Power

Spectra Charger

SCR Automatic Battery Charger

SBC Data Power Inc.
1760 Monrovia Avenue, Suite C8
Costa Mesa, Ca 92627
Ph 949 646 8191 www.sbcdatapower.com

- Industrial-grade battery charger
- Microprocessor control and digital display
- Universal control boards; and control disable for tamper-free operation
- Online adjustment
- Modular construction for easy maintenance and replacement
- Battery Eliminator option for use as a DC source without batteries
- UL Listed and CSA label

The Alpha Spectra Industrial Battery Charger incorporates the latest digital and power electronics technologies, making it one of the most reliable battery chargers available. The unique SCR rectifier with a double wound isolation transformer provides precise regulated DC output and current limiting capabilities. Three different output-filtering configurations are available to match powering requirements. Approved UL, CSA and EMI standards. Made in the USA.

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Specifications

Electrical

AC Input Voltage:	120, 208 or 240V +10%, -12%
Phase:	1
Frequency:	50 or 60Hz ±3Hz
Power Factor:	0.8 typical full load
Efficiency:	80 to 90% at 50 to 100% load
DC Output Voltage:	24, 48 or 130VCD nominal
Current:	6, 12, 20, 25 or 50ADC
Continuous Rating:	110% rated current at max equalize voltage at 50˚C
Voltage Regulation:	±.25% for line, load and temperature
Transient Response:	<±6% with 20 to 100% step load with battery connected
Electrical Noise:	30m Vrms/32BDrnC weighted maximum on filtered versions (battery eliminator) <2%Vrms for 130VDC output <1%Vrms for 48VDC output

Mechanical

NEMA 1 Enclosures:	Standard
Dimensions S1 (in):	17.5H x 19W x 16.75D
(mm):	445H x 483W x 425D
Dimensions S2 (in):	26.25H x 19W x 16.75D
(mm):	667H x 483W x 426D
Dimensions S3 (in):	35H x 19W x 13.75D
(mm):	889H x 483W x 425D

Environmental

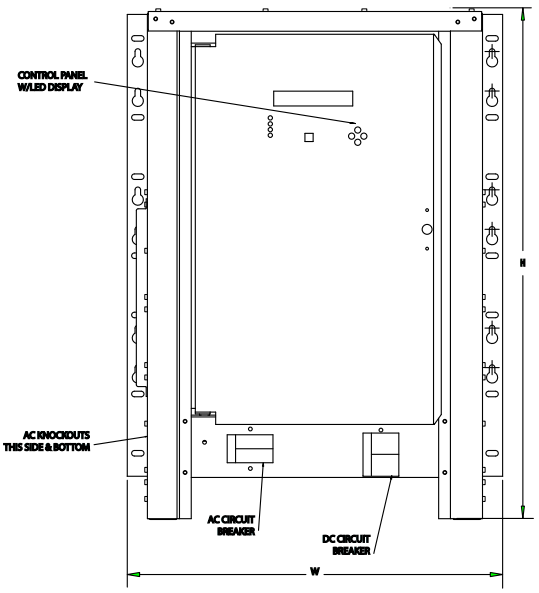
Natural Convection	
Ambient Temperature:	0 to 40°C (32 to 105°F)
Elevation:	1000m (3000ft) without derating
Relative Humidity:	0 to 95% (non-condensing)

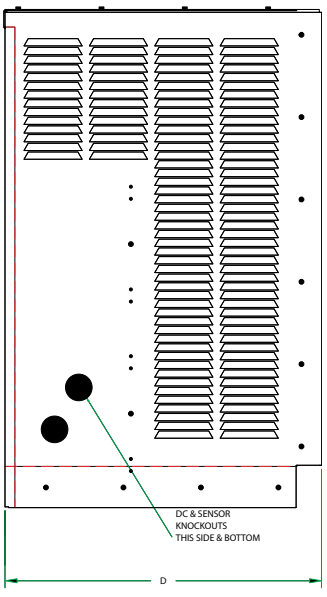
Standard Features

- LCD Display
- Charger Pause 0-60 Min
- Reverse Polarity Protection
- Sprinkler Resistant Ventilation
- UL Listed
- Stackable Enclosure
- High DC Voltage Shutdown
- Push Button Mode Selection
- AC and DC Surge Suppressors
- Wire Protection on Field Connections
- Floor Mount Legs
- Summary Alarm Contact Relay
- Summary Alarm Buzzer
- AC H/L Voltage Alarm and AC Fail Indication
- H/L DC Voltage Alarm
- AC Input and DC Output Circuit Breakers
- Control Panel and Circuit Breakers Recessed
- Bottom/Side Cable Entry
- AC, DC, Float and Equalize Indicator Lights
- Field Programmable with Security Levels
- Compression Terminal Strip for Field Wiring

Optional Features

- DC Ouput Filter
- Battery Eliminator Filter
- Input Lightning Arrestor
- Remote Control Panel
- Parallel Charging
- Remote DC Voltage Sensor
- Conformal Seal on Electronic Boards
- Anti-Fungus Coating
- Special AC Input Voltage
- 19" or 23" Relay Rack Mounting
- NEMA 4 or 12 Enclosure
- Cabinet Heater
- Special AC Power Connections
- Local or Remote Voltage Sensor
- Remote Temperature Compensation
- Individual Alarm Relay Contact Board (alarm input/output board)





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ST Series Rating Table

Output Voltage	Float Voltage Range	Equalize Voltage Range	DC Ampere Rating	6A			12A			18A			20A			25A			50A		
			AC Input	120	208	240	120	208	240	120	208	240	120	208	240	120	208	240	120	208	240
24 VDC	24VDC to 30VDC	24VDC to 30VDC	AC Input Amperes (Nominal)	5A	4A	3A	7A	5A	5A	12A	8A	8A	12A	8A	8A	14A	10A	10A	30A	22A	22A
			AC Input Circuit Breaker	10A	10A	10A	10A	10A	10A	15A	15A	10A	15A	15A	10A	20A	15A	10A	40A	30A	30A
			DC Output Circuit Breaker	15A	15A	15A	30A	30A	30A	40A	40A	40A	40A	40A	40A	60A	60A	60A	90A	90A	90A
			Cabinet Style	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S3	S3	S3
			Shipping Weight (lbs)	70	70	70	75	70	75	85	85	85	85	85	85	90	90	90	125	125	125
48VDC	48VDC to 60VDC	48VDC to 60VDC	AC Input Amperes (Nominal)	7A	5A	5A	14A	10A	10A	23A	14A	15A	23A	14A	15A	28A	17A	20A	54A	27A	27A
			AC Input Circuit Breaker	10A	10A	10A	20A	10A	10A	30A	20A	15A	30A	20A	15A	30A	25A	20A	70A	40A	40A
			DC Output Circuit Breaker	15A	15A	15A	30A	30A	30A	50A	40A	50A	50A	50A	50A	60A	60A	60A	90A	90A	90A
			Cabinet Style	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	S3	S3	S3
			Shipping Weight (lbs)	75	75	75	90	90	90	110	110	110	110	110	110	115	115	115	222	222	222
130VDC	120VDC to 150VDC	120VDC to 150VDC	AC Input Amperes (Nominal)	14A	11A	8A	27A	17A	15A	45A	26A	22A	45A	24A	22A	56A	32A	27A	n/a	68A	50A
			AC Input Circuit Breaker	20A	15A	15A	40A	30A	25A	60A	40A	30A	60A	40A	30A	70A	60A	40A	n/a	90A	70A
			DC Output Circuit Breaker	15A	15A	15A	25A	25A	25A	40A	40A	40A	40A	40A	40A	60A	60A	60A	n/a	90A	90A
			Cabinet Style	S1	S1	S1	S1	S1	S1	S2	S2	S2	S2	S2	S2	S2	S2	S2	n/a	S3	S3
			Shipping Weight (lbs)	100	100	100	130	130	130	175	175	175	175	175	175	190	190	190	n/a	340	340

ST Model Number Configuration

	ST														
A		B			C			D	E	F	G	H	I	J	K

If a space has no option selected a zero must be inserted.

Box	ST	Description
A	1	1 Phase
B		Nominal DC Output Voltage
	024	24VDC
	048	48VDC
	130	130VDC
C		NominalDC Output Current
	006	6ADC
	012	12ADC
	020	20ADC
	025	25ADC*
	050	50ADC*
D		Input Voltage
	1	120
	2	208 (not UL listed)
	3	240
E		Filtering
	0	Unfiltered
	1	Filtered / Eliminator
F		Relays
	0	No Relays
	1	Individual Alarm Relay Contact Board

Note: Charger with 208VAC input does not have UL/CSA approval yet.

Box	ST	Description
G		Remote Sensing
	0	Not Supplied
	1	Remote Control Panel
	2	Remote Temperature Compensation
	3	Remote DC Voltage Sensing
	4	Lines 1 & 2
	5	Lines 1 & 3
	6	Lines 2 & 3
	7	Lines 1, 2 & 3
H		Lightning Arrestor
	0	Not Supplied
	1	Included
I		Charging
	0	Not Supplied
	1	Parallel Charging
	2	Series Charging
J		Special Treatments
	0	Nothing
	1	Fungus Proofing
	2	Conformal Seal On Electronic DC Board
	3	Option 1 and 2
K		Other Options
	0	Nothing
	1	Lockable enclosure door
	2	NEMA 4 enclosure
	3	NEMA 12 enclosure
	4	19" Rack flanges @6.0" from front
	5	23" Rack flanges @6.0" from front
	6	Lines 1 & 4
	7	Lines 1 & 5

For more information visit www.alpha.com

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049-215-33-003 (1/06)

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