

# QA600A SERIES ON-BOARD SEAL CHARGER

This series chargers designed with sealed structure. It suitable for flooded lead acid batteries, sealed lead acid batteries, lithium-ion batteries, LifePO4 batteries, nickle cadmium batteries and etc. They are used to cycle charge or floating charge battery pack in electric bumper car, walk-behind mowers, patrol vehicles, fork lifts, floor scrubber, AGV, ships, electric aerial work platform, walk-behind mowers, electric watercraft and so on.

Models	Rated Voltage for Battery Pack	Max Output Voltage	Max Output current	CV			Transition/cut-off Current
				Lead Acid	Li-ion	LiFePO4	Li
QA600A-12V30A	12V	17V	30A	14.7V	12.6V	14.6V	3.0A
QA600A-24V15A	24V	34V	15A	29.4V	29.4V	29.2V	1.5A
QA600A-24V20A	24V	34V	20A	29.4V	29.4V	29.2V	2.0A
QA600A-36V12A	36V	47V	12A	44.1V	42.0V	43.8V	1.5A
QA600A-48V10A	48V	66V	10A	58.8V	54.6V	58.4V	1.0A
QA600A-60V08A	60V	84V	08A	73.5V	67.2V	73.0V	1.0A



## TECHNOLOGY PARAMETERS

- AC Input Voltage Range: 185-270VAC; 45-63Hz
- AC Input Max Current: 3.0A@220VAC
- Efficiency:  $\geq 92.0\%$
- Noise:  $\leq 45\text{dB}$
- Protection level: IP65

## SAFFTY

- Active LLC technique is applied for a rapid respond on a fault; Quick active software self-protection and reliable passive hardware self-protection on voltage & current; Advanced charging strategy is integrated as a safeguard for battery system.

## RELIABILITY

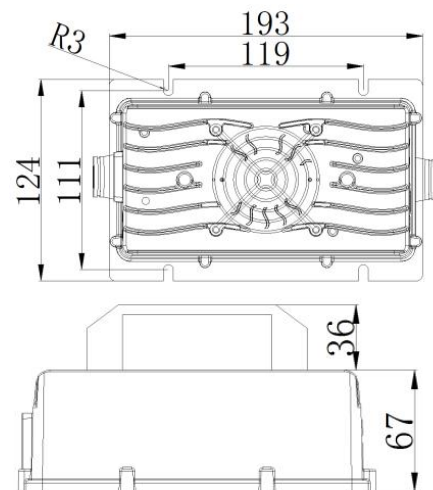
- The shell is shaped by integrated die casting technique. And filled with special glue. The active cooling fan is also designed to be a fan with a potting structure and a longer life. This charger series have been operating in all kinds of industrial environment (wet. hot. cold. high altitude) for more than ten years, the design is proved to pass the verification.

## FUCTIONS

Triple colors indicator is compatible. Vehicle charging lock system is compatible. Can meet common standards of charge for EV.

## SIZE & WEIGHT & TEMPERATURE

- Net Weight: 1.7kg
- Operating Temperature:  $-30^{\circ}\text{C}$ — $65^{\circ}\text{C}$
- Storage Temperature:  $-40^{\circ}\text{C}$ — $95^{\circ}\text{C}$
- Size: 193\*124\*67mm



## PROTECTION FUNCTIONS

- Burnout Protection: Temperature of charger exceeds the limitation. The charge will low down the power load. Temperature of environment exceeds  $65^{\circ}\text{C}$ , the charger will stop charging and switch itself to standby mode until temperature of environment goes down.

- Protection for Reverse Connection of Batteries: The circuit inside the charger shuts down with batteries when the batteries are connected reversely and will not damage the charger.

- NO-load Protection: There is no output when the batteries are not connected.

- Short Circuit Protection: The circuit inside the charger shuts down with batteries when output is short circuit. The charger will start charging only after troubleshooting and restart the charger.

- Automatic shutdown when fully charging: The charging automatically turns off after the battery is fully charged according to the charger's judgment.