CURTIS

Power Conversion

Battery Chargers

Model 1627

delta-q TECHNOLOGIES

Model 1627

Battery Chargers

The Curtis Model 1627 high frequency battery chargers are portable and allow easy charging of industrial vehicle batteries from 24 VDC to 48 VDC using any standard outlet in the world.

Curtis Model 1627 provides 1,200 Watts at output voltages of 24, 36 and 48 VDC. Model 1627 battery chargers are ideal for use in material handling, airport, golf, aerial lift, sweeper/scrubber, utility, Light-On-Road and general industrial battery-powered vehicles.

FEATURES

- Rugged, sealed aluminum die cast enclosure protects against extreme environments.
- Integrated USB port allows easy updating of software, charge profiles and retrieval of charge history.
- Wide range AC mains input (85–270 VAC) allows use of one charger anywhere in the world and eliminates the need to stock and service multiple models.
- Convection cooling eliminates the need for a cooling fan, thereby increasing reliability and eliminating the need for fan replacement/service.
- Advanced, high-frequency, switchmode design allows more efficient (90% typ), faster charging and optimal charging independent of battery type or condition.
- IP66 protection allows reliable operation in harsh environments.
- Power Factor of >0.98 minimizes utility surcharges and optimizes the use of AC line power.
- Select from an extensive list of approved charge algorithms (default I_1, I_2, U, I_3).
- The chargers can store 25 separate algorithms which can be selected to match the specific batteries in use, thereby eliminating the need for multiple models and resulting in lower operating costs.
- Lightweight and compact size allows on-board use and offers space advantages over ferro-resonant chargers in traditional off-board installations.

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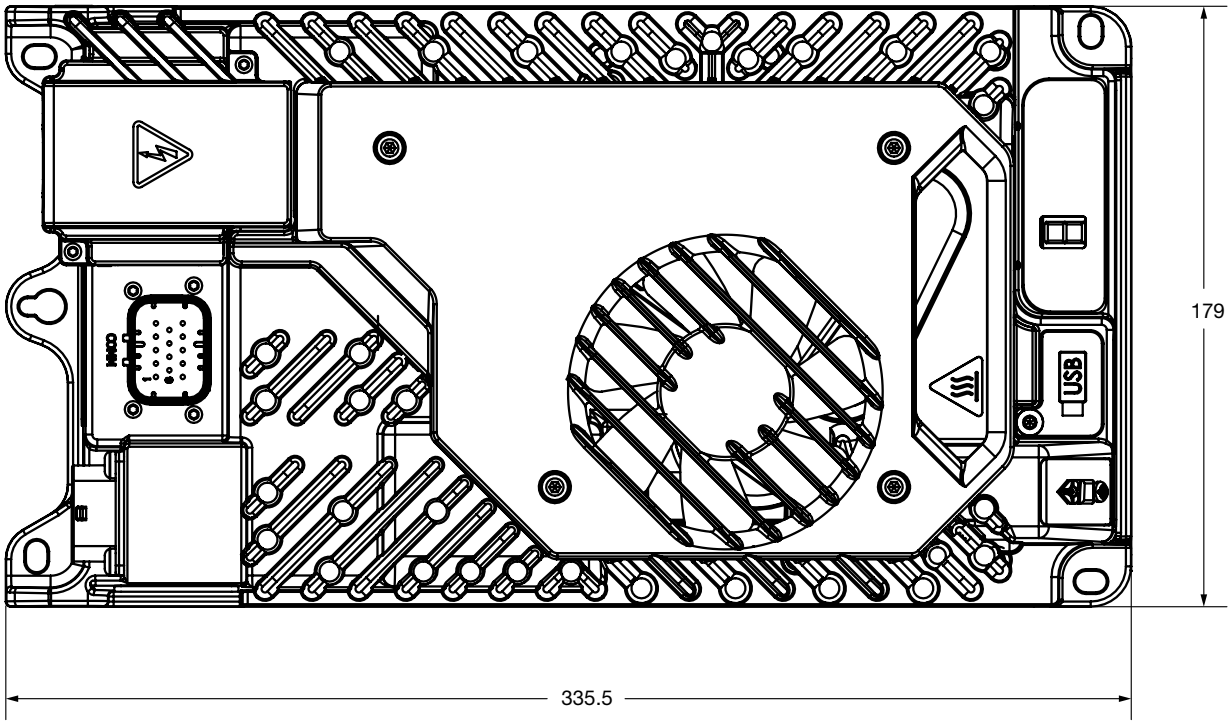
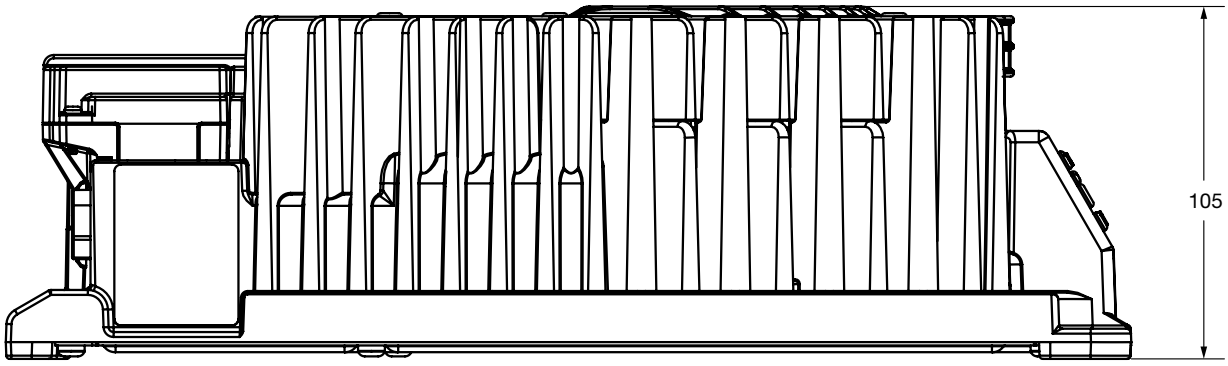
DIMENSIONS mm





NOTES:

1. AC & DC cables are available. For a full list, please contact Curtis Instruments.
2. Optional accessories are available as factory fit or stand alone items.
3. Drawings for optional accessories and cables are available on request.

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SPECIFICATIONS

DC Output	24 VDC	36 VDC	48 VDC
Maximum DC output voltage	36 V	54 V	72 V
Maximum DC output current	50.0 A	33.3 A	25.0 A
Maximum DC output power	1200 W		
Deep discharge recovery (minimum voltage)	1.2 V	1.8 V	2.4 V
Maximum C3 interlock signal current	10.0 A	2.0 A	0.5 A
Maximum COMM models interlock relay current	2.0 A	1.5 A	1.0 A
Battery type	Lead acid (wet / AGM / gel), lithium		
Reverse polarity	Electronic protection with auto-reset		
Short circuit	Electronic current limit		

AC Input		
AC input voltage range	85–270 VAC	
Nominal AC input voltage	100–240 VAC	
Nominal AC input frequency	50 / 60 Hz	
Maximum AC input current	14.5 A	
Nominal AC input current	13.4 A @ 100 VAC	11.1 A @ 120 VAC
	5.7 A @ 230 VAC	5.5 A @ 240 VAC
Power factor	>0.99 @ 120 VAC	>0.98 @ 230 VAC

Regulatory	
Effciency	90% at full load, 120 VAC, 48 VDC | 92% at full load, 240 VAC, 48 VDC California Energy Commission (CEC) compliant
Safety	UL1564, CSA 107.2, EN 60335-2-29
Emissions	FCC Part 15 / ICES 003 Class A, EN55011
Immunity	EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-4

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SPECIFICATIONS continued

Mechanical	
Dimensions	33.5 x 17.9 x 10.5 cm (13.2 x 7.0 x 4.1″)
Weight	4.1 kg (9.0 lbs)
AC input connector	IEC320 / C14 (requires country-specific cord)
DC output connector	M6 threaded fasteners for ring terminals (field replaceable)
Service port	Sealed (IP66) USB 2.0 Host Port (Type A) with dust cover
Mounting holes	6.4mm (1/4″) diameter slots
Cooling	Active cooling with fan (Variable speed, field serviceable, field replaceable)

Environmental		
Enclosure	IP66 (NEMA4)	
Operating temperature	–40°C to +65°C (–40°F to 149°F)	Derated at >40°C (104°F)
Storage temperature	–40°C to +85°C (–40°F to 185°F)	

WARRANTY

Two year limited warranty from time of delivery.