Main Features

- High efficiency and compact size
- Active PFC
- Digital Power regulation
- Wide input voltage range 170…550Vac
- Wide output voltage range 24…120Vdc, user settable
- User settable current limitation threshold
- Remote ON/OFF or other remote control functions
- Modbus over RS-485 interface for control and monitoring
- Multiple protections
- 2 user programmable voltage steps with settable duration
- Can be used as battery charger (lead acid, nickel, lithium)
- Can be used for LED lighting
- Can be paralleled for power or redundancy (with external ORing Module)
- Up to 50°C operating temperature with no derating
- Suitable for **POWERMASTER** software (available for Windows and Android OS)
- Excellent versatility, allowing parts stock savings

TECHNICAL DATA

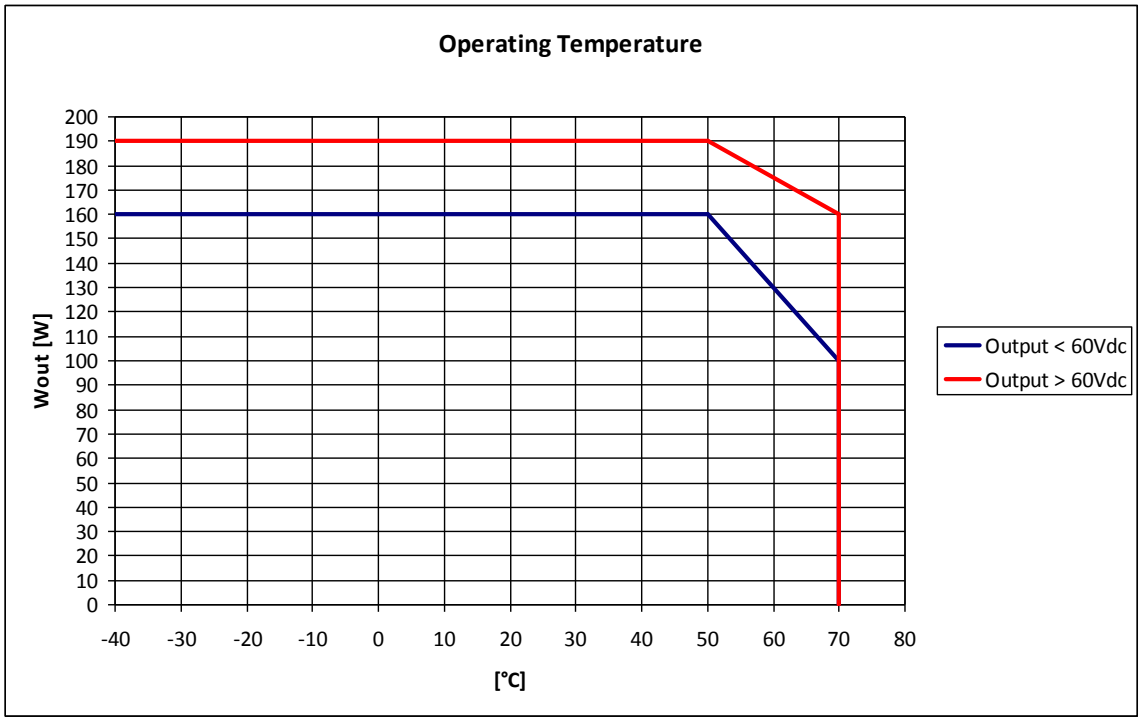
Model type	SBP200L
OUTPUT DATA	
Rated voltage	24…120Vdc
Adj. output voltage range	24…120Vdc (1V resolution programmable)
Continuous current	4.0A @ 24Vdc, 3.0A @ 48Vdc, or Vout x Iout= 200W Max. for Vout > 48Vdc
Overload limit	4.4A to 1.9A (depending on Vout)
Short circuit peak current	4.9A to 2.2A (depending on Vout)
Load regulation	≤ 1%
Ripple & Noise[1]	≤ 200mVpp
Hold up time	≥ 25ms
Battery charger function	C.C. / C.V. (setup via front panel or **POWERMASTER** application)
Battery chemistries	▪ Lead Acid ▪ Lithium
Protections	▪ Overload and short circuit protection ▪ Thermal protection ▪ Input undervoltage lockout (UVLO) ▪ Input overvoltage protection (VDR)
Status Signals	▪ 7 segment, 3 digits display ▪ 3 programming keys ▪ **ENABLE** - isolated remote ON/OFF input, active for 5…30Vdc ▪ **DC OK** - dry contact (NO, 24Vdc / 1A) ▪ **Modbus** over **RS-485** interface
Parallel connection	Possible for power and redundancy (with external ORing module)
INPUT DATA	
Input AC rated voltage Frequency	Nominal: 1/2 phases 200…500Vac Range: 170…550Vac 47…63Hz
Input DC rated voltage	250...725Vdc
Input AC rated current Vin = 200Vac Vin = 500Vac	 1.4A 0.5A
Input DC rated current Vin = 250Vdc Vin = 725Vdc	 1.0A 0.4A
Standby power	< 4W
Power Factor Correction	Active > 0.9
Inrush peak current	≤ 50A
Touch (leakage) current	≤ 0.4mA
Internal Protection fuse	None, external fuse must be provided
Recommended external protection	MCB 10A C curve It is strongly recommended to provide external surge arresters (SPD) according to local regulations.
GENERAL DATA	
Efficiency	> 82% … > 90% (depending Vout)
Dissipated power	< 21W
Operating temperature[2]	- 40°C…+ 70°C
Derating	Over 60Vdc: - 1.5W/°C over 50°C Under 60Vdc: - 3.0W/°C over 50°C See Fig.1
Storage temperature	- 40°C...+ 80°C
Humidity	5…95% r.H. non condensing
Life time expectation	71'686h (8.1 years) at 25°C ambient full load
MTBF	▪ MIL-HDBK-217F > 500'000h at 25°C ambient full load
Overvoltage category Pollution degree	▪ EN50178 III ▪ IEC60664-1 2
Input / output isolation	4.2kVdc
Input / ground isolation	2.2kVdc
Output / ground isolation	0.75kVdc
Safety Standards	▪ UL508 (reference) ▪ EN60950 (reference) ▪ EN50178 (reference)
EMC Emission	▪ EN55011 (CISPR11) Class A ▪ EN55022 (CISPR22) Class A ▪ EN61000-3-2 Class A
EMC Immunity	▪ EN61000-4-2 Level 3 ▪ EN61000-4-3 Level 3 ▪ EN61000-4-4 Level 3 ▪ EN61000-4-5 Level 4 ▪ EN61000-4-11 Level 2
Protection degree	▪ EN60529 IP20
Vibration sinuosoidal	▪ IEC60068-2-6 (5-17.8Hz: ±1.6mm; 17.8-500Hz: 2g 2hours / axis (X,Y,Z)
Shock	▪ IEC60068-2-27 (30g 6ms, 20g 11ms; 3 bumps / direction, 18 bumps total)
IN/OUT Connection terminals	2.5mm², screw type pluggable (24...12AWG)
Auxiliary connection terminals	Up to 0. 5mm², Fast pluggable type (20AWG)
Communication interface connector	RS-485 through RJ45 Female

Case material	Aluminum
Weight	0.75kg
Size (W x H x D)	80.0 x 120.0 x 100.0mm

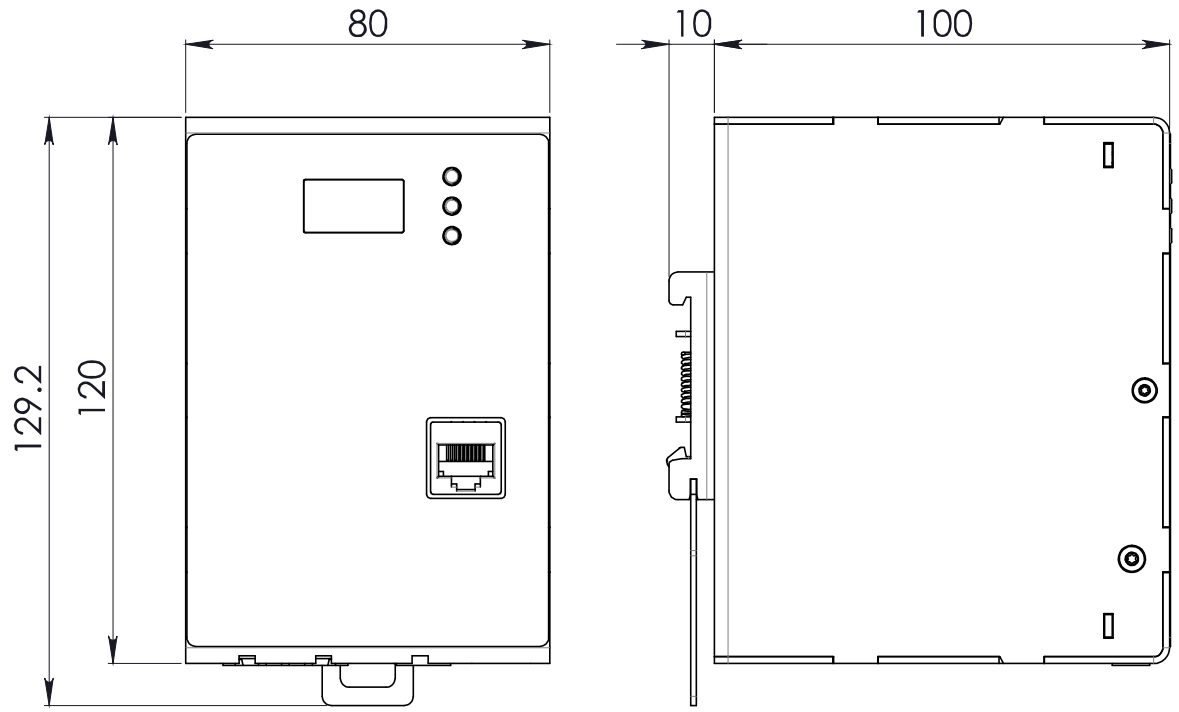
1) Ripple and Noise are measured with 20MHz bandwidth, probe terminated with a 0.1µF MKP parallel capacitor.
2) Start-up type tested: - 40°C, possible at nominal voltage with load deration.

Notes:
- For more details, performance and descriptions regarding all parameters not indicated in the above table, please refer to the user manual downloadable from www.nextys.com
- Technical parameters are typical, measured in laboratory environment at 25°C and 400Vac / 50Hz, at nominal values, after minimum 5 minutes of operation.
- Power rating, losses, efficiency, ripple, thermal behaviour and start-up may change outside of the nominal rated input range. Contact factory for details.
- Data may change without prior notice in order to improve the product.

Fig.1



DIMENSIONS



CONNECTION

Input Connection:

Single phase:
- L1 = Line
- N = Neutral
- ⏚ = Earth ground

2 phases:
- L1 = Phase 1
- L2 = Phase 2
- ⏚ = Earth ground

DC:
- L1 = + Positive DC
- L2 = - Negative DC
- ⏚ = Earth ground

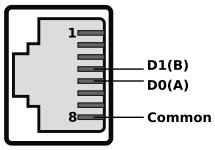
ENABLE: (5...30Vdc)
- + = Positive DC
- - = Negative DC

Output Connection:

- + = Positive DC
- - = Negative DC

Signaling:
DC OK: dry contact
- + = NO
- - = COM

RS-485



- PIN4 = TX/RX D1
- PIN5 = TX/RX D0
- PIN8 = GND