

DELPHYS MX

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



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.

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.

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.

The solution for

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

Attestations and certifications



Advantages



Our dedicated Expert Services for UPS

We offer services to ensure your UPS highest availability:

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



www.socomec.com/services





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).

Mechanical options

- Reinforced IP protection up to IP52.
- Dust filters.
- Fan redundancy 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.
- 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

Rated voltage Signor Si		DELPHYS MX						
Rount coliptor Paralle configuration Paralle co	Sn [kVA]	250	300	400	500	800	900	
Parallel configuration	Pn [kW] ⁽¹⁾	225	270	360	450	720	810	
Reted voltage** Voltage tolerance 380 V + 400 V + 415 V 360 to 460 V Rated frequency 50/60 Hz 50/60 Hz Rated voltage 380 V + 400 V + 415 V Voltage blerance 380 V + 400 V + 415 V Voltage blerance 50/60 Hz Rated frequency 50/60 Hz Frequency 50/60 Hz Frequency blerance 20/25 Triad output voltage distortion - intear load Total output voltage d	Input/output	3/3						
Relation by Septiminate	Parallel configuration	up to 6 units						
Vallage blearance 340 to 460 V 360 to 460 V Rated frequency 50(60 Hz 51 Hz 50	INPUT							
Retail frequency S0/80 H	Rated voltage ⁽²⁾	380 V - 400 V - 415 V						
Fequency tolerance 1971	Voltage tolerance	340 to 460 V 360 to 460 V						
Power factor / THDI 0.93 / < 4.5% 0.94 / < 5% OLTPUT Rated voltage 380 V - 400 V - 415 V Voltage blevance \$ 380 V - 400 V - 415 V Voltage blevance 5.060 Hz Frequency blevance ± 0.2% Total output voltage distortion - linear load Total output voltage distortion - non-linear load Total output voltage distortion - non-linear load Total output voltage distortion - non-linear load Total output voltage distortion - non-linear load Total output voltage distortion - non-linear load Total output voltage distortion - non-linear load Total output voltage distortion - non-linear load Total output voltage distortion - non-linear load Total output voltage distortion - non-linear load Total output voltage distortion - non-linear load Total output voltage distortion - non-linear load Total output voltage distortion - non-linear load Total voltage voltage distortion - non-linear load Total voltage vol	Rated frequency	50/60 Hz						
Sabet voltage Sabet voltage Sabet voltage Sabet voltage toltage Sabet voltage toltage Sabet voltage toltage Sabet voltage toltage voltage distortion - Innear load Sabet voltage distortion - Innear load Thitul ∨ 2.5% Sabet voltage distortion - Innear load Thitul ∨ 2.5% Sabet voltage distortion - Innear load Thitul ∨ 2.5% Sabet voltage distortion - Innear load Thitul ∨ 2.5% Sabet voltage distortion - Innear load Thitul ∨ 2.5% Sabet voltage distortion - Innear load Thitul ∨ 2.5% Sabet voltage distortion - Innear load Thitul ∨ 2.5% Sabet voltage distortion - Innear load Thitul ∨ 2.5% Sabet voltage distortion - Innear load Thitul ∨ 2.5% Sabet voltage distortion - Innear load Thitul ∨ 2.5% Sabet voltage Sabet voltage voltage Sabet voltage Sabet voltage voltage voltage Sabet voltage voltage voltage Sabet voltage voltage voltage voltage voltage Sabet voltage vo	Frequency tolerance	± 5 Hz						
Rated voltage S80 V + 400 V + 415 V Voltage blerance C1 % (static load), ± 2% in 5 ms (ynamic load conditions from 0 to 100 %) Frequency tolerance C2 % Frequency tolerance C2 % Frequency tolerance C30 % Frequency tolerance	Power factor / THDI	0.93 / < 4.5%				0.94 / < 5%		
Voltage to larance < 1% (static lack), ± 2% in 5 ms (dynamic load conditions from 0 to 100%) Rated frequency 50/60 Hz Total output voltage distortion - Innear load ThdU < 3.2 %	OUTPUT							
Reted frequency 100	Rated voltage	380 V - 400 V - 415 V						
Frequency tolerance	Voltage tolerance	< 1 % (static load), ± 2 % in 5 ms (dynamic load conditions from 0 to 100 %)						
Total output voltage distortion - linear load Total output voltage distortion - non-linear load (EC 62043-3) Short-circuit current Overload	Rated frequency	50/60 Hz						
Total output voltage distortion - non-linear load (IEC 62043-3) ThidU < 3.2 % ThidU < 2.5 % Overload 150% for 1 minute, 125% for 1 0 minutes Overload 3:1 Sector Crest factor 3:1 Sector Admissible power factor without derating inductive up to 0.9 leading BVPASS Rated voltage 380 V - 400 V - 415 V Voltage tolerance ± 10% Rated frequency 50500 Hz Frequency tolerance ± 2% (configurable for GerSet compatibility) EFFICIENCY Unline mode Eo Mode up to \$3.5 % Eo Mode EO Mode 10 to 4 to	Frequency tolerance	± 0.2%						
INUU	Total output voltage distortion - linear load	ThdU <2%						
Overload 150% for 1 minute, 125% for 10 minutes Crest factor 3:1 Admissible power factor without derating Brace factor BYPASS Rated voltage 380 V - 400 V - 415 V Voltage tolerance # 10% Rated frequency 50/60 Hz Frequency tolerance ± 2% (configurable for GenSet compatibility) Frequency tolerance ± 2% (configurable for GenSet compatibility) Frequency tolerance ± 2% (configurable for GenSet compatibility) EFFICIENCY Online mode ± 2% (configurable for GenSet compatibility) EFFICIENCY Online mode ± 2% (configurable for GenSet compatibility) EFFICIENCY Online mode ± 2% (configurable for GenSet compatibility) EFFICIENCY Online mode ± 2% (configurable for GenSet compatibility) EFFICIENCY		ThdU < 3.2 % ThdU < 2.5%						
Crest factor 3: Inductive up 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 SenSet compatibility) Frequency tolerance ± 2% (configurable for SenSet compatibility) FIFICIENCY Online mode up to 93.5% Eco Mode up to 93.5% Eco Mode p88 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 100 maximum altitude 270 dBA ≤ 70 dBA ≤ 75 dBA UPS CABINET Dimensions W x D x H 1600 x 95 x 1930 mm 3300 x 995 x 2210 mm Weight 2500 kg 2800 kg	Short-circuit current	Up to 4,4 In						
Crest factor 3: Inductive up 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 Set compatibility) Frequency tolerance ± 2% (configurable for Set compatibility) FFICIENCY Online mode up to 93.5% Eco Mode up to 93.5% Eco Mode p 80 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 100 monthlitude at a 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 27 dBA ≤ 75 dBA UPS - 20 dBA ≤ 70 dBA ≤ 70 dBA	Overload							
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 ± 2% (configurable for GenSet compatibility) EEO Mode 98% EEO 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 (\$0 3746) [®]) ≤ 75 dBA UPS CABINET UPS CABINET 1000 m without derating (max. 3000 m) Acoustic level at 1 m (\$0 3746) [®]) ≤ 75 dBA ≤ 75 dBA UPS CABINET ED MED SO NG S	Crest factor							
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 ± 2% (configurable for GenSet compatibility) EEO Mode 98% EEO 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 (\$0 3746) [®]) ≤ 75 dBA UPS CABINET UPS CABINET 1000 m without derating (max. 3000 m) Acoustic level at 1 m (\$0 3746) [®]) ≤ 75 dBA ≤ 75 dBA UPS CABINET ED MED SO NG S	Admissible power factor without derating							
Voltage to lerance ± 10% Rated frequency 50/60 Hz Frequency tolerance ± 2% (configurable for GenSet compatibility) EFFICIENCY Online mode ± 10 to 93.5% ± 500 Med ± 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) 4 57 dBA UPS CABINET UPS CABINET Dimensions W x D x H 1600 x 995 x 1930 mm 3200 x 995 x 2210 mm Weight 2500 kg 3300 kg 5900 kg Dimensions W x D x H 1600 x 995 x 1930 mm 3200 x 995 x 2210 mm Weight 2500 kg 3300 kg 5900 kg 5900 kg EVED Colours FAL 9006 STANDARDS STEX/EDAG (2040.1.1, AS 62040.1.1,	BYPASS				· ·			
Voltage to lerance ± 10% Rated frequency 50/60 H≥ Frequency to lerance ± 2% (configurable for GenSet compatibility) EFFICIENCY Up to 93.5% ECO Mode ± 100 to 10	Rated voltage	380 V - 400 V - 415 V						
### EPFICIENCY Performance	-							
### FICIENCY Online mode	Rated frequency	50/60 Hz						
### FICIENCY Online mode	Frequency tolerance	± 2% (configurable for GenSet compatibility)						
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)® ≤ 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 1P20 Colours RAL 9006 STANDARDS Safety IEC/EN 62041-1, AS 62040.1.1, AS 62040.1.2 EEC/EN 62040-2, AS 62040.2 Performance IEC/EN 62040-3, AS 62040.3	EFFICIENCY							
ENVIRONMENT Operating ambient temperature Relative humidity Maximum altitude Acoustic level at 1 m (ISO 3746)® 3 ≤ 70 dBA 572 dBA 575 dBA UPS CABINET Dimensions W x D x H 1600 x 995 x 1930 mm Weight 2500 kg 2800 kg 3300 kg 5900 kg Degree of protection Colours STANDARDS Safety EMC Performance FINAL BACE FINAL BACE	Online mode	up to 93.5%						
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)® ≤ 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/EN 62041-1, AS 62040.1.1, AS 62040.1.2 EMC Performance IEC/EN 62040-2, AS 62040.2 Performance IEC/EN 62040-3, AS 62040.3	Eco Mode	· I · · · · · · · · · · · · · · · · · ·						
Relative humidity 0 % - 95 % without condensation Maximum altitude 1000 m without derating (max. 3000 m) Acoustic level at 1 m (ISO 3746) ^(S) ≤ 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 3300 kg 5900 kg Degree of protection IP20 Colours RAL 9006 STANDARDS Safety IEC/EN 62041-1, AS 62040.1.2 EEC/EN 62040-2, AS 62040.2 Performance IEC/EN 62040-3, AS 62040.3	ENVIRONMENT							
Relative humidity 0 % - 95 % without condensation Maximum altitude 1000 m without derating (max. 3000 m) Acoustic level at 1 m (ISO 3746) ^(S) ≤ 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 3300 kg 5900 kg Degree of protection IP20 Colours RAL 9006 STANDARDS Safety IEC/EN 62041-1, AS 62040.1.1, AS 62040.1.2 EMC IEC/EN 62040-2, AS 62040.2 Performance IEC/EN 62040-3, AS 62040.3	Operating ambient temperature	from 0 °C up to +35 °C (from 15 °C to 25 °C for maximum battery life)						
Maximum altitude 1000 m without derating (max. 3000 m) Acoustic level at 1 m (ISO 3746) ^(S) ≤ 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/EN 62041-1, AS 62040.1.1, AS 62040.1.2 EMC IEC/EN 62040-2, AS 62040.2 Performance IEC/EN 62040-3, AS 62040.3								
Acoustic level at 1 m (ISO 3746) ^(S) ≤ 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/EN 62041-1, AS 62040.1.1, AS 62040.1.2 EMC IEC/EN 62040-2, AS 62040.2 Performance IEC/EN 62040-3, AS 62040.3	-	1000 m without derating (max. 3000 m)						
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/EN 62041-1, AS 62040.1.1, AS 62040.1.2 EMC EMC IEC/EN 62040-2, AS 62040.2 IEC/EN 62040-3, AS 62040.3	Acoustic level at 1 m (ISO 3746)(3)		≤ 70 dBA		1	≤ 7	5 dBA	
Weight 2500 kg 2800 kg 3300 kg 5900 kg Degree of protection IP20 Colours RAL 9006 STANDARDS Safety IEC/EN 62041-1, AS 62040.1.1, AS 62040.1.2 EMC IEC/EN 62040-2, AS 62040.2 Performance IEC/EN 62040-3, AS 62040.3	UPS CABINET					_		
Weight 2500 kg 2800 kg 3300 kg 5900 kg Degree of protection IP20 Colours RAL 9006 STANDARDS Safety IEC/EN 62041-1, AS 62040.1.1, AS 62040.1.2 EMC IEC/EN 62040-2, AS 62040.2 Performance IEC/EN 62040-3, AS 62040.3	Dimensions W x D x H		1600 x 99	5 x 1930 mm		3200 x 995	5 x 2210 mm	
Degree of protection IP20 Colours RAL 9006 STANDARDS Safety IEC/EN 62041-1, AS 62040.1.2 EMC IEC/EN 62040-2, AS 62040.2 Performance IEC/EN 62040-3, AS 62040.3		250			3300 kg			
Colours RAL 9006 STANDARDS IEC/EN 62041-1, AS 62040.1.1, AS 62040.1.2 EMC IEC/EN 62040-2, AS 62040.2 Performance IEC/EN 62040-3, AS 62040.3	•							
STANDARDS Safety IEC/EN 62041-1, AS 62040.1.1, AS 62040.1.2 EMC IEC/EN 62040-2, AS 62040.2 Performance IEC/EN 62040-3, AS 62040.3	ů .							
Safety IEC/EN 62041-1, AS 62040.1.1, AS 62040.1.2 EMC IEC/EN 62040-2, AS 62040.2 Performance IEC/EN 62040-3, AS 62040.3	STANDARDS							
EMC IEC/EN 62040-2, AS 62040.2 Performance IEC/EN 62040-3, AS 62040.3		IEC/EN 62041-1, AS 62040.1.1, AS 62040.1.2						
Performance IEC/EN 62040-3, AS 62040.3	-							
	Product declaration	CE. RCM (E2376)						

(1) Conditions apply. (2) **DELPHYS MX** 250-500: others on demand. (3) As per power range.

