

DELPHYS MP Elite+

Resilient transformer-based power protection
from 60 to 200 kVA



The solution for

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

Advantages



Our dedicated Expert Services for UPS

We offer services to ensure your UPS highest availability:

- > Commissioning
- > On-site intervention
- > Preventive maintenance visits
- > 24-hour call out and rapid on-site repairs
- > Maintenance packages
- > Training



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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.

High availability

- Field-proven technology.
- Fault-tolerant architecture with redundancy of basic functions, such as the ventilation system.
- Easy maintainability reduces MTTR thanks to pull-out sub-assemblies and front access all components.
- Accurate diagnostics guarantee power supply to the load.
- Cascade failure prevention for parallel systems.
- Mechanical & electrical robustness for industrial environments.
- Soft start capability (ramp up) of the IGBT inverter allows a good operation even with a genset.
- Specifically designed to be adapted to different industrial environment: high IP protection options, high peak current capability, long back up time...

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)

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)⁽²⁾.
- 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.

Communication options

- GTS (Graphic Touch Screen).
- ADC interface (configurable voltage-free contacts).
- MODBUS RTU.
- MODBUS TCP.
- PROFIBUS / PROFINET.
- BACnet/IP interface.
- NET VISION: professional WEB/SNMP interface for UPS monitoring and shutdown management of several operating systems.
- 3 extra slots for communication cards.

Remote monitoring service

- SoLink, remote monitoring service that connects your UPS to your Critical Power specialist 24/7.

Technical data

		DELPHYS MP Elite+					
		60	80	100	120	160	200
Sn [kVA]		60	80	100	120	160	200
Pn [kW]		54	72	90	108	144	180
Input/output		3/3					
Parallel configuration		up to 6 units (distributed or centralised bypass)					
INPUT							
Rated voltage		380V - 400V - 415V ⁽¹⁾					
Voltage tolerance		342 to 460V ⁽²⁾					
Rated frequency		50/60 Hz					
Frequency tolerance		45 to 65 Hz					
Power factor / THDI		0.99 constant / 2.5% without filter					
OUTPUT							
Rated voltage		380V - 400V - 415V (configurable) ⁽¹⁾					
Voltage tolerance		< 1% (static load), ± 2% in 5 ms (dynamic load conditions from 0 to 100%)					
Rated frequency		50/60 Hz					
Frequency tolerance		± 0.2%					
Total output voltage distortion - linear load		ThdU <2%					
Total output voltage distortion - non-linear load		ThdU <4%					
Short-circuit current on inverter (100ms)		Up to 3.5 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		from 0 °C up to +40 °C ⁽²⁾ (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					
Product declaration		CE, RCM (E2376)					

(1) Others on demand. (2) Conditions apply.