



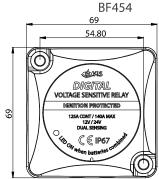
### Digital Voltage Sensitive Relay (DVSR) / Automatic Charging Relay (ACR)

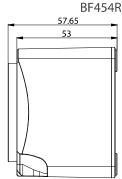












#### **Features**

- New Easy-to-Configure Wiring Design allowing easy configuration without wire peeling or cutting silicon sealing
- Automatically combines two batteries when charging and isolates the two batteries when not charging
- DC 12/24V input auto ranging
- Dual port sensing allowing charging batteries from either direction (starting engine or aux power)
- Ultra Low Stand-by Current (0.3mA) Comparing to Traditional VSR (about 5mA)
- Dimensions fits BF43x Fuse Boxes and Battery Switch, matching mainstream products in market (BEP style)
- Robust Glass Fiber reinforced Nylon enclosure
- Built-in LED indication (ON when VSR engages)
- Port for remote LED indicating VSR status (LED not included)
- Surface or panel mount options
- Optional Storage Mode allows zero power consumption when engine is off

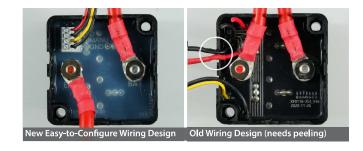
## **Specifications**

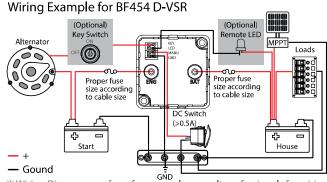
- Nominal Voltage | DC 12V / 24V Auto Detect
- Relay Operating Voltages

	DC 12V	DC 24V
Combine	13.3V	26.6V
Open	12.8V	25.6V
Low Voltage Lockout	9.5V	16.0V
Over Voltage Lockout	19.0V	30.0V

- Current Rating | 125A Continuous / 140A Intermittent
- Power Consumption | 0.3mA (Standby) / 270mA (Engage) / 0mA (Storage Mode) (@12V) 0.35mA (Standby) / 170mA (Engage) / 0mA (Storage
- Note | ( F IP67 ISO8846 / SAE J1171 (Ignition Protected)

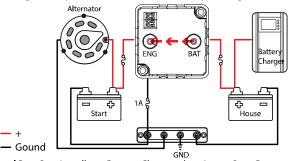
VSR (Voltage Sensitive Relay) are automatically controlled switches that allow two batteries to be combined when charging, and to be isolated when not charging and current is draining from one of the batteries. VSR helps reserve a fully charged battery at all time, and avoid the dead battery and towing on the sea. D-VSR is an upgraded Digital version of VSR with features like 12/24V system support, dual-port sensing, much lower standby power consumption and better reliability.





Wiring Diagrams are for reference only, consult professionals for wiring suits your needs.

#### Wiring Example for D-VSR with Battery Charger



Dual Port Sensing allows Battery Charger charging to Start Battery when engine is off.

# D-VSR with Cable Kit for 2nd Battery

BF454KIT



This Kit provides all the necessary cables, accessories and D-VSR that you need to install the secondary battery. Customer installing this for the first time will find it convenient to have the cables ready in single package.

Mode) (@24V)