

[WS12400L、WS24400L]

1.Introduction

SW12400L/SW24400 wind/solar hybrid controller, adopt micro chip to control battery charging and also dump load, in the same time, SW12400L controller monitor battery voltage, and have the function of manual stop wind generator and also charging showing, etc.

2.Safe warning

1. SW12400/SW24400 is used to connect the same voltage and the same power wind generator, solar panel to charge the battery bank, is not allowed to connect the other type charge power ,otherwise it will damage controller.
2. When installation, it need to first correctly connect battery bank , then connect wind generator or solar panel, otherwise it will damage controller because of wind generator or solar panel voltage is very high when there is no load. The sequence is reverse on disconnection.
3. When changing battery bank, please switch the controller “STOP”,”ON” to be STOP position, then change the battery bank.

Description	SW12400L	SW24400L
Rated DC VOTAGE	12V _{DC}	24V _{DC}
Wind generator	12V _{AC} /400W / 3 phase	24V _{AC} /400W/ 3 phase
Solar panel	12V _{DC} / 150W	24V _{DC} /150W
Battery bank	Lead acid battery bank	
Switch	“ON” wind generator to working mode, “STOP” wind generator to stop mode	
Charge voltage	14. 1±0. 1V	28.2±0. 1V
Floating charge voltage	13. 4±0. 1V	26.8±0. 1V
Wind generator rated control current	33.3A (Max 66A)	16.7A (Max33A)
Controller static state cost power	<10mA (typical value mA)	
Control drop voltage	<1.2V (typical value 0.6V)	
Controller protection function	Solar panel reverse connection, battery bank reverse connection, battery bank over charge, short-circuit	
Dump load	Inner build(the temperature may very high on working, don't touch it.!)	
Working temperature	-30—+40℃; humidity : less than 90%; sea level: lower than 2000 M	
Noise	< 30 Db	
Size	380×180×130	
Weight	3/2 Kg	

Don' t touch the dump load tank with hand, in case scald

四、Controller panel



1、Switch to be “ON” position ,wind generator is working condition. Switch to be “STOP” position, wind generator to be stop position.

2、Battery bank charge showing: The “Green Light” is always ON when battery bank is full; the “Green light” FLASH when the battery bank is not full. The “Green light” is off when the battery bank is lower,

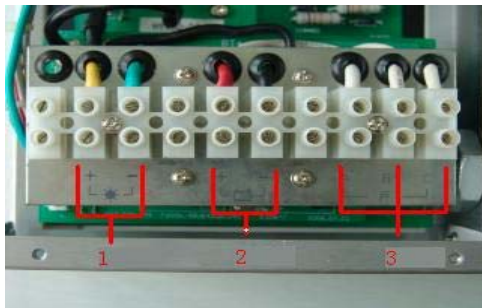
please cut off the load, in case damage the battery bank.

3、Charging showing: When wind generator reach to charge voltage and charge the battery bank , the “Green light” FLASH, when solar panel charge the battery bank, the “Red light” flash.

4、Dump load showing: When battery bank is full, and wind generator or solar panel continue to charge the battery bank, controller will dump extra power to heating element.

五、Controller connection

1、Open the box



2、System connection

- No 1 to connect the solar panel. Using 2.5mm² two core cable, connect to solar panel terminal “+”、“-”
- No 2 connect to battery bank. Using not less than 4mm² cables.
- Connect wind generator. Please let the switch to be STOP position. Using 3×2.5mm² 3 core cable, to connect wind generator 3 wire output (no need to pay attention to polarity) When wind generator put to be “ON” ,wind generator to be on running mode
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6. Trouble solving

1. Controller “2” light is OFF, please check with battery bank voltage is too lower or connection is correct, and the cables is good.
2. Wind generator don’ t work, please check with controller is on STOP position. Please also check with the cables is damaged or not.
3. It can’ t charge the battery bank when the wind generator running is slow, at this time, the CONTROLLER PANEL light is OFF.
4. When battery bank voltage is too lower, and control panel light is OFF, please cut off the load to protect the battery bank.