



DELPHYS **MX**

Flexible transformer-based solution for resilient architectures
from 250 to 900 kVA

Three-phase UPS



The solution for

- > Industry
- > Processes
- > Infrastructure
- > IT applications
- > Healthcare

Attestations and certifications



**BUREAU
VERITAS**

DELPHYS MX series is
attested by Bureau Veritas.

Advantages



Optimum load protection

- Permanent operation in VFI mode (online double conversion).
- The inverter isolation transformer provides galvanic separation both between the DC current and the load and between the two sources.
- Output voltage precision under all load conditions.
- High overload capacity to withstand abnormal load conditions.
- Easy maintainability reduces MTTR thanks to pull-out sub-assemblies and front access to all components.
- Fault-tolerant architecture with built-in redundant components.

Minimised Total Cost of Ownership

- High efficiency in VFI mode, including the transformer.
- High power density: its small footprint saves space on your premises.
- The high and constant input power factor helps limit the dimensions of your upstream network infrastructure.
- Mains connection of the rectifier requires only 3 cables (no neutral).
- High short-circuit capacity simplifies downstream protective devices.

Flexible and easily upgradable

- Robust and reliable paralleling mode.
- Distributed or centralised bypass ensures perfect compatibility with any electrical infrastructure.
- Hot-plug capability simplifies extension or redundancy while keeping high quality power.
- The transformer based topology is adapted to all kinds of electrical installations.

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 6 communication cards.

Electrical options

- 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).
- 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.

Remote monitoring service

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

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	ThdU <2%					
Total output voltage distortion - non-linear load (IEC 62043-3)	ThdU < 3.2 %		ThdU < 2.5%			
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	
Degree of protection	IP20					
Colours	RAL 9006					
STANDARDS						
Safety	IEC/EN 62041-1, IEC 60950-1, AS 62040.1.1, AS 62040.1.2					
EMC	IEC/EN 62040-2, AS 62040.2					
Performance	IEC/EN 62040-3, AS 62040.3					
Product declaration	CE, RCM (E2376)					

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