

Spectra Charger

SCR Automatic Battery Charger



- 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.

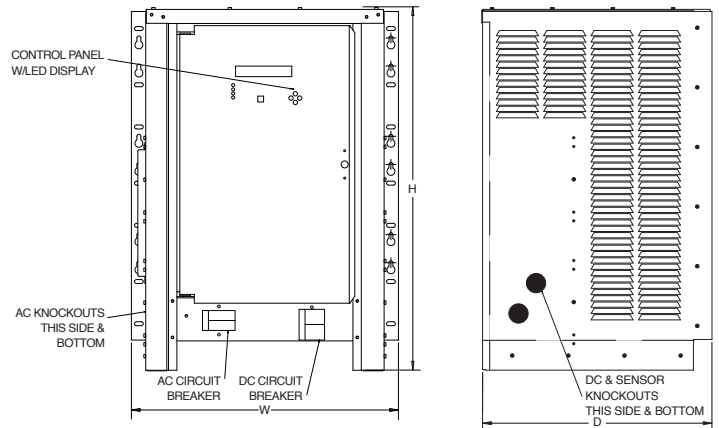
Electrical	
AC Input Voltage:	120, 208 or 240V +10%, -12%
Phase:	1
Frequency:	50 or 60Hz ±3Hz
Power Factor:	0.8 typical full load
Efficiency:	80 to 90% at 50 to 100% load
DC Output Voltage:	24, 48 or 130Vdc nominal
Current:	6, 12, 18, 20, 25 or 50Adc
Continuous Rating:	110% rated current at maximum equalize 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/32Bdmc weighted maximum on filtered versions (battery eliminator), <2% Vrms for 130VDC output, <1%Vrms for 48VDC output

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

Environmental	
Natural Convection Ambient Temperature:	0 to 40°C / 32 to 105°F
Elevation:	1000m / 3000ft without derating
Relative Humidity:	0 to 90% (non-condensing)

Standard Features	
<ul style="list-style-type: none"> • LCD display • Charger pause 0 to 60 minutes • Reverse polarity protection • Sprinkler resistant ventilation • UL listed • Stackable enclosure • 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 	<ul style="list-style-type: none"> • Bottom/side cable entry • AC, DC, float and equalize indicator lights • Field programmable with security levels • Compression terminal strip for field wiring • 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

Optional Features	
<ul style="list-style-type: none"> • DC output filter • Battery eliminator filter • Input lightning arrestor • Remote control panel • Parallel charging • Remote DC voltage sensor • Parallel charging • Remote DC voltage sensor 	<ul style="list-style-type: none"> • Special AC power connections • Local or remote voltage sensor • Remote temperature compensation • Individual alarm relay contact board • Conformal seal on electronic boards • Special AC input voltage • 19" or 23" relay rack mounting • Cabinet heater



ST Series Rating Table																					
Output Voltage	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
24VDC	AC Input Amperes (Nominal):			5A	3A	3A	7A	5A	5A	10A	6A	6A	12A	7A	7A	14A	8A	8A	24A	15A	15A
	AC Input Circuit Breaker:			10A	10A	10A	10A	10A	10A	15A	10A	10A	15A	10A	10A	14A	8A	8A	24A	15A	15A
	DC Output 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	AC Input Amperes (Nominal):			7A	5A	5A	14A	8A	7A	17A	11A	10A	18A	12A	10A	28A	14A	13A	45A	25A	23A
	AC Input Circuit Breaker:			10A	10A	10A	20A	15A	10A	30A	15A	15A	30A	15A	15A	30A	20A	20A	60A	40A	40A
	DC Output Breaker:			15A	15A	15A	30A	30A	30A	50A	50A	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
125VDC	AC Input Amperes (Nominal):			14A	9A	8A	27A	17A	15A	45A	24A	21A	45A	24A	22A	63A	32A	32A	—	70A	60A
	AC Input Circuit Breaker:			20A	15A	15A	40A	30A	25A	60A	40A	30A	60A	40A	30A	70A	40A	40A	—	90A	70A
	DC Output Breaker:			15A	15A	15A	25A	25A	25A	40A	40A	40A	40A	40A	40A	60A	60A	60A	—	90A	90A
	Cabinet Style:			S1	S1	S1	S1	S1	S1	S2	S2	S2	S2	S2	S2	S2	S2	S2	—	53	53
	Shipping Weight (lbs):			100	100	100	130	130	130	175	175	175	175	175	175	190	190	190	—	340	340

ST Model Number Configuration (If a space has no option selected a zero must be inserted)												
A	ST	B	C	D	E	F	G	H	I	J	K	

Box	ST	Description
A	1	1 Phase
B	24	Nominal DC Output Voltage 24VDC
	48	48VDC
	130	130VDC
C	006	Nominal DC Output Amperage 6ADC
	012	12ADC
	018	18ADC
	020	20ADC
	025	25ADC
	050	50ADC
D		Input Voltage
	1	120
	2	208
	3	240
E	0	Filtering Unfiltered
	1	Filtered/Eliminator
F	0	Relays No relays
	1	Individual alarm relay contact board
G	0	Remote Sensing 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	0	Lightning Arrestor Not supplied
	1	Included

Box	ST	Description
I	0	Charging Not supplied
	1	Parallel charging
	2	Deleted
J	0	Special Treatments Not supplied
	1	Fungus proofing
	2	Conformal seal on electronic DC board
	3	Lines 1 & 2
K	0	Other Options Nothing
	1	Lockable enclosure door
	2	Deleted
	3	Deleted
	4	19" rack flanges @ 6" from front
	5	23" rack flanges @ 6" from front
	6	Lines 1 & 4
7	Lines 1 & 5	

Note: Consult factory for charger with 208VAC and UL/CSA approval



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