



# DELPHYS MP Elite+

Resilient transformer-based power protection  
from 60 to 200 kVA

Three-phase UPS

new



DELPHYS 12T B 1 CAT

## The solution for

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

## 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.

## 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)<sup>(2)</sup>.
- 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.

### 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

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

### Technical data

DELPHYS MP Elite+						
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)					
<b>INPUT</b>						
Rated voltage	380 V - 400 V - 415 V <sup>(1)</sup>					
Voltage tolerance	342 to 460 V <sup>(2)</sup>					
Rated frequency	50/60 Hz					
Frequency tolerance	45 to 65 Hz					
Power factor / THDI	0.99 constant / 2.5% without filter					
<b>OUTPUT</b>						
Rated voltage	380 V - 400 V - 415 V (configurable) <sup>(1)</sup>					
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 <sup>(2)</sup>					
Crest factor	3:1					
<b>BYPASS</b>						
Rated voltage	380 V - 400 V - 415 V					
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					
<b>EFFICIENCY</b>						
Online mode	93.5%					
Eco Mode	98%					
<b>ENVIRONMENT</b>						
Operating ambient temperature	from 0 °C up to +40 °C <sup>(2)</sup> (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
<b>UPS CABINET</b>						
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					
<b>STANDARDS</b>						
Safety	IEC/EN 62040-1, AS 62040.1.1, AS 62040.1.2					
EMC <sup>(3)</sup>	IEC/EN 62040-2, AS 62040.2					

(1) Others on demand. (2) Conditions apply. (3) 80-200.