / THDI: 0.99 constant / 2.5% without filter.

- **Mechanical & electrical robustness**
  - Reinforced IP protection up to IP52.
  - Top entry connection.
  - Fan redundancy with failure detection.
  - Dust filters.
  - Reinforced IP protection degree.
  - EBS (Expert Battery System)(2).

- **Safety**
  - CE, RCM (E2376).
  - Product declaration preventative maintenance needs).
  - Battery protection).
  - Battery protection).
  - Battery protection).
  - Battery protection).

- **Efficiency**
  - Eco Mode 98%.
  - Online mode.
  - Frequency tolerance:
  - Rated frequency: 50/60 Hz.
  - Voltage tolerance:
  - Rated voltage: 380 V - 400 V - 415 V.

- **System’s protection and monitoring**
  - 6 outputs (general alarm, back-up, bypass, battery protection),
  - 3 inputs (emergency stop, generating set, EBS (Expert Battery System)(2).
  - Long back up time rectifier.
  - ACS synchronisation system for 2n systems.

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**Links**

- [DELPHYS MP Elite+](#)
- [Soitec](#)

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**New**

Three-phase UPS

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**Image**

- Delphys MP Elite+ front view
- Delphys MP Elite+ side view
Parallel systems
- Distributed or centralized bypass for parallel architecture up to 6 units.
- Redundant systems ("1+1" and "n+1").
- "2n" architecture with Static Transfer Systems.

Standard electrical features
- Slots for 3 communication cards.
- Backfeed protection: detection circuit.
- Standard interface:
  - 3 inputs (emergency stop, generating set, battery protection),
  - 4 outputs (general alarm, back-up, bypass, preventative maintenance needs).

Electrical options
- EBS (Expert Battery System)(1).
- FLYWHEEL compatible.
- ACS synchronisation system for 2n architecture.
- Redundant electronic power supplies.
- Hot plug option (increase the power keeping the load supplied in double conversion).
- Long back up time rectifier.

Mechanical options
- Reinforced IP protection degree.
- Dust filters.
- Fan redundancy with failure detection.
- Top entry connection.
- Reinforced IP protection up to IP52.

Technical data

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<th>Sn [kVA]</th>
<th>Pn [kW]</th>
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| Input / output | 3/3 |
| Parallel configuration | up to 6 units (distribuated or centralised bypass) |

**INPUT**
- Rated voltage: 380V - 400V - 415V(1)
- Voltage tolerance: +2% (configurable for GenSet compatibility)
- Frequency tolerance: ±0.2%
- Total output voltage distortion - linear load: ThdL <2%
- Total output voltage distortion - non-linear load: ThdL <4%
- Short-circuit current on inverter (100ms): Up to 24 In
- Overload: Up to 150% for 1 minute, 125% for 10 minutes(2)
- Crest factor: 3:1

**BYPASS**
- Rated voltage: 380V - 400V - 415V
- Voltage tolerance: ±10% (selectable)
- Rated frequency: 50/60 Hz
- Frequency tolerance: ±2% (configurable for GenSet compatibility)
- Short-circuit current on by-pass (20ms): Up to 24 In

**EFFICIENCY**
- Online mode: 93.5%
- Eco Mode: 98%

**ENVIRONMENT**
- Operating ambient temperature: 0°C to +40°C (from 15°C to 25°C for maximum battery life)
- Relative humidity: 0% - 95% without condensation
- Maximum altitude: 1000 m without derating (max. 3000 m)
- Acoustic level at 1 m (ISO 3746): 65 dBA / 67 dBA

**UPS CABINET**
- Dimensions W x D x H: 1000 x 800 x 1930 mm
- Weight: 740 kg / 860 kg / 1020 kg
- Degree of protection: IP20 (other IP as option)
- Colours: RAL 9006

**STANDARDS**
- Safety: IEC/EN 62040-1, AS 62040.1.1, AS 62040.1.2
- EMC: IEC/EN 62040-2, AS 62040.2
- Declaration: CE, CMC (E2376)