Three Phase UPS System

80kVA-600kVA



- Up to 96% efficiency across a wide load range
- Near-unity input power factor >0.99
- Low input harmonic distortion <3%
- Dual input Mains for independent control of power sources
- Smart Rotation Redundancy optimized UPS reliability.
- Intelligent burn-in Technology without load.
- Large HMI Coloured LCD Touch Screen for advanced control and monitoring

Bric M Series Modular Online UPS (80kVA~600kVA)

The BRIC M Series is a modular UPS ideal for medium to large sized power applications. With its modular structure, the true on-line, double conversion, three-phase UPS system offers a scalable and paralleable architecture for optimal power designs.

Flexible Modular Design

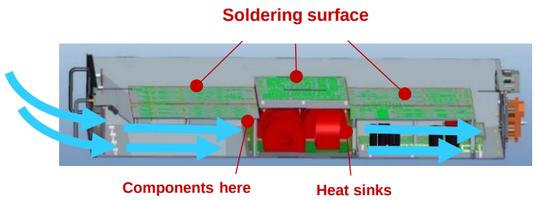
The modular architecture offers a scalable solution by providing the ability to add or remove power modules when the load increases or decreases, ensuring that the UPS system always operate at optimum efficiency.

Furthering the advantages, the hot-swappable functionality of critical components and power modules improve the serviceability of the UPS system thereby reducing Mean Time To Repair (MTTR) and ensuring power continuity should a module fails.



Air Flow Design

In order to optimize the performance of the power modules, the modules has an unique air flow design with directed airflow channel. Fans are specifically positioned to direct cool air over the components and heat sinks to increase heat dissipation. It prevent dust and moisture from accumulating at the soldering points that could result in short circuit.

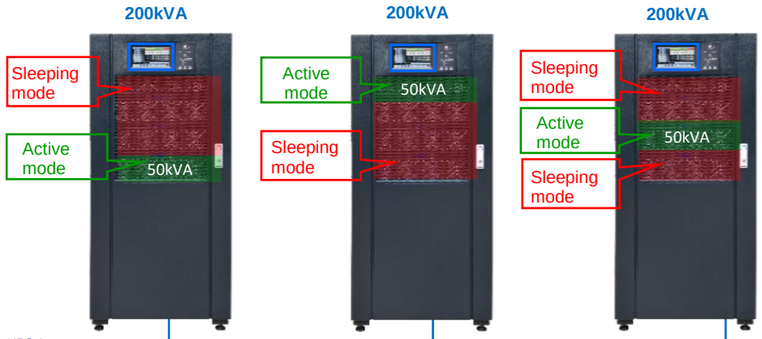


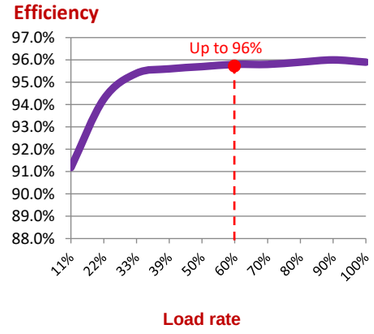
Parallel Architecture

The flexibility of the power modules allows parallel expansion to achieve redundancy and to increase the total system capacity. Up to three UPS system can be paralleled without additional hardware.

Smart Rotation Redundancy

In parallel system configuration, the UPS System ensure the highest efficiency also at partial load rate conditions down to very low load rate conditions - using Smart Rotation Redundancy. Each UPS automatically adjust the number of active power modules (PM) to share the load demand equally, putting the remaining power modules in a “sleeping mode”. With this feature, the active PM operate at a higher effective load percentage, thus improving the efficiency and reliability of the overall UPS System.





Overall Active System Capacity: 150kVA
Overall Output Supply: 90kVA
Effective Total Load Rate: 60%
Achieve Efficiency: ≥96%

Smart Human Machine Interface

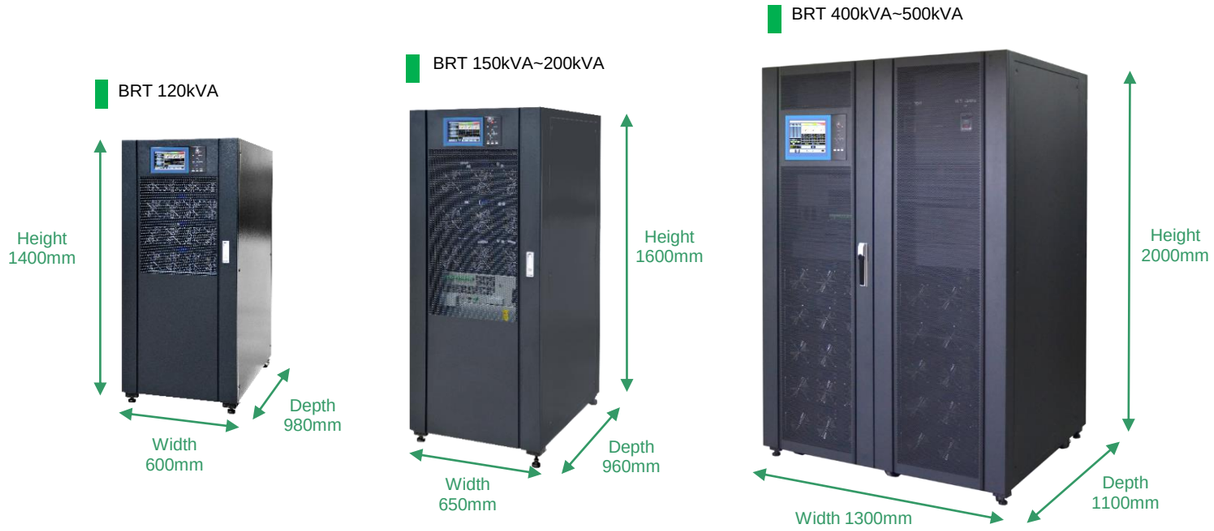
The UPS is fully equipped with user-friendly monitoring and controls in various languages. A large coloured LCD touch screen provides direct controls and parameters displays on a single page view.

BRT33 Tower Online UPS (100kVA~500kVA)

The BRT series is an advanced 3 Phase tower UPS ideal for small and medium data centers. Seamlessly integrated into today's data center design, this design is easily and efficently serviceable, offers a scalable and paralleable architecture as demand grows.

IGBT Technology

Multiples high power density subsystems comprise of advanced IGBT electronics with speed controlled cooling fans are integrated into the compact UPS tower design. The design features of multiple subsystems is to facilitate ease of maintenance and repair, and space saving with a small footprint of 0.5m^2 at 100kVA.



Built-in Maintenace and Static Bypass

Built-in Maintenance and Static Bypass switch prevents interruption by allowing load transfer to utility during overloads.

Parallel Architecture

Parallel up to 1500kVA to increase the system’s total capacity and providing fail-safe redundancy, thus enhancing its fault management capability by preventing a single point of failure.

Smart Rotation Redundancy

Featuring Smart Rotation Redundancy, each UPS automatically adjust the number of active subsystem to share the load demand equally, putting the remaining subsystems in a “sleeping mode”. This feature allows the active subsystems to maximise uptime and availability of the overall UPS System.

Smart Human Machine Interface

Equip with market largest Smart HMI, the 10.4inch Colored LCD Touch Screen provides real time information, enables direct control and access to all parameters and waveforms for management of the UPS System.







BRIC M Series
On-Line Modular UPS
30KVA ~ 600KVA



PERFECT FOR:

Small/medium datacenter | Medical equipment | Critical loads | Industry

- Hot-Swappable Power Modules to reduce Mean Time to Repair (MTTR)
- High Power Density
- High Efficiency >96% in On-line mode
- High Input Power Factor >0.99
- Low Input Harmonic, THDi% <3%
- High Scalability supporting N+X redundancy
- Smart Sleep Mode for Energy Saving
- Advanced Operation Interface -- Colored LCD Touch Screen
- Individual LCD display on each module for 30kVA, 40kVA and 50kVA



LCD Display Module status:

- Input Voltage
- Input Current
- Output Voltage
- Output Current
- Output Load %



Specification

Power Module Model		BRIC M-30P	BRIC M-40P	BRIC M-50P
Power Rating		**30kVA/30kW**	**40kVA/40kW**	**50kVA/50kW**
Input	Voltage, Phase	380V / 400V / 415V, 3 Phase + N + G		
	Voltage Range	304V ~478V line to line at full load		
	Frequency	50Hz / 60Hz		
	Power Factor	≥0.99		
	THDi	<3%		
Bypass	Voltage, Phase	380/400/415V, 3 Phase + N + G		
	Voltage Range	-20% to 15%		
	Frequency	50/60Hz		
	Frequency Range	±3Hz		
Ouput	Voltage, Phase	380V / 400/V / 415V, 3 Phase + N		
	Voltage Range	±1.5%		
	Power Factor	1.0		
	Frequency	50/60Hz		
	Frequency Range	±0.01% (free running)		
	Crest Factor	3:1		
	THDu	<1% for linear load; <5.5% for non-linear load		
Protection	Overload Capacity	110% for 60 minutes, 125% for 10 minutes, 150% for 1 minute, >150% for 200ms		
Battery	DC Voltage	±240Vdc (with +/N/- connections)		
	Number of batteries	36~44pcs configurable		
	Charging Power	20% of UPS Capacity		
System	VFI Mode	>95%	>96%	
	ECO Mode	>99%		
Interface	Display	7" Touch Screen (for Bric M-80,100,160,200 Cabinet) 10.4" LCD Coloured Touch Screen (for Bric M-180, 240, 300, 400, 500, 600 Cabinet)		
	Built-in Communication	RS232, RS485, USB, Dry Contact		
	Optional Communication	SNMP		
Parallel Features	Max. no of PM in Parallel	30	30	30
	Max. Parallel Capacity	900kVA	1,200kVA	1500VA
Physical	Power Module Dimension (mm)	440 (W) x 590 (D) x134 (H)	510 (W) × 700 (D) × 178 (H)	
	Power Module Weight	34kg	44kg	45kg
	Protection Index	IP20		
	Noise (at 1 meter)	72dB at 100% load; 62dB at 45% load		
Environment	Operating Temperature	0~40°C		
	Operating Humidity	0~95% (without condensation)		
Standards and Certifications	Standards	IEC/EN 62040-1 (Safety) and IEC/EN 62040-2 (EMC), IEC/EN 62040-3 (Performance)		
	Markings	CE		

Cabinet Model	Per Cabinet Capacity	No. of Power Modules per Cabinet	Cabinet Dimension (mm)	Cabinet Weight
BRIC M-180-30P	180kVA	Up to 6 nos. x Bric M-30P	600 (W) × 1100 (D) × 1600 (H)	178kg
BRIC M-300-30P	300kVA	Up to 10 nos. x Bric M-30P	600 (W) × 1100 (D) × 2000 (H)	242kg
BRIC M-600-30P	600kVA	Up to 20 nos. x Bric M-30P	2000 (W) × 1100 (D) × 2000 (H)	660kg
BRIC M-80-40P	80kVA	Up to 2 nos. x Bric M-40P	600 (W) × 980 (D) × 1150 (H)	210kg
BRIC M-160-40P	160kVA	Up to 4 nos. x Bric M-40P	650(W) × 960 (D) × 1600 (H)	350kg
BRIC M-240-40P	240kVA	Up to 6 nos. x Bric M-40P	650 (W) × 1095 (D) × 2000 (H)	490kg
BRIC M-400-40P	400kVA	Up to 10 nos. x Bric M-40P	1300 (W) × 1100 (D) × 2000 (H)	900kg
BRIC M-100-50P	100kVA	Up to 2 nos. x Bric M-50P	600 (W) × 980 (D) × 1150 (H)	210kg
BRIC M-200-50P	200kVA	Up to 4 nos. x Bric M-50P	650 (W) × 960 (D) × 1600 (H)	350kg
BRIC M-300-50P	300kVA	Up to 6 nos. x Bric M-50P	650 (W) × 1095 (D) × 2000 (H)	490kg
BRIC M-500-50P	500kVA	Up to 10 nos. x Bric M-50P	1300 (W) × 1100 (D) × 2000 (H)	900kg
BRIC M-600-50P	600kVA	Up to 12 nos. x Bric M-50P	1300 (W) × 1100 (D) × 2000 (H)	1040kg

BRT33 Series
On-Line Tower UPS

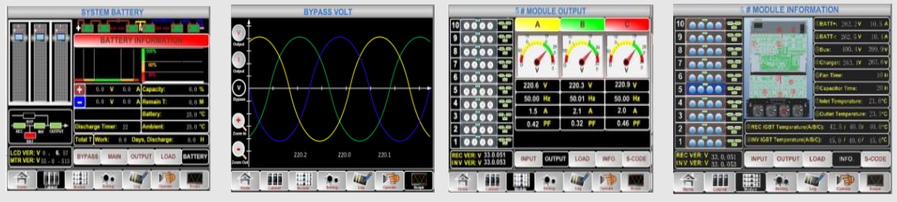
100KVA ~ 500KVA



PERFECT FOR:

Small/medium datacenter | Medical equipment | Critical loads | Industry

- Front Access for operation and maintenace reduces Mean Time to Repair (MTTR)
- High Power Density, Small Footprint
- High Efficiency >96% in On-line mode
- High Input Power Factor >0.99
- Low Input Harmonic, THDi% <3%
- Built in Backfeed Protection and Maintenance Switch
- Advanced Operation Interface -- Colored LCD Touch Screen



Specification

Model (BRT33)		BRT33-100P	BRT33-120P	BRT33-150P	BRT33-200P	BRT33-250P	BRT33-300P	BRT33-400P	BRT33-500P
Power Rating		100kVA / 100kW	120kVA / 120kW	150kVA / 150kW	200kVA / 200kW	250kVA / 250kW	300kVA / 300kW	400kVA / 400kW	500kVA / 500kW
Input	Voltage, Phase	380V / 400V / 415V, 3 Phase + N + G							
	Voltage Range	304V ~478V line to line at full load							
	Frequency	40~70Hz							
	Power Factor	≥0.99							
	THDi	<3%							
Bypass	Voltage, Phase	380/400/415V 3 Phase + G + N							
	Voltage Range	20% to 15%							
	Frequency	50/60Hz							
	Frequency Range	±1Hz, ±3Hz, ±5Hz (Setectable)							
Ouput	Voltage, Phase	380/400/415V 3 Phase + N + G							
	Voltage Range	±1.5%							
	Power Factor	1.0							
	Frequency	50/60Hz							
	Frequency Range	±0.01% (free running)							
	Crest Factor	3:1							
	THDu	<1% for linear load; <5.5% for non-linear load							
Protection	Overload	110% for 60 minutes, 125% for 10 minutes, 150% for 1 minute, >150% for 200ms							
Battery	Voltage	±240Vdc (with +/N/- connections)							
	Charging Power	20% of UPS Capacity							
System	VFI Mode	>96%	>95.5%	>96%					
	Backup Mode	>96%	>95%	>96%					
	ECO Mode	>99%							
Interface	Display	7" Coloured LCD Touch Screen				10.4" Coloured LCD Touch Screen			
	Built-in Communication	RS232, RS485, USB, Dry Contact							
	Optional Communication	SNMP							
Parallel Features	Max. Parallel Capacity	400kVA	480kVA	600kVA	800kVA	1000kVA	1200kVA	1200kVA	1500kVA
Physical	Dimension (mm)	600 (W) × 980 (D) × 1150 (H)	600 (W) × 980 (D) × 1400 (H)	650 (W) × 960 (D) × 1600 (H)		650 (W) × 970 (D) × 2000 (H)		1050 (W) × 1000 (D) × 2000 (H)	1300 (W) × 1000 (D) × 2000 (H)
	Weight	210kg	266kg	305kg	350kg	445kg	490kg	700kg	900kg
Environment	Operating Temperature	0~40°C							
	Operating Humidity	0~95% (without condensation)							
	Protection Grade	IP20							
	Noise (at 1 meter)	<68dB at 100% load; 65dB at 45% load			<72dB at 100% load; 69% at 45% load				
Standards and Certifications	Standards	IEC/EN 62040-1 (Safety) and IEC/EN 62040-2 (EMC), IEC/EN 62040-3 (Performance)							
	Markings	CE							