

MASTERYS MC

from 10 to 80 kVA

for critical IT and industrial applications

For strategic applications

- Designed to protect production processes and IT applications.
- Intelligent: LAN network interface, integrated as standard, for improved UPS supervision [\[Info. p. 105\]](#).

Tailored to your environment

- Easy to install.
- Easy to handle (fitted with castors).
- Unique to the market with its highly compact size.
- Can even be installed in existing 19" rack cabinets (up to 30 kVA).
- Flexible back-up times: different configurations are available either within the standard UPS cabinet or by using taller UPS cabinets, without increasing floor space.
- Scalable power or availability (using redundancy) by placing up to 6 units in parallel.
- Harmonic distortion reduced (THDI < 3%) via use of an IGBT rectifier [\[Info. p. 98\]](#).
- Graphic display.
- Redundant batteries: the battery packs are connected to each other in two distinct strings. If one battery pack in a string is not functioning, back-up time is still available from the remaining string.
- EXPERT BATTERY SYSTEM for battery management [\[Info. p. 106\]](#).
- ALWAYS ON MODE energy saving operation without upstream harmonic feedback [\[Info. p. 99\]](#).
- ENERGY SAVER power management in parallel configuration [\[Info. p. 99\]](#).
- GLOBAL SUPPLY SYSTEM generating set management [\[Info. p. 104\]](#).
- Protection against backfeed on the upstream network (internal or external)
- Separate rectifier supply and bypass networks for 3/1 models.
- Internal maintenance manual bypass.



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



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Your protection for

- > Industrial networks
- > Servers
- > Telecommunications
- > Medical and laboratories



Range

Model	Input/output	kVA	Back-up time std
MC 110	3/1	10	18'
MC 310	3/3	10	18'
MC 115	3/1	15	11'
MC 315	3/3	15	11'
MC 120	3/1	20	10'
MC 320	3/3	20	10'
MC 330	3/3	30	10'
MC 340	3/3	40	10'
MC 360	3/3	60	12'*
MC 380	3/3	80	8'*

Back-up time at 75% of the load
*using an external battery cabinet type W

Technical data

kVA	10	15	20	30	40	60	80
kW	8	12	16	24	32	48	64
Input/output: 3/1	●	●	●				
Input/output: 3/3	●	●	●	●	●	●	●
Parallel configuration	up to 6 units						

INPUT

Nominal voltage	(3ph + N) 400 V ± 20% ⁽¹⁾ (up to -35% at 70% nominal load)
Input frequency	50/60 Hz ± 10%
Power factor/THDI	0.99/< 3% ⁽²⁾

OUTPUT

Output voltage	if 1ph + N 230 V ± 1% (can be configured 220/240 V) if 3ph + N 400 ± 1% ⁽¹⁾ (380/415 V configurable)
Output frequency	50/60 Hz ± 2% (can be configured from 1% to 8% with generating set)
Automatic bypass	nominal output voltage ± 15% (configurable from 10% to 20% with generating set)
Overload	125% for 10 minutes/150% for 60 seconds
Crest factor	3:1 (complying with IEC 62040-3)
PF acceptable without de-rating	up to 0.9 lead. (up to 0.7 lead for 10 minutes)

EFFICIENCY

Global efficiency (On-line)	up to 93%
Efficiency in ECO-MODE	up to 98%
Efficiency in ALWAYS-ON MODE	up to 96%

ENVIRONMENT

Operating ambient temperature	0 °C to + 40 °C (15 °C to 25 °C for best battery life)
Storage temperature range	- 5 to + 45 °C (15 °C to 25 °C for best battery life)
Relative humidity	0% - 95% without condensation
Maximum altitude	1 000 m without de-rating (maximum 3000 m)
Noise level (ISO 3746)	< 55 dB

WEIGHT (kg)

Weight (with standard batteries)	190	195	240	315	415	200 ⁽³⁾	210 ⁽³⁾
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DIMENSIONS W x D x H (mm) and BACK-UP TIMES in min.

Cabinet type S (Short) (444 x 795 x 800 mm)	18'	11'					
Cabinet type M (Medium) (444 x 795 x 1000 mm)	27' 45'	16' 25'	10' 18'	10'			
Cabinet type T (Tall) (444 x 795 x 1400 mm)	75' 100'	45' 65'	30' 45'	18' 28'	10'	UPS (without battery)	
Max. B.U.T. ⁽⁴⁾	up to 500'	up to 300'	up to 200'	up to 130'	up to 90'	12'	8'

STANDARDS

Safety	IEC 62040-1-1 (TÜV SÜD certified), IEC 60950-1-1
Performance and Topology	(EN) IEC 62040-3 [VFI-SS-111]
EMC standard	IEC 62040-2 (2nd Edition) EN 50091-2
Product certification	CE
IP rating	IP 20 (according to IEC 60529), IP 21 optional

■ standard configuration - back-up time at 75% load.

⁽¹⁾ three-phase 220-230-240 V with 40-60-80 kVA on demand.

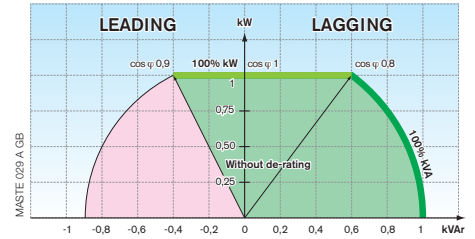
⁽²⁾ for source THDV < 2% and nominal load.

⁽³⁾ batteries fitted in an external cabinet.

⁽⁴⁾ Back-up time.

Supply of lagging and leading loads

[Info. p. 97]



Standard equipment

- RS 232 / 485 serial port.
- Additional RS 232 interface.
- Embedded LAN interface.
- 2 slots for interfaces.

Accessories

- Parallel kit.
- Power share (load shedding output).
- External maintenance bypass.
- Extended back-up time.
- Additional battery charger.
- Isolation transformer.
- ACS synchronisation system on 3/3 version [Info. p. 70 and 74].

Communication options

- Remote access panel.
- ADC interface (configurable dry contacts).
- GSS interface (generating set management).
- UNI VISION PRO software to manage connected applications and control automatic shutdowns. Serial cable included [Info. p. 93].
- NET VISION interface WEB/SNMP manager for connecting the UPS to the Ethernet network [Info. p. 93].

Remote maintenance

- T.SERVICE for continuous monitoring of MASTERYS via the SOCOMEC UPS maintenance service [Info. p. 110].