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# Solar charge regulator serie FOX-X60

Comfortable handling, ease of installation and manifold display features are characteristics of the charge regulator serie FOX-X60 with integrated graphical display. Only quality components with automotive admission and extended temperature range are used.

### Product charateristics

- Overcharge protection 20A is equal to solar modules of 340 Watt 12V (680W @ 24V)
- Discharge protection or night light function adjustable (max. 20A), shut-off threshold via menu adjustable
- FOX-360 for 2 battery banks
- System voltage 12V or 24V (automatically)
- Battery type can be individually set for AGM, GEL and Lead-acid batteries
- Display with backlight (30sec)
- Loads are supplied always of battery 1
- Charge ratio from B1 to B2 adjustable

The charge regulators FOX-260 and FOX-360 are designed for 20A module current.

The graphical backlit LCD display with very legible lettering shows the actual informations: Battery voltage(s) [V], charging current [A], module generated power [A], power consumption [A], battery charge conditions as bar chart.

For the adjustment of basic settings such as selection of a battery type, various input screens are available.

The optimized loading characteristic achieved in combination with the Hardware PWM-control ensure significantly rapid and gentle charging of the battery. Hazardous gassing or overcharging are safely prevented.

The size of the heat sink is also dimensioned for high environmental temperatures.

### **TECHNICAL FEATURES**

## Charge regulator serie FOX-X60

	FOX-260	FOX-360
Charge of	1 battery bank	up to 2 battery banks
Battery switchover	none	Relay bistable, galvanic isolated
Charge ratio	none	standard 90%/10% (B1/B2),
		adjustable
Fuses to B1, B2	1x25A, soldered internally	2x25A, soldered internally
System voltage	12V/24V, automatic detection, both battery banks similar	
- Detection 12V	U <sub>battery 1</sub> : 6V 17V => 12V system	
- Detection 24V	U <sub>battery 1</sub> : larger 17V => 24V system	
System operating voltage	8,5V 35V	
Temp. compensation	-20mV/°K @12V, -40mV/°K @24V	
PWM frequency	244Hz	
max terminal voltage	50V (open circuit voltage of the modules, Uoc)	
Discharge protection	max. 20A at 25°C	
- Shut-off threshold	standard 10,5V, via menu adjustable	
- Switch-on/switch-off delay	60 seconds	
Nightlight function	max. 20A at 25°C	
- Switch on/switch off	no charge current of the module/ charge current present	
- Shut-off threshold	standard 11,25V, via menu adjustable	
- Time delay	10 minutes	
Display	backlit graphic LCD, 30 sec., 128x64 pixel	
Terminals	6 VA screws, max. 16mm <sup>2</sup>	8 VA screws, max. 16mm <sup>2</sup>
Power requirement	7,0mA (with backlight 18,0mA, 30sec.)	
Voltage drop	0,0 0,27V (between 0 20A)	
Environmental conditions	-25°C +50°C, non-thawing, IP 22	
Storing conditions	-25°C +80°C	
Weight	300g	
Dimensions	128,6 x 106,7 x 53,5mm (LxWxH)	

### **RANGE OF APPLICATIONS**

- For motor boats and saling yachts
- For camping and caravan
- For mobile current supply
- For industry, shipping and building sector

#### DIMENSIONS



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