



DELPHYS MX

from 250 to 900 kVA

the Mega Power protection up to 5.4 MVA

Three-phase UPS



The solution for

- > Industry
- > Telecommunications
- > Processes

Attestations



**BUREAU
VERITAS**
DELPHYS MX series is
attested by Bureau Veritas.

Advantages



Lower Total Cost of Ownership

- Minimized running costs, by:
 - very high efficiency of up to 93.5% (VFI mode, including the transformer),
 - 'Energy saver' automatically adapts the number of running units to the real load,
 - free-cooling compatible.
- Reduced footprint.
- Exceptional high power density (the most compact unit of its class): 500 kVA in less 1.6 meters (width) per unit including the bypass.
- PFC "clean input" rectifier (without filters) with a lasting high input power factor whatever the operating conditions.
- Intelligent built-in battery monitoring system interacts with "charging mode" to prolong battery lifetime.
- Leading power factor load compatible without derating.

High reliability and availability

- Internal fault-tolerant architecture with internal redundancies and fan failure localisation.
- Intelligent embedded battery monitoring with failed block localisation and preventative remote alarm.
- Able to withstand an output short-circuit and overload.
- Reliable and robust paralleling mode.
- Multisystem automatic cross synchronisation (ACS) for an optimized use with STS.
- Output isolation transformer to reduce the influence of N-GND (Neutral Line-to-Ground) voltage and load harmonic current on UPS inverter.

Flexible architecture

- Parallel system with modular units.
- Powerful central bypass for power extension or redundancy.
- Tier 3 and Tier 4 compatible.
- Designed for optimal use with STS in downstream network.

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.
- Reduced MTTR thanks to extractible power bridges or fans on "cassette".
- Front accessibility for all components.

Simplified communication

- Easy remote monitoring via web browser or via customer's supervision systems (web, intranet, extranet...).
- Very open connectivity (MODBUS/JBUS, JBUS tunnelling, LAN).

Parallel systems

- To fulfil the most demanding needs for power supply availability, flexibility and the installation to be upgraded.
- Modular parallel up to 6 units, development without constraint.
- Centralized bypass for progressive development.
- Twin channel architecture with Static Transfer Systems.

Standard electrical features

- Backfeed protection: detection circuit.
- Standard interface:
 - 3 inputs (emergency stop, generating set, battery protection),
 - 4 outputs (general alarm, back-up, bypass, preventative maintenance needs).
- EBS (Expert Battery System).

Standard communication features

- Multilanguage graphic display.
- Slots for 7 communication cards.

Electrical options

- BHC INTERACTIVE.
- EBS (Expert Battery System).
- FLYWHEEL compatible.
- ACS synchronisation system.
- Redundant electronic power supplies.

Mechanical options

- Reinforced IP protection degree.
- Ventilation filters.
- Redundant ventilation with failure detection.
- Top entry connection.

Communication options

- GTS (Graphic Touch Screen).
- ADC interface (configurable voltage-free contacts).
- RS232, RS422, RS485 serial port JBUS/MODBUS or PROFIBUS.
- MODBUS TCP interface (JBUS/MODBUS tunneling).
- BACnet/IP interface.
- NET VISION: professional WEB/SNMP interface for UPS monitoring and shutdown management of several operating systems.
- Alarm notification via SMS.

Remote monitoring service

- Remote mobile and web-based surveillance service connected 24/7 to your local Socomec Service Centre.

Technical data

DELPHYS MX						
Sn [kVA]	250	300	400	500	800	900
Pn [kW]	225	270	360	450	720	800
Input/output	3/3					
Parallel configuration	up to 6 units					
INPUT						
Rated voltage ⁽¹⁾	380 V - 400 V - 415 V					
Voltage tolerance	340 to 460 V			360 to 460 V		
Rated frequency	50/60 Hz					
Frequency tolerance	± 5 Hz					
Power factor / THDI	0.93 / < 4.5%			0.94 / < 5%		
OUTPUT						
Rated voltage	380 V - 400 V - 415 V					
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	< 2%					
Total output voltage distortion - non-linear load (IEC 62043-3)	< 4%			< 3%		
Short-circuit current	Up to 4,4 In					
Overload	150% for 1 minute, 125% for 10 minutes					
Crest factor	3:1					
Power factor without derating	0.9 lagging to 0.9 leading					
BYPASS						
Rated voltage	380 V - 400 V - 415 V					
Voltage tolerance	± 10%					
Rated frequency	50/60 Hz					
Frequency tolerance	± 2% (configurable for GenSet compatibility)					
EFFICIENCY						
Online mode	up to 93.5%					
Eco Mode	98%					
ENVIRONMENT						
Operating ambient temperature	from 0 °C up to +35 °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) ⁽²⁾	≤ 70 dBA		≤ 72 dBA		≤ 75 dBA	
UPS CABINET						
Dimensions W x D x H	1600 x 995 x 1930 mm			3200 x 995 x 2210 mm		
Weight	2500 kg	2800 kg	3300 kg	5900 kg		
Degree of protection	IP20					
Colours	RAL 9006					
STANDARDS						
Safety	IEC 62040-1; EN 62040-1; IEC 60950-1					
EMC	IEC 62040-2; EN 62040-2					
Performance	IEC 62040-3					
Product declaration	CE					

(1) DELPHYS MX 250-500: others on demand. - (2) As per power range.