RC Series

Delta-Q Technologies RC Series

900W-1200W Battery Charger for Lithium and Lead-Acid Battery Chemistries

RC Series chargers are robust battery chargers certified for use on residential and industrial electric applications. Versatile CANopen and J1939 CAN bus features allow OEMs to extract charger status, update algorithms and software, and view fault and error logs. Suitable for applications in floor care, utility vehicles, aerial work platforms and material handling.

RC1200

Available Models	24V	36V	48V
RC900 Models		✓	✓
RC1000 Models	✓		
RC1200 Models		✓	✓

✓ Lead-Acid

✓ Lithium

Charger Features

Global + Efficient

Reliable operation on any single-phase grid worldwide. High-efficiency performance for electricity savings and shorter charge times.

High Reliability

Rugged, IP66 sealed aluminum die-cast enclosure protects against vibration, shock, dirt, chemicals and fluids. Manufactured in a world-class facility specializing in high-reliability solutions.

OEM System Integration

CAN bus enables OEMs to update the software of the charger, algorithms, and extract charger status, charger history, fault and error logs. For lithium-ion applications, the BMS can control the charger through CAN bus.

UNECE R10 Standard Compliance

Compliance with UNECE R10 and European touch-safe voltage regulations allows for easy integration into electric vehicles.

Charge Quality

Charge algorithms to precisely charge all types of lithium and lead-acid batteries (including deep-cycle) while balancing charge time, battery life and application requirements.

On- and Off-Board Installations

Optionally available with a handle, the RC series can be installed both on-board the application and off-board.

OEM Features

- CAN bus communication for machine telematics / BMS integration
- Safety interlock feature to prevent vehicle movement while charging
- OEM customizable, field replaceable cable design
- Auto-recharge for low voltage in maintenance mode
- Optional battery temperature sensing and remote LED.
- Optional tri-color LED and button for charging status, charge algorithm selection, error and fault indication

RC900

Application Examples

DC Output	RC900 **36V**	RC900 **48V**	RC1000 **24V**	RC1200 **36V**	RC1200 **48V**
Max DC output voltage	54 VDC	72 VDC	36 VDC	54 VDC	72 VDC
Max DC output current	25.0 A	20.0 A	41.3 A	33.0 A	25.0 A
Max DC output power	900 W	900 W	1000 W	1200 W	1200 W
Deep discharge recovery (Lead-acid minimum voltage)	0.1 VPC	0.1 VPC	0.1 VPC	0.1 VPC	0.1 VPC
Dry contact interlock current rating	1.0 A	0.3 A	1.0 A	1.0 A	0.3 A
Lithium final charging voltage	36-54 VDC	48-72 VDC	24-36 VDC	36-54 VDC	48-72 VDC
Lithium cells in series	8 to 14	10 to 19	5 to 9	8 to 14	10 to 19
Battery type	Lead-acid (wet / AGM / gel), lithium-ion				
Reverse polarity	Hardwired with Poka-Yoke DC terminals & electronic protection with auto-reset				
Short circuit	Electronic current limit				
AC Input	RC900 **36V**	RC900 **48V**	RC1000 **24V**	RC1200 **36V**	RC1200 **48V**
AC input voltage range	85-270 VAC				
Nominal AC input voltage range	100-240 VAC				
Nominal AC input frequency	50/60 Hz				
Max AC input current	10.5 A	10.5 A	11.25 A	14.0 A	14.0 A
Nominal AC input current	8.4 A @ 120 VAC	8.4 A @ 120 VAC	11.1 A @ 120 VAC	11.1 A @ 120 VAC	11.1 A @ 120 VAC
	4.3 A @ 240 VAC	4.3 A @ 240 VAC	5.7 A @ 240 VAC	5.7 A @ 240 VAC	5.7 A @ 240 VAC
Nominal AC power factor	>0.99 @ 120 VAC, >0.98 @ 230 VAC				
Mechanical	RC900 **36V**	RC900 **48V**	RC1000 **24V**	RC1200 **36V**	RC1200 **48V**
Dimensions	300 x 179 x 80 mm (11.8 x 7.0 x 3.2”)				
Weight	3.65 kg (8.0 lbs)		3.55 kg (7.8 lbs)		
AC input connector	IEC320/C14 with Delta-Q country-specific AC cord				
DC output connector	Poka-Yoke threaded fasteners for ring terminals. Negative: M6; Positive M8				
Mounting holes	M6 diameter slots				
Cooling	Natural convection		Forced convection with variable speed fan		
Regulatory	**All Models**				
Efficiency	93% peak efficiency; California Energy Commission (CEC) and Department of Energy (DOE) compliant				
Safety	CE, UL1564, EN 60335-2-29, AS/NZS60335 (RCM)				
Emissions	**All Models:** FCC Part 15 / ICES 003 Class B, EN 61000-3-2, EN 61000-3-3, EN 61000-6-3, CISPR 14.1 **RC900 48V and RC1200 48V:** UNECE R10				
Immunity	**All Models:** CISPR 14.2, EN 61000-6-2 **RC900 48V and RC1200 48V:** UNECE R10				
Environmental	**All Models**				
Enclosure	IP66 (NEMA4)				
Mechanical shock & vibration	Shock: ISO 16750-3 chap. 4.2.2. Vibration: ISO 16750-3 chap. 4.1.2.4 (Test IV: vehicle body) GMW 3172				
Operating temperature	-40°C to +65°C (-40°F to 149°F)				
Storage temperature	-40°C to +85°C (-40°F to 185°F)				
Regulatory	**All Models**				
	CE, cULus, LISTED, BC, KC				

Please note the above specifications are subject to change.

info@delta-q.com

www.delta-q.com

DOCUMENT **720-0032** R1 LAST UPDATED: 07/09/2018