# **QA450A SERIES ON-BOARD SEAL CHARGER**

This series chargers design of sealed structure. It suitable for flooded lead acid batteries, sealed lead acid batteries, Lithium batteries, NI-MH batteries, Nickle Cadmium batteries, etc. They ate used to cycle charge or floating charge battery pack in electric Bumper Car, Walk-behind Mowers, fork lifts, Floor Scrubber, AGV, ships, Electric Aerial Work Platform Walk-behind Mowers Electric Watercraft

Models	Rated	age for Output	Max Output current	CV			Transition/cut- off Current
	Battery Pack			Lead Acid	Li-ion	LiFePO4	Li
QA450A-12V15A	12V	15A	15	14.7V	12.6V	14.6V	1.5A
QA450A-24V12A	24V	34V	12	29.4V	29.4V	29.2V	1.5A
QA450A-24V15A	24V	34V	15	29.4V	29.4V	29.2V	1.5A
QA450A-36V10A	36V	48V	10	44.1V	42.0V	43.8V	1.0A
QA450A-48V06A	48V	66V	06	58.8V	54.6V	58.4V	1.0A



#### **TECHNOLOGY PARAMETERS**

- AC Input Voltage Range : 185-270VAC; 45-63Hz
- AC Input Max Current : 4.0A@220VAC
- Efficiency:  $\geq$  92.0%
- Noise :  $\leq$  45dB
- Protection level : IP65

### SAFFTY

Active Switches forward 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

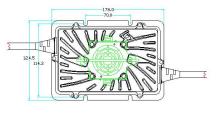
• The shell is shaped by integrated die casting technique. And filled with special glue. The active cooling fan is also designed to be a fan with a potting structure and a longer life. Products of Charger Series have been operating in all kinds of industrial environment (Wet. Hot. Cold. High altitude) for more than ten years, the design is proved to pass the verification.

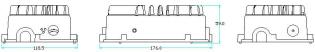
# **FUCTIONS**

Double Colors Indicator is compatible.

SIZE AND WEIGHT&TEMPERATURE

- Net Weight: 1.7kg
- Operating Temperature: -30°C-65°C
- Storage Temperature: -40°C-95°C
- Size: 176\*124.5\*59





#### PROTECTION FUNCTIONS

Burnout Protection: Temperature of charger exceeds the limitation. The charge will low down the power load. Temperature of environment exceeds 65  $^{\circ}$ 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.