UPS Specialist



The Provider of High Efficiency and Energy-saving UPS

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ALWAYS DYNAMIC INNOVATION

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BENW3300 20-300kVA Professional level- modular machine

BENW3300 series is three phase in three phase out UPS. It is a modular design UPS and it has N+X redundancy technology.The UPS has covered all power from 20kVA to 300kVA, and it is flexible configuration and gradual investment for customer。BENW3300 series UPS could solve different problem of supply power, for example power failure, high voltage of city electricity, low voltage of city electricity, instantaneous voltage drop, damping oscillation, high voltage pulse, voltage fluctuation, surge voltage, harmonic distortion, clutter interference, frequency f luctuation and other power problems.

BENW3300 series UPS could be used in many more area, from computer equipment to communication systems and automatic devices.

Digital control
BENW3300 series UPS is designed for digital control， all performance indicators of UPS are very well, it provided more stable and reliable control system.

he customer could set the charging current, and it could automatically switch smoothly constant current, constant voltage and float charging mode. Voltage can be configured by customer ±192Vdc/±204Vdc/±216Vdc/±228Vdc/±240Vdc (32/34/36/38/40 units optional).

Every modular has capacity of 20KVA/25KVA/30KVA. The height of all the modular are 3U, they could be input and output online and realize “0” repair time.

UPS has large LCD display and with touch function, Chinese / English bilingual menu, single module LCD/LED display.

BENW3300 series UPS used 19 inch standard cabinet, it can perfectly match the application environment of computer room, and it saved area of computer room. It has two type 1.4 m（5 modular）and 2 m（10 modular）.

When an emergency occurs, UPS can be switched to the bypass power supply. Repair man can repair the EPO function safely online, in case of emergency press the EPO button can be emergency shutdown and it also has the function of remote emergency shutdown (REPO) .

The number of redundant modules can be set by customer, system availability could up to 99.999%. MTBF(average of no trouble time）is more than 250 thousand hours. Every module is used the independent control system, with the hot plug technology, and it can easily pull out the fault module for the maintenance and support cabinet in parallel, the maximum number of 4 units, and the UPS can share the battery pack when they parallel.



Technical Data

Type			BENW3300 60KVA/90KVA	BENW3300 100KVA/150KVA	BENW3300 200KVA/300KVA
Capacity	UPS cabinet		20~90kVA/18~81kW	20~150kVA/18~135kW	20~300kVA/18~270kW
	Power modular		20kVA/18 kW, 25kVA/22.5kW, 30kVA/27kW		
input	Input wiring		3Ph+N+PE		
	Rated voltage		380/400V/415Vac		
	Voltage range		208~478Vac		
	Frequency range		40~70Hz		
	Power factor		≥0.99		
	Bypass range		380 upper limited：25%（optional+10%、+15%、+20%） 400 upper limited：20%（optional +10%、+15%） 415 upper limited：15%（optional +10%）limited：-45%(optional -20%、-30%) protection range of bypass frequency：±10%		
	Input current harmonic		≤3% (100% no linear load)		
Output	Output wiring		3Ph+N+PE		
	Rated voltage		380/400V/415Vac		
	Power factor		0.9		
	Voltage accuracy		±1%		
	Load peak ratio	City electricity mode	Synchronization with input：when frequency of city electricity exceeds maximum±10%（set ±1%、±2%、±4%、±5%）, output frequency50×(±0.2%)Hz		
		Battery mode	(50/60±0.2%)Hz		
	Load peak ratio		3:1		
	Switching time		City electricity mode to bypass mode: 0ms(tracking)；City electricity mode to battery mode:0ms		
	Overload capacity		load≤110%，60min，≤125%， maintain 10min，≤150% maintain 1min，≥150% change to bypass at once		
	Output voltage harmonics		≤2%(100%linear load)		
Efficiency			Normal mode 95%		
	Communication interface		RS232、RS485、2个Intelligent Slot（smart card mounting）、dry node		
Battery	Battery voltage		±192V\±204V\±216V\±228V\±240V DC; (32 units、34 units、36 units、38 units、40 units optional)		
	Charging current	UPS cabinet	30A Max	50A Max	100A Max
		Power module	10A Max.		
Working environment	Working temperature		0℃~40℃		
	relative humidity		0~95% no condensation		
	Storage temperature		-25℃~55℃		
	Altitude		< 1500m		
Feature	Size（D×W×H）mm	Cabinet	840 x 600 x 1400	1100 x 600 x 2000	
		Modular	580 x 443 x131		
	Weight（net）Kg	Cabinet	158	170	305
		Modular	20K modular，32KGS; 25K modular, 33KGS；30K modular，33.5KGS		
Standard			CE,EN/IEC 62040-2，EN/IEC 62040-1-1，YD/T1095-2008		

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BEBRM9100 10-400KVA

Online three phase in three phase out

- Double conversion on-line design, input power factor up to 0.97 (with input filter), output with isolation transformer
- DSP digital control technology, convenient for testing, system update and system maintenance
- Suitable for multiple voltage standard, High output power factor (0.9 hysteresis), strong overload capacity
- The intelligent battery management technology, floating automatic exchange, prediction of discharge time of battery, regular self-checking, improving the service life of the battery
- Parallel machine function, major machine will be generated automatically, the system can be up to 6 UPS
- With LBS synchronization function, the realize two independent UPS system synchronization, improve system reliability
- Prefect protection function, EPO emergency shutdown function to ensure stable and reliable operation of the system
- Prefect the monitoring function, support RS232 and RS485, LCD large screen color display, SNMP adapter (optional)

Technical Data

Type		BEBRM9100-010	BEBRM9100-020	BEBRM9100-030	BEBRM9100-040	BEBRM9100-060	BEBRM9100-080	BEBRM9100-100	BEBRM9100-120	BEBRM9100-160	BEBRM9100-200	BEBRM9100-300
Capacity(kVA/kW)		10kVA/9kW	20kVA/18kW	30kVA/27kW	40kVA/36kW	60kVA/54kW	80kVA/72kW	100kVA/90k	120kVA/108k	160kVA/144kW	200kVA/180kW	300kVA/270kW
Input	Wiring	3Ph+N+PE										
	Rated voltage	380/400/415VAC										
	Voltage range	-25%/+20%										
	Frequency	50/60Hz										
	Frequency range	45-65Hz										
	Power factor	≥0.98(with filter)										
branch	Rated voltage	380/400/415VAC 3PH+N+PE										
	Voltage	+20%(+10%, +15%, +20% Adjustable); -40%(-10%, -20%, -30%,-40% Adjustable)										
	Frequency	50/60Hz										
Output	Rated voltage	380/400/415VAC										
	Voltage accuracy	±1%										
	Power factor	0.9 or 0.8 optional										
	Harmonic	<1%（100% linear load）,<3%（100% no linear load）										
	overload	≤105%，normal operation；≤110%，working after 60 min.；≤125%，working after 10 min.；＞150% ，wording after 1 min.										
	Peak coefficient	3:1(max)										
efficiency		>89%	>90%	>91%		>92%					>92.5%	>93%
parallel operation		Max. 6										
Battery		384Vdc										
size（W*D*H）(mm)		800*570*1190			760*880*1610			805*1160*1610		945*1400*1910		1400*16
Net Weight (Kg)		215	270	315	330	480	523	800	900	1220	1423	1800
Gross Weight (Kg)		270	325	370	385	550	593	890	990	1350	1552	1948
环境条件	Tempterature	0-40℃										
	Humidity	0-95%(No condensation)										
	Noise（1m	<60dB			<65dB							<70db
通讯		Rs232, RS485, 干接点卡, SNMP(optional)										
standard	Safty	IEC/EN60950-1,IEC/EN62040-1										
	EMC	IEC/EN62040-2,IEC61000										

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BENW3300 10-40kVA

Online three phase in three phase out

- Advanced DSP digital control, resulting in the highest levels of reliability
- Online double conversion, input power of up to 0.99
- Output power factor up to 0.9 (0.8 optional), with higher actual carrying capacity
- Intelligent charging management, the number of batteries could be choosed (32 ~40 optional), rich selection of accessories, USB or RS485, SNMP card, and parallel board, relay card
- ECO mode operation, energy saving to reduce user costs
- Parallel redundancy function, can be paralleled 4 units, when paralleled could use common battery group
- Four modes of arbitrary conversion (three phase in three phase out, three phase in single phase out, single phase in three phase out, single phase in single phase out)

Technical Data

Type			BENW3300-100(L)	BENW3300-200(L)	BENW3300-300(L)	BENW3300-400(L)
Capacity (kVA/kW)			10kVA/9kW	20kVA/18kW	30kVA/27kW	40kVA/36kVA
Input	Input Wiring		3Ph+N+PE			
	Rated voltage		380/400/415Vac			
	Voltage range		208~478Vac			
	Frequency range		45-55Hz at 50Hz/54-66Hz at 60Hz (self-adaption)			
	Power Factor		≥0.99			
	Input current harmonic		≤3%(100% no linear load)			
	Bypass range		Upper limit of bypass protection voltage：220V： +- 25%（operational + 10%、 + 15%、 + 20%）；			
			230V： +- 20%（operational + 10%、 + 15%）；			
			240V： +- 15%（operational + 10%）			
			voltage limit of bypass protection：-45%(operational -20%、-30%)			
			Bypass frequency protection range：±10%			
Output	Input Wiring		3Ph+N+PE			
	Rated voltage		380/400/415Vac			
	Power Factor		0.9			
	Voltage accuracy		±1%			
	output frequency	City electricity mode	Synchronization with input：when frequency of city electricity exceeds maximum ±10%（could be set ±1%、±2%、±4%、±5%）,output frequency50×(±0.2)Hz			
		Battery mode	(50/60±0.2%)Hz			
	Load peak ratio		03:01			
	Output voltage distortion		≤2% linear load			
			≤5% no linear load			
efficiency			Normal operation ≥94.5%			
Battery	Battery voltage		±192V DC (32 units)			
	Charge current		10A max			
switching time			City electricity mode to bypass mode: 0ms(tracking)；City electricity mode to battery mode:0ms			
Protection	Overload capacity		load≤110%,60min,≤125%,maintain10min,≤150% maintain 1min,≥150% shutdown at once			
	Over temperature protection		Normal mode: change to bypass mode; battery mode: shutdown output at once			
	Emergency shutdown (EPO)		Shutdown output at once			
Communication interface			USB,RS485,drynode, parallel machine（optional）,SNMP Card（optional）,relay card（optional）			
Working environment	Working temperature		0℃~40℃			
	relative humidity		-25℃~55℃			
	Storage temperature		0~95% no condensation			
	Altitude		< 1500m，≥1500m according to GB/T 3859.2 derating use			
Feature	size(D×W×H) mm		828x250x800（Standard）			680x250x540（long）
	Weight（Net）Kg		123/45	123/45	126/46	128/48
Standard			YD/T1095-2008			

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ARETEK Battery

【Maintenance-free sealed lead-acid battery】

Product Introduction

Bender maintenance-free sealed lead-acid battery applies AGM valve control technology and highly purified material to manufacture low resistant, high energetic and excellent heavy load discharge performance as well as longer floating charge and cycle life.

Application Fields

Widely used in UPS/EPS, the power switch, medical facility, security and protection system, automatic control system, electrical cars, electrical tools and ect.

Product Features

·Voltage grade: 6V, 12V
·Self-discharge: ≤3%/month
·Good high-rate discharge performance
·Sealed reaction efficiency: ≥98%
·Working temperature range: 0~40C

Structure Features

·Grid alloys: anode and cathode of grid alloy applies lead calcium alloy, anti-corrosion, prevent water loss
·Battery separator: high absorbability and stability of microporous superfine fiber glass partition
·Batter shell: High strength ABS resistant to shock and vibration (can use flame retardant grade)
·Terminal precision: apply multilayer column sealing technology
·Safety valve: High quality safety valve, effectively guarantee battery life and safety during usage

Install and Use

.Suggested floating voltage: 2.27~2.30V/cell, unit cell temperature compensates -3mv/C in 25C
.Suggested equalizing charge: 2.35~2.40V/cell, unit cell temperature compensates -5mv/C in 25C
.Can be installed in any position except upside down
.Batteries can be connected and installed in single row or several rows on floor or platforms



[Technical parameters of sealed lead-acid battery]

Technical parameters of maintenance-free sealed lead-acid battery for BEBR-12V 2V 8V									
Type	Voltage rating(V)	Rated capacity(AH)	Size(mm) ±5%				Weight (KG)	Terminal type	terminal arrangement
			L(mm)	W(mm)	H(mm)	OverallH			
BEBR2-50	2	50	161	50	166	166	3	F36	Mode5
BEBR2-100	2	100	171	72	205	229	6.2	F14/F39	Mode5
BEBR2-150	2	150	172	102	205	228	7.96	F22	Mode5
BEBR2-200	2	200	171	111	366	366	13.6	F18/F29	Mode7
BEBR2-300	2	300	171	150	366	365	19.7	F18/F29	Mode7
BEBR2-400	2	400	211	176	329	367	27.4	F18/F29	Mode8
BEBR2-500	2	500	242	172	329	365	32.0	F18/F29	Mode8
BEBR2-600	2	600	302	175	328	366	39.7	F18/F29	Mode8
BEBR2-800	2	800	411	175	327	367	53.5	F18/F29	Mode9
BEBR2-1000	2	1000	475	175	327	367	64.7	F18/F29	Mode9
BEBR2-1500	2	1500	401	352	338	383	102	F28	Mode10
BEBR2-2000	2	2000	490	349	338	382	134	F18/F29	Mode11
BEBR2-3000	2	3000	712	351	338	383	200	F28	Mode11
BEBR6-04	6	4	70	47	100	104	0.68	F1/F2	Mode4
BEBR6-10	6	10	151	50	93	98	1.6	F1/F2	Mode6
BEBR6-12	6	12	151	50	93	98	1.75	F1/F2	Mode6
BEBR6-100	6	100	195	170	205	210	15.1	F13	Mode5
BEBR6-110	6	110	281	128	203	206	16	F13	Mode5
BEBR6-150	6	150	260	180	247	252	22.8	F13	Mode5
BEBR6-180	6	180	298	172	227	232	28.6	F25	Mode5
BEBR6-200	6	200	323	178	226	256	30.6	F17	Mode4
BEBR12-07	12	7	151	66	95	100	2.1	F1/F2	Mode1
BEBR12-09	12	8	151	66	95	100	2.4	F1/F2	Mode1
BEBR12-12	12	12	151	98	95	99	3.4	F1/F2	Mode1
BEBR12-17	12	17	181	77	167	167	5.2	F6/F38	Mode3
BEBR12-24	12	24	174	166	126	126	7.7	F1/F2	Mode3
BEBR12-33	12	33	197	131	154	165	10.3	F1/F2	Mode6
BEBR12-38	12	38	196	165	170	170	11.7	F9/F36	Mode3
BEBR12-55	12	55	229	139	209	228/11	17.1	F1/F2	Mode6
BEBR12-65	12	65	349	467	174	174	19.6	F1/F2	Mode3
BEBR12-80	12	80	331	173	217	224	26.0	F13	Mode6
BEBR12-90	12	90	331	173	217	224	27.5	F13	Mode6
BEBR12-100	12	100	331	173	217	224	30.0	F13	Mode6
BEBR12-120	12	120	406	173	209	237	35.4	F1/F2	Mode6
BEBR12-150	12	150	482	171	240	240	44.6	F16/F23	Mode6
BEBR12-200	12	200	523	240	219	245/223	61.0	F17/F24	Mode2
BEBR12-250	12	250	520	269	220	226/249	73.0	F17/F24	Mode2

VALUES

Customer-orientated / Quality / Trust / Innovation

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