



**BOOLEAN ENGINEERING PTY. LTD.**

**Electronics Technology Consultants**



**robin@booleanengineering.com**

# APPLICATION NOTE

AN-60

[www.booleanengineering.com](http://www.booleanengineering.com)

## ES240 – RCBO Overload and Safety Model

### Overload and Safety Functionality

This note describes an application for using the **EASYSafe** as a means to control and protect connected appliances from current overload and personnel from electrocution.

The ES240 -RCBO is an in-line, single switch board, bench top or surface mounted, consisting of a 10 amp circuitbreaker and 30 ma Earth Leakage Safety Switch (RCBO).

**No electrician is needed** as when the IEC plug is connected to the electrical mains the on board IEC socket will safely and reliably deliver power to any attached equipment.

The **EASYSafe** conforms to Australian Standard ASNZS 61009.1 and complies with Energy Safe Victoria's additional testing and verification requirements as of 1<sup>st</sup> July 2018.

The RCBO used has C curve magnetic tripping and 10 amp overload with a breaking capacity of 4500 amps and residual earth leakage detection of 30 ma.



The practice of powering multiple pieces of equipment on a single mains circuit can have a significant impact on system operation in the event of one faulty device  
**brings down all the connected equipment.**

The ES240-RCBO individually protects each circuit and the personnel using it, so when a fault occurs, you know exactly which circuit to troubleshoot and  
**all other installed devices remain on line.**