

Three Phase UPS System

10kVA-600kVA



- ❶ Taurus Series, 10kVA~80kVA
- ❷ BRC Series, 25kVA~200kVA
- ❸ Bric M Series, 20kVA~600kVA
- ❹ BRT33 Series, 100kVA~500kVA

Taurus Tower Online UPS (10kVA~80kVA)

The Ablerex Taurus is a mid-size, three-phase, new generation of transformer-less UPS that delivers power protection for the increasing loads in today's data centers.

With a transformerless design and Energy Saving Storage (ESS) technology, the Ablerex Taurus UPS is available in various configurations with integrated enclosures and external battery cabinets, ranging from 10kVA to 80kVA to suit your requirements.

Features

- Single unit capacity from 10kVA to 80kVA
- Parallel up to 6units, max. capacity 480kVA
- High efficiency and low cost of ownership
- Near to unity input power of 0.99
- Up to 96% Efficiency in Double conversion mode
- Fully rated output power
- Full front access maximizes system serviceability
- Full DSP (Digital Signal Processing) controlled

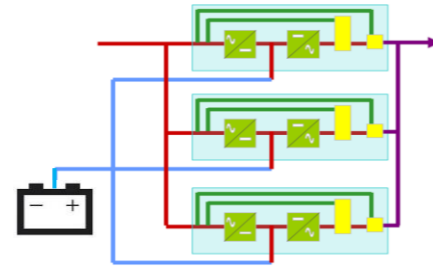
Parallel Architecture

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

Flexible Battery Configuration

When operating in parallel configuration, the Ablerex Taurus UPS can be configured with common battery bank or individual battery bank to achieve the required backup time autonomy, providing highest load availability and reliability with cost effectiveness.

The number of battery block per string can be easily adjusted to achieve optimal sizing of battery capacity and minimal investment.



Advanced Interface

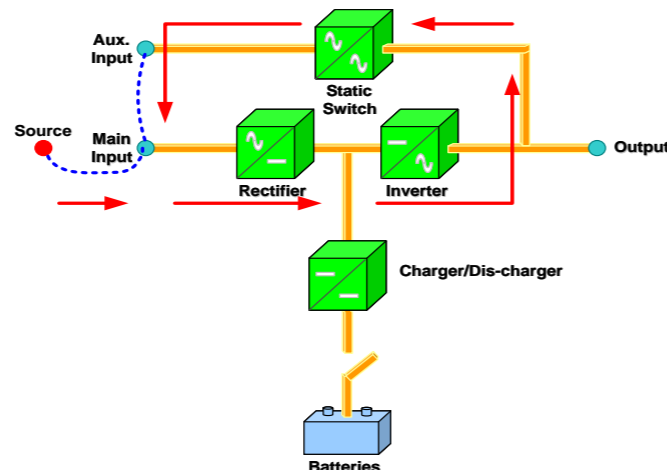
The Ablerex Taurus UPS is equipped with an advanced LCD Coloured Touch Screen interface offering direct control and access to all parameters and system management with ease.



Automated Burn-in Test

With the ability to perform a full load test and/or full battery discharge test without the connection of a load bank, the Taurus UPS offers an unprecedented spectrum of benefits. The Taurus UPS is programmed to process power in a recirculating fashion, using its own rectifiers and inverters as an internal load bank.

This load testing method generates significant saving in cost, time, coordination and power during UPS commissioning or servicing.

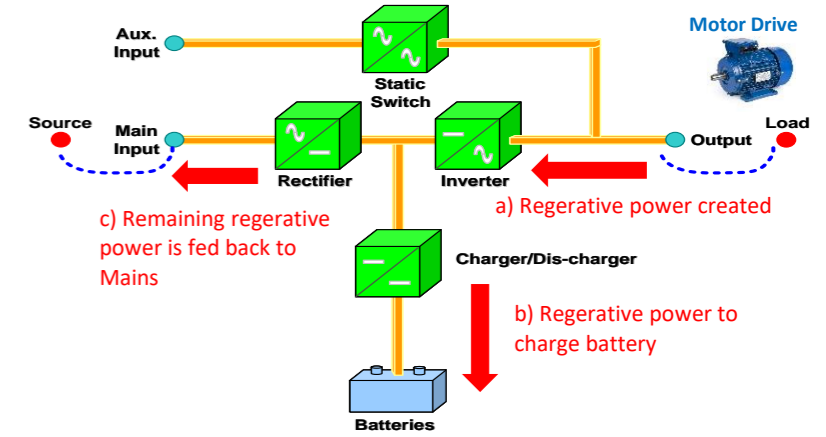


Taurus UPS for Regenerative Load

The Taurus UPS is designed with two bi-directional IGBT to absorb the intermittent regenerative power from Motor load (VSD). With this design, the Taurus UPS allows regenerative power to flow back smoothly to the Mains without causing any damage to the UPS or interruption to the connected load and energy saving during regeneration transients.

How Taurus UPS works

When braking slows or Motor stops, a) regenerative power is created and flows back to the UPS; b) if the battery is not fully charge, regenerative power is converted to DC via inverter to charge the battery; and c) remaining regenerative power is feed back to the Mains via the rectifier.



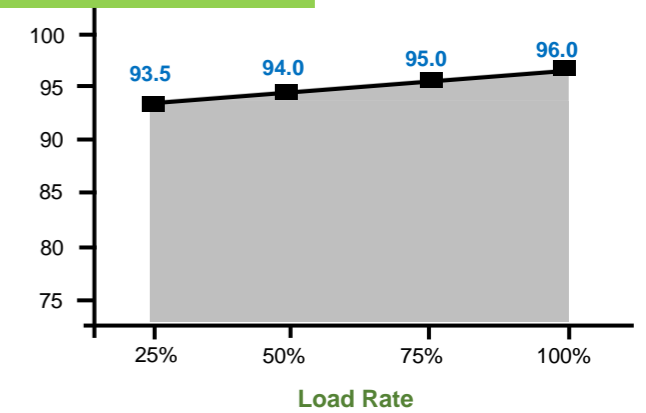
Power Performance

Power Performance by providing a clean rectifier connection to the utility power. It meets today's industry standards for energy saving, low current harmonic pollution to the utility power and achieves up to 0.99 at Input Power Factor as well as <3% Current THD.

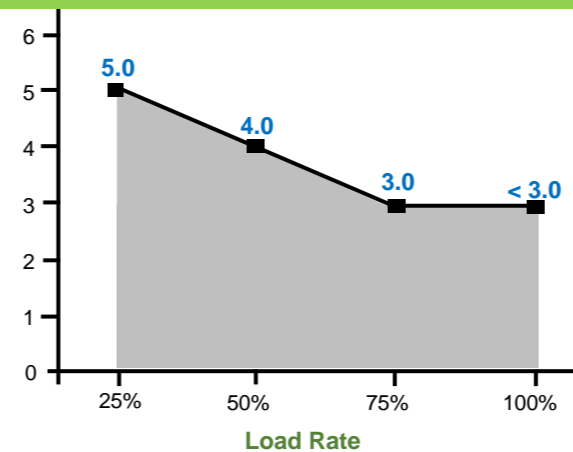
High Efficiency from Low Load to Full Load

The Ablerex Taurus delivers high efficiency at partial and full load (up to 96% in double conversion online mode), dramatically reducing operating cost of the system, extending components service life and increasing overall power performance.

AC - AC efficiency



Input Current Total Harmonic Distortion (THDi)



Low input current total harmonic distortion (THDi)

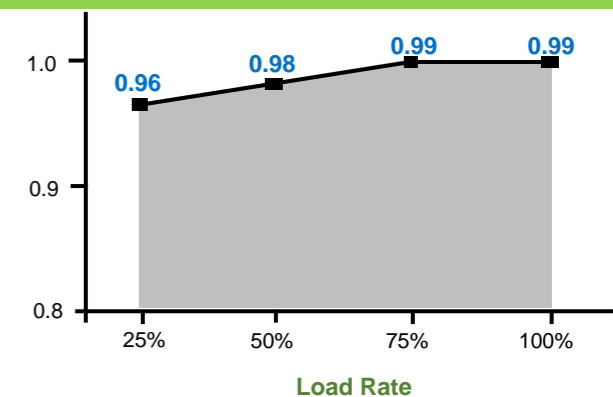
The Ablerex Taurus manage the input current total harmonic distortion (THDi) at a low level (3% at 100% load), eliminating harmonic distortion at the input of the system, providing greater operation reliability and extending the service life of UPS.

Near-to-unity input power factor from Low Load to Full Load

The Ablerex Taurus input power factor is 0.99 even with partial loads, thus reducing the input installation cost by using smaller size input cables, fuses and Isolation Transformers.

The Ablerex Taurus can supply load from 0.9 leading to 0.9 lagging without derating.

Input Power Factor Versus Load



Three Phase UPS System

100kVA-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 & BRC Series Modular Online UPS (10kVA~600kVA)

The BRIC M & BRC 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 paralleleable architecture for optimal power designs.

Flexible Modular Design

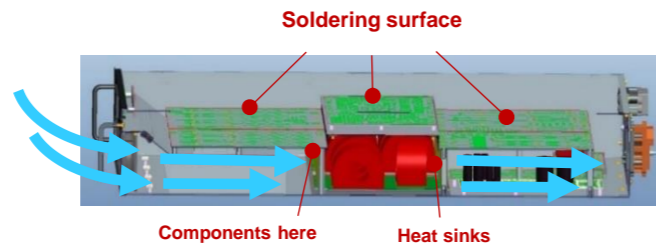
The modular architecture offers a scalable solution by providing the ability to add or remove power modules when the load increases or decreases, ensuring that the UPS system always operate at optimum efficiency.

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.

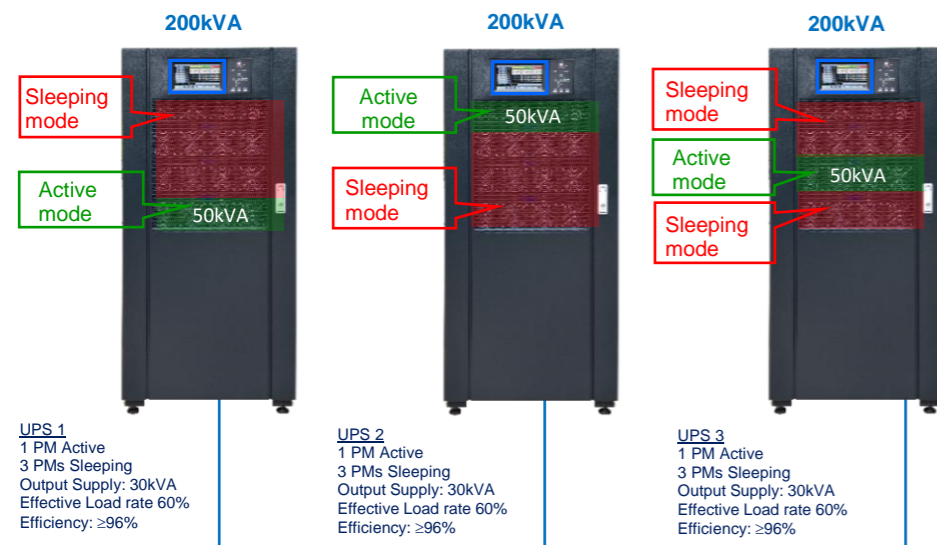


Parallel Architecture

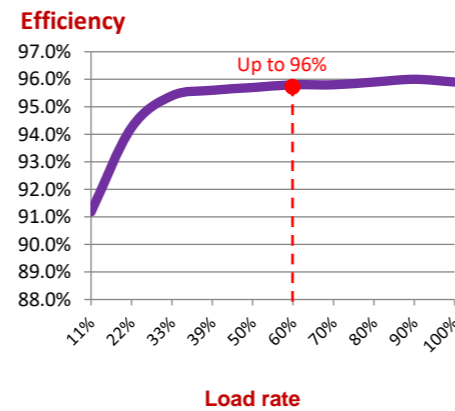
The flexibility of the power modules allows parallel expansion to achieve redundancy and to increase the total system capacity. Up to three UPS system can be paralleled without additional hardware.

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.



Load Demand: 90kVA



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 efficiently serviceable, offers a scalable and paralleleable 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 0.5m² at 100kVA.



Built-in Maintenance 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.

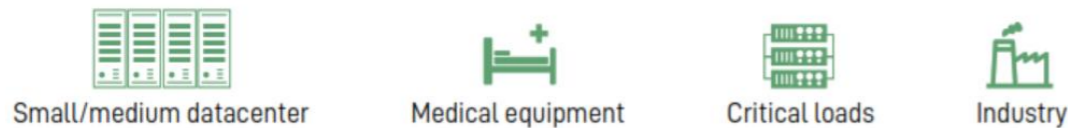


BRT33 Series On-Line Tower UPS

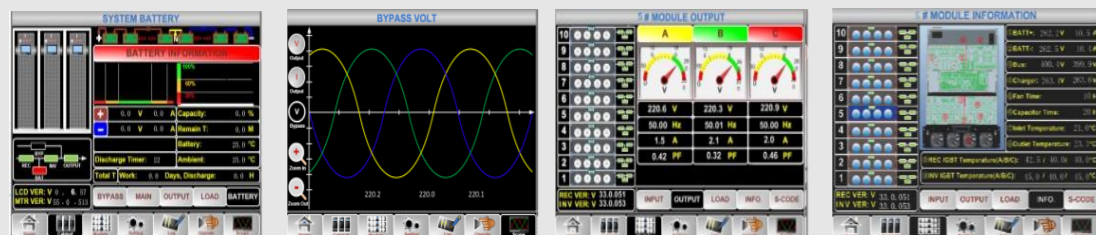
100KVA ~ 500KVA



PERFECT FOR:



- ◆ Front Access for operation and maintenance 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)		
Output	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		
Protection	THDu								<1% for linear load; <5.5% for non-linear load		
	Battery		Overload						110% for 60 minutes, 125% for 10 minutes, 150% for 1 minute, >150% for 200ms		
		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	

BRC Series On-Line Modular UPS

25KVA ~ 200KVA



PERFECT FOR:



- ◆ Three-Phase Modular System designed for Rack Integration
- ◆ Hot-Swappable Power Modules to reduce Mean Time to Repair (MTTR)
- ◆ High Power Density
- ◆ High Efficiency >96% in On-line mode
- ◆ Low Input Harmonic, THDi% <3%
- ◆ High Scalability supporting N+X redundancy
- ◆ Advanced Operation Interface -- 7" Colored LCD Touch Screen



Specification

Power Module Model	BRC-25C	
Power Rating	25kVA/25kW	
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 + N + G
	Voltage Range	Settable, -40% ~ +25%
	Frequency	50/60Hz
	Frequency Range	±1Hz, ±3Hz, ±5Hz (Setectable)
Output	Voltage, Phase	380V / 400V / 415V, 3 Phase + N + G
	Voltage Range	±1% (Static Load)
	Power Factor	1.0
	Frequency	50/60Hz
	Frequency Range	±0.1% (free running)
	Crest Factor	3:1
Protection	THDu	<1% for linear load; <6% for non-linear load
	Overload Capacity	110% for 60 minutes, 125% for 10 minutes, 150% for 1 minute, >150% for 200ms
Battery	DC Voltage	±240Vdc (with +/- connections)
	Number of batteries	32~44pcs configurable
	Charging Power	20% of UPS Capacity
System	VFI Mode	>96%
	Backup Mode	>95%
	ECO Mode	>99%
Interface	Display	7" Coloured LCD Touch Screen
	Built-in Communication	RS232, RS485, Dry Contact
	Optional Communication	SNMP
Parallel Features	Max. no of PM in Parallel	Up to 30 Power Modules
	Max. Parallel Capacity	up to 750kVA
Physical	Power Module Dimension (mm)	436 (W) × 677 (D) × 85 (H)
	Power Module Weight	18kg
	Protection Index	IP20
	Noise (at 1 meter)	65dB
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
BRC-150	150kVA	Up to 6 nos. x BRC-25C	482 (W) x 916 (D) x 931 (H)	140kg
BRC-200	200kVA	Up to 8 nos. x BRC-25C	482 (W) x 916 (D) x 1550 (H)	160kg

BRIC M Series On-Line Modular UPS

10KVA ~ 200KVA



PERFECT FOR:



Small/medium datacenter



Medical equipment

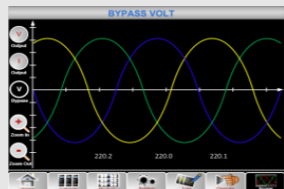


Critical loads



Industry

- ◆ Hot-Swappable power modules for predicative power management and lowest MTTR
- ◆ High Power Density
- ◆ High Input Power Factor >0.99
- ◆ Low Input Harmonic, THDi% <3%
- ◆ High Scalability supporting N+X redundancy
- ◆ Advanced Operation Interface -- Colored LCD Touch Screen
- ◆ Front panel dismountable, easy for fan replacement
- ◆ Multiple fans running in parallel maximizing airflow and allows redundancy



Specification

Power Module Model	BRIC M-10P		BRIC M-20P	
Power Rating	10kVA/10kW		20kVA/18kW	
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	<4%	<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 / 400V / 415V, 3 Phase + N		
	Voltage Range	±1.5%		
	Power Factor	1.0	0.9	
	Frequency	50/60Hz		
	Frequency Range	±0.01% (free running)		
	Crest Factor	3:1		
Protection	THDu	<1% for linear load; <5.5% for non-linear load		
	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%		
	ECO Mode	>98%	>99%	
Interface	Display	7" LCD Coloured Touch Screen		5.7" Touch Screen
	Built-in Communication	RS232, RS485, USB, Dry Contact		
	Optional Communication	SNMP		
Parallel Features	Max. no of PM in Parallel	30	20	
	Max. Parallel Capacity	300kVA	400kVA	
Physical	Power Module Dimension (mm)	436 (W) x 590 (D) x 85 (H)		440 (W) x 590 (D) x 134 (H)
	Power Module Weight	15.3kg		22kg
	Protection Index	IP20		
	Noise (at 1 meter)	56dB at 50% load		55dB at 50% 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-20-10P	20kVA	Up to 2 nos. x Bric M-10P	485 (W) x 697 (D) x 398 (H)	42kg
BRIC M-40-10P	40kVA	Up to 4 nos. x Bric M-10P	485 (W) x 697 (D) x 575 (H)	51kg
BRIC M-60-10P	60kVA	Up to 6 nos. x Bric M-10P	485 (W) x 751 (D) x 1033 (H)	70kg
BRIC M-60-20P	60kVA	Up to 3 nos. x Bric M-20P	600 (W) x 900 (D) x 1100 (H)	105kg
BRIC M-120-20P	120kVA	Up to 6 nos. x Bric M-20P	600 (W) x 900 (D) x 1600 (H)	150kg
BRIC M-200-20P	200kVA	Up to 10 nos. x Bric M-20P	600 (W) x 900 (D) x 2000 (H)	180kg

BRIC M Series On-Line Modular UPS

30KVA ~ 600KVA



PERFECT FOR:



- ◆ 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
	Power Factor			1.0
Output	Voltage, Phase			380V / 400V / 415V, 3 Phase + N
	Voltage Range			±1.5%
	Frequency			50/60Hz
	Frequency Range			±0.01% (free running)
	Crest Factor			3:1
Protection	THDu			<1% for linear load; <5.5% for non-linear load
	Overload Capacity			110% for 60 minutes, 125% for 10 minutes, 150% for 1 minute, >150% for 200ms
	DC Voltage			±240Vdc (with +/N/- connections)
Battery	Number of batteries			36~44pcs configurable
	Charging Power			20% of UPS Capacity
	VFI Mode			>95%
System	ECO Mode			>99%
	Display			7" Touch Screen (for Bric M-80,100,160,200-50P 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
Interface	Optional Communication			SNMP
	Max. no of PM in Parallel			30
	Max. Parallel Capacity			900kVA
Parallel Features	Power Module Dimension (mm)			440 (W) x 590 (D) x134 (H)
	Power Module Weight			34kg
	Protection Index			IP20
	Noise (at 1 meter)			72dB at 100% load; 62dB at 45% load
	Operating Temperature			0~40°C
Physical	Operating Humidity			0~95% (without condensation)
	Standards			IEC/EN 62040-1 (Safety) and IEC/EN 62040-2 (EMC), IEC/EN 62040-3 (Performance)
Environment	Markings			CE
	Standards and Certifications			
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 HR31 & HR33 Series Rack Tower Convertible Online 10-40kVA UPS



PERFECT FOR:



Small datacenter



Telecom



Networking



Critical loads

- ◆ 3 Phase Online UPS System designed for 19" rack integration
- ◆ Compact design leaving free space for other rack-mounted devices
- ◆ High Input Power Factory >0.99
- ◆ Unity Output Power Factor 1.0
- ◆ Wiring Configuration from 3/1 to 3/3 (for HR31 10kVA & 20kVA only)
- ◆ Dual Input Mains for independent control of power sources
- ◆ Advanced Operation Interface -- 5.5" Colored LCD Touch Screen

Specification

UPS Model	HR31-10	HR31-20	HR33-15	HR33-25	HR33-40
Power Rating	10kVA/10kW	20kVA/20kW	15kVA/15kW	25kVA/25kW	40kVA/40kW
Input	Voltage, Three Phase	380V / 400V / 415V, 3 Phase + N + G		380V / 400V / 415V, 3 Phase + N + G	
	Voltage Range	304V ~478V line to line at full load		304V ~478V line to line at full load	
	Frequency	50Hz / 60Hz		50Hz / 60Hz	
	Power Factor	≥0.99		≥0.99	
	THDi	<4% (100% Linear Load)		<3% (100% Linear Load)	
Bypass	Voltage, Phase	1PH: 220/230/240V or Settable to 3PH: 380/400/415V		3PH: 380/400/415V	
	Voltage Range	Settable -40% to 20%		Settable -40% to 25%	
	Frequency	50/60Hz		50/60Hz	
	Frequency Tolerance	Settable ±1Hz, ±3Hz, ±5Hz		Settable ±1Hz, ±3Hz, ±5Hz	
Output	Voltage, Phase	1PH: 220/230/240V or Settable to 3PH: 380/400/415V		3PH: 380/400/415V	
	Voltage Tolerance	1% for balance load; 1.5% for unbalance load		1% for balance load; 1.5% for unbalance load	
	Frequency	50/60Hz		50/60Hz	
	Frequency Tolerance	±0.1% (free running)		±0.1% (free running)	
	Power Factor	1.0		1.0	
	THDu	<1.0% for linear load; <5.5% for non-linear load		<1.0% for linear load; <5.0% for non-linear load	
	Crest Factor	3:1		3:1	
Protection	Overload Capacity	110% for 1 hour; 125% for 10 min; 150% for 1min; >150% for 200ms			
Battery	DC Voltage	±240Vdc (with +/N/- connections)		±240Vdc (with +/N/- connections)	
	Number of batteries (12V)	36/38/40pcs configurable		36/38/40pcs configurable	
	Charging Power	20% of UPS Capacity		20% of UPS Capacity	
System	VFI Mode	>95%		>96%	
	ECO Mode	>98%		>98%	
Wiring Configuration	Changeable from 3/1 to 3/3			Not Applicable	
Interface	Display	5.5" LCD Coloured Touch Screen			
	Built-in Communication	RS232, RS485, Dry Contact		RS232, RS485, Dry Contact	
	Optional Communication	SNMP Card, USB Card		SNMP Card, USB Card	
	Optional Add-ons	Parallel kit		Parallel kit	
Physical	PM Dimension (mm)	438W × 780D × 130H		438W × 780D × 130H	
	PM Weight	25kg		30kg	
	Protection Index	IP20			
	Noise (at 1 meter)	65dB at 100% load; 62dB at 45% load			
Environment	Operating Temperature	0~40°C			
	Operating Humidity	0~95% (without condensation)			
Standards	Safety and EMC IEC/EN 62040-1 (Safety) and IEC/EN 62040-2 (EMC)				

