

MODULAR RECTIFIER AC/DC

series SBN - AC/DC

NOMINAL VOLTAGE

24 Vdc, 48 Vdc, 110 Vdc, 125 Vdc, 220 Vdc

Modular Rectifier AC/DC designed with modern philosophy of modular conception technology to ensure and cover DC power supply with high reliability, handling and maintenance.



ALBAT'S Rectifier Rectifier AC/DC with its Modular design represents a perfect solution for a wide range application in the:

- Energetics,
- Industrial and
- Telecommunication market.

MAIN FEATURES:

- Switched-mode rectifier
- Power range per module from 400 W to 4400 W
- Input voltage from 90 V to 320 Vac
- Suitable for all common voltages: 12V, 24V, 48V, 108 to 110V, 125V, 216 to 220 Vdc
- 19" Rack design
- Modular design
- Digital controller
- External battery

AVAILABILITY:

- N+1 redundancy
- Hot swap conception
- Energy save via sleep mode
- Temperature controlled charging
- Battery test during operation
- Local and remote control
- LVDB system protection battery
- Over voltage protection for system and modules

ECONOMIC EFFICIENCY:

- High performance beside low volume and weight
- High efficiency, power factor 0,99
- Suitable for lead and NiCad batteries
- All-inclusive system

ALBAT provide completely Design by your technical request, Production, Assembly and Service in warranty and after-warranty period.

The production process is in accordance with the standards ISO 9001:2008 and ISO 14001:2004. All products are in compliance with IEC and EN standards.

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Technical Specification

OUTPUT																
Nominal Voltage Vdc	24				48						110		125		220	
Operation Voltage Vdc	20 to 29	21 To 29	43 to 58	42 to 58	42 to 60	42 to 58	44 to 58	44 to 58	42 to 60	90 to 180	90 to 160	90 to 160	180 to 320	180 to 320	180 to 320	
Power per Module kW	0,4	3,1	0,3	0,65	1,0	1,2	2,0	2,4	4,0	1,1	4,4	1,1	4,4	1,1	4,4	
Power per Shelf kW	2,0	15,5	0,9	3,25	5,0	6,0	8,0	9,6	20,0	6,6	22	6,6	22	6,6	22	
Max Power per System kW	Per technical request / Parallel function of Modules / Shelves															
Height per Shelf U	2	4	1	2	4	1	2	1	4	4	4	4	4	4	4	
Load regulation %	Static $\leq \pm 0,5$															
Line regulation %	Static $\leq \pm 0,1$															
INPUT																
Nominal Voltage Vac	100 / 110 / 115 / 120 / 127 / 208 / 220 / 230 / 240															
Operating Voltage Vac	90 to 320	176 to 312	90 to 300	90 to 140	150 to 320	90 to 175	187 to 312	187 to 310	187 to 320	176 to 320						
Extended Voltage Vac (de-rated)	-	176 to 90	-	90 to 70	150 to 90	277 to 300	187 to 90	90 to 187	187 to 90	176 to 150						
Frequency Hz	45 to 70		47 to 63	45 to 70	45 to 66	45 to 70	45 to 66			45 to 66						
Power Factor	$> 0,99$															
THD %	≤ 5															
Efficiency %	> 90	> 90	$> 93,8$	> 91	> 91	> 93	$> 94,2$	> 96	$> 94,9$	> 93	> 92	> 93	> 92	> 93	> 92	
PERFORMANCE / FEATURES																
Indicators	AC main OK; Module OK; Module fail;															
Adjustments, via controller	Float voltage; Equalize voltage; High & low voltage alarms; High voltage shutdown; Current limit; Slope; Start delay;															
Protection	Current limit / short circuit; Start delay; Input / output fuses; Output high voltage shutdown; Power limiting; Thermal foldback / shutdown; Input transient; AC low line foldback shutdown;															
ENVIRONMENTAL																
Standard temperature °C	-40 to +50	-40 to +65	-40 to +70	-40 to +50	-40 to +55	-40 to +65	-40 to +55			-40 to +55						
Extended temperature °C	-40 to +85 (de-rated)						-40 to +75 (de-rated)									
Humidity %	0 to 95 RH non-condensing															
Elevation m (de-rated more than 2000)	-500 to 3000	-500 to 4000	-500 to 3000	-500 to 3000	-500 to 4000	-500 to 3000	-60 to 4000	-500 to 3000	-500 to 4000	-500 to 2800						
CONTROLLER																
Features	High resolution color touchscreen LCD display for local access; Embedded web based UI accessed via Ethernet using internet browser; Built in multi-tone speaker; LED indicators (green, amber, red);															
Battery	Automatic battery test; Battery runtime and capacity indication; Charge current Control; Temperature compensation; Equalize; Absorption charge settings with entry/exit criteria;															
System	User management – Admin + 5 users with configurable access rights; Advanced inventory management with custom inventory items; User configurable alarms and custom data; Advanced equation editing with timers and counters; Software, firmware, and configuration file upgrade management; CAN Bus interface to power electronics and peripherals; Custom data logging and performance monitoring; Power save feature for optimizing system efficiency;															
Communication ports	2 x Ports for communication with shelves; 2 x Ethernet ports front and rear; 2 x USB ports front and rear;															
Inputs (possibility of extension)	4 x Voltage; 4 x Shunt; 4 x Temp; 8 x Digital; 12 x Relay;									2 x Voltage; 1 x Shunt; 2 x Temp; 4 x Digital; 6 x Relay;						
MECHANICAL																
Cabinet dimension	600 x 600 x 2000 mm + 100 mm / or different per technical request															
Cabinet protection	IP 21 or IP 54 or IP 65 (standard or AIR-conditioned or Seismic resistance) / or different per technical request															
Installation	Indoor / Outdoor															
AGENCY COMPLIANCE																
Safety	CSA C22.2 NO 60950-1-03; CE MARKED; UL 60950-1 1th edition; IEC/EN 60950-1;															
EMC / Emission	CFR47 PART 15 CLASS A; ICES-03 CLASS A; EN 55022 CLASS A; C-TICK; EN 61000-3-2; EN 61000-3-3;															
EMC / Immunity	EN 61000-4-2; EN 61000-4-3; EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-11; ANSI/IEEE C62.41 CAT B3															

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FUNCTIONAL DIAGRAM

