



*Dolphin*  
charger



**DOLPHIN 1 - DOLPH2 - 12 VOLT**

Ref	Type	Characteristics	Ref	Type	Characteristics
299000	12V10A	2 Output 115/230V Manual	299700	12V10A	2 Output 115/230V Manual
299002	12V15A	2 Output 115/230V Manual	299702	12V15A	3 Output 115/230V Manual
299004	12V20A	2 Output 115/230V Manual	299715	12V20A	3 Output 115/230V Auto
299070	12V30A	3 Output 115/230V Manual	299770	12V30A	3 Output 115/230V Auto
299003	12V40A	3 Output 115/230V Manual	299703	12V40A	3 Output 115/230V Auto
299011	12V60A	3 Output 115/230V Manual	299711	12V60A	3 Output 115/230V Auto
299008	12V80A	3 Output 230V	299708	12V80A	3 Output 115/230V Auto
299508	12V80A	3 Output 115/230V Manual			
299007	12V100A	3 Output 115/230V Manual	299707	12V100A	3 Output 115/230V Auto

All DolphIN Battery Chargers are 50/60Hz automatic

**REMOTE PANELS (OPTIONAL)**

For all models of DolphIN Battery Chargers



Reference: 299034  
DOLPHIN 1

Reference: 299037 (for 12v30a and higher)  
DOLPH2 - 3 m cable  
supplied as standard



**DOLPHIN 1 - DOLPH2 - 24 VOLT**

Ref	Type	Characteristics	Ref	Type	Characteristics
299072	24V10A	3 Output 115/230V	299772	24V10A	3 Output 115/230V Auto
299010	24V20A	3 Output 115/230V	299710	24V20A	3 Output 115/230V Auto
299012	24V30A	3 Output 115/230V	299712	24V30A	3 Output 115/230V Auto
299514	24V40A B	3 Output 115/230V		See 299714	
299014	24V50A	3 Output 230V	299714	24V50A	3 Output 115/230V Auto
299515	24V60A B	3 Output 115/230V		See 299716	
299016	24V80A	3 Output 230V		See 299716	
299516	24V80A	3 Output 115/230V	299716	24V80A	3 Output 115/230V Auto
299017	24V100A	3 Output 230V	299717	24V100A	3 Output 230V
299018	24V120A	3 Output 230V	299718	24V120A	3 Output 230V
			299795	24V120A	3 Output 230V - 3 phase
299243	24V120A	3 Output 400V	299728	24V120A	3 Output 400V - 3 phase
299046	24V150A	3 Output 400V	299796	24V150A	3 Output 230V - 3 phase
299046	24V150A	3 Output 400V	299730	24V150A	3 Output 400V - 3 phase
299019	24V160A	3 Output 230V	299719	24V160A	3 Output 230V

All DolphIN Battery Chargers are 50/60Hz automatic

All New DolphIN Battery Chargers have a **Power Supply** Mode at position 8.

Ref	Type	Characteristics	Ref	Type	Characteristics
299616	24V60A B	3 Output 115/230V	299716	24V80A	3 Output 115/230V
299610	24V80A	3 Output 115/230V			
299612	24V100A	3 Output 230V	299717	24V100A	3 Output 230V
299614	24V120A	3 Output 230V	299718	24V120A	3 Output 230V



Battery chargers

Battery chargers



An easy to understand panel s  
status of the charger or present  
(Optional remote panel also av

All Do  
Battery C  
are CE

Blue plastic flanges to support and attach the charger.

Modern lightweight and compact design with white aluminum powder coated casing

Programme selector switch (Not 12V10, 15 20A or 24V10A) including winterizing and 6 battery types

A cover that can wing greater protection installation. The the elements ne installation.

Built in fan



Clearly indicated access terminals cable output poi

Temperature sensor for battery compensation

Showing the  
presence of faults.  
(available)

Dolphin  
Chargers  
marked



ISO 9002 certified  
manufacturing plant

Universal AC input vol-  
tage 115/230 VAC  
50/60 Hz

Switch mode technology  
and four-stage charging  
design

Latest SMD electronic  
construction technology

Internal connection for LED remote panel

LED Display for Programming &  
Monitoring Functions

Battery chargers

# Main characteristics of all Dolphin Chargers.

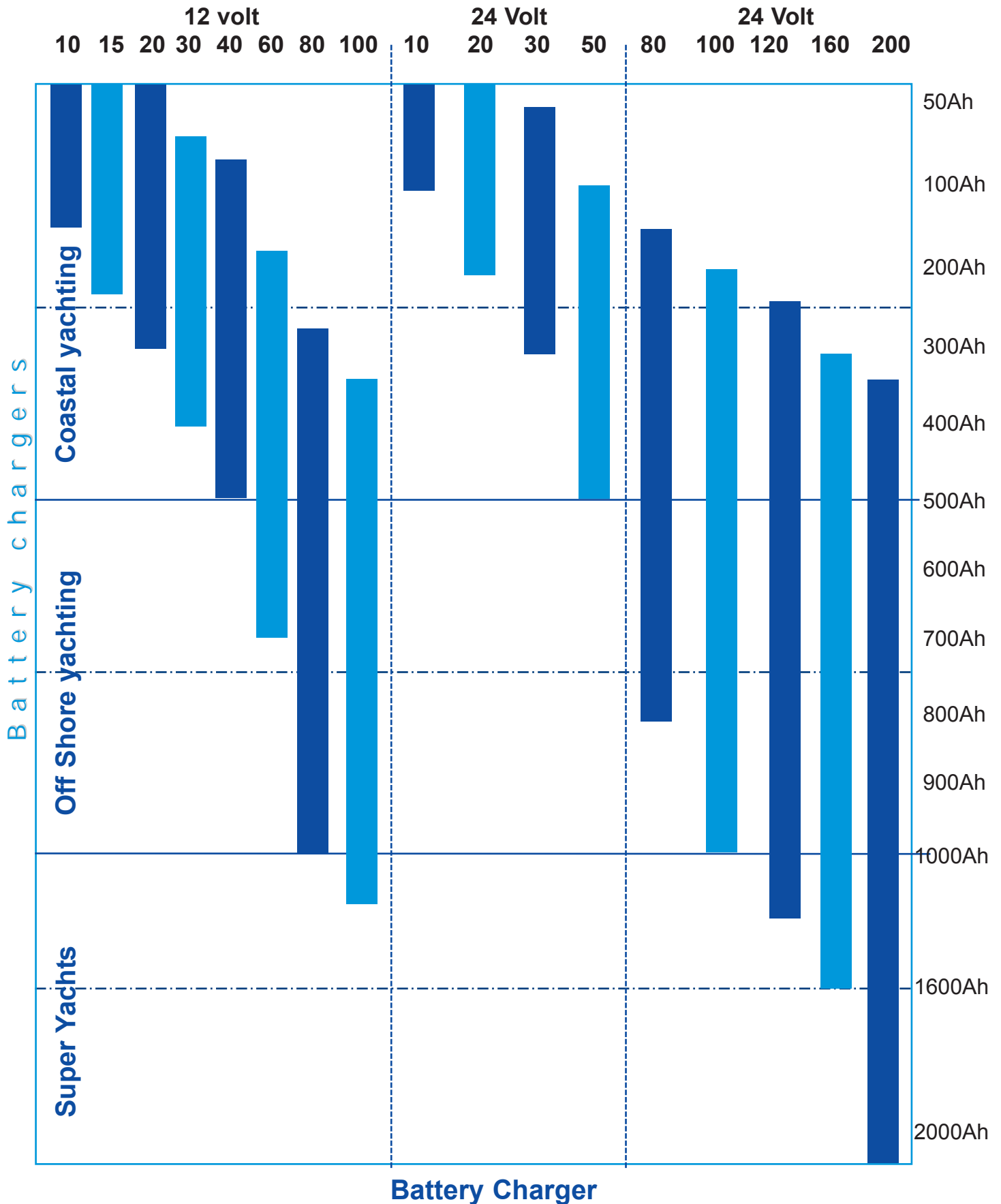
be only partially removed, allo-  
cation of the PC Board during  
technician only has access to  
necessary to carry out a successful

3 independent DC  
terminals with an individual  
terminal for each terminal.



3 year warranty  
(2 years for 12v10a /15a /20a & 24v10a)

## How to choose the right Dolphin Charger for your boat



We recommend a charging rate to a maximum of 20% of the amp hour capacity of the battery.  
E.g. the charger for a 300Ah battery is maximum 60amps.

## Electrical cabinet

This new concept combines AC circuit protection with a battery charger. The AC circuit protection includes a residual current device (RCD\*\*) and 2 miniature circuit breakers (MCB). The battery charger is an IUoU charging curve switch mode type with 2 or 3 outputs for engine and service batteries.



\*\*GFCI - Ground fault circuit interrupter

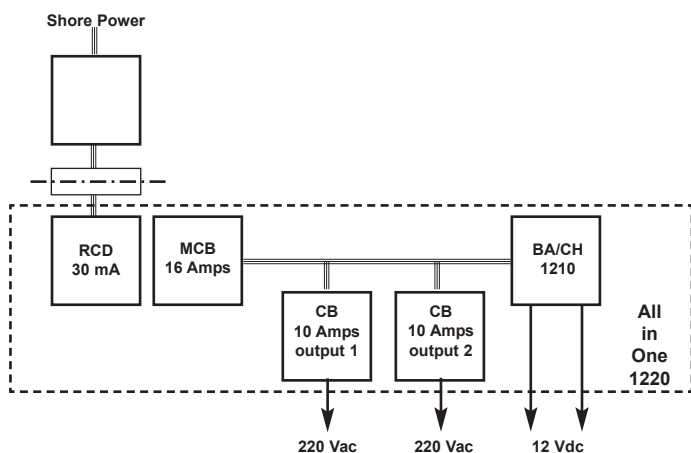


In today's high tech world, more and more people need a compact and efficient source of electrical power on small craft. **REYA has developed an innovative "All-in-One" unit which combines an AC distribution system with a 12V switch mode battery charger**, all in the same compact box.

**AC circuit protection is by means of a 30 mA, 16 amp R.C.C.B. unit.** Two AC loads can be connected, each with its own 10 amp double pole circuit breaker.

**The battery charging function is identical to that in the standard Dolphin Battery Charger.**

The "All-in-One" units are available in **3 different models**, 10amp, 15amp and 20amp. All have 2 or 3 outlets to provide charging for 2 or 3 separate banks if required.



### Norm

#### ISO 13297 (electrical systems-Alternating current installations)

##### 3.7.5 Main supply circuits

A manually reset trip free double-pole circuit breaker shall be installed in conductors to the main power supply circuits.

##### 3.8 Earth leakage protection / Ground fault protection

3.8.2 The main supply circuit shall be equipped with a double-pole RCD breaker having a maximum nominal trip sensitivity of 30 mA (this value is for quick tripping and protection against personal shock) and 100 milliseconds maximum trip time.

The unit conforms to the latest ISO 13297 regulations.

Model:	10 amp	15 amp	20 amp
Voltage:	12 V	12 V	12 V
Charger outputs:	2	3	3
Charge:	10A	15A	20A
Charging characteristics:	IUoU	IUoU	IUoU

Model	Reference	Code	Weight & Dimensions
12V 10amps	ALLINONE1210	299810	2.1kg & 265x280x110mm
12V 15amps	ALLINONE1215	299815	2.1kg & 265x280x110mm
12V 20amps	ALLINONE1220	299820	2.1kg & 265x280x110mm

# Battery Chargers 12 Volt

## Coastal Yachting - 12V 10A - 12V 120A



**DOLPHIN**  
12V 10A / 15A



**DOLPHIN**  
12V 30A / 40A

### DOLPHIN2 Battery Chargers - 12 Volt

- provide a reliable, stress free way to charge batteries. They are compatible with all types of generators currently available on the market.  
Your Dolphin Battery Charger has an automatic 115V/230V switchover (except 12v10a & 12v15a) meaning that your charger is always compatible with shore power. Acceptable voltage range is 98 - 130 Volts and 195 - 265 Volts. Regardless of the quality of shore power (weak shore power supply in high summer) your DOLPHIN 2 will work efficiently.
- **Sturdy & reliable**, there are **6 charging programmes** suitable for all common types of marine batteries. In addition, there are 2 winterising programmes, 1 sulphation recovery programme & 1 power supply programme. This latter function is very practical for certain on board instruments or for guaranteeing a constant & efficient illumination whilst prolonging the life of the light bulb.

### Remote Control Panel



Dolphin 2

#### Remote Control Panel Dolphin 2:

Suitable for the complete **DOLPHIN2** range (from 12V 30A), this panel carries out the same functions as the display panel on the front of the charger.

Dimensions: 120 x 65 mm (15 mm deep).  
Supplied with 5m flat cable & connector.

Description	Reference	Code
Control Panel (Dolphin 2)	REMOTIBC2	299037

#### Accessories:

Extensions (cable & connectors)	Reference	Code
5 meters	RAL5M	299077
15 meters	RAL15M	299078
Temperature Sensor	SONDE-T	299045

### Charging Programmes

By internal switch for: 12V30A - 12V80A (DOLPHIN2)

Position	U. Boost	U.Float.
0- Cycle Wet or flooded electrolyte batteries	14.4V	13.2V
1- Cycle Sealed Lead batteries/ <b>MAXIMA</b>	14.2V	13.6V
2- Cycle Lead Calcium batteries	14.8V	13.8V
3- Cycle DELPHI batteries	15.4V	13.8V
4- Cycle OPTIMA batteries	15.5V	13.8V
5- Winterisation Free lead batteries	14.4V	13.2V
6- Winterisation Sealed Lead batteries Gel - DELPHI - MAXIMA	14.2V	13.6V
7- Cycle Gel batteries	14.4V	13.8V
8- Power Supply		13.6V
9- Sulphation recovery Programme	17.0V	13.8V

# Battery Chargers

## Dolphin charger 2 12V

Models	12V 10A	12V 15A	12V 20A	12V 30A	12V 40A	12V 60A	12V 80A	12V100A
<b>Codes</b>	<b>299700</b>	<b>299702</b>	<b>299715</b>	<b>299770</b>	<b>299703</b>	<b>299711</b>	<b>299708</b>	<b>299707</b>
<b>Battery capacity</b>	→ 160 Ah	→ 220 Ah	→ 300 Ah	→ 400 Ah	→ 500 Ah	→ 700 Ah	→ 1000 Ah	→ 1200 Ah
<b>Input:</b>								
<b>Input Voltage</b>	115V/230V ± 15%							
<b>Frequency</b>	50/60 Hz ± 10%							
Switchover 115V/230V	Manual	Manual	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Cos phi	0.65 typ.	0.65 typ.	0.9 typ.	0.9 typ.	0.9 typ.	0.9 typ.	0.9 typ.	0.9 typ.
Efficiency	>80%							
Max current 115/230V	2.0A / 1.0A	3.2A / 1.6A	3.7A / 1.4A	4.8A / 2.4A	6.4A / 3.2A	10A / 5A	14A / 7A	18A / 9A
Max power rating	160W	240W	300W	490W	650W	980W	1300W	1900W
Active Power	250 VA	370 VA	350 VA	550 VA	735 VA	1100 VA	1450 VA	2100VA
Fuse	T3A 5x20	T4A 5x20	T5A 5x20	T8A 6.3x32	T10A 6.3x32	T15A 6.3x32	T15A 6.3x32	2 x T15A
<b>Output:</b>								
<b>Number of DC outputs (isolated)</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
<b>Max Charge</b>	<b>10 A ±5%</b>	<b>15 A ±5%</b>	<b>20 A ±5%</b>	<b>30 A ±5%</b>	<b>40 A ±5%</b>	<b>60 A ±10%</b>	<b>80 A ±10%</b>	<b>100 A ±10%</b>
Charging Curve	I.U.Uo 3 stages			Depends on charging programme			Depends on charging programme	
Charge selector	2 pos. (Normal & Pb-Ca)							
Position "Norm."	All types of batteries							
Position "Pb-Ca"	Lead-Calcium Batteries							
Boost DC1 (norm)	14.4V	14.4V	14.4V	10 charging programmes				
Boost DC1 (Pb-Ca)	15.0V	15.0V	15.0V					
Float DC1 (norm & Pb-Ca)	13.8V	13.8V	13.7V					
DC2, DC3 Outputs	DC1-0.3V	DC1-0.3V	DC1-0.3V					
Voltage Share	± 2%			± 2%			± 2%	
Ripple	< 1%			< 1%			< 1%	
Fuse	F15A	F20A	F25A	2 x F20A	2 x F30A	3 x F30A	4 x F30A	4 x F30A
<b>Protection</b>								
Short Circuit fault	Electronic			In case of output overload - Output short-circuit				
Temperature fault	Vigitherm (15A only)			excessive internal or battery temperature (optional)				
Reverse polarity	Battery fuse			faulty external temperature (optional) -				
General failure	Fuse			Output overvoltage - General fault				
Display	LED On-Off			6 LEDs				
Remote panel	No			Octopus Panel (optional)				
<b>General</b>								
Control	--			Microprocessor based RISC technology				
Operating/storage temp	0°C to +50°C / -20°C to +70°C			0°C to +50°C / -20°C to +70°C				
Humidity	10% to 90% (without condensation)			10% to 90% (without condensation)				
Electronic protection	By tropicalisation			By tropicalisation				
Convection	Speed controlled cooling (natural 10A)			Forced Fan Cooling				
EMC	EN50081-1, EN50082-1, EN61000-3-2			EN50081-1, EN50082-1, EN61000-3-2				
Security	EN60335-1			EN60335-1				
<b>Housing</b>								
Construction	White aluminium with powder coated treatment - blue plastic flanges							
Protection	IP22							
Mounting	Wall mounted 4 x M4 screws							
H x W x D	180x170x100	180x170x100	200x180x100	270x290x120	270x290x120	330x350x120	330x350x120	330x370x170
Weight	1.5 Kg	1.5 Kg	1.5 Kg	4 Kg	4 Kg	5 Kg	5 Kg	8 Kg

# Battery Chargers

24v 10a to 24v50a



DOLPHIN  
24V 10A



DOLPHIN  
24V 50A

Battery chargers

## Remote Control Panel



Dolphin 2

### Remote Control Panel Dolphin 2:

Suitable for the complete **DOLPHIN2** range (from 12V 30A), this panel carries out the same functions as the display panel on the front of the charger.

Dimensions: 120 x 65 mm (15 mm thick).  
Supplied with 5m flat cable & connector.

Description	Reference	Code
Control Panel (Dolphin 2)	REMOTEBC2	299037

### Accessories :

Extensions (cable & connectors)		
5 meters	RAL5M	299077
15 meters	RAL15M	299078
Temperature Sensor	SONDE-T	299045

## DOLPHIN2 chargers - 24 Volts

- **For truly international boats.**  
These Battery Chargers have been programmed to automatically adapt themselves (without the need for manual intervention) to monophasic voltages worldwide (115V 50 or 60 Hz - 230V 50 or 60 Hz 240V 50 Hz ...).
- **The 24 battery charger range is the most complete one on the international market.** The range begins with the small but highly talented 24V 10A and goes all the way to the very powerful 24V 400A which is capable of equipping even the most luxurious yachts.

The larger chargers (80A plus) are described in the Superyacht section.

- **Thanks to the 10 charging positions**, these chargers are suitable for use with all major battery types currently available on the market: Acid Free, Gel, Lead Calcium, 2V batteries...

The enormous advantage of position 8 is the possibility it offers to use the charger as a stable Power Supply unit. This allows a stable and continuous power supply needed for certain on board equipment which need to be running constantly as well as prolonging the life of items such as light bulbs.

## Charging Programmes

By internal switch for: 24V20A to 24V50A (DOLPHIN 2)

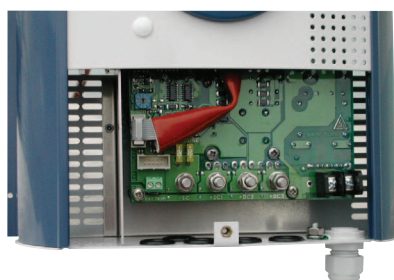
Position	U. Boost	U.Float.
0- Cycle Wet or flooded electrolyte batteries	28.8V	26.4V
1- Cycle Sealed lead batteries/MAXIMA	28.4V	27.2V
2- Cycle Lead calcium batteries	29.6V	27.6V
3- Cycle DELPHI batteries	30.8V	27.6V
4- Cycle OPTIMA batteries	31.0V	27.6V
5- Winterisation Free lead batteries	28.8V	26.4V
6- Winterisation Sealed lead batteries Gel - DELPHI - MAXIMA	28.4V	27.2V
7- Cycle Gel batteries	28.8V	27.6V
8- Power supply		27.2V
9- Sulphation recovery programme	34.0V	27.6V



# Battery Chargers

## Dolphin charger 2 24V

Models	24V 10A 299772	24V 20A 299710	24V 30A 299712	24V 50A 299714	24V 80A 299716 299539	24V100A 299717
<b>Built in alarm:</b>						
<b>Battery capacity</b>	→ 160 Ah	→ 300 Ah	→ 500 Ah	→ 800 Ah	→ 800 Ah	→ 1000 Ah
<b>Input:</b>						
<b>Input voltage</b>	115V/230V ± 15%					230V ± 15%
<b>Frequency</b>	50/60 Hz ± 10%					
Switchover 115V/230V	Automatic					NA
Cos phi	0.9 typ.					0.6 typ
Efficiency	>80%					
Max current 115/230V	3.2A / 1.6A	6.4A / 3.2A	5A / 10A	8A / 16A	26A / 13A	16A
Max Power Rating	300 W	650 W	980 W	1630 W	2700 W	3400 W
Active power	350 VA	735 VA	1100 VA	1850 VA	3000 VA	3800 VA
Fuse	T5A 5x20	T10A 6.3x32	T15A 6.3x32	T20A 6.3x32	2 x 20A	2 x 20A
<b>Output :</b>						
<b>Isolated outputs</b>	3	3	3	3	3	3
<b>Charging current</b>	10 A ±5%	20 A ±5%	30 A ±10%	50 A ±10%	80 A ±5%	100 A ±5%
Charging curve	I.U.Uo (3 stages)					
Charge selector	2 pos. (Norm. & Pb-Ca)					
Position "Norm."	All battery types					
Position "Pb-Ca"	Lead calcium battery					
Boost DC1 (norm)	28.8V					
Boost DC1 (Pb-Ca)	30.0V					
Float DC1 (norm&Pb-Ca)	27.2V					
Output DC2, DC3	DC1-0.6V					
Voltage share	± 2%					
Ripple	< 1%					
Fuse	F15A	F30A	2 x F25A	3 x F25A	4 x F30A	4 x F30A
<b>Protection</b>						
Short circuit fault	Electronic	In case of output overload - Output short-circuit				
Temperature fault	Vigitherm	excessive internal or battery temperature (optional)				
Reverse polarity	Battery fuse	faulty external temperature (optional) -				
General failure	Fuse	Output over voltage - General fault				
Display	LED On-Off	6 LEDs				
Remote panel	No	Octopus Panel (optional)				
<b>General</b>						
Control	-	Microprocessor based RISC technology				
Operating/storage		0°C to +50°C / -20°C to +70°C				
Humidity		10% to 90% (without condensation)				
Electronic protection		By tropicalisation				
Ventilation		Forced fan cooling				
EMC		EN50081-1, EN50082-1, EN61000-3-2				
Security		EN60335-1				
<b>Additional functions</b>						
1/2 charge		By switch on front of charger				
Paralleling		Yes				
<b>Housing</b>						
Construction	White aluminium with powder coated treatment - blue plastic flanges					
Protection	IP22					
Mounting	Wall mounted 4 x M4 screws					
H x W x D	200x180x100	270x290x120	330x350x120	330x350x120	330x360x170	330x360x170
Weight	1.5 Kg	4.0 Kg	5.0 Kg	5.0 Kg	8.0 Kg	8.0 Kg



### Safe & easy installation

Thanks to a handy opening on the front of the charger, the PC Board is protected throughout the installation phase. The installer only has access to the components he needs to complete the installation or perform any modifications. All other components are protected by the housing.

### Warranty

Dolphin Battery Chargers are protected by an international warranty against manufacturing faults for three years (providing they have not been used for purposes other than those intended by the manufacturers).



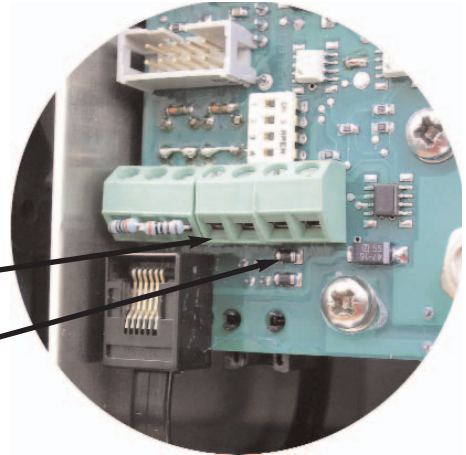
**DOLPHIN  
24V 100A**

## Superyachts - 24V 80A to 24V 400A

- Demand for energy on Superyachts and Super Motor Boats increases continuously as more and more appliances are adapted for use on board. In order to meet this increasing demand, Reya has produced a range of progressive chargers which allow users to change with their energy needs.
- These 24V 80 Amp and 24V 100 Amp chargers can be connected in parallel giving a charge capacity in 24V of 400 Amps (for a battery bank of 4000 Ah!) maximum, with a master charger that synchronizes the activities & functions of the group of chargers.

But that's not all, on a "small power quay", the 1/2 charge function will allow the user to top up the charge (to a minimum level) thus assuring the continuing operation of the batteries.

- Built in charger alarms are available



Detects charger fault

Low voltage alarm

### Remote Control Panel



**Dolphin 2**

#### Remote Control Panel Dolphin 2 :

Suitable for the complete **DOLPHIN2** range (from 12V 30A), this panel carries out the same functions as the display panel on the front of the charger.

Dimensions: 120 x 65 mm (15 mm thick).

Supplied with 5m flat cable & connector.

Description	Reference	Code
Control Panel (Dolphin 2)	REMOTEBC2	299037

#### Accessories:

Extension (cable & connectors)		
5 meters :	RAL5M	299077
15 meters	RAL15M	299078
Temperature sensor (Dolphin 24-80 & 24-100 - delivered as standard)	TS2480/24100	299042

## Superyachts

### Paralleling chargers

#### Heavy Duty Chargers: 24V-200/300/400 Amps

This power is obtained by putting 2-3 or 4 identical chargers in parallel.

Paralleling is secured by a RS485 type connection which offers the following advantages

- Up to 4 chargers in parallel.
- Synchronisation of charging curves.
- Centralisation of status display (battery charge & faults) on the master charger.
- Centralisation of controls (manual equalisation & 1/2 charge) on the master charger.

This operation must be carried out in the factory in line with specific internal programme settings.

*Most common combinations using 24V100A - see below; for other combinations, please consult us.*

### Dolphin Mega

	Code
24V200a	299724
24V300a	299725
24V400a	299729

Connector cable for paralleling

Code  
299721

# Battery Chargers

## Dolphin charger 2 24V

Models	24V120A	24V150A	24V160A
230VAC - 1 Phase	299718	-	299719
230VAC - 3 Phase	299795	299796	-
400VAC - 3 Phase	299728	299730	-
<b>Battery capacity</b>	<b>→ 1200 Ah</b>	<b>→ 1500 Ah</b>	<b>→ 1600 Ah</b>
<b>Input:</b>			
<b>Input Voltage</b>		See above ± 15%	
<b>Frequency</b>		50/60 Hz ± 10%	
Switchover 115V/230V		NA	
Cos phi		0.6 typ - 1 phase 0.9 typ - 3 phase	
Efficiency		>80%	
Max current 230VAC	20A/ 7A (1 / 3 phase)	9A (3 Phase)	27A (1 phase)
400VAC	7A (3 phase)	9A (3 Phase)	-
Max power rating	4050W	5400W	5400W
Active power	4500VA	6000VA	6000VA
Fuse	3 x 20A	3 x 20A	4 x 20A
<b>Output:</b>			
<b>Isolated outputs</b>	<b>3</b>	<b>3</b>	<b>3</b>
<b>Charging current</b>	<b>120A ±5%</b>	<b>150A ±5%</b>	<b>160A ±5%</b>
Charging curve	Depends on charging programme		
Charge selector	Depends on charging programme		
Position "Norm."	Depends on charging programme		
Position "Pb-Ca"	10 charging programmes		
Boost DC1 (norm)	Depends on charging programme		
Boost DC1 (Pb-Ca)	Depends on charging programme		
Float DC1 (norm & Pb-Ca)	Depends on charging programme		
Output DC2, DC3	Depends on charging programme		
Voltage Share		± 2%	
Ripple		< 1%	
Fuse	8 x F30A	8 x 30A	8 x 30A
<b>Additional functions</b>			
Paralleling	Max. 2 chargers in parallel - see "Superyachts"		
1/2 Charge	By button on front panel- see below		
<b>Housing</b>			
Construction	White aluminium powder coated treatment - with blue plastic flanges		
Protection	IP22		
Mounting	Wall mounted with 12 screws M4		
H x W x D	710x370x170		
Weight	14.6kg max		
<b>Protection</b>			
Short Circuit fault	In case of output overload - Output short-circuit		
Temperature fault	excessive internal or battery temperature (optional)		
Reverse polarity	faulty external temperature (optional) -		
General failure	Output over voltage - General fault		
Display	6 LEDs		
Remote Panel	Octopus Panel (optional)		
<b>General</b>			
Control	Microprocessor based RISC technology		
Operating/storage Temp	0°C to +50°C / -20°C to +70°C		
Humidity	10% to 90% (without condensation)		
Electronic protection	By tropicalisation		
Convection	Forced Fan Cooling		
EMC	EN50081-1, EN50082-1, EN61000-3-2		
Security	EN60335-1		



### 1/2 charge

By button on front of charger

1 short press → 1/2 charge.

1 short press → reverts to normal charge.

# OEM - 12V 20A & 40A Battery Chargers 3 output 115/230 VAC - 50/60 HZ



A product designed and developed with the specific needs of our OEM customers in mind, Reya is proud to present our OEM Battery Charger. We have paid special attention to the time necessary to install this charger - it's fast!

The features of this new Dolphin Battery Charger are synonymous with reliability and high efficiency and have a worldwide supported warranty and are insensitive to international differences in input voltage and frequency.

Models	20	40
Reya Reference	299520	299540
AC input:		
voltage range	115V/230V (±15%)	
frequency	50/60 Hz (± 10%)	
115V/230V adjustment	Internal	Automatic
AC consumption full load	575 VA	735 VA
Cos phi	0.6	0.9
Nominal battery voltage	12 Vac	
Charge current ± 5%	20 Amps	40 Amps
Battery capacity	200 Ah	400 Ah
Battery type setting	Lead Acid & Calcium Lead	<b>9 positions</b>
DC Outputs	3	
Output voltage (boost/float)		
Wet	14.4/13.6 V	14.4/13.2 V
Calcium	15.0/13.6V	14.2/13.6 V
Protections :		
Short-circuit	Yes	
Overload	Yes	
Reverse polarity	Yes	
Over-temp.	Yes	
Display	LED	Tricolour LED
Operating temperature	0°C to +50°C	
Storage temperature	-20°C to +70°C	
Humidity	10% - 90% (without condensation)	
Cooling	Forced fan cooling	
EMC standard	EN 50081-1 and EN 50082-1	
Safety standard	EN 60335-1	
Dimensions (HxLxD mm)	210x135x85	305x160x105
Weight	0.9kg	1.90kg
Enclosure	Powder coated aluminium	

Multi- charging programmes

Fully automatic multi-stage charger

Can charge up to 3 battery banks simultaneously

Protection features:

  Short-circuit protection

  Over-temperature shutdown

  Overload

  Input protection (fuses)

Tolerant to high input voltage variations

Advanced power switching technology

Built to ABYC and UL standards

CE marked

Marine-grade construction with conform tropicalized circuit boards.

Aluminium casing with powder-coated treatment for a better corrosion resistance

ISO 9001 assembling subcontractor

3 year warranty

### Charging programmes

(12v40a *only* by means of an internal switch)

**Switch position 00** Wet or flooded electrolyte batteries

**Switch position 01** Sealed lead batteries

**Switch position 02** Calcium-lead batteries

**Switch position 03** "AC DELCO" batteries

**Switch position 04** "Yellow Top" batteries

**Switch position 05** Free lead batteries winterising

**Switch position 06** Sealed lead batteries winterising

**Switch position 07** Gel batteries

**Switch position 08** Power Supply

**Switch position 09** Inoperative

*Dolphin*  
charger

# WATERPROOF BATTERY CHARGER



## Automatic Battery Charger Waterproof and shock resistant (IP65)

Nothing can damage this charger, not water, hydrocarbons or impurities. The housing is aluminium and the electronics are coated in resin.

### Thermal protection

This battery charger can even be used in warmer areas of the boat like the machine room. The higher the ambient temperature, the lower the power output (60°C+) but not even this will damage the charger.

### Automatic charger with 3 charging curves - IUoU

The battery is protected against all overloads and can remain permanently connected (operating in floating).

### Installation

Quick & easy to install, it is suitable for indoor and outdoor use and can be positioned horizontally or vertically.

Model	12 Volts - 7 Amps	12 Volts - 17 Amps
<b>Code</b>	<b>498000</b>	<b>498100</b>
<b>Battery capacity</b>	<b>18 - 80 Ah</b>	<b>20 - 180 Ah</b>
<b>Input</b>		
Input voltage	170 - 270 VAC	170 - 270 VAC
Input frequency	40 - 60 Hz	40 - 60 Hz
<b>Output</b>		
Number of outputs	1	1
Output voltage	14.4 / 13.8 VDC	14.4 / 13.8 VDC
Charging curve	IUoU	IUoU
Fuse (supplied)	6.3 / 10 Amps	6.3 / 20 Amps
<b>Protection</b>		
Short circuit	Yes	Yes
Reverse polarity	Yes (fuse)	Yes (fuse)
Temperature fault	Signalled by flashing LED	Signalled by flashing LED
<b>General</b>		
Operating temperature	-30 to +55°C	-30 to +55°C
Ventilation	natural	natural
Humidity	up to 100%	up to 100%
<b>Visualisation</b>		
Number of LEDs	2 (1 yellow + 1 green)	3 (1 yellow + 2 green)
LED (operation)	Boost / floating	Boost / floating
LED (alarm)	Reverse polarity - battery voltage too low - high temperature	
<b>Housing</b>		
Protection level	IP65 (Electronics immersed in resin)	
Material	Aluminium casing	
Colour	Grey	
Dimensions (LxWxH)	155 x 80 x 43 mm	192 x 98 x 47 mm
Weight	1.1 Kg	1.4 Kg
<b>Wiring</b>		
Gauge	3 x 0.75 mm <sup>2</sup> x 1.5m long - with EU rated plugs 2P+T	
Battery Cable	1 x 1.5 mm <sup>2</sup> x 1.5m long	1 x 1.25mm <sup>2</sup> x 1.5m long
<b>EMC</b>		
Security - emissions	EN 60335-1 / EN 60335-2-29 / EN 55014 / EN 60555-2 / EN 60555-3 EN 55022 Cl.B / EN 61000-3-2 / EN 61000-3-3 / EN 61000-4-2 EN 61000-4-11 / e-marking 95-54-EG	