

NBP S

Triple "S" You can touch

Reliable Power Quality

- Input voltage 165 Vac - 264 Vac
- Input frequency 50/60 Hz \pm 10% suitable for industrial applications
- Input power factor more than 0.99 at full load
- Output voltage 220 Vac \pm 1%
- Crystal controlled output frequency 50/60 Hz \pm 0.1%

Smart Protection

- 16/32 bit microcontroller UPS
- 20 kHz PWM inverter
- Built-in power factor correction
- EMI/RFI and power line noise protection
- Surge, spike, blackout, brownout, overload and short circuit protection
- No break power backup scheme
- Zero time transfer full static switch
- Built-in sealed lead acid (maintenance free) battery
- DC start (AC start without battery (C) is optional)
- Manual maintenance bypass mode
- Extended backup time with battery extension rack (option)
- Hot standby configuration (H) (option)
- Auto self-test every 2-week duration (T) (option)

Power Display and Management

- LED status and 16 Characters LCD display for monitoring and setting UPS parameter
- 256 records event log (E) (option)

Communication

- Two RS-232 serial interface ports, one port for monitoring software (Easy-Mon X) and the other port for remote terminal (R) is optional.
- Dry contact port (D) (option)
- SNMP/HTTP monitor capability (S) (option)

More Safety

- Built in output isolation transformer
- Load-Safe with new battery test scheme
- Emergency Power Off (EPO)

Energy Saving

- High efficiency > 96% with Economy mode and Sleep mode
- Automatic detective and shutdown when no load
- Automatic battery charge power boosting (A) (option)

High Input Power Factor

True on-line Double Conversion Sine Wave UPS

Smart

- Better power control with Smart CPU
- Better monitor and configure with Smart display and management software

Safe

- Safer with isolation transformer
- Safer load with new battery test scheme
- Safer protection for industrial applications

Save

- Saver energy with economy and sleep modes
- Saver maintenance cost with more reliable products.



A5043



ISO 9001



ISO 14001



EMS 01007548



ISO 9001



QMS 002



Q-MARK



5 PM's AWARDS



ISO 9001



ISO 14001



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TIS 1291-2545



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LEONICS CO.,LTD.

ISO 9001



ISO 14001
EMS 01007/045

SPECIFICATIONS

MODEL		NBP 3KS	NBP 5KS	NBP 6KS	NBP 8KS	NBP 10KS
CAPACITY	VA / W	3000 VA / 2400 W	5000 VA / 4000 W	6000 VA / 4800 W	8000 VA / 6400 W	10,000 VA / 8000 W
INPUT	Voltage (single phase)	220 Vac -25%, +20%, (± 25% option)				
	Frequency	50 Hz / 60 Hz ± 10% at nominal voltage (± 12% option)				
	Power factor	More than 0.99 at full load				
OUTPUT	Voltage (single phase)	220 Vac ± 1%				
	Frequency	Nominally locked to line frequency, free running 50 Hz / 60 Hz ± 0.1% (Crystal controlled)				
	Wave form	Pure sine wave (Sinusoidal)				
	Total harmonic distortion	Less than 3% at full linear load				
	Transient condition	Less than 5% for 100% instantaneous load variation				
	Overload capability	150% for 1 min., 125% for 12 min.		150% for 2 min., 125% for 12 min.		
	Crest factor ratio	3:1				
	Protection	Over heat, overload, over voltage, under voltage, short circuit proof and battery low voltage shutdown				
EFFICIENCY	AC to AC (at full load, Pf.=1)	> 87%				
	Economy mode / Sleep mode	> 96%				
BATTERY	Type	Sealed lead-acid (maintenance free) rechargeable				
	Standard backup time (full load)	more than 30 min.	more than 17 min.	more than 17 min.	more than 12 min.	more than 9 min.
	Special backup time (option)	15 - 60 min.				
	Continuous recharging time	Less than 4 hours to 90% after full load discharge				
	Management	End of life indicator and alarm				
AUTOMATIC BYPASS SWITCH	Capability	150% for 10 minutes				
		1500% for 1 cycle				
SURGE PROTECTION	Standard energy	UL recognized surge protection to std.1449				
	I _{peak}	170 joules (510 joules option) (2 microsec wave form) 8 kA (8/20 microsec wave form)				
TRANSFER TIME	Mains fail or recover	Zero time (True on-line UPS)				
	UPS to bypass and vice versa	Zero time (Make before break)				
	Auto reverse	After overload return to normal				
MANUAL CONTROLS	Maintenance bypass switch	yes				
INDICATOR	Front panel LED's	Bypass input, line input, rectifier / charger, inverter, inverter supply, load level, overload, battery level, low battery, replace battery, automatic bypass, maintenance bypass, UPS On, UPS shutdown, over temperature / fault, alarm				
	16 characters LCD Display	Input voltage, input frequency, output voltage, output current, output frequency, output power, % load, battery voltage, % battery, backup time, UPS status (load power factor and load power options (P-code))				
AUDIBLE ALARM	Two tones with reset for silence	Mains failure, low battery, replace battery, load on bypass, over temperature, fault				
FEATURES	Automatic detective and shutdown when no load	yes (default setting is off)				
	Manual self-test	yes				
	DC start	yes				
	AC start without battery	Option (C-code)				
INPUT	Main input	Terminal blocks with main input circuit breaker				
	Bypass input	Terminal blocks (Bypass input circuit breaker is optional (I-code))				
OUTPUT OUTLET		Terminal blocks (Output circuit breaker is optional (O-code))				
COMMUNICATIONS INTERFACE	RS232 port	Serial interface port can be connected to PC, workstations or servers for automatic unattended shutdown. Easy-Mon X software may be required (Free download at www.leonics.com)				
	Remote terminal	Option (R-code)				
	Remote status interface	Dry contact is optional (D-code)				
	SNMP / HTTP capability	Internal or external are optional (S-code)				
ACOUSTIC NOISE	At 1 metre	< 50 dBA			< 55 dBA	
ENVIRONMENT	Temperature	0°C to 40°C				
	Humidity	0 - 95% (non-condensing)				
PHYSICAL DIMENSIONS (W x H x D) (cm)	UPS include standard battery	27 x 80 x 81			43 x 111.5 x 93	
	Battery extension rack (option)	Separate (UPS and battery extension rack)				
WEIGHT (Approximate in kg.)	UPS include standard battery	140	148	155	280	
	Battery extension rack (option)	Depending on battery capacity				
CONFORMANCE	Design regulation	IEC 62040-1, (2), EN 61000-4-2, (4), (6), IP20, TIS-1291				

Continuous product development is our commitment. In that manner, the above specifications may be changed without prior notice.

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