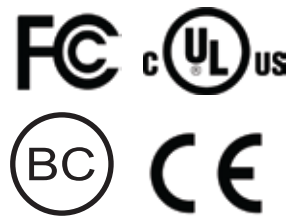


# 24V, 2.5A Lead Acid Battery Charger



## **Features**

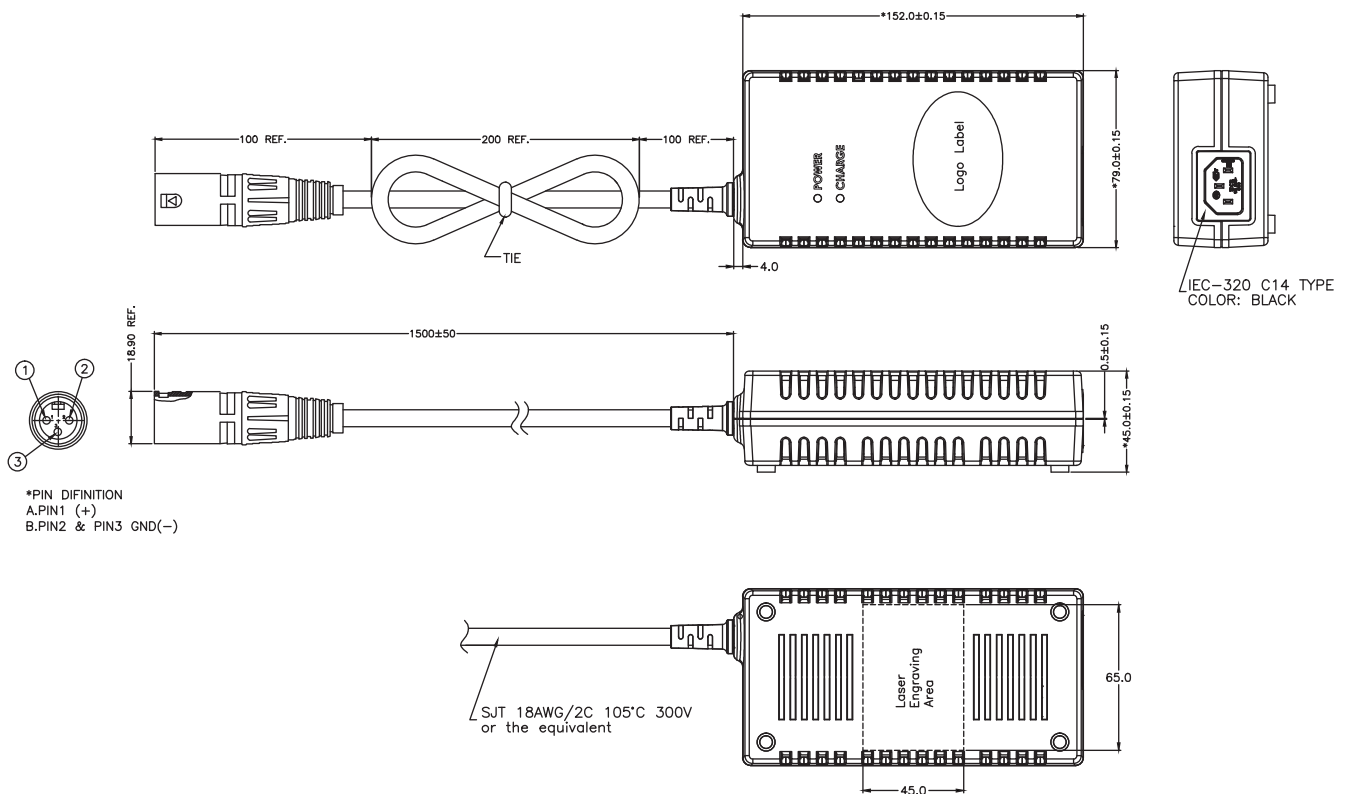
- *RESNA Compliant*
- *CEC Compliant*
- *LED Indicators Charge State*
- *OVP, OTP, SCP*
- *Charges AGM Batteries*
- *Max 12hrs Charging Time*

## **Applications**

- *Power Wheelchairs*
- *Electric Motorcycle*
- *Mobility Scooters*

Model name		DA60U-240A-R
Input	Input Rating	100 to 240VAC
	Input Current	1.5A(RMS)max for 115VAC; 0.75A(RMS)max for 230VAC
	Frequency	47-63 Hz
	No Load Input Power	≤0.21W at 230VAC
	Leakage Current	<0.1mA max at 264VAC
	Inrush Current	<150A max at 230VAC; <75A max at 115VAC(cold start at ambient 25°C)
	Hold-up Time	16mS at input voltage of 230VAC/60Hz, output load 60Wmax
Output	DC Output Voltage	24V
	Bulk Mode Voltage	29.6V
	Float Mode Voltage	27.3V
	Charge Current	2.5A
	Ripple	240mV pk-pk @25°C <sup>(1)</sup>
	Efficiency	24V/2.5A efficiency ≥85% @25°C min. at 115Vac/60Hz and 230Vac/50Hz input
	Over-Voltage Protection	32V trip point. Output will remain off until power is recycled
	Over-Temp. Protection	Non-latching
	Short-Circuit Protection	The output can be shorted without damage
	Reverse Polarity Protection	Shall produce no more than 100mA of current or any damage
	Battery Over-Charge Protection	Charger time-out. No greater than 12hrs, for bulk/absorption charging
Environmental	Temperature	Operating: -25°C to 50°C
		Non-Operating -25°C to 70°C
	Emissions	Humidity: 20% to 90% non-condensed
		Complies with FCC Part 15 Class B
		Complies with EN55014-1 and EN55014-2 Class B
		Complies with EN61000-3-2 Class A
	Immunity	Complies with EN61000-3-3
EN61000-4-2:2008		
EN61000-4-3:2006+A1:2007+A2:2010		
EN61000-4-4:2012		
EN61000-4-5:2014 + A1:2017		
Compliance	EN61000-4-6:2013	
	EN61000-4-8:2009	
	EN61000-4-11:2004 + A1: 2017	
General	Insulation Resistance	ISO 7176-14(RESNA) CISPR 11: 2015 IEC 60529-IPX1
	Hi-Pot Test	>100M Ohm minimum, 500VDC
	AC Input Connector	Primary to Secondary: 3000VAC for 1min, 10mA
	DC Output Cable	IEC C14 inlet
	DC Plug	SJT 18AWG Black; 1500mm±50mm
	DC Plug Pin Assignment	XLR connector
		Pin 1 = 24V(connected to battery+); Pins 2 & 3 = Ground (connected to battery-)

Model name		DA60U-240A-R
General	LED Indicator	Blue LED: bulk mode or float charge(state of charge)
		Bulk mode ● <b>Blinking 2Hz</b> ● Green LED: Indicates charge on Float mode ● ● Green LED: Indicates charge on
Outline	L x W x H	152mm(5.98in) x 79mm(3.11in) x 45mm(1.77in)
	Weight	650g(1.43lbs)



Notes:

(1)This is performed by applying a 0.1μF ceramic capacitor and a 47μF low-ESR Electrolytic capacitor across the test point and oscilloscope is setting 20MHz

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**Supplier's Declaration of Conformity**  
**47 CFR § 2.1077 Compliance Information**

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NOTE: This model has/The models in this product series have been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications to equipment not expressly approved by PHIHONG could void the user's authority to operate the equipment.