Uninterruptible Power Supply From 10 to 60kVA







# The solution for

Small & Medium Data Centers
Banks
E-Medical
Medical Services
Telecom & Media Infrastructure
Transport
Control Rooms







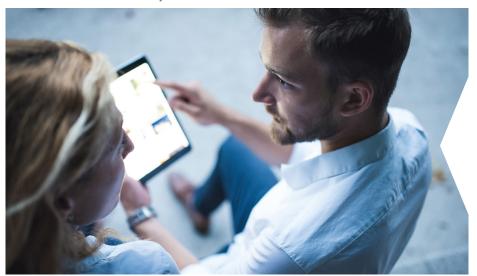
# Socomec at the forefront of innovation

#### Socomec and UPS: more than 50 years of history

Critical equipment requires high quality energy which, in turn, depends upon a faultless - continuous - power supply.

Our Uninterruptible Power Systems (UPS), Static Transfer Systems (STS) and AC / DC converters make up the most innovative and comprehensive product portfolio in the industry, covering a wide range of applications and meeting the unique and exacting requirements of every sector.

The new three phase, medium power UPS MASTERYS range has been designed in our European centre of excellence. Produced in our European manufacturing facility, our attention to detail and focus on quality – as well as customer service - have been at the heart of what we do for over 50 years.



# Ensuring absolute business continuity

Maintaining the uptime of your critical applications is a major concern for facility managers.

Availability, reliability and quality as well as quick and risk-free maintainability of the power supply system are key factors in achieving this target.

#### Socomec factories join the digital world

Since 2014, Socomec has been investing to bring its manufacturing facilities in line with industry 4.0 standards. Beyond lean manufacturing, the digitalisation of production means that we can ensure the delivery of a competitive offering with continuously improving service levels whilst also supporting the creation of more personalised products.





#### **Expert services support**

Our technicians' expertise and proximity are fundamental to ensure equipment reliability, durability and optimised performance. Socomec offers a comprehensive support service package:

- Commissioning
- On-site testing
- Certified preventive maintenance visits
- 24-hour call out and rapid on-site repairs
- Genuine spare parts
- Power quality and energy efficiency audits

### UPS from 10 to 60kVA

### Trustworthy power



The MASTERYS BC+ 208V has been designed with the Powersmiths' quality requirements. It is a very robust and high-quality three-phase UPS. Its double conversion topology, based on IGBT technology, prevents loads from any events. The MASTERYS BC+ 208V offers superior electrical performance, providing all systems with valuable energy protection. It is an unrivaled reliable UPS built with the very best, offering end-users efficient features. The small footprint, combined with the fully front-access design of the MASTERYS BC+ 208V, saves a lot of space in its locations.



#### Efficient and cost effective solution

Combined with the highly efficient double conversion, the embedded eco-mode of the MASTERYS BC+ 208V will improve the system's efficiency. Moreover, an embedded active working mode option will enable the UPS to perform in eco-mode or double conversion, depending on statistics analyzing the power quality.



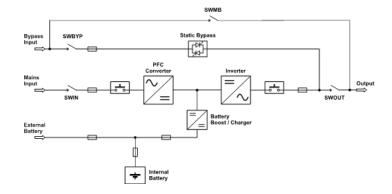
#### Flexible design

The two different designs, with either 1 (input) or 4 switches (input, bypass, maintenance bypass, load switch), offer a very robust topology, increasing the reliability of the system.



#### Front accesss maintenence

- Easy maintenance through brick concept
- True front access.



### UPS from 10 to 60kVA

### Unrivaled power performance





- Up to 95% efficiency in true online double conversion.
- Eco-Mode available to increase efficiency.



### Unrivalled reliabiliy

- IGBT-based technology providing a power factor 1 from 40kVA.
- Long product life expectancy.



### **Compact Design**

- Reduced footprint, saving valuable space.
- Two different designs: 10-30kVA and 40-60kVA.



### Fully rated system

- Overload certified in double conversion mode.
- Overload certified in Bypass mode.

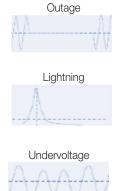


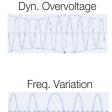
#### Long runtime engineered-in

- Several optimized choices for standard internal battery configuration.
- Increased internal battery density for reduced footprint and simplified installation.
- Internal basic autonomy available up to 30kVA without additional external battery cabinets.

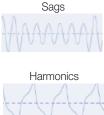
# MASTERYS BC+ 208V designed for the quality and the availability of your power supply

The true Voltage Frequency Independent (VFI) design is the best solution for any critical load. It is the safest solution to prevent any disturbances from the installation. Any event coming from the source is handled by the rectifier and converted into DC energy. The rectifier then converts the energy into perfect AC curves at 60Hz. Double conversion is the most relevant technology to protect electrical installations.

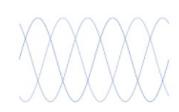




Overvoltage







VFI Double Conversion Output

### UPS from 10 to 60kVA

# User focused design

#### **Battery**

The MASTERYS BC+ 208V has 2 different designs. The first design, 10-30kVA, is capable of providing backup time from internal and external batteries. The second design, 40-60kVA, will be combined with external batteries. The technologies used are VRLA AGM/GEL/NiCd, ensuring the safety of the installation. The UPS integrates an embedded battery management system to track any events happening on the batteries and optimize the best performances.

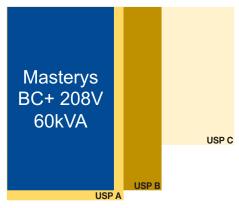
#### **HMI**



7" LCD touch screen with 3 languages embedded

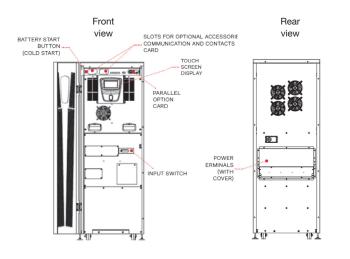
#### Compact footprint

The market is requiring every installation to be more compact. That is why Powersmiths designed a very small footprint UPS for North American applications. The MASTERYS BC+ 208V is a very cost-effective equipment as it saves the end-user a lot of space in its electrical room. The UPS is manufactured with very robust components, quaranteeing the high reliability of the MASTERYS BC+ 208V.

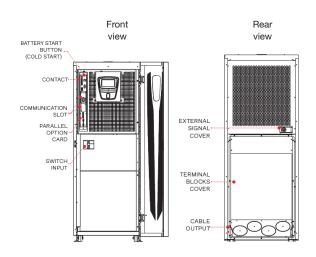


60kVA UPS footprint in UL Market

#### MASTERYS BC+ 208V 10-30kVA with 1 or 4 switches



# MASTERYS BC+ 208V 40-60kVA with 1 or 4 switches



# Product specifications

	Masterys BC+ 208V					
Sn [kVA]	10	20	30	40	50	60
Pn [kW]	9	18	27	40	50	60
Parallel configuration	Up to 6 units			Up to 4 units		
nput						
Rated voltage	208 V 3ph+N					
Voltage tolerance	167 V to 249 V					
Rated frequency	50/60Hz +/- 10%					
Input power factor / THDi	< 3%					
Dutput						
Rated voltage	208 V / 220 V 3ph+N					
Rated frequency	50 / 60 Hz					
Output voltage distortion (THDv)	< 3%					
Output voltage performance (load variation 0 - 100%)	Complies with IEC 62040-3 Class 1 (VFI-SS-111)					
Inverter overload capability (under rated conditions)	103% continuous / 110% 60 min / 125% 10 min / 150% 1 min					
Bypass overload capability (under rated conditions)	110% continuous / 125% 60 min / 150% 10 min / 200% 1 min					
		110700		117 10070 10 1111117 2007	70 1 111111	
Efficiency Double conversion VFI mode Eco Mode			Up to	95%	70 T TIIIII	
Double conversion VFI mode Eco Mode				95%	70 T TIIIIT	
Double conversion VFI mode Eco Mode			Up to	95% 98%	7 T T T T T T T T T T T T T T T T T T T	
Double conversion VFI mode  Eco Mode  Battery		Internal or External	Up to	95% 98%	External	
Double conversion VFI mode  Eco Mode  Battery  Technologies  Configuration			Up to	95% 98%		
Double conversion VFI mode  Eco Mode  Battery  Technologies  Configuration			Up to	95% 98% /GEL/NiCd		
Eco Mode  Battery Technologies Configuration Environment			Up to Up to VRLA AGM	95% 98% /GEL/NiCd / 0 - 40 °C		
Double conversion VFI mode  Eco Mode  Battery  Technologies  Configuration  Environment  Operating ambient temperature			Up to Up to VRLA AGM 32 - 104 °F	95% 98% /GEL/NiCd / 0 - 40 °C		
Double conversion VFI mode  Eco Mode  Battery  Technologies  Configuration  Environment  Operating ambient temperature  Reative humidity	21.7x32		Up to Up to VRLA AGM 32 - 104 °F 5-95% withou	95% 98% /GEL/NiCd / 0 - 40 °C g condensing		600mm
Double conversion VFI mode  Eco Mode  Battery  Technologies  Configuration  Environment  Operating ambient temperature  Reative humidity  Dimensions and Weight	21.7x32	Internal or External	Up to Up to VRLA AGM 32 - 104 °F 5-95% withou	95% 98% /GEL/NiCd / 0 - 40 °C g condensing	External	600mm
Double conversion VFI mode  Eco Mode  Battery  Technologies  Configuration  Environment  Operating ambient temperature  Reative humidity  Dimensions and Weight  Dimensions WxDxH  Weight		Internal or External 2.7x59.0'' / 550x830x1	Up to Up to VRLA AGM 32 - 104 °F 5-95% withou	95% 98% /GEL/NiCd / 0 - 40 °C g condensing	External 3.6x63.0'' / 600x980x16	1
Double conversion VFI mode  Eco Mode  Battery  Technologies  Configuration  Environment  Operating ambient temperature  Reative humidity  Dimensions and Weight  Dimensions WxDxH		Internal or External  2.7x59.0" / 550x830x1	Up to Up to VRLA AGM 32 - 104 °F 5-95% withou	95% 98% /GEL/NiCd / 0 - 40 °C g condensing	External 3.6x63.0'' / 600x980x16 613	1

### Standard

#### System features:

- Dual input mains
- Internal maintenance bypass switch\*
- Auxiliary main switch breaker\*
- Output switch
- Power walk-in ramp for excellent compliance with generators
- UPS status led indicator
- Long life internal battery\*

#### **Communication features:**

- UPS status led indicator
- Multilanguage graphic touch screen display
- 2 slots for communications
- USB port for maintenance
- Contact interface with 5x opto insulated Input and 4x Output relay

# **Options**

#### **Electrical options:**

- Versions with other operating voltages 208V/480V, 480V/208V, 480V/480V
- Parallel configuration kit
- External battery cabinets
- External wrap around Bypass

#### **Communication options:**

- SNMP card / Embedded webserver
- Dry contacts

<sup>\*</sup>on selected models

# Socomec: our innovations supporting your energy performance

1 independent manufacturer

3,900 employees worldwide

8 % of sales revenue dedicated to R&D

**400** experts dedicated to service provision

#### Your power management expert







POWER MONITORING



POWER CONVERSION



ENERGY STORAGE



SERVICES

#### The specialist for critical applications

- Control, command of LV facilities
- Safety of persons and assets
- Measurement of electrical parameters
- Energy management
- Energy quality
- Energy availability
- Energy storage
- Prevention and repairs
- Measurement and analysis
- Optimization
- Consultancy, commissioning and training

#### A worldwide presence

### 12 production sites

- France (x3)
- Italy (x2)
- Tunisia
- IndiaChina (x2)
- USA (x3)

# 30 subsidiaries and commercial locations

- Algeria Australia Belgium Canada
- China Dubai (United Arab Emirates)
- France Germany India Indonesia Italy
- Ivory Coast Netherlands Poland Portugal
- Romania Singapore Slovenia
- South Africa Spain Switzerland Thailand
- Tunisia Turkey UK USA

# 80 countries

where our brand is distributed

#### SOCOMEC, Inc.

9 Galen Street, Suite 120 Watertown, MA 02472 Tel. 617 245 0447 Fax 617 245 0437 info.us@socomec.com

#### POWERSMITHS International Corp.

8985 Airport Road Brampton, ON, L62 5T2 Canada Tel. 905 791 1493 Toll-free. 800 747 9627 support@powersmiths.com www.powersmiths.com YOUR DISTRIBUTOR / PARTNER

#### www.socomec.us









