



# MASTERYS BC+

4<sup>th</sup> generation digital native general purpose UPS  
from 100 to 160 kVA

Three-phase UPS



## 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.

## 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.

## 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   |         |          |
| <b>INPUT</b>                     |   |         |          |
| 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%  |         |          |
| <b>OUTPUT</b>                    |   |         |          |
| 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   |         |          |
| <b>BYPASS</b>                    |   |         |          |
| Rated voltage                    | rated output voltage  |         |          |
| Voltage tolerance                | ± 15% (configurable with from 10% to 20%)                               |         |          |
| Rated frequency                  | 50/60 Hz  |         |          |
| Frequency tolerance              | ± 2%  |         |          |
| <b>EFFICIENCY</b>                |   |         |          |
| Double conversion mode           | up to 95%   |         |          |
| Always on mode                   | up to 99%   |         |          |
| <b>ENVIRONMENT</b>               |   |         |          |
| 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 |
| <b>UPS CABINET</b>               |   |         |          |
| 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   |         |          |
| <b>STANDARDS</b>                 |   |         |          |
| 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.

## Our dedicated Expert Services for UPS

We offer services to ensure your UPS highest availability:

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



[www.socomec.com/services](http://www.socomec.com/services)