www.bcn-ups.com

EPower

10KVA - 160KVA

High output power factor 0.9

Three-phase/Three-phase

LOCAL AREA NETWORKS (LAN) | SERVERS | DATA CENTRES | TELECOM-MUNICATIONS DEVICES | E-BUSINESS (Servers Farms, ISP/ASP/POP) | INDUSTRIAL PROCESSES | INDUSTRIAL PLCS | ELECTRO-MEDICAL DEVICES | EMERGENCY DEVICES (Lights/Alarms)

TIS.1291 Part 1-2553
TIS.1291 Part 2-2553
TIS.1291 Part 3-2555

HEAVY DUTY DESIGNED

ISOLATION TRANSFORMER

GERMAN QUALITY

SUPPORT INDUSTRIAL

Highlights

- True online double conversion
- Double DSP control
- High output power factor 0.9
- Strong environmental adaptability
- Intelligent battery management
- N+X parallel redundancy, up to 6 units
- Power walk in design
- Compatible with the generator
- LBS synchronization
- Comprehensive and reliable protection
- EPO function
- ECO mode for energy saving
- Dual input source
- Common battery bank (Optional)
- Cold start function (Default for <200kVA)
- Energy backfeed protection device (Optional)
- With Input/Output/Bypass/Maintenance Bypass breaker
- Over-voltage/under-voltage protection
- Over-frequency protection
- Over-current protection
- Over-voltage protection for bus bar
- Over-temperature protection
- Output overload protection
- Output short-circuit protection
- Emergency power-off
- Input phase reverse protection
- Battery reverse connection protection

FEATURES

Online double conversion

• Online Double Conversion design helps to output a pure sine wave, which is immune from the UPS input, so that the load can run steadily.

• UPS transfers among different working mode without ouput interruption, thereby powering the load uninterruptedly.

Full DSP control

• Double DSP control makes the whole system more stable and reliable.

High power factor

• The output power factor up to 0.9 better matches the load.

• The input power factor 0.97with filter helps to improve the efficiency, reduce the harmonicpollution to the Grid and lower the UPS running cost.

Optimized battery management

• Intelligent battery management system and advanced battery auto float/boost charge technology, reduces the frequency of battery maintenance, greatly improves the battery efficiency and extends battery life.

• Battery discharge time prediction:
The system will display the backup time of battery calculated by discharge current and voltage.

• Battery self-test: Battery is automatically tested as regular intervals.

• Flexible battery voltage configuration

N+X parallel redundancy

• N+X parallel redundant design, up to 6 units available, makes the configuration more flexible.

• Any unit in parallel system fails, the faulty one will automatically cut off the output, and the load will be powered by the remained unit.

EPower

10KVA - 160KVA

High output power factor 0.9

Three-phase/Three-phase

LOCAL AREA NETWORKS (LAN) | SERVERS | DATA CENTRES | TELECOM-MUNICATIONS DEVICES | E-BUSINESS (Servers Farms, ISP/ASP/POP) | INDUSTRIAL PROCESSES | INDUSTRIAL PLCS | ELECTRO-MEDICAL DEVICES | EMERGENCY DEVICES (Lights/Alarms)

• It is easy to configure the parallel system just by connecting the parallel cables and doing proper settings.

• Non-fixed Master-Slave relationship: Among several UPS in parallel, the unit startup first is Master UPS, the others are Slave. The master and slave may be exchanged.

Wide input adaptability

• The range of AC input voltage is (380/400/415Vac)(-25%/+20%), minimizing transfer to battery mode,thereby greatly prolonging the battery life.

• Wide input frequency ranging from 45Hz to 65Hz, ensures stability of UPS while generator connected.

Power walk in

• Specially designed power walk in function, in which rectifier of each unit in parallel system will be turned on in sequence at intervals to avoid the sudden load on the generator, thereby reducing the cost of the generator required.

Generator mode

• Set the maximum output power of the generator when a smaller one than needed is employed to extend the battery duration time. In this case, the load is supplied by both the generator and battery.

LBS synchronization

• Synchronize the output of the two independent UPS systems (Single unit or parallel) even when the two systems are operating on different modes (Bypass/Inverter) or on battery.

Multi-protection

• Self-diagnosis function will take place before start-up for safety.

• Multi-protection: AC input under/over voltage, overload,short-circuit, over-current, over bus voltage, overtemperature, fan failure, auxiliary power failure, battery under voltage, battery over-charge and so on.

EPO function

• A concave red EPO button with transparent cover is embodied in the LCD control panel for emergency power off.

User-friendly network management

• Chinese/English LCD and LED mimic diagram: Real time operation parameters and status (7 inch touchscreen optional)

• RS232 & RS485 communication ports: For local monitor with corresponding software, both can support MODBUS protocol.

• SNMP adapter (Optional): For remote monitor through network

• Dry contacts (10-160kVA optional) for additional monitoring:

a) UPS on Inverter

b) Mains input failure

c) Remote EPO

d) Battery low voltage alarm

e) UPS fault

f) UPS alarm

g) UPS on battery

h) UPS on bypass

Note：d)--h) optional

EPower
10KVA - 160KVA

LOCAL AREA NETWORKS (LAN) | SERVERS | DATA CENTRES | TELECOM-MUNICATIONS DEVICES | E-BUSINESS (Servers Farms, ISP/ASP/POP) | INDUSTRIAL PROCESSES | INDUSTRIAL PLCS | ELECTRO-MEDICAL DEVICES | EMERGENCY DEVICES (Lights/Alarms)

High output power factor 0.9

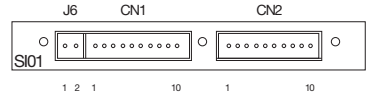
Three-phase/Three-phase

Display Panel (option)

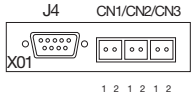
LCD TOUCH SCREEN 7 INCH

LCD DISPLAY PANLE 4.7 INCH

Communication ports



Output dry contact port Input dry contact port



RS232 port RS485 port

EPower
10 - 80kVA

True On-line Double Conversion Three Phase/Three Phase

APPLICATION

- Computer room
- Data center
- PLC system
- Precision instrument
- Intelligent device
- Glass & metallurgy industry
- Automation equipment
- Auto manufacturing
- Petrochemical intdustry
- Power Plant

MODEL
EPower 10-30kVA

MODEL
EPower 40-60kVA

MODEL
EPower 80-100kVA

MODEL
EPower 120-160kVA

Your choice of power protection

www.bcn-ups.com

EPower

10-160 kVA Three-phase/Three-phase

MODELS	EP10	EP20	EP30	EP40	EP60	EP80	EP100	EP120	EP160
Capacity (VA)	10KVA	20KVA	30KVA	40KVA	60KVA	80KVA	100KVA	120KVA	160KVA
Power (W)	9KW	18KW	27KW	36KW	54KW	72KW	90KW	108KW	144KW
INPUT									
Voltage range	(380Vac/400Vac/415Vac) : 380Vac -25%,+20% 3 Phase 4 Wires + PE								
Frequency range	50/60Hz±5Hz								
Power factor	≥0.97*								
OUTPUT									
Voltage range	380Vac/400Vac/415Vac ±1% 3 Phase 4 Wires + PE								
Frequency	50Hz/60Hz±0.05%								
Harmonic distortion (THDv)	≤2% (Linear load)								
Waveform	Pure sine wave								
Power factor	0.9 (lag)								
Crest factor	3:1 (max)								
Efficiency	88%	89%		90%		90.5%	92%		92.5%
Overload									
BYPASS									
Rated voltage	380Vac/400Vac/415Vac 3 Phase 4 Wires + PE								
Frequency	50Hz/60Hz								
AC mode » Battery mode	0ms (zero time)								
Voltage protection range	Upper limit : +10%, +15%, +20% (adjustable) Lower limit : -10%, -20%, -30%, -40% (adjustable)								
Frequency protection range	±10% (±2.5%, ±5%, ±20% adjustable)								
BATTERY									
Battery voltage (VDC)	384V (360~384Vdc)								
SYSTEM FEATURES									
Transfer time	0ms (zero time)								
Overload	Load<110%/60min;<125%/10mins;<150%/1 min, to Bypass								
LED display	Input, inverter, bypass, battery, output status								
LCD display	Input/Output voltage, frequency, power,power factor, battery voltage, current, battery status, load percentage, UPS status, history record								
Communication interface	RS232, RS485, EPO, Dry contact (Optional), SNMP card (Optaional)								
Optional	Harmonic filter, SNMP adapter, LBS cables, battery temperature sensor, Bypass current-sharing inductor								
ENVIRONMENTAL									
Operating temperature	0~40°C								
Storage temperature	-25°C~55°C								
Humidity	0~95% non-condensing								
Altitude	<1500m								
Noise (1m)	< 58dBA				< 68dBA				
PHYSICAL CHARACTERISTICS									
Net weight (Kg)	145	165	204	255	320	450	556(6P)/ 1300(12P)	693(6P)/ 1450(12P)	780(6P)/ 1645(12P)
Gross weight (Kg)	160	180	225	280	345	485	591(6P)/ 1370(12P)	738(6P)/ 1520(12P)	825(6P)/ 1775(12P)
Dimension (W×D×H) mm	350x650x1050			430x830x1100		720x690x1400	720x690x1400(6P) 1515x830x1600(12P)	890x790x1600(6P) 1515x830x1600(12P)	890x790x1600(6P) 1400x1000x1900(12P)
STANDARDS									
Safety	IEC/EN 62040-1;IEC 62477-1								
EMC	IEC/EN 62040-2 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6,IEC 61000-4-8, IEC 61000-4-11, IEC 61000-2-2)								
Performance	IEC/EN 62040-3								

*With optional filter.
All parameters are measured under the condi on of laboratory
Specifications are subject to charge without p or notice

- All speficications subject to change without notice.
- Custom-made speficications are acceptable.
- Manufactured by factory with
  ISO 9001, ISO 14001, OHSAS 18001, CE, STANDARD

TIS.1291 Part 1-2553
TIS.1291 Part 2-2553
TIS.1291 Part 3-2555

Your choice of power protection