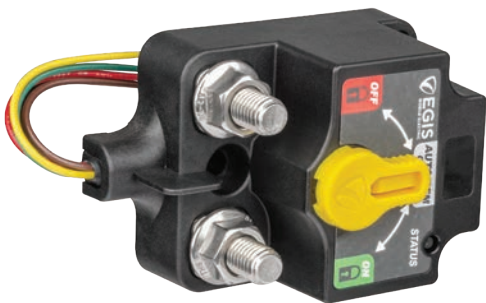


EGIS BATTERY MANAGEMENT SYSTEMS



EGIS Battery Management Systems



Double Pole Solenoids 3



Dual Battery Relays 4



Smart Dual Battery Relay 6



Voltage Sensing Relay 8



Low Voltage Disconnect Relay 10

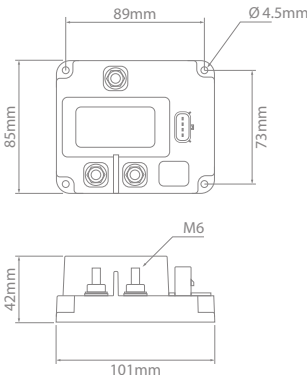
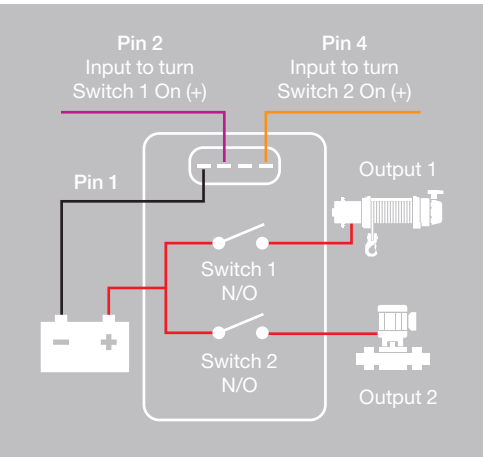
EGIS Battery Management Systems

Double Pole Solenoids

- Common input double pole solenoid.
- Independent switching.
- Remotely switch electrical loads reducing voltage drop and cable cost.
- Robust construction.
- Environmentally sealed – IP64.
- 4-year warranty.
- Made in North America.



Operational Current Draw : E7422 175mA
 E7422-24 90mA
 Terminals : M6 Stainless Steel
 Connector : Molex 4-Pin with 600mm Fly Lead
 Ingress protection : IP64
 Approvals : CE



EGIS Double Pole Solenoids

Part No.	Voltage	Current Rating – Per Circuit (A)		Contact Type	Operational Current Draw (mA)
		Continuous	Intermittent		
E7422	8–18			N/O	175
E7422-24	16–34	80	120		90

Supplied with 3 x terminal insulator, 4 x mounting screw and 1 x Molex connector with 600mm fly lead.

EGIS Battery Management Systems

Dual Battery Relays

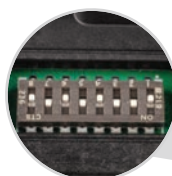


IP64 CE 4Yrs Made in North America

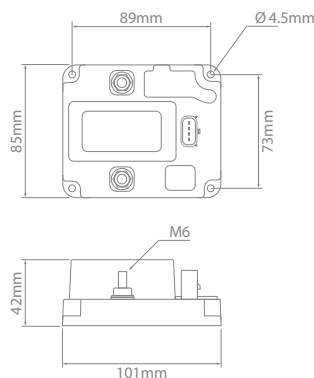
- Ideal for dual battery systems.
- User-selectable On and Off voltage set points.
- Configurable via onboard DIP switches.
- Dynamic voltage sensing technology.
- Start assist function.
- Over voltage protection.
- Optional under voltage lockout.
- Low off-state power draw – 1.3mA.
- Simple installation.
- LED status indicator.
- Robust construction.
- Environmentally sealed – IP64.
- 4-year warranty.
- Made in North America.

Current Rating : Continuous 160A
 Operational Current Draw : E7610 340mA
 E7610-24 170mA
 Off-state Current Draw : 1.3mA
 Terminals : M6 Stainless Steel
 Connectors : Molex 4-Pin with 110mm Fly Lead
 Ingress protection : IP64
 Approvals : CE

DIP switches for relay configurations



LED status indicator



EGIS Dual Battery Relays

Part No.	Voltage	Current Rating (A)		Contact Type	Off Volts	On Volts	Off-state Current Draw (mA)
		Continuous	Max. (5 min)				
E7610	8–18	160	240	N/O	12.1–12.8	12.9–13.6	1.3
E7610-24	16–36				24.2–25.6	25.8–27.2	

Supplied with 2 x terminal insulator, 4 x mounting screw and 1 x Molex connector with 110mm fly lead

EGIS Battery Management Systems

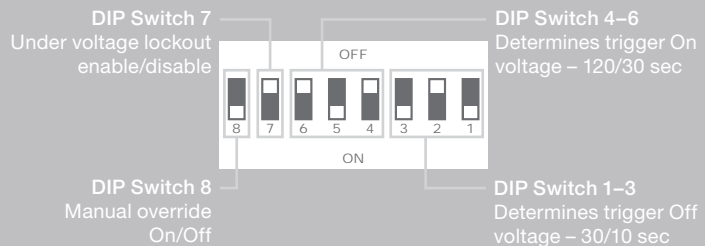
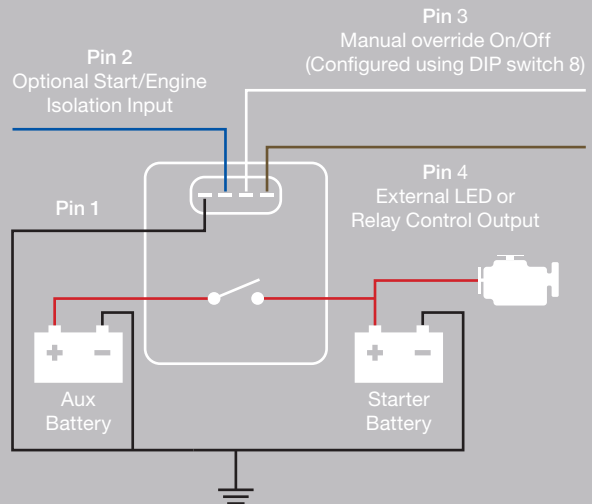
The EGIS Dual Battery Relays efficiently manage dual battery systems. They support all battery types and feature user-configurable On and Off voltage set points, adjustable via onboard DIP switches.

- 120 second On-delay after voltage set point is reached, if the voltage exceeds set point by 0.6 volts (or more), the On-delay is reduced to 30 seconds.
- 30 second Off-delay after voltage set point is reached, if the voltage falls below the set point by 0.4 volts (or more), the Off-delay is reduced to 10 seconds.
- Includes a start assist function, enabling manual connection between the starter and auxiliary batteries for reliable engine cranking.
- Onboard status LED provides real-time system feedback.
- Can be hard-wired to force On or Off.
- Ultra-low off-state current draw – 1.3mA, minimising unnecessary power loss and helps prevent flat batteries.
- Optional low-voltage lockout prevents connection to faulty batteries.



EGIS Dual Battery Relays feature *Dynamic Voltage Sensing* technology allowing the units to adapt their behaviours relative to system voltage.

Delivering smart control with faster, more effective control of charging and battery protection functions.



EGIS Battery Management Systems

Smart Dual Battery Relay

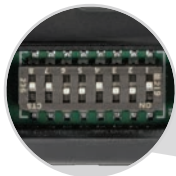


IP64 CE 4 Yrs Made in North America

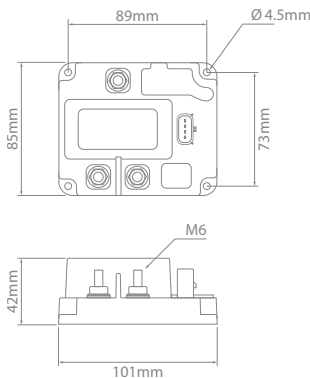
- Smart dual battery isolator with independent load management circuit.
- Configurable via onboard DIP switches.
- Both Automatic Charging Relay (ACR) and Timed Delay Relay (TDR) functions can be hard wired to turn On or Off.
- TDR offers selectable time delay and voltage set points for disconnection of aux loads.
- Optional over & under voltage protection with input voltage sensing trigger.
- Under voltage lock out.
- Low off-state power draw – 1.4mA.
- LED status indicators.
- Manual override.
- Environmentally sealed – IP64.
- 4-year warranty.
- Made in North America.

Current Rating : Continuous 80A per Circuit
 Operation Current Draw : 170mA
 Off-state Current Draw : 1.4mA
 Max Aux Output : 400mA
 Terminals : M6 Stainless Steel
 Connector : Molex 4-Pin with 600mm Fly Lead
 Ingress protection : IP64
 Approvals : CE
 Operating Temperature : -40°C to 55°C

DIP switches for relay configurations



LED status indicators



EGIS Smart Dual Battery Relay

Part No.	Voltage	Current Rating – Per Circuit (A)		ACR		TDR		TDR		Off-state Current Draw (mA)
		Continuous	Max. (5 min)	Off /On Volts	Time Delay (sec)	Off Volts	On Volts	Time Delay		
E7614	8–18	80	125	12.8–13.1	30	13.0	13.3	0 sec – 4 hr		1.4

Supplied with 3 x terminal insulator, 4 x mounting screw and 1 x Molex connector with 600mm fly lead

EGIS Battery Management Systems

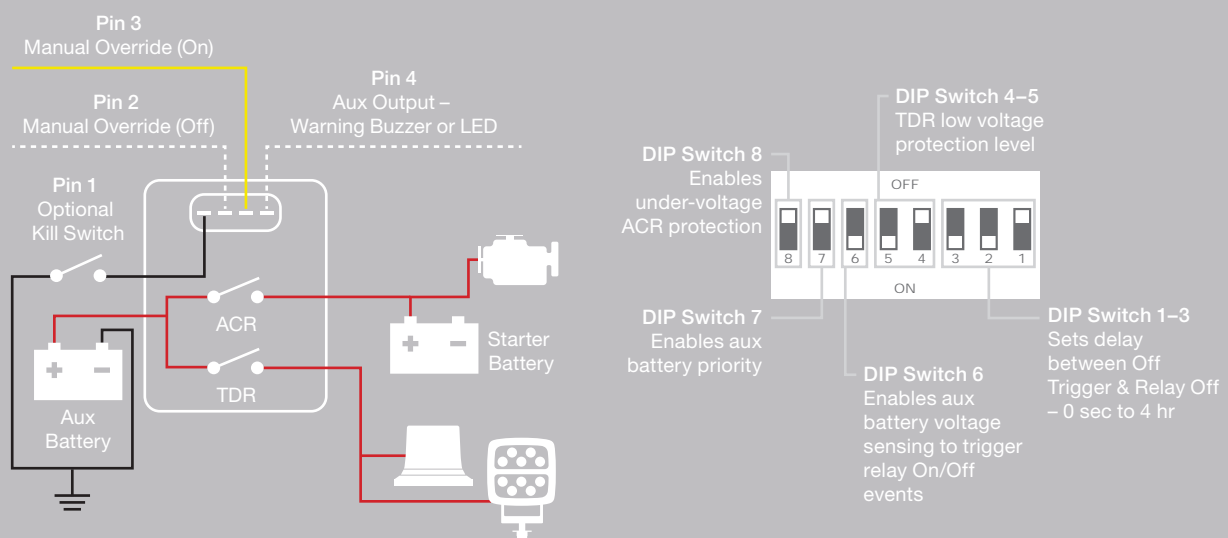
The EGIS Smart Dual Battery Relay is an advanced automotive relay designed for managing auxiliary battery charging and timed load shedding for additional circuits. Configurable via onboard DIP switches, it provides efficient control over dual battery systems and auxiliary loads.

The Automatic Charging Relay (ACR) function automatically connects and disconnects the auxiliary load based on voltage set points.

- The ACR connects to the auxiliary battery 30 seconds after the system voltage reaches 13.3V.
- The ACR disconnects the auxiliary battery 30 seconds after the system voltage drops below user configurable level of 12.7V or 12.25V.

The Timed Delay Relay (TDR) function offers selectable timed delays and voltage thresholds for disconnecting the auxiliary load.

- The TDR connects to the auxiliary battery when the system voltage reaches 13.3V.
- The configurable off-delay timer is activated at 13V, with durations ranging from 0 seconds to 4 hours.
- Additional user configured low voltage points of 12V, 11.5V, or 11V can be used to bypass the delay timer settings.



EGIS Battery Management Systems

Voltage Sensing Relay



- Configurable as a voltage sensing relay, a low voltage disconnect relay and a manual or electronic high current switch/isolator.
- Manual override lever allows manual control and the ability to isolate relays On or Off for servicing.
- Configurable via onboard DIP switches.
- Low off-state power draw – 1.3mA.
- Simple installation.
- LED status indicator.
- Robust construction.
- Includes protective terminal cover.
- Sealed housing with breather filter protects against water and dust ingress.
- Environmentally sealed – IP67, IP6K9K.
- Broad operating temperature.
- 4-year warranty.
- Made in North America.

8V
36V

IP67

IP
6K9K

CE

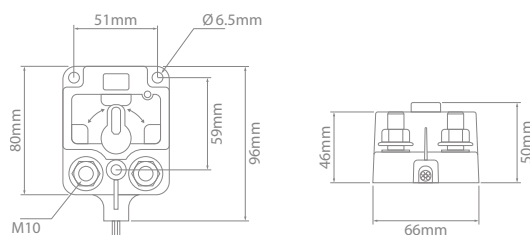
4Yrs

Made in North America

Voltage :	8–36V
Current Rating :	Continuous 500A
	Intermittent 1600A
Terminals :	M10 Stainless Steel
Mechanical Switching Life :	1,000,000 Cycles
Connector :	250mm Fly Lead
Ignition Protection :	SAE J1171 / ISO 8846
Ingress Protection :	IP67, IP6K9K
Approvals :	CE
Operating Temperature :	-40°C to 105°C



EGIS Battery Management Systems



EGIS Voltage Sensing Relay

Part No.	Voltage	Current Rating (A)		Over Voltage Protection (VDC)		State Change Current (A)		Off-state Current Draw (mA)
		Continuous	Intermittent (30 sec)	@12V	@24V	@12V	@24V	
E8710-1500	8–36	500	1600*	17	34	5	3	1.3

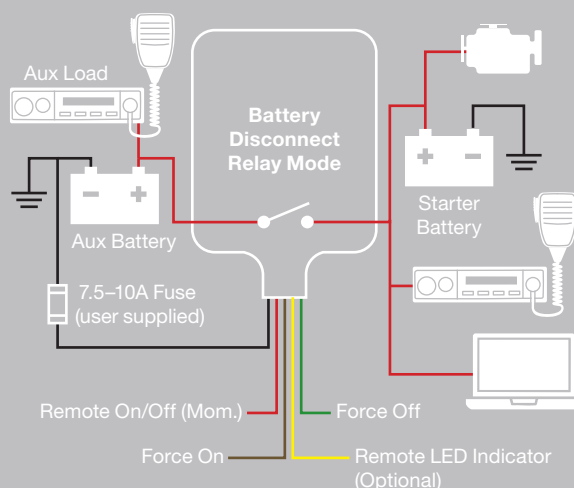
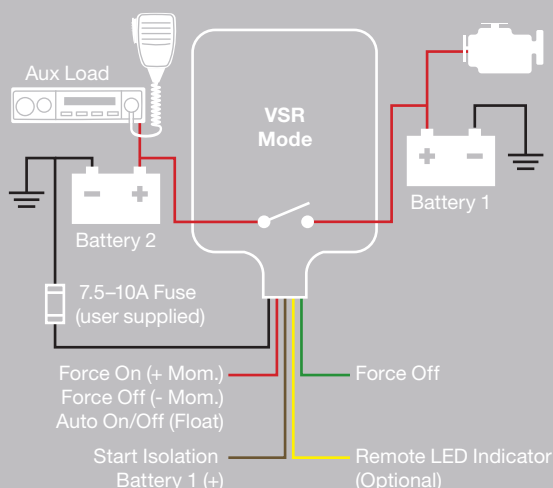
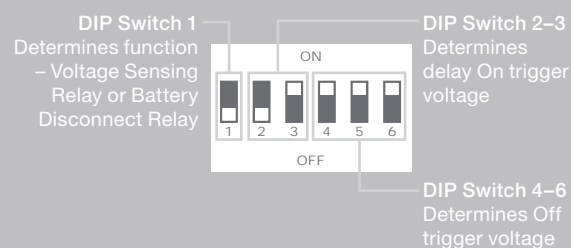
* Intermittent current rating up to 1600A for 30 seconds when using two 4/0 AWG cables.

The EGIS Voltage Sensing Relay offers flexible functionality via onboard dip switches allowing the device to be used as a voltage sensing relay, a low voltage disconnect relay and a manual or electronic high current switch/isolator.

- Auto ranging 12–24V operation.
- 500A continuous current capability in an extremely compact footprint.
- User selectable On (connect) voltage points 12.5–13.5V and 25.0–27.0V.
- User selectable Off (disconnect) voltage points 11.4–12.7V and 22.8–25.4V.
- Manual and electric (remote switch) On/Off override control.
- Manual override lever allows manual control and the ability to isolate relays On or Off for servicing.
- Onboard and optional remote LED status indicators.

The EGIS VSR features an *Advanced Charge Management* algorithm that continues to monitor system voltage even after the low voltage disconnect point is reached.

The VSR will turn off only after system voltage reaches the user set Off point and a continued decline in battery voltage is observed.



EGIS Battery Management Systems

Low Voltage Disconnect Relay



8V
36V

IP67

IP
6K9K

CE

4Yrs

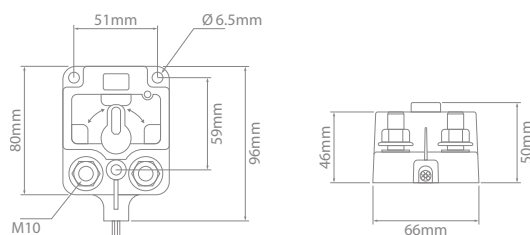
Made in North America

- Configurable voltage disconnect settings and off delay times.
- Configurable via onboard DIP switches.
- Override lever allows manual control and the ability to isolate relays On or Off for servicing.
- Low off-state power draw – 1.3mA.
- Simple installation.
- LED status indicator.
- Robust construction.
- Includes protective terminal cover.
- Sealed housing with breather filter protects against water and dust ingress.
- Transient spike protected.
- Environmentally sealed – IP67, IP6K9K.
- Broad operating temperature.
- 4-year warranty.
- Made in North America.

Voltage :	8–36V
Current Rating :	Continuous 500A
	Intermittent 1600A
Max Aux Output :	400mA
Terminals :	M10 Stainless Steel
Mechanical Switching Life :	1,000,000 Cycles
Connector :	250mm Fly Lead
Ignition Protection :	SAE J1171 / ISO 8846
Ingress Protection :	IP67, IP6K9K
Approvals :	CE
Operating Temperature :	-40°C to 105°C



EGIS Battery Management Systems



EGIS Low Voltage Disconnect Relay

Part No.	Voltage	Current Rating (A)		Over Voltage Protection (VDC)		State Change Current (A)		Off-state Current Draw (mA)
		Continuous	Intermittent (30 sec)	@12V	@24V	@12V	@24V	
E8710-1700	8–36	500	1600*	17	34	5	3	1.3

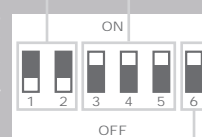
* Intermittent current rating up to 1600A for 30 seconds when using two 4/0 AWG cables.

The EGIS Low Voltage Disconnect Relay offers flexible functionality via onboard dip switches allows device to be used as a low voltage disconnect relay with configurable voltage disconnect settings and Off delay times.

- Auto ranging 12–24V operation.
- 500A continuous current capability in an extremely compact footprint.
- Pre-programmed to connect at 13.1V or 26.2V system voltage.
- User selectable low voltage disconnect settings between 11.2–12.7V and 22.4–25.4V.
- User selectable Off delay times from 0 seconds to 10 minutes.
- Selectable low voltage early alarm output triggers at 0.2–0.4V for 12 volt system or 0.4–0.8V for 24 volt system before preset voltage disconnect setting reached.
- Manual and electric (remote switch) On/Off override control.
- Manual override lever allows manual control and the ability to isolate relays On or Off for servicing.
- Auxiliary external low voltage output.

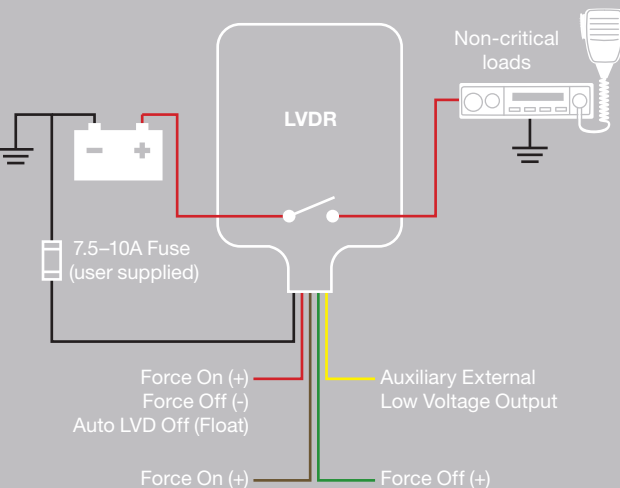


DIP Switch 1–2
Determines Off Time Delay after Low Voltage Disconnect setting is reached – 0 sec to 10 min



DIP Switch 3–5
Determines Low Voltage Disconnect setting

DIP Switch 6
Determines Low Voltage Warning level





ionnic.com



Lighting | Safety | Electrical