



MASTERYS BC+

4th generation digital native general purpose UPS
from 100 to 160 kVA

Three-phase UPS



The solution for

Commercial buildings

- > Security control
- > Payment systems
- > Emergency services
- > IT networking
- > Building automation

Smart manufacturing

- > Process control systems
- > Cloud service access

Certifications



The MASTERYS BC+ series is certified by TUV SUD with regard to product safety (EN 62040-1).



Seismic resistant
The MASTERYS BC+ units have successfully passed severe tests to verify resistance to withstand Zone 4 seismic events.

The best protection with a cost-effective approach

- Online double conversion mode with an output power factor of 0.9.
- Best-in-class online efficiency.
- Versatile to operate in different electrical environments.
- Standard design with dual input mains to manage independent power sources.
- Standard design equipped with input, output and auxiliary mains switches.
- Internal manual bypass for easy maintenance with no power interruption.

Easy to integrate and user-friendly

- Compact, lightweight and easy to install.
- Low acoustic noise level.
- Modern aesthetics combined with ergonomics
- User-friendly multilingual interface with a graphic LCD display.

Extremely reliable, robust and durable

- Completely designed and manufactured in Europe.
- Certified seismic resistance.

Tailor-made - as standard

- Easy configurable for retrofit in existing installations.
- Catalogue base flexibility to meet specific needs.
- Fast delivery time for a fully personalized solution.

Native digital solution

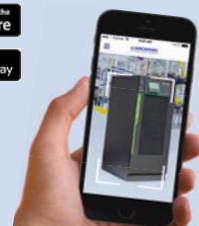
- Ready for integration in LAN and Industry 4.0 ecosystem.
- IoT ready and remote cloud services.
- Multiprocessor intelligent product architecture.
- Product identification and configuration using standard QR codes.

Advantages



A tutoring app for a simplified installation

- > Augmented Reality technology
- > Guided workflow on your smartphone
- > Verification and validation by the Socomec Service Center



System features

- Dual input mains.
- Internal maintenance bypass switch.
- Input mains switch breaker.
- Output switch breaker.
- Auxiliary mains switch breaker.
- Backfeed protection: detection circuit.
- Power walk-in ramp for excellent compliance with generators.

Standard communication features

- Graphical LCD multilingual display.
- 2 slots for communication options.
- USB port to download log file.
- Ethernet port for service purposes.

System options

- External battery cabinet with normal or long-life VRLA batteries.
- High capacity battery charger.
- Alternative backup power technologies:
 - NiCd batteries
 - Li-Ion batteries
 - Li-Ion capacitors
- 3-phase input without neutral.
- Internal backfeed isolation device.
- Common mains coupling bars.
- TN-C grounding system.
- ACS synchronisation system.
- IP21 degree of protection.
- Top cabling kit.
- Top ventilation kit.
- Bypass redundant cooling.
- Seismic fixing kit.

Technical data

MASTERYS BC+			
Sn [kVA]	100	120	160
Pn [kW]	90	108	144
Input/output	3/3		
Parallel configuration	up to 6 units		
INPUT			
Rated voltage	400 V 3ph+N (3 wire input also available on demand)		
Voltage tolerance	240 V to 480 V		
Rated frequency	50/60 Hz ± 10%		
OUTPUT			
Power factor	0.9 (according to IEC/EN 62040-3)		
Rated voltage	3ph + N: 400 V (can be configured 380/415 V)		
Rated frequency	50/60 Hz		
Frequency tolerance	± 2% (configurable for GenSet compatibility)		
Total output voltage distortion	< 1%		
Overload	125% for 10 minutes, 150% for 1 minute		
Crest factor	3:1		
BYPASS			
Rated voltage	rated output voltage		
Voltage tolerance	± 15% (configurable with from 10% to 20%)		
Rated frequency	50/60 Hz		
Frequency tolerance	± 2%		
EFFICIENCY			
Double conversion mode	up to 95%		
Always on mode	up to 99%		
ENVIRONMENT			
Operating ambient temperature	from 0 °C 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)	< 60 dBA		< 65 dBA
UPS CABINET			
Dimensions	W	600 mm	
	D	855 mm	
	H	1400 mm	1930 mm
Weight	220 kg	232 kg	340 kg
Degree of protection	IP20		
Colours	Metallised Grey E150HVR		
STANDARDS			
Safety EMC	IEC/EN 62040-1, AS 62040.1.1, AS 62040.1.2		
Performance	IEC/EN 62040-3, AS 62040.3		
Environmental	full compliance with the RoHS EU directive		
Seismic compliance	on demand, in accordance with the Uniform Building Code UBC-1997 Zone 4		
Product declaration	CE, RCM (E2376)		

Communication options

- Dry-contact, RS232/485 interfaces.
- MODBUS RTU.
- MODBUS TCP.
- BACnet/IP interface.
- NET VISION: professional WEB/SNMP, ethernet interface for UPS monitoring and remote automatic shutdown.
- Ethernet gateway for cloud services.

Remote monitoring service

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