

OPERATING AND USERS MANUAL

EN



Dolphin premium

Automatic battery chargers

12V10A

399000 – PF.09272

12V15A

399010 – PF.09273

12V25A

399020 – PF.09274

12V40A

399030 – PF.09275

24V20A

399040 – PF.10284

WARNING

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	12V 10A	12V 15A	12V 25A	12V 40A	24V 20A
Charging curve 1 Lead open		Battery type: Lead open			
		V.boost = 14,2V V.float = 13,2V		= 28,4V = 26,4V	
Charging curve 2 GEL		Battery type: GEL, AGM, Spiral			
		V.boost = 14,2V V.float = 13,7V		= 28,4 = 27,4	
Charging curve 3 Lead Calcium		Battery type: Lead Calcium			
		V.boost = 14,8V V.float = 13,7V		= 29,6 = 27,4	
Charging curve 4 Power Supply or LiFeSo4 with integrated BMS		Battery type: Power supply or LiFeSo4+BMS			
		V.boost = 14,2V V.float = 14,2V		= 28,4 = 28,4	
Weekly Equalization	automatic				
Voltage Allowance	+/- 2%				
Residual wave	< 1% pp (BW < 20 MHz)				
Current	10A	15A	25A	40A	20A
Fuse	F15A 32V Automotive	F20A 32V Automotive	2xF15A 32V Automotive	2xF25A 32V Automotive	2xF15A 32V Automotive
Protections	Against output overload, output short circuit, excessive internal temperature, excessive battery temperature, output overvoltage, battery reverse polarity (fuse)				
General					
Display	Tricoloured LED				
Night mode (Diagram B)	/	/	Button		
Operating temp	-10°C to +50°C / +14°F to +122°F				
Storage temp	-20°C to +70°C / -4°F to +158°F				
Humidity	10% to 90% (without condensation)				
Ventilation	Natural		Forced fan cooling		
EMC	EN61000-6-3 & EN61000-6-1				
Security	EN60335-2-29 (2002)				
Housing	White aluminium – wall mounted				
Mounting	2 x 4mm screws				
Dimensions (mm)	238(h)x120.5(w)x95.6(d)		354(h)x120.5(w)x 95.6(d)		
Weight	1.3 kg / 2.87lbs		1.9 kg / 4.2lbs		
Ac Connection	3 points, 20A 230V, 4mm ² max Ref : 770.813/G11-000 (WINSTA - WAGO)				
Battery Connection	4 points, 40A 630V, 10mm ² max Ref : PC 6-16/4-G1F-10,16 (PHOENIX CONTACT)				

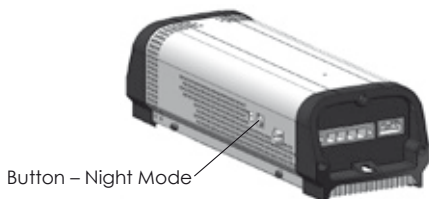
Diagram A :



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	12V 10A	12V 15A	12V 25A	12V 40A	24V 20A
Input					
Tension	230V +/- 15% 115V please consult us		115V - 230V (+/- 15%)		
Frequency	50Hz - 60Hz (+/- 10%)				
Cos phi	0.6 typ		0.9 typ		
Efficiency	80% typ				
Mains consumption	1.3A	1.9A	4A/2A	7A/3.5A	
Fusible	T2A 250V 5x20mm	T3, 15A 220V 5x20mm	T6A 250V 5x20mm	T10A 250V 5x20mm	
Output					
Nb of outputs	3 isolated outputs				
Nb charging curves	4 possible charging curves. Selection by external dip-switch				
Curves types	IUUo & automatic weekly equalization				
Charging profiles (Diagram A)					

Diagram B :



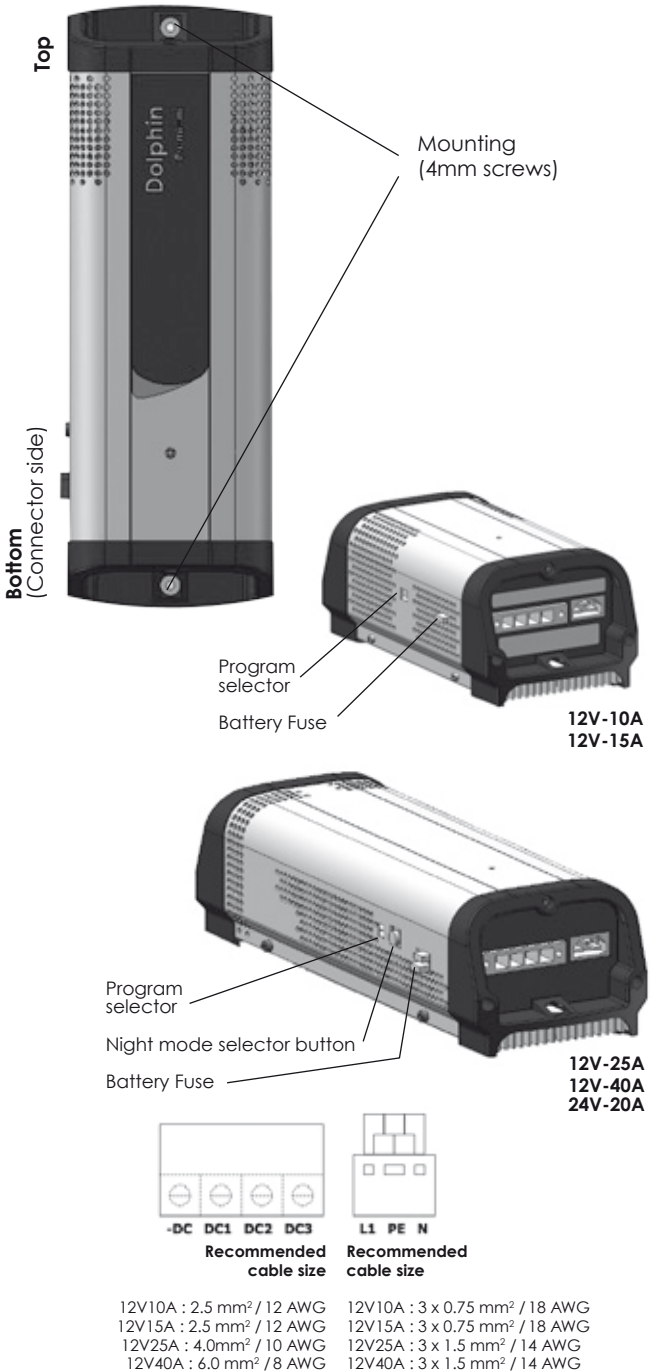
OPERATING INSTRUCTIONS

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CHARGE		ABSORPTION (1)
		EQUALISATION (2)
		END EQUAL. (3)
		FLOATING (4)
FAULT		TEMP (5)
		VOLT OUT (6)
		BAT FUSE (7)

MODE	LED	STATUS
Absorption	Steady yellow (1)	The batteries are charging. Time required to complete Absorption mode varies depending on the initial status of the batteries, but is limited to 6 hours.
Equalisation	Yellow blinking (2)	The batteries are coming to the end of the charging cycle. Time required to complete Equalization mode, depending on the initial status of the batteries, varies from 30 minutes to 4 hours.
End of Equalisation	Green blinking (3)	The batteries are almost charged. Floating mode will begin in less than 30 minutes.
Floating	Green (4)	The batteries are completely charged.
Internal Temperature fault	Red fixed (5)	The charger is on Standby for a period of between 30 seconds and 10 minutes. Once the fault has been solved, the device will start up again automatically. ▶ <i>If this problem arises, please check the external temperature as well as the internal fan and the space around the charger.</i>
Output voltage fault	Red blinking (6)	The charger is on Standby for a period of 30 seconds. Once the fault has been solved, the device will start up again automatically. ▶ <i>In reality, the PC Board has probably failed and the damage is irreversible.</i>
Battery fuse fault	Red Flashing (7)	The fuse should be replaced. ▶ <i>Please check all connections as well as the battery's polarity and status</i>
"Night" Mode 12V-25A 12V-40A 24V-20A	-	This mode allows the charger to work without noise (from the fan). In this case, charging levels adapt. To activate this mode, press the button for about 2 seconds. To deactivate, a simple press of the button or the mode deactivates automatically after 10 hours.

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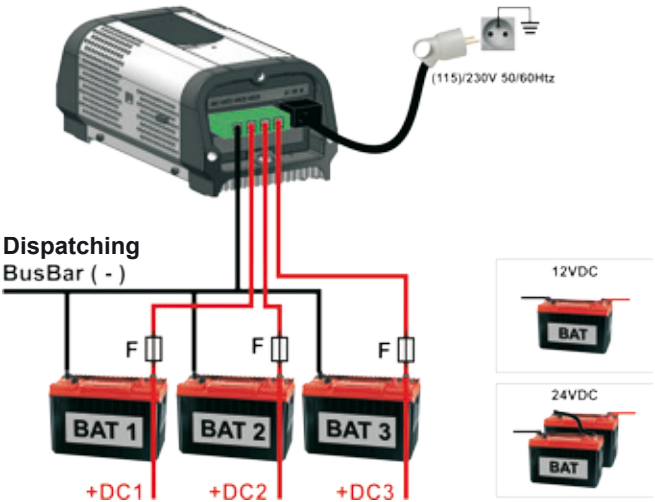


Lg cables : 1.5 m / 4.9 feet max Lg cables : 3 m / 9.8 feet max
Cable type: according to local regulations

CONNECTION

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Wiring diagram



Assembling the shore power connector



◀STEP 1:

Remove approx 2 cm of the outer sheath
Remove approx 8 mm of the inner wires' sheaths
Tinplate the bare copper ends



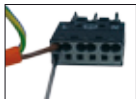
◀STEP 2:

Remove the security cap using an utility knife



◀STEP 3:

Pull the conductor through the pre latched strain relief housing



◀STEP 4:

Open the clamp with a screwdriver and insert the first cable up to the stop. Repeat this step for all three cables.



◀STEP 5:

Latch the connector on to the strain relief housing.



◀STEP 6:

Snap together the upper and lower parts of the strain relief housing and tighten it using the screw.

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