

EC Series Battery Chargers

Single Phase 24/48/130 Vdc, 6/12/20/25/50 Amp Float Chargers

The EC Series chargers are microprocessor controlled, easy to setup and easy to operate via a user-friendly LCD screen. These highly reliable chargers include many standard features including: filtering (battery eliminator), internal temperature compensation, local alarms with indication on the LCD screen, summary alarm via Form C relay, a summary alarm buzzer, a ground pad plus many more.

The single phase EC Series chargers are available from 24 to 130 Vdc and rated from 6 to 50 Amps. They are compatible with flooded lead-acid (FLA), valve-regulated lead-acid (VRLA) and nickel-cadmium (NiCd) battery systems.



Applications

- Substations/Switchgear
- Power Generation
- Industrial
- Telecommunications
- UPS
- Microwave Relay Sites



Standard Features

- Battery Eliminator: 30mVrms filtering with or without battery*
- AC & DC breakers
- Internal temperature sensor/voltage compensation (can be disabled)
- 1% LCD displays Vdc, Adc, timer hrs., fault codes and charger settings
- Local LEDs for AC On, DC On, Float and Equalize
- Common/summary Form C alarm contact/relay on main control board for DC fail, high Vdc, low Vdc, DC fail, high Vac, low Vac, pos/neg ground fault and end of discharge alarms
- Summary alarm buzzer
- All alarms can be disabled
- High/Low DC voltage shutdown
- Manual or automatic 1–255 hr. equalize timer
- Push button (Hold to Equalize) mode selection
- Ground terminal lug
- Controls can be disabled for security
- AC & DC surge suppressors
- Universal control board
- NEMA 1 enclosure with sprinkler resistant ventilation
- ANSI 61 gray powder coated finish
- All chargers are stackable and floor, wall or shelf mountable
- Bottom/side cable entry
- Full 5 year warranty
- Made in USA!

*100mVrms for 130 Vdc models. Meets or exceeds NEMA PE5-1996 requirements.

Technical Specifications

- 30 year design life
- SCR technology
- UL1012/1564 listed cUL/CSA certified
- Designed to meet NEMA PE5
- FCC part 15 and ICES-003, class A
- Input
 - 120, 208 or 240 Vac single phase input (+10%, -12%)
 - 50/60Hz (±3 Hz)
- Output voltage regulation: ±0.25%
- Efficiency: 85–90% typical at 50–100% load
- Charger delay: 8 sec. to 60 min. (after AC return)
- Current limit: adjustable from 0–110%
- Float/Equalize range

24 Vdc:	24–30V
48 Vdc:	48–60V
130 Vdc:	120–150V
- High DC voltage alarm

24 Vdc:	12–32.4V
48 Vdc:	24–64.8V
130 Vdc:	60–162V
- Low DC voltage alarm

24 Vdc:	12–30V
48 Vdc:	24–60V
130 Vdc:	60–150V
- End of Discharge voltage alarm

24 Vdc:	12–24V
48 Vdc:	24–48V
130 Vdc:	60–120V
- Audible noise: less than 62 dBA 5 feet from charger
- Cooling: natural convection (no fans)
- Operating temperature range: 32–105° F (0–40° C)
- Elevation: 3300 ft. (1000m) without derating
- Relative humidity: 0–95% without condensation
- Alarm relay contact rating

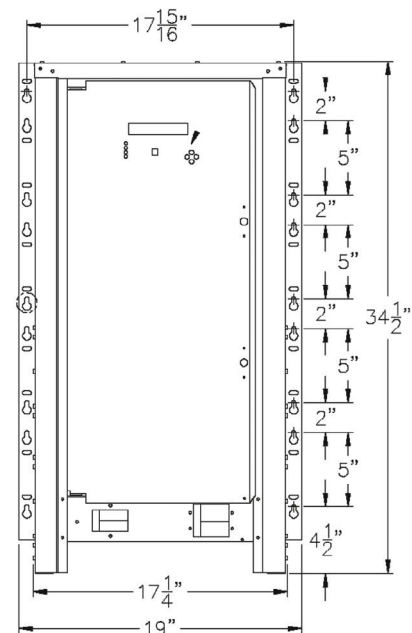
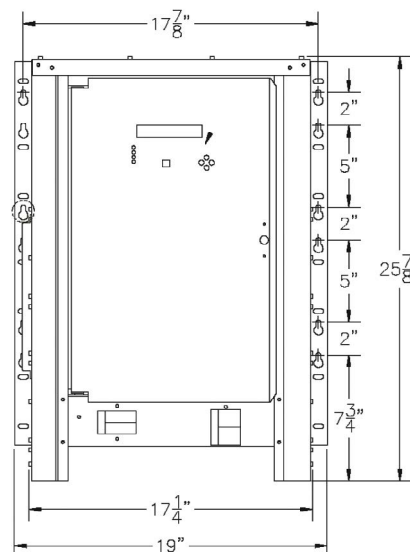
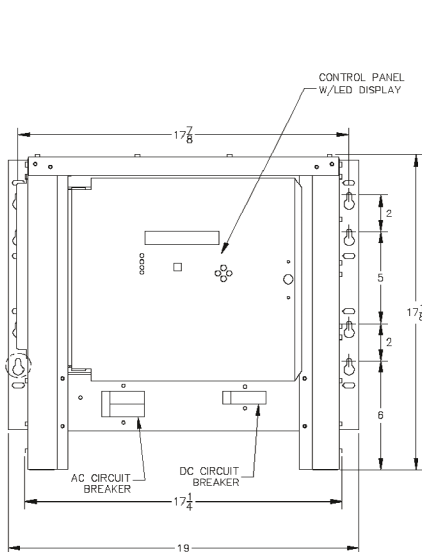
Max. switching voltage:	150 Vdc, 125 Vac
Max. switching power:	30 Vdc, 60 Vac
Max. switching/carry current:	2.0 A

Available Options

- Alarm board with NO/NC individual Form C alarm contacts/relays. Includes: Summary, DC fail, high Vdc, low Vdc, high Vac, low Vac, pos/neg ground fault (combined) and end of discharge alarms
- Remote temp. comp. cable/sensor (10 ft. or 25 ft.)
- Remote DC voltage sensing cable (30 ft.)
- AC input lightning arrestor
- Lockable cabinet door with (2) keys
- 19" relay rack mounting brackets
- 23" relay rack mounting brackets
- NEMA 3R/12 enclosure
- Export packaging

Cabinet Information

Cabinet Style	Dimensions (in.) W x D x H	Wall Mount	Floor Mount	Stackable	Rack Mount
S-1	19.0 x 17.9 x 17.1	Standard	Standard	Standard	Optional
S-2	19.0 x 17.9 x 25.9	Standard	Standard	Standard	Optional
S-3	19.0 x 17.9 x 34.5	Standard	Standard	Standard	Optional



Technical Data

Output Voltage	DC Ampere Rating AC Input	6A			12A			20A			25A			50A		
		120	208	240	120	208	240	120	208	240	120	208	240	120	208	240
24 Vdc	AC Input Amperes (Nom.)	5A	3A	3A	7A	5A	5A	12A	7A	7A	14A	8A	8A	24A	15A	15A
	AC Circuit Breaker	10A	10A	10A	10A	10A	10A	15A	10A	10A	20A	10A	10A	30A	20A	20A
	DC Circuit Breaker	15A			30A			40A			60A			90A		
	Cabinet Style	S-1			S-1			S-1			S-1			S-3		
	Shipping Weight (Lb.)	70			75			85			90			190		
48 Vdc	AC Input Amperes (Nom.)	7A	5A	5A	14A	8A	7A	18A	12A	10A	28A	14A	13A	45A	25A	23A
	AC Circuit Breaker	10A	10A	10A	20A	15A	10A	30A	15A	15A	30A	20A	20A	60A	40A	40A
	DC Circuit Breaker	15A			30A			50A			60A			90A		
	Cabinet Style	S-1			S-1			S-1			S-1			S-3		
	Shipping Weight (Lb.)	75			90			110			115			222		
130 Vdc	AC Input Amperes (Nom.)	14A	9A	8A	27A	17A	15A	45A	24A	22A	63A	32A	32A	N/A	70A	60A
	AC Circuit Breaker	20A	15A	15A	40A	30A	25A	60A	40A	30A	70A	50A	40A	N/A	90A	70A
	DC Circuit Breaker	15A			25A			40A			60A			N/A 90A		
	Cabinet Style	S-1			S-1			S-2			S-2			N/A S-3		
	Shipping Weight (Lb.)	100			130			175			190			N/A 340		

EC Series Single Phase Ordering Information

Ordering Code									
	A	B	C	D	E	F	G	H	I
Example	EC	48-	06	E	240	1	2	1	4
Your Code	EC			E					

Description	Code	Feature
A	EC	EC Series
B Nominal DC Output Voltage	24-	24 Vdc
	48-	48 Vdc
	130-	130 Vdc
C Nominal DC Output Current	06	6 Adc
	12	12 Adc
	20	20 Adc
	25	25 Adc
	50	50 Adc
D Filtering	E	Filtered/Eliminator (std.)
E AC Input Voltage	120	120 Vac, 50/60 Hz
	208	208 Vac, 50/60 Hz
	240	240 Vac, 50/60 Hz
F Alarms	0	None
	1	Alarm Board/Individual Form C Contacts/Relays
G Remote Control/Sensing	0	None
	1	Remote Temp Comp Cable/Sensor (10 ft.)
	2	Remote Temp Comp Cable/Sensor (25 ft.)
	3	Remote Voltage Sensing Leads (30 ft.)
	4	Options 1 & 3
	5	Options 2 & 3
H Lighting Arrestor	0	None
	1	Included
I Other Options	0	None
	1	Lockable Door (2 keys)
	2	NEMA 3R (Outdoor)
	3	NEMA 12 (Indoor)
	4	19" Relay Rack Mounting Brackets
	5	23" Relay Rack Mounting Brackets
	6	Options 1 & 4
	7	Options 1 & 5

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