

Single-phase
and three-phase
UPS

MASTERYS BC

from 8 to 40 kVA

for critical IT and industrial applications

The ideal protection

- Tailored for medium-sized businesses.
- Advantages of advanced technology.

An excellent size / power / back-up time ratio

- Well suited for sensitive professional applications.
- Suitable for protection in IT environments due to the scope of the back-up time and the possibility of installation in 19" rack cabinets.

Tailored to your environment

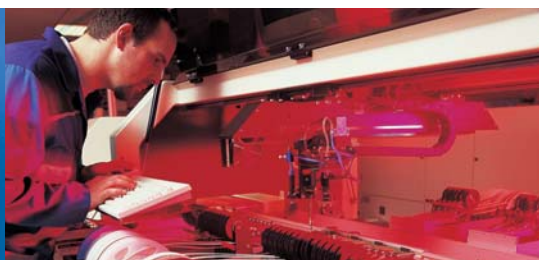
- Easy to install.
- Easy to handle (fitted with castors).
- Unique to the market with its highly compact size.
- Can even be installed in existing 19" rack cabinets.
- Flexible back-up times: different back-up time configurations are available either within the UPS standard cabinet or by using taller UPS cabinets, without changing the floor space (W = 444, D = 795 mm).
- Power and availability (redundancy) can be extended by placing up to 2 units in parallel [Info. p. 101].
- Combi Concept: BC108 and BC110 models are compatible with single or three-phase inputs, which can be configured during installation.
- Fitted with an alphanumeric LCD display.
- EXPERT BATTERY SYSTEM for battery management.
- Protection against backfeed on the upstream network (internal or external backfeed).
- Separate rectifier supply and bypass networks for 3/1 models.



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



- Your protection for
- > Industrial networks
 - > Servers
 - > Telecommunications
 - > Medical and laboratories



Range




| Model | In/out | kVA | Typical B.U.T. ⁽¹⁾ |
|-----------|---------------------------|-----|-------------------------------|
| BC108S+A1 | 1/1 or 3/1 ⁽²⁾ | 8 | 16' |
| BC108S+C1 | 1/1 or 3/1 ⁽²⁾ | 8 | 25' |
| BC108M+A2 | 1/1 or 3/1 ⁽²⁾ | 8 | 45' |
| BC108M+C2 | 1/1 or 3/1 ⁽²⁾ | 8 | 60' |
| BC108T+B3 | 1/1 or 3/1 ⁽²⁾ | 8 | 95' |
| BC110S+A1 | 1/1 or 3/1 ⁽²⁾ | 10 | 12' |
| BC110S+C1 | 1/1 or 3/1 ⁽²⁾ | 10 | 20' |
| BC110M+A2 | 1/1 or 3/1 ⁽²⁾ | 10 | 30' |
| BC110M+C2 | 1/1 or 3/1 ⁽²⁾ | 10 | 45' |
| BC110T+B3 | 1/1 or 3/1 ⁽²⁾ | 10 | 60' |
| BC112S+B1 | 3/1 | 12 | 12' |
| BC112S+C1 | 3/1 | 12 | 16' |
| BC112M+B2 | 3/1 | 12 | 25' |
| BC112M+C2 | 3/1 | 12 | 35' |
| BC112T+B3 | 3/1 | 12 | 55' |
| BC115S+C1 | 3/1 | 15 | 11' |
| BC115M+D1 | 3/1 | 15 | 16' |

| Model | In/out | kVA | Typical B.U.T. ⁽¹⁾ |
|-----------|--------|-----|-------------------------------|
| BC115M+C2 | 3/1 | 15 | 25' |
| BC115T+C3 | 3/1 | 15 | 45' |
| BC115T+C4 | 3/1 | 15 | 65' |
| BC120M+D1 | 3/1 | 20 | 10' |
| BC120M+C2 | 3/1 | 20 | 18' |
| BD120T+D2 | 3/1 | 20 | 30' |
| BC120T+D3 | 3/1 | 20 | 45' |
| BC310S+A1 | 3/3 | 10 | 12' |
| BC310S+C1 | 3/3 | 10 | 20' |
| BC310M+A2 | 3/3 | 10 | 30' |
| BC310M+C2 | 3/3 | 10 | 45' |
| BC310T+B3 | 3/3 | 10 | 60' |
| BC312S+B1 | 3/3 | 12 | 12' |
| BC312S+C1 | 3/3 | 12 | 16' |
| BC312M+B2 | 3/3 | 12 | 25' |

| Model | In/out | kVA | Typical B.U.T. ⁽¹⁾ |
|-----------|--------|-----|-------------------------------|
| BC312M+C2 | 3/3 | 12 | 35' |
| BC312T+B3 | 3/3 | 12 | 55' |
| BC315S+C1 | 3/3 | 15 | 11' |
| BC315M+D1 | 3/3 | 15 | 16' |
| BC315M+C2 | 3/3 | 15 | 25' |
| BC315T+C3 | 3/3 | 15 | 45' |
| BC315T+C4 | 3/3 | 15 | 65' |
| BC320M+D1 | 3/3 | 20 | 10' |
| BC320M+C2 | 3/3 | 20 | 18' |
| BD320T+D2 | 3/3 | 20 | 30' |
| BC320T+D3 | 3/3 | 20 | 45' |
| BC330M+C2 | 3/3 | 30 | 10' |
| BC330T+C3 | 3/3 | 30 | 18' |
| BC330T+C4 | 3/3 | 30 | 30' |
| BC340T+D2 | 3/3 | 40 | 10' |

Back-up time at 75% of the load - (1) Back-up time. - (2) Combi: single or three-phase input configurations.

Technical data

| kVA | 8 | 10 | 12 | 15 | 20 | 30 | 40 |
|---|--|------------------|---------|-------------|------------|------------|-----------|
| kW | 5.6 | 7 | 8.4 | 12 | 16 | 24 | 32 |
| Input/output: 1/1 | ● ⁽¹⁾ | ● ⁽¹⁾ | | | | | |
| Input/output: 3/1 | ● ⁽¹⁾ | ● ⁽¹⁾ | ● | ● | ● | | |
| Input/output: 3/3 | | ● | ● | ● | ● | ● | ● |
| Parallel configuration | up to 2 units | | | | | | |
| INPUT | | | | | | | |
| Nominal voltage | (1ph + N) 230 V ± 20% (up to -35% at 70% nominal load); (3ph + N) 400 V ± 20% (up to -35% at 70% nominal load) | | | | | | |
| Input frequency | 50/60 Hz ± 10% | | | | | | |
| Power factor/THDI | 0.99 / < 6% ⁽²⁾ | | | 0.99 / < 3% | | | |
| OUTPUT | | | | | | | |
| Output voltage | if single-phase, 230 V ± 1% (can be configured 208 ⁽⁴⁾ /220/230/240 V); if three-phase 400 ± 1% (360 ⁽⁴⁾ /380/400/415 V configurable) | | | | | | |
| Output frequency | 50/60 Hz ± 2% (configurable from 1% to 8% with generating set) | | | | | | |
| Automatic bypass | Nominal output voltage ± 15% (configurable from 10% to 20% with generating set) | | | | | | |
| Overload (mains mode) | 125% for 2 min / 150% for 10 sec | | | | | | |
| 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 92% | | | up to 93% | | | |
| Efficiency in ECO-MODE | up to 98% | | | | | | |
| ENVIRONMENT | | | | | | | |
| Operating ambient temperature | 0 °C to + 40 °C (15 °C to 25 °C for best battery life) | | | | | | |
| Storage temperature range | -5 °C to + 50 °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 3 000 m) | | | | | | |
| Noise level (ISO 3746) | < 50 dB | | < 55 dB | | | < 62 dB | |
| WEIGHT (kg) | | | | | | | |
| Weight (with standard batteries) | 155 | 160 | 175 | 195 | 240 | 315 | 415 |
| DIMENSIONS (W x D x H) and BACK-UP TIME in min | | | | | | | |
| Cabinet type S (Short) (444 x 795 x 800 mm) |  | 16' | 12' | 12' | 11' | | |
| | | 25' | 20' | 16' | | | |
| Cabinet type M (Medium) (444 x 795 x 1 000 mm) |  | 45' | 30' | 25' | 16' | 10' | 10' |
| | | 60' | 45' | 35' | 25' | 18' | |
| Cabinet type T (Tall) (444 x 795 x 1 400 mm) |  | 95' | 65' | 55' | 16' | 30' | 18' |
| | | | | | 65' | 45' | 28' |
| Max. B.U.T. ⁽³⁾ | | | | up to 300' | up to 200' | up to 130' | up to 90' |
| STANDARDS | | | | | | | |
| Safety | EN 62040-1-1 (TÜV SÜD certified), EN 60950-1-1 | | | | | | |
| Performance & topology | EN 62040-3 [VFI-SS-111] | | | | | | |
| EMC standard | EN 62040-2 | | | | | | |
| Product certification | CE | | | | | | |
| IP rating | IP 20 (according to IEC 60529), IP 21 optional | | | | | | |

■ standard configuration - back-up time at 75% load.
 (1) combi: single or three-phase input configurations.
 (2) 1/1 configuration, THDI < 25% for 3/1 configuration.
 (3) Back-up time.
 (4) @ P_{OUT} = 90% P_{NOM}.

Standard equipment

- RS 232 / 485 serial port.
- 2 slots for interfaces.

Accessories

- Parallel kit.
- 19" rack kit.
- Power share (load shedding connectors).
- Integrated maintenance bypass with separate supply networks.
- External maintenance bypass.
- Isolation transformer.

Communication options

- Remote access panel.
- ADC interface (configurable dry contacts).
- **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 SUCOMECS UPS maintenance service [Info. p. 110].