

SBP200

AC/DC Variable Power Supply 36 VDC to 205 VDC 200W



■ Main Features

- J High efficiency and compact size
- J Active PFC
- J Wide input voltage range 170...550Vac
- J Wide output voltage range 36...205Vdc, user settable
- J 2 user programmable voltage steps with settable duration
- J Digital Power regulation
- J Remote ON/OFF or other remote control functions possible through ENABLE input
- J Multiple protections
- J Ideal for elevator application
- J Excellent versatility, allowing parts stock savings
- J Up to 50°C operating temperature with no derating

TECHNICAL DATA

Model type	SBP200	
OUTPUT DATA		
Rated voltage	36...205Vdc	
Adj. output voltage range	36...205Vdc (1V resolution programmable)	
Continuous current	2.3A Max. or $V_{out} \times I_{out} = 187W$ Max. for $V_{out} > 80Vdc$	
Overload limit	2.4A	
Short circuit peak current	2.5A	
Load regulation	$\leq 1\%$	
Ripple & Noise ¹	$\leq 600mVpp$	
Hold up time	$\geq 30ms$	
Protections	<ul style="list-style-type: none"> ▪ Overload and short circuit with constant current (3s) and one shot (no auto recovery) ▪ Thermal protection ▪ Input undervoltage lockout (UVLO) ▪ Input overvoltage protection (VDR) 	
Status Signals	<ul style="list-style-type: none"> ▪ 7 segment, 3 digits display ▪ 3 programming keys ▪ ENABLE - Insulated remote ON/OFF input, active for 12...230Vac/dc 	
Parallel connection	Possible with external ORing module	
INPUT DATA		
Input AC rated voltage ²	Nominal: 1/2 phases 200...500Vac	
Frequency	Range: 170...550Vac 47...63Hz	
Input DC rated voltage	250...725Vdc	
Input AC rated current		
Vin = 200Vac	1.4A	
Vin = 500Vac	0.5A	
Input DC rated current		
Vin = 250Vdc	1.4A	
Vin = 725Vdc	0.7A	
Standby power	< 6W	
Power Factor Correction	Active > 0.9	
Inrush peak current	$\leq 50A$	
Touch (leakage) current	$\leq 0.3mA$	
Internal Protection fuse	None, external fuse must be provided	
Recommended external protection	MCB 6A C or 4A D curve It is strongly recommended to provide external surge arresters (SPD) according to local regulations.	
GENERAL DATA		
Efficiency	> 87%	
Dissipated power	< 28W	
Operating temperature ³	- 40°C...+ 70°C	
Derating	- 4.2W/°C over 50°C (do not exceed $V_{out} \times I_{out} = 100W$ Max. at 70°C)	
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	
Overvoltage category	▪ EN50178	III
Pollution degree	▪ IEC60664-1	2
Input / output isolation	4.2kVdc	
Input / ground isolation	3.4kVdc	
Input / ENABLE isolation	4.2kVdc	
Output / ground isolation	1.65kVdc	
Output / ENABLE isolation	4.2kVdc	
ENABLE / ground isolation	4.2kVdc	
Safety Standards	<ul style="list-style-type: none"> ▪ UL508 (reference) ▪ EN60950 (certified) ▪ EN50178 (reference) 	
EMC Emission	<ul style="list-style-type: none"> ▪ EN55011 (CISPR11) Class A ▪ EN55022 (CISPR22) Class A ▪ EN12015 Class A ▪ EN61000-3-2 Class A 	
EMC Immunity	<ul style="list-style-type: none"> ▪ 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 ▪ EN12016 	
Protection degree	▪ EN60529	IP20
Vibration sinusoidal	▪ IEC60068-2-6	(5-17.8Hz: $\pm 1.6mm$; 17.8-500Hz: 2g 2hours / axis (X,Y,Z))
Shock	▪ IEC60068-2-27	(30g 6ms, 20g 11ms; 3 bumps / direction, 18 bumps total)
Connection terminals	2.5mm ² , screw type pluggable (24...12AWG)	

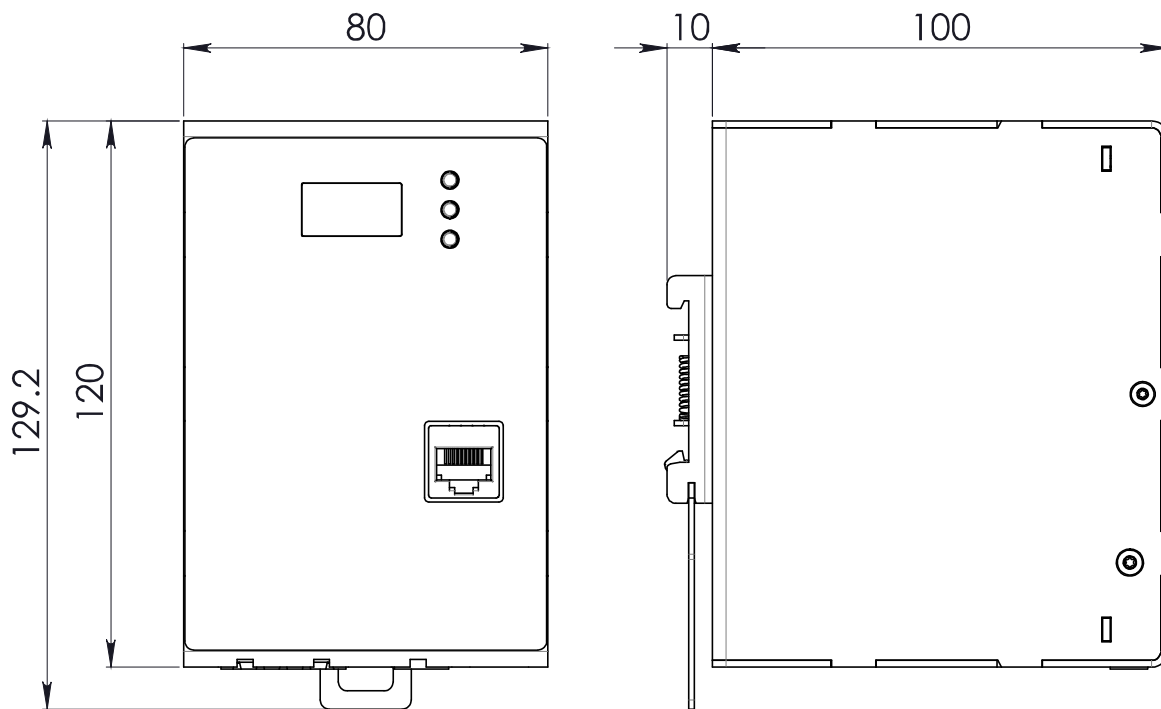
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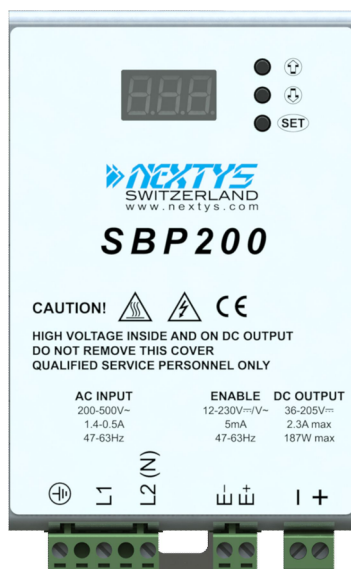


Case material	Aluminum
Weight	0.75kg
Size (W x H x D)	80.0 x 120.0 x 100.0mm
<p>1) Ripple and Noise are measured with 20MHz bandwidth, probe terminated with a 0.1µF MKP parallel capacitor. 2) CB Scheme certified up to 528Vac. 3) Start-up type tested: - 40°C, possible at nominal voltage with load deration.</p> <p>Notes: - For more details, performance and descriptions regarding all parameters not indicated in the above table, please refer to the instruction 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.</p>	

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: (12...230Vac/dc)

- E+ = Positive DC
- E- = Negative DC

Output Connection:

- + = Positive DC
- - = Negative DC