



Smart Battery Isolator
WM BSM050

L×W×H(mm):72×72×36

**Features**

- Prevent loads on auxiliary battery from draining the main battery;
- Works with all alternator types, No diode efficiency loss;
- Reduces charging system workload by not connecting auxiliary battery until primary battery is charged to 13.2V;
- Lower strain on expensive charging components extends their useful life;
- Allows bi-directional charging from alternator or from shore/campground power charger/converter when available;
- Simple installation - Connect to main battery, auxiliary battery, and ground;
- Smaller, lighter, less heat generated;
- Applicable for 12V and 24V system.

Ordering Information

<u>WM BSM050</u>	<u>-160</u>	<u>- 12V</u>	<u>-XXX</u>
1	2	3	4
1 Part number: WM BSM050			
2 Input rated Voltage(VDC): 12V: 12VDC; 24V: 24VDC			
3 Ampere Continue : 160A(12VDC), 100A(24VDC)			
4 Time parameter can be set according to customer's special needs			

Performance parameter

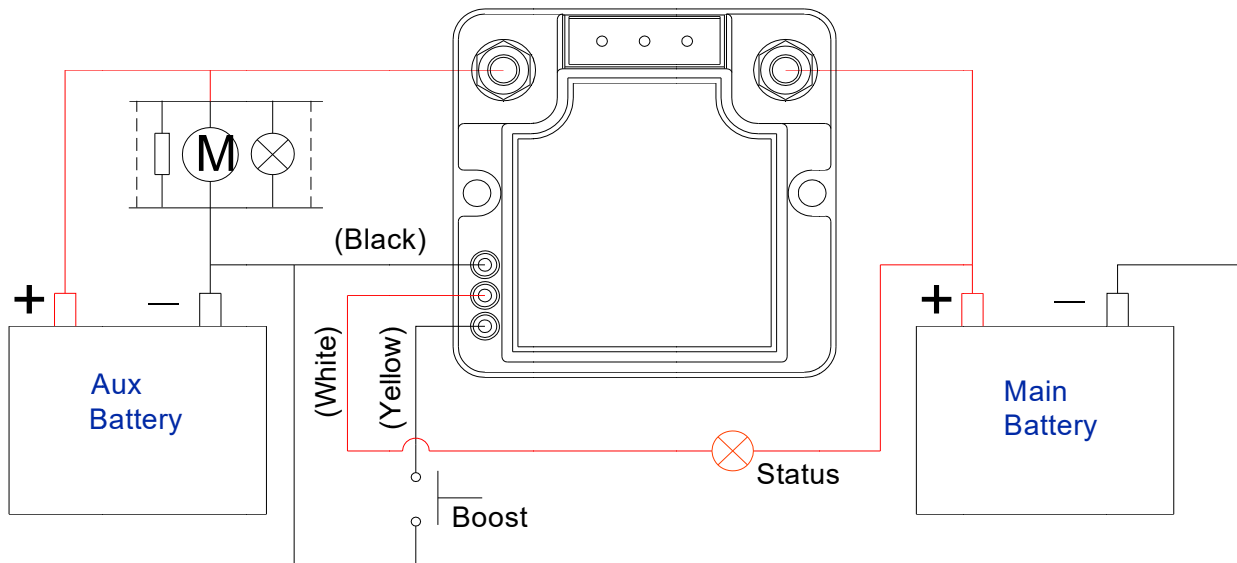
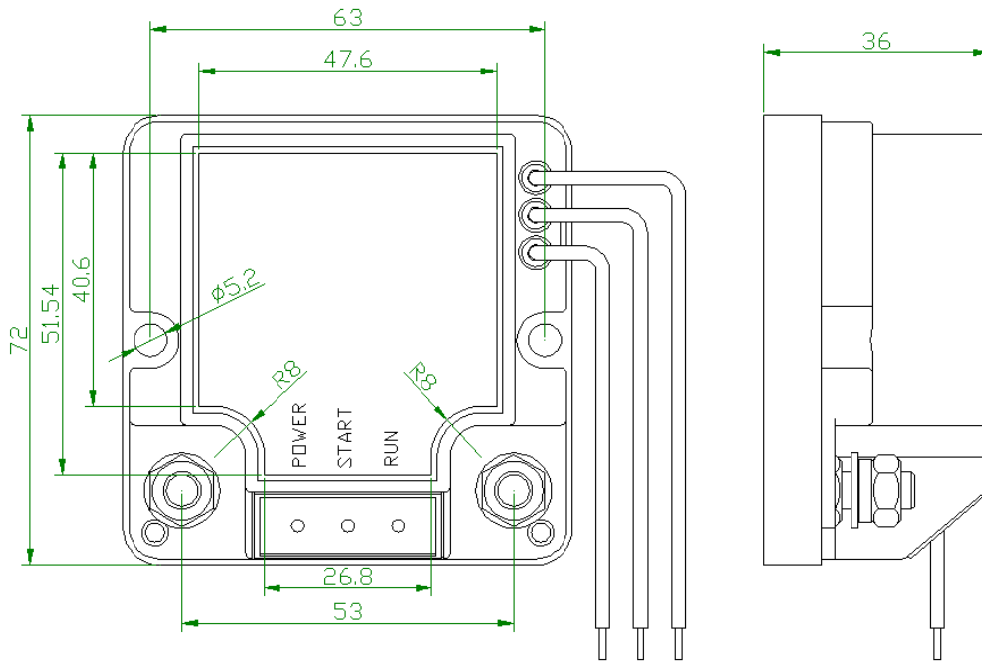
		Min	Typical	Max	Operate Time	Release Time
Normal input voltage	12VDC	9VDC		16VDC		
	24VDC	18VDC		32VDC		
Connect voltage(NF*)	12VDC		≥13.2V		10 s	
	24VDC		≥26.4V		10 s	
Disconnect voltage(NF**)	12VDC		≤12.7V			10 S
	24VDC		≤25.4V			10 S
Emergency start	12VDC				0 s	60 s (U<12.7V)
	24VDC				0 s	60 s (U<25.4V)
Continuous current			160A			
Quiescent current			5mA	8mA	Relay off, start signal input open or grounded	
Battery terminals	Specification			Torque		
	5/16-24			50 in-lbs (5.78 Nm)		

Operation condition

Operating temperature range	-40℃~+85℃	Operating condition
Ingress protection	IP65	Per IEC
Humidity	0 to 90% RH	
Vibration resistance	10~500Hz	per SAE J1455
Shock		per SAE J1455
Thermal shock		per SAE J1455
EMI/RF		per SAE J1455& SAE J1113
Weight(Approx.)	160g	

Layout (Bottom views, Unit: mm)

Dimensions / Wiring diagram(Bottom views)



Wiring diagram (Bottom views)

Note: the anode feet of the isolator can answer the main battery or secondary battery, their position can replace each other.