## Voltage Sensitive and Ignition Fed Relays

## Voltage Sensitive Relays Pro Con VSR range (80A-240A) (refer to CVSR page for safety features)

**0.0V drop and low quiescent current.** The voltage drop is 0.01V allowing for negligible power loss across the relay. The quiescent current is 1mA.

6 LED information display

Automatic voltage activation. True to word the relays are sensitive to voltage. On voltage is 13.3V. Off is 13.0V (x2 for 24V). This can be manually changed.

**Ignition/signal override** is possible to allow for manual override.



High quality brass connections.

Uni and Bidirectional charging relay: Multiple relays can be used to link / isolate as many battery banks as suitable.

**Built to IP66 waterproof** 

**Available in:** 80A, 160A, 240A **12/24V auto select.** 

Start up time delays: A 30 second start up time delay prevents the relay coming on while the engine is being started, protecting the relay circuit and preventing fuses blowing and damage to the relay.

| Voltage Sensitive Relays (adjustable) |           |                   |           |        |  |
|---------------------------------------|-----------|-------------------|-----------|--------|--|
| DC (V)                                | Rated (A) | Size L x W x D mm | Weight Kg | Code   |  |
| 12 & 24 auto                          | 80        | 140 x180 x 40     | 0.1       | VSR80  |  |
| 12 & 24 auto                          | 160       | 140 x190 x 40     | 0.2       | VSR160 |  |
| 12 & 24 auto                          | 240       | 140 x200 x 40     | 0.25      | VSR240 |  |
|                                       |           |                   |           |        |  |

## **Additional VSRs**



Magnetic Digital VSR: The Digital VSR shares the same features as the above VSR80-240 range. It has fewer LEDs but is totally waterproof and ingress proof. This relay requires the use of the magnet to change the relays settings. The largest current rating is 160A.

| Voltage Sensitive Relays (adjustable) |           |           |         |  |  |
|---------------------------------------|-----------|-----------|---------|--|--|
| DC (V)                                | Rated (A) | Weight Kg | Code    |  |  |
| 12 & 24 auto                          | 80        | 0.1       | VSRB80  |  |  |
| 12 & 24 auto                          | 160       | 0.1       | VSRB160 |  |  |



Analogue VSR: The Analogue VSR is the most affordable VSR that Sterling does. It has no adjustable features. The user can not adjust the voltage thresholds and there is no switching delay. The unit is also not 12V/24V auto select. They are simply 12V or 24V models. The unit has a fixed on voltage of 13.3V and the fixed off voltage of 13.0V. Ignition override is also possible.

| Voltage Sensitive Relays (adjustable) |           |           |           |  |  |
|---------------------------------------|-----------|-----------|-----------|--|--|
| DC (V)                                | Rated (A) | Weight Kg | Code      |  |  |
| 12                                    | 80        | 0.1       | VSRA8012  |  |  |
| 12                                    | 160       | 0.1       | VSRA16012 |  |  |
| 24                                    | 80        | 0.1       | VSRA8024  |  |  |
| 24                                    | 160       | 0.1       | VSRA16024 |  |  |

## Ignition Fed Relays (refer to CVSR page for safety features)

**Available in:** 12V 80A,160A & 240A 24V 50A 100A & 150A

Requires Ignition / D+ / Signal feed to operate: This range of low cost signal activated relays are the simplest in the range. It offers the ability to link together as many battery banks as you wish and therefore charge different battery banks on a boat / vehicle when the engine is running.



IP66 waterproof (built to)

Starter battery interlock: This unit has the ability to interlock with up to 2 engines starter motors to ensure the relay is inactive when starter motors are engaged, thus protecting the relay and avoiding fuses blowing.

| DC (V) | Rated (A) | Size L x W x D mm | Weight Kg | Code     |
|--------|-----------|-------------------|-----------|----------|
| 12     | 80        | 140 x 60 x 40     | 0.025     | IFR1280  |
| 12     | 160       | 140 x 70 x 40     | 0.030     | IFR12160 |
| 12     | 240       | 140 x 80 x 40     | 0.030     | IFR12240 |
| 24     | 50        | 140 x 60 x 40     | 0.025     | IFR2450  |
| 24     | 100       | 140 x 70 x 40     | 0.030     | IFR24100 |
| 24     | 150       | 140 x 80 x 40     | 0.030     | IFR24150 |
|        |           |                   |           |          |