

804DCL Heavy Duty DC Link Box



Introduction

The 804DCL Heavy Duty DC Link Box incorporates battery isolation, primary protection and control in a single package. There are variants available for single start battery and domestic battery and also for twin starter battery with domestic battery.

Key Features

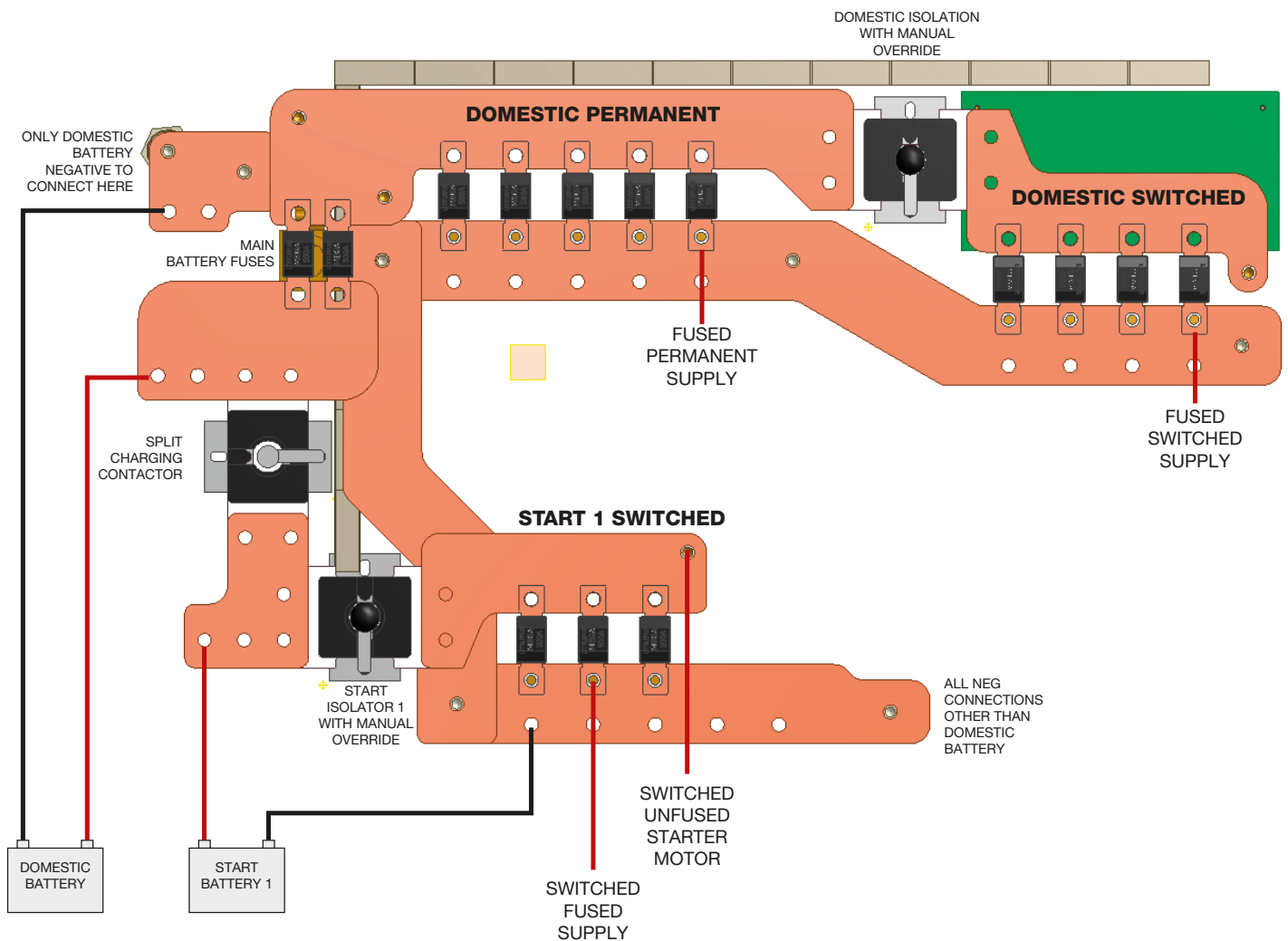
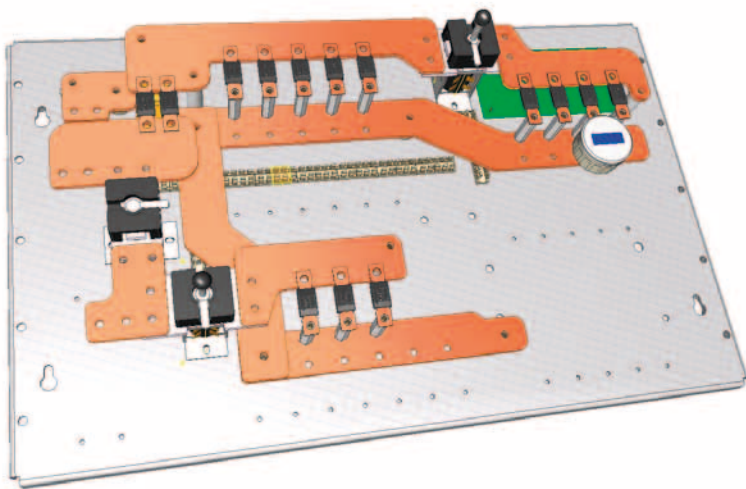
- 600 amp continuously rated remote battery isolators with manual overrides. Split charging contactors that link batteries together whilst a charging source is present
- 1000 amp shunt that connects to an optional BMV602 or ammeter
- Fused permanent and switched supplies from the domestic battery
- Fused switched supply from starter battery (ies)
- E-Plex monitoring of all battery voltages and domestic battery current
- E-Plex control and monitoring of all contactors
- Designed to accept a Victron BMV-600/602 for battery state of charge monitoring
- LEN value 4

Design Specifications

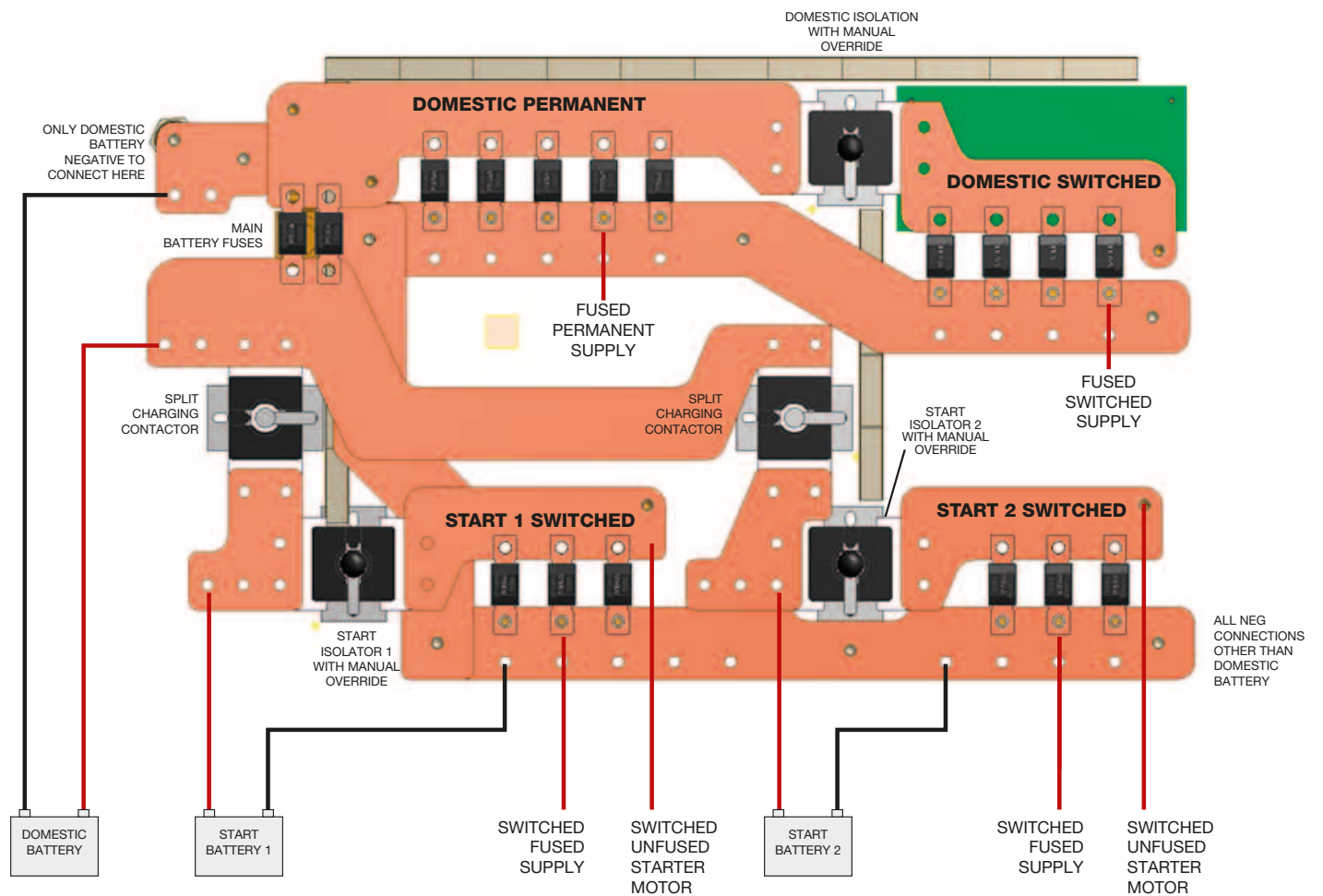
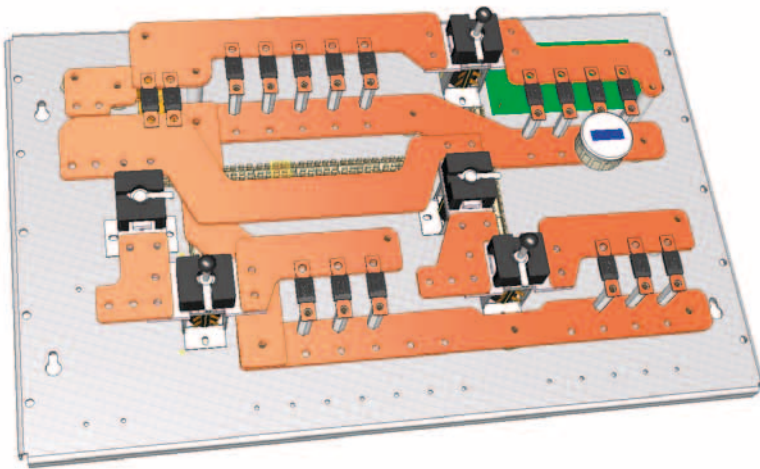
This product brings together all of the primary DC control, monitoring and protection into a single intelligent cost effective package.

- Size: 860mm(w) x 540mm(h) x 175mm(d)
- Designed for 12V or 24V systems
- 600A continuous rating
- Robust stainless steel back plate with injection moulded cover

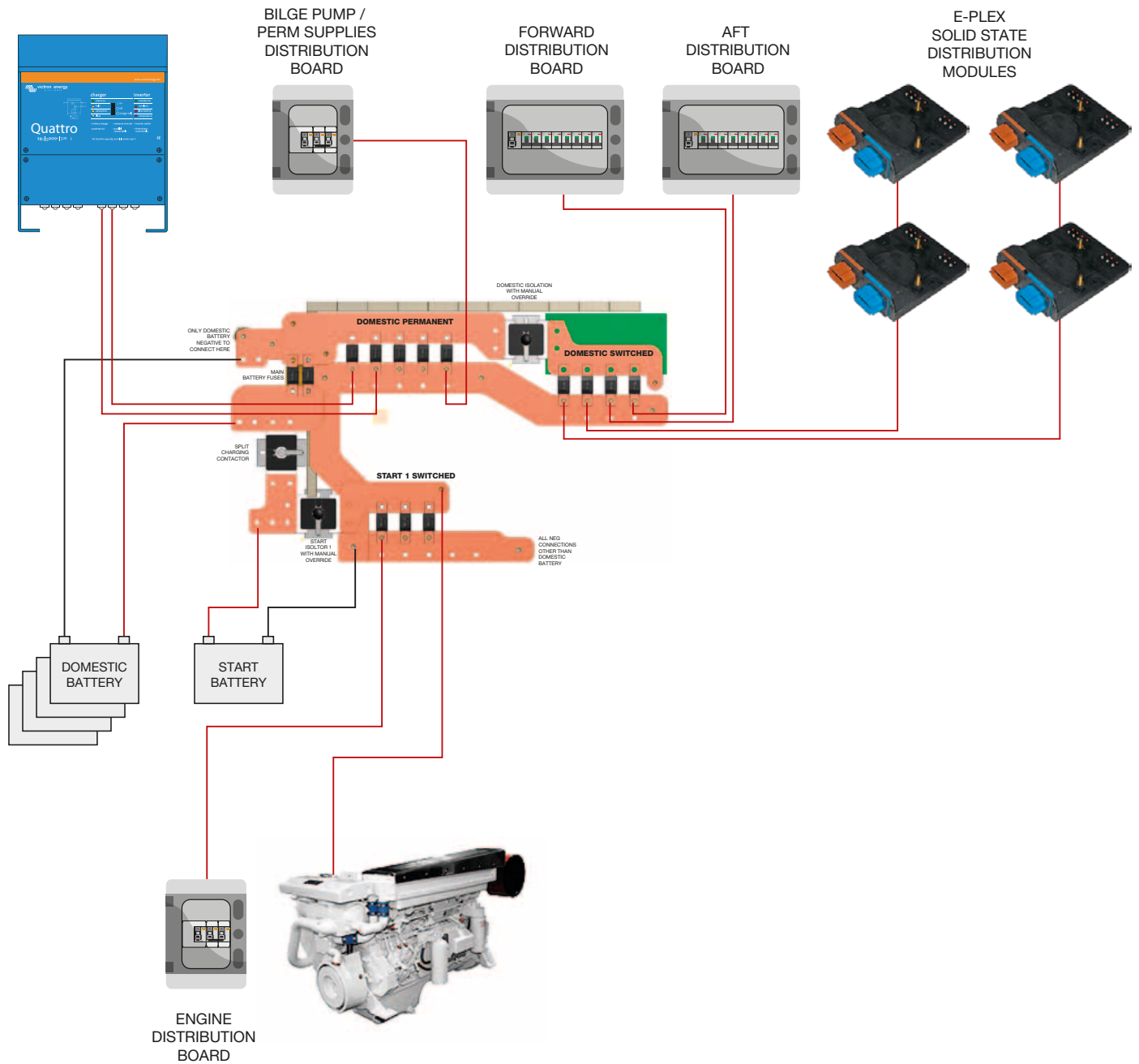
Example Connection - 1 Engine



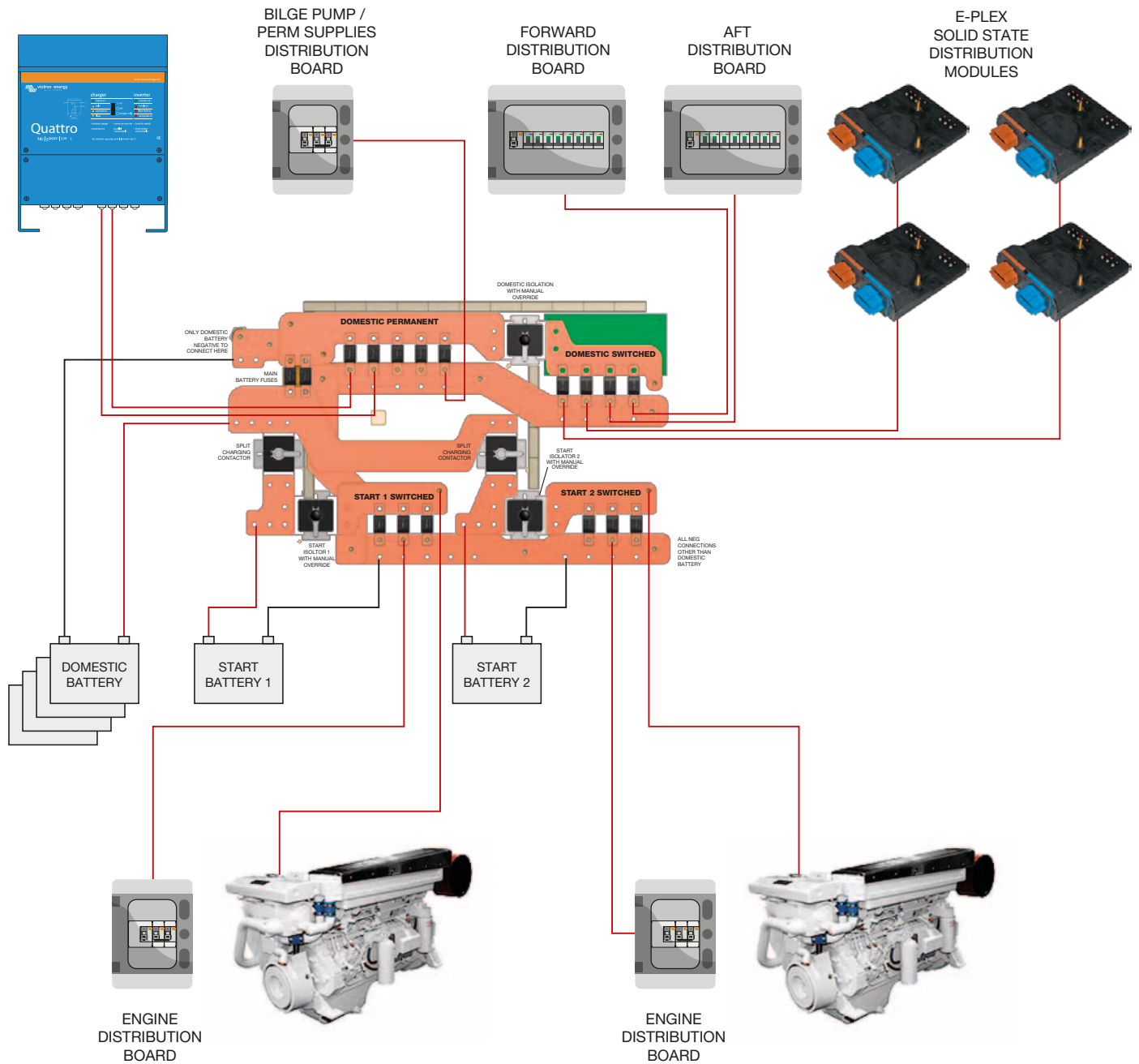
Example Connection - 2 Engine



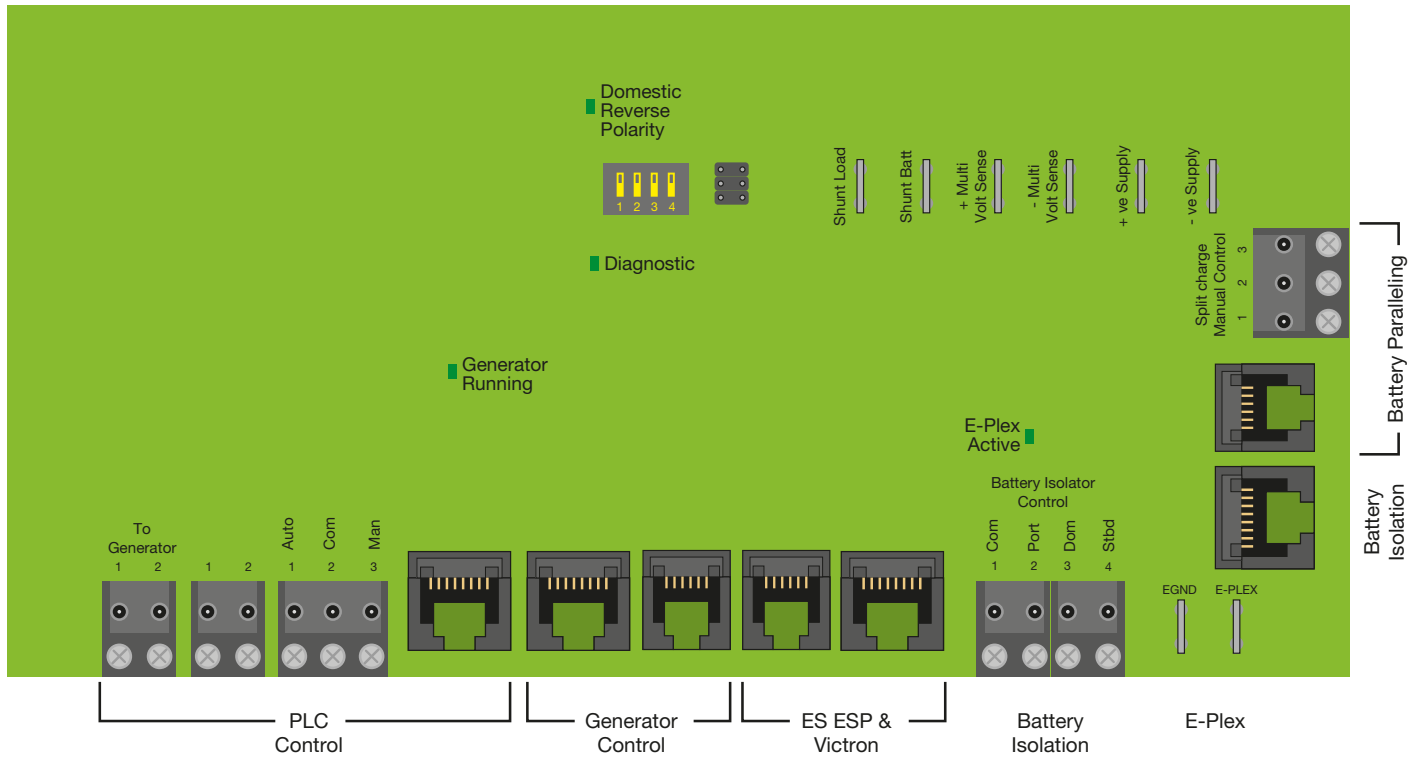
System Example (1 Engine)



System Example (2 Engine)



PCB Connections



DIP Switch settings

DIP Switch	Description	Off (Default)	On
1	Voltage Select	24V	12V
2	Engine 1 & 2 Status to E-Plex	Normal	Reversed
3	E-Plex control of contactors	Enabled	Disabled
4	Low Voltage Disconnect	Disabled	Enabled

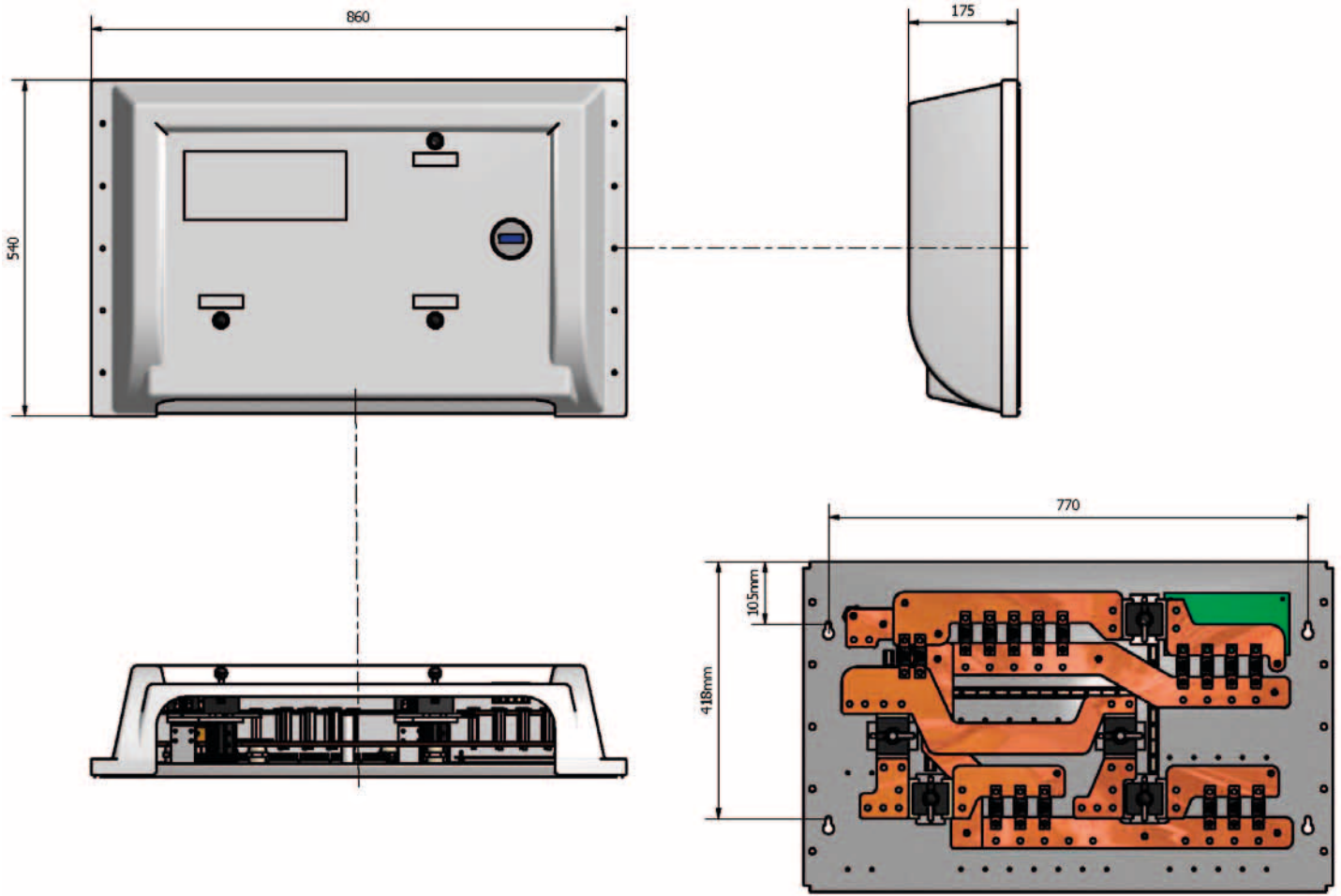
Diagnostics and LED Indicators

There are several leds about the board. Some represent momentary states such as the Generator Running LED or charge state of Battery Isolator Coils. Others indicate conditions through flash patterns.

Flash Patterns			
LED	Function	Pattern	
D63	Split Charge Contactor Engaged Indication	Continually Cycles through flash patterns while contactor is engaged	
		1 Flash	Engine 1 » Domestic Engaged
		2 Flash	Domestic » Engine 2 Engaged
D27	Battery Isolator State Change Indication	Cycles through the flash patterns of isolators that have changed recently	
		1 Flash	State of Engine 1 Isolator Changed
		2 Flash	State of Domestic Isolator Changed
		3 Flash	State of Engine 2 Isolator Changed

State LEDs		
LED	Indication	
D8	Generator Running	
D22	Green	Charge Domestic Isolator ON state
	Red	Charge Domestic Isolator OFF state
D23	Green	Charge Engine 1 Isolator ON state
	Red	Charge Engine 1 Isolator OFF state
D24	Green	Charge Engine 2 Isolator ON state
	Red	Charge Engine 2 Isolator OFF state
D33	Fuse tripped: Board Supply	
D25	Fuse tripped: Contactor Supply	
D31	Fuse tripped: -VS(e) Voltage Sense	
D44	Fuse tripped: Shunt Load	
D45	Fuse tripped: Shunt Battery	
D19	Fuse tripped: + Multi Volts Sense	
D32	Fuse tripped: - Multi Volts Sense	
D26	Fuse tripped: +ve Supply	
D29	Fuse tripped: -ve Supply	
D31	Fuse tripped: Auxillary Battery +ve	
D34	E-Plex Transmission	

Dimensional Diagram



Ordering Information

Description	E-Plex Part Number
804DCL - Heavy Duty DC Link Box - 1 Engine	EP-DC-804DCL-01
804DCL - Heavy Duty DC Link Box - 2 Engine	EP-DC-804DCL-02



George Summers Close, Medway City Estate, Rochester, Kent ME2 4EL
tel: +44 (0)1634 778704 Fax: +44 (0)1634 290773

email: sales@e-plex.co
web: www.e-plex.co

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