

The innovation is by design. The features are the icing on the cake...

Amelec Australia Pty Ltd are pleased to announce the release of the new interVOLT EBI Pro - Electronic Battery Isolator - Programmable for the automotive market. The EBI Pro is a revolution in dual battery control devices. Based on the solid foundation of our ground-breaking Programmable Voltage Sensing Relay (PSR) the EBI Pro has been designed from the ground up for 4WD and RV applications.

Unlike conventional electro-mechanical isolators the EBI Pro is solid state. Solid state means no moving parts. That is, no contacts to vibrate, chatter, arc, wear and ultimately – fail. The MOSFET based topology of the EBI Pro is proven. Reliability, durability and longevity are built in.

The solid state aspect is just the beginning. Like its big brother the PSR, the EBI Pro is also adjustable in terms of voltage and time delay. This provides the installer or operator with the means to customise the EBI Pro for the application rather than suffer the 'one size fits all' philosophy from manufacturers of traditional devices.

The EBI Pro is built for Australian conditions - seriously. It has been designed for under bonnet installations and will run 100 Amps continuously at 60°C. That's higher than most manufacturers rate their batteries! The device is environmentally sealed and the MOSFETs are epoxy encapsulated. In short, the EBI Pro is designed to provide years of service – isn't that what you want from a dual battery controller?

We also threw in a few more features ...

- High visibility LED status display and indicators
- 500 Amp peak rating (100 Amps continuous)
- Emergency Combine Mode for back-up starting
- Remote output for mode indication (LED light)
- Counter Charge Control feature (see manual)
- Automatic electrical overload protection
- Automatic thermal overload protection
- Under/over voltage automatic disconnect
- Insulated rubber terminal protection boots
- Corrosion resistant construction and hardware

Full specifications overleaf.
Detailed installation/
operation manual
included with product
and available online.



Electronic Battery Isolator (Programmable)



Optional Combination Switch/Indicator

SPECIFICATIONS

- **Topology** – solid state Mosfet (metal oxide semiconductor field-effect transistor) switching circuit
- **Application** – for 12VDC in-vehicle dual battery installations only
- **Input Voltage** – 8-17VDC nominal
- **Control Voltage** –
 - The **COMBINE** (on state) voltage limits are user adjustable in 0.1 Volt increments from 9.2 Volts to 16.0 Volts
 - The **ISOLATE** (off state) voltage limits are user adjustable in 0.1 Volt increments from 9.0 Volts to 15.9 Volts
- **Time Delay** – both the COMBINE and ISOLATE time delay limits are user adjustable in 1 second increments from 1 to 250 seconds
- **Alert Voltage** – the ALERT! voltage limits are user adjustable in 0.1 Volt increments from 9.0 Volts to 15.9 Volts
- **Constant Rating** – 100 Amps DC continuous @ 60°C ambient temperature
- **Surge Rating** – 500 Amps DC at ↓50°C for a period of 5 seconds @ 10% duty cycle
- **Contact Resistance** – across switch terminals ↓2.0 milliohm @ 25°C
- **Indicator Output Signal** – 30mA maximum (current limited)
- **Device Current Draw** –
 - In 'Isolate' mode (open contacts) ↓30mA
 - In 'Combine' mode (closed contacts) ↓40mA
 - Add ≈ 10mA when LED Status Display is active
 - Add up to 30mA for external LED indicator if connected
- **Environmental considerations** – Operating temperature range is -25°C to +60°C. Humidity should not exceed 90%
- **Environmental Protection** – Electronics sealed for dust and water protection to IP67 rating (internal components only)
- **Safety and Protection Devices** –
 - Thermal overload shutdown – automatic reset
 - Electrical overload protection – automatic reset
 - Under voltage disconnect – automatic reconnect
 - High voltage disconnect – automatic reconnect

- **User Interface** – the user or operator interface is used to control and monitor the various functions of the EBI Pro. The user interface consists of a 3 digit LED display, 6 set point indicators and 2 control buttons. Refer to operator manual for detailed information on setting the EBI Pro parameters.
- **Connections – Switch Terminals**
 - Main (starting) battery positive – marked MAIN BATT
 - Auxiliary (second) battery positive – marked AUX BATT
- **Connections – Control Terminals**
 - Main negative input for sensing 0V – marked NEG
 - Alert trigger indicator output 12V – marked IND
 - Remote emergency combine switch input 12V – marked REM
- **Termination** –
 - Switch Terminals – M8 threaded stud, tin plated copper, 304 stainless steel hardware
 - Control Terminals – M3 threaded contacts, tin plated brass, 304 stainless steel hardware
- **Construction** – Manufactured using corrosion resistant materials throughout. Electronics are epoxy encapsulated for protection against vibration, dust, water and for thermal dissipation purposes –
 - **Housing** – black E-Coat die cast aluminium
 - **Lid and Base** – Injection moulded Polycarbonate
 - **Mounting bracket** – Bright zinc plated steel
- **Conformity** – Conforms to Australian and New Zealand Electro-Magnetic Compatibility (EMC) standards under AS/NZS CISPR 11:2004
- **Dimensions** –
 - Footprint – 62mmW x 92mmL overall
 - Profile – 94mmH overall (including terminal boots)
- **Weight** – 495 grams

