

Single-phase
and three-phase
UPS

MASTERYS BC

from 8 to 20 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.



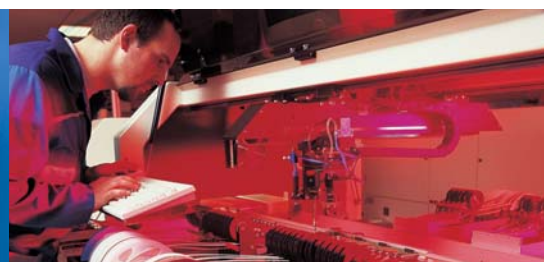
The MASTERYS BC series is certified by TÜV SÜD with regard to product safety (EN 62040-1-1)



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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'

Model	In/out	kVA	Typical B.U.T. ⁽¹⁾
BC115S+C1	3/1	15	11'
BC115M+D1	3/1	15	16'
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'

Model	In/out	kVA	Typical B.U.T. ⁽¹⁾
BC312S+B1	3/3	12	12'
BC312S+C1	3/3	12	16'
BC312M+B2	3/3	12	25'
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'

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
kW	5.6	7	8.4	12	16
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⁾				
OUTPUT					
Output voltage	if single-phase, 230 V ± 1% (can be configured 220/240 V); if three-phase 400 ± 1% (380/415 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%				
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	1000 m without de-rating (maximum 3000 m)				
Noise level (ISO 3746)	< 50 dB		< 55 dB		
WEIGHT (kg)					
Weight (with standard batteries)	155	160	175	195	240
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 1000 mm)		45'	30'	25'	16'
		60'	45'	35'	25'
Cabinet type T (Tall) (444 x 795 x 1400 mm)		95'	65'	55'	16'
					65'
Max. B.U.T. ⁽³⁾				up to 300'	up to 200'
STANDARDS					
Safety	IEC 62040-1-1 (TÜV SÜD certified), IEC 60950-1-1				
Performance & 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) combi: single or three-phase input configurations.
(2) 1/1 configuration, THDI < 25% for 3/1 configuration..
(3) Back-up time.

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 SOCOMEC UPS maintenance service [[Info. p. 110](#)].