



# MASTERYS BC

Reliable, simple and ready-to-use power protection  
from 15 to 80 kVA

Single-phase and  
three-phase UPS



## The solution for

- > Server rooms
- > Service Sector
- > Infrastructure
- > Healthcare Sector
- > Light industrial applications

## Technology

- > VFI "online double conversion"

## Certifications



The MASTERYS BC series is certified by TÜV SÜD with regard to product safety (EN 62040-1).

## A complete, cost-effective solution

- Online double conversion mode with an output power factor of 0.9 providing 12% more active power compare to UPS with a power factor of 0.8.
- Dual input mains allows you to manage independent power sources.
- Increased system availability placing two UPS in parallel for 1+1 redundancy.
- Internal manual bypass for easy maintenance without power interruption.
- Internal batteries providing more than 1 hour runtime.
- Multilanguage display.

## Tailored to your environment

- Saves space with a reduced footprint and optimized cabinet size.
- Low noise level.
- Flexible battery solutions
- Compact, lightweight and easy to install.
- Extended battery life and performance with exclusive EBS battery charging management for increased battery life.

## Standard electrical features

- Dual input mains (15-40 kVA).
- Internal manual bypass.
- Backfeed protection: detection circuit.
- EBS (Expert Battery System) for battery management.

## Electrical options

- Dual input mains (60-80 kVA).
- External battery cabinet.
- External temperature sensor.
- Additional battery chargers.
- Galvanic isolation transformer.
- Parallel kit.
- ACS synchronization system.

## Standard communication features

- MODBUS RTU.
- 2 slots for communication options.

## Communication options

- Dry-contact interface.
- PROFIBUS.
- 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

| MASTERYS BC                      |  |          |          |          |                     |          |
|----------------------------------|--|----------|----------|----------|---------------------|----------|
| Sn [kVA]                         | 15   | 20       | 30       | 40       | 60                  | 80       |
| Ph [kW]                          | 13.5   | 18       | 27       | 36       | 54                  | 72       |
| Input/output 3/1                 | •  | •        | -        | -        | -                   | -        |
| Input/output 3/3                 | •  | •        | •        | •        | •                   | •        |
| Parallel configuration           | 1+1 <sup>(1)</sup>   |          |          |          |                     |          |
| <b>INPUT</b>                     |  |          |          |          |                     |          |
| Rated voltage                    | 400 V 3ph + N  |          |          |          |                     |          |
| Voltage tolerance                | 240 V to 480 V <sup>(2)</sup>  |          |          |          |                     |          |
| Rated frequency                  | 50/60 Hz ± 10%   |          |          |          |                     |          |
| Power factor / THDI              | 0.99 / < 3%  |          |          |          |                     |          |
| <b>OUTPUT</b>                    |  |          |          |          |                     |          |
| Rated voltage                    | 1ph + N: 230 V (can be configured 220/240 V)<br>3ph + N: 400 V (can be configured 380/415 V) |          |          |          |                     |          |
| Voltage tolerance                | static load ±1% dynamic load in accordance with VFI-SS-111                                   |          |          |          |                     |          |
| Rated frequency                  | 50/60 Hz   |          |          |          |                     |          |
| Frequency tolerance              | ± 2% (configurable from 1% to 8%)  |          |          |          |                     |          |
| 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% (configurable for Genset compatibility)   |          |          |          |                     |          |
| <b>EFFICIENCY</b>                |  |          |          |          |                     |          |
| Online mode @ 100% of load       | up to 94,5%  |          |          |          |                     |          |
| <b>ENVIRONMENT</b>               |  |          |          |          |                     |          |
| Operating ambient temperature    | from 0 °C up to +40 <sup>(3)</sup> °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) | < 52 dBA   | < 55 dBA | < 55 dBA | < 55 dBA | < 62 dBA            | < 62 dBA |
| <b>UPS CABINET</b>               |  |          |          |          |                     |          |
| Dimensions W x D x H             | 444 x 795 x 800/1000/1400 mm   |          |          |          | 444 x 795 x 1400 mm |          |
| Weight <sup>(3)</sup>            | 105 kg   | 110 kg   | 135 kg   | 152 kg   | 180 kg              | 200 kg   |
| Degree of protection             | IP20   |          |          |          |                     |          |
| Colours                          | RAL 7012   |          |          |          |                     |          |
| <b>STANDARDS</b>                 |  |          |          |          |                     |          |
| Safety                           | IEC/EN 62040-1 (TÜV SÜD certified), EN 60950-1, AS 62040.1.1, AS 62040.1.2                   |          |          |          |                     |          |
| EMC                              | IEC/EN 62040-2, AS 62040.2   |          |          |          |                     |          |
| Performance                      | VFI-SS-111 - IEC/EN 62040-3, AS 62040.3  |          |          |          |                     |          |
| Product declaration              | CE, RCM (E2376)  |          |          |          |                     |          |

(1) The standard model is prepared for a 1+1 redundant system. Upon request, it is possible to have connected up to 6 modules in a parallel system. (2) Conditions apply. (3) Without batteries.

## UPS and internal batteries

