

FUSING

NOTE: Maximum total current of the device is 32 A. This includes the device current consumption plus the current supplied to the outputs. Each Output supply is rated Max 16 A.

Output Supply 1 & Output Supply 2 must not exceed 16 A.

Output Supply 3 & Output Supply 4 must not exceed 16 A.

NOTE: Output Supplies 1 & 2 are NOT FITTED on model DSEM643.

Select fuses appropriately to protect the circuits connected to the device's outputs.

Pin	Description	Used to Supply Outputs on Pins
1	Output Supply 1	B1, B13, B24, B25, B26, B27, B32, B33, B34, B35
3	Ignition (15)	1 A Fuse. Must be supplied by a mechanical switch connected to Pin A4 (ECU+) of the same ECU device.
4	ECU Supply	3 A Fuse
8	Output Supply 2	B2, B3, B4, B5, B10, B11, B12, B23
16	Output Supply 3	C24, C25, C26, C27, C32, C33, C34, C35
23	Output Supply 4	C1, C2, C3, C4, C5, C10, C11, C12, C13, C23

NOTE: Unused cores, in particular core loops, lead to interference coupling that influence the connected controller.



DEEP SEA ELECTRONICS PLC 053-186 ISSUE 3 DSEM640 / DSE M643 Installation Instructions

These instructions are intended as a quick guide only. For complete instructions and specifications, refer to DSE part number 057-244 *DSEM640 / DSEM643 Operator Manual* available from www.deepseapl.com.

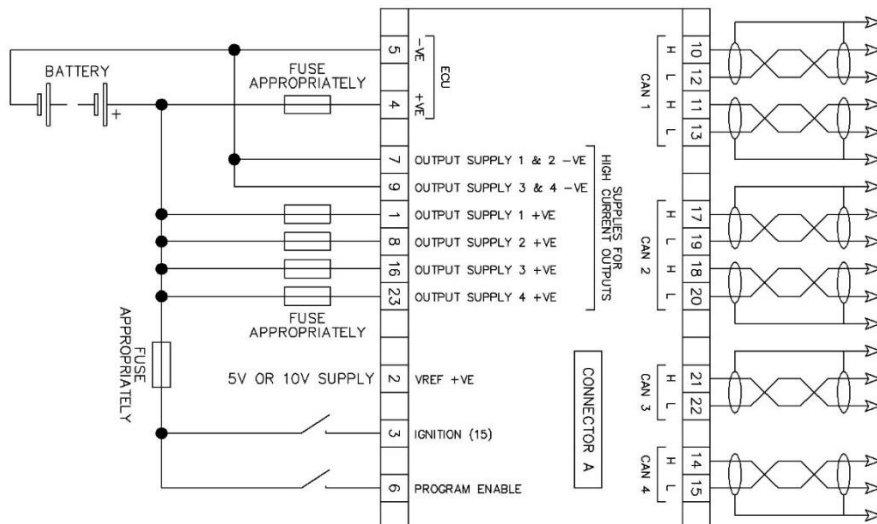
NOTE: Cables / wires must be installed as indicated by the manufacturer to prevent water entering the device. Part number of suitable connectors are detailed in DSE part number 057-244 *DSEM640 / DSEM643 Operator Manual* available from www.deepseapl.com.

NOTE: Connector B is NOT FITTED on model DSEM643.

NOTE: M12 protection plugs must be installed in both the USB and Ethernet interfaces to ensure IP67 rating.

NOTE: To ensure the protection of the device against electrical interference and the safe function of the device, the housing must be connected to the ground of the vehicle / machine.

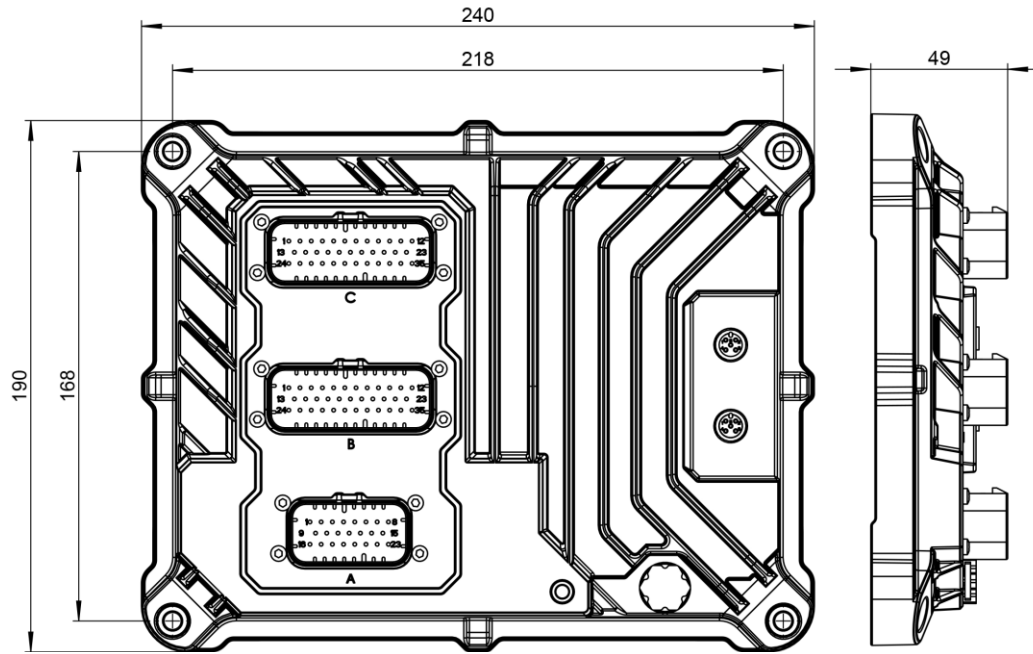
NOTE: Software and associated Device Descriptors are available from www.deepseapl.com.



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DIMENSIONS



Dimensions in mm

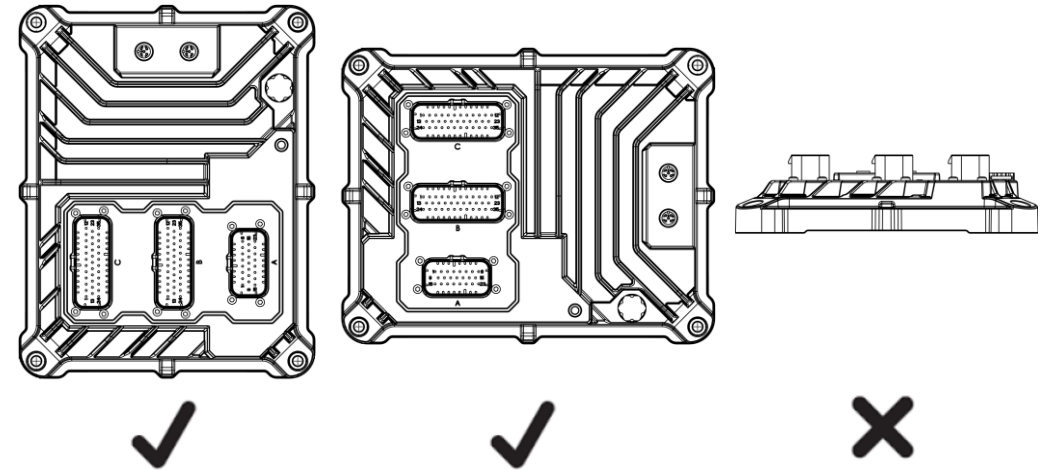
Overall Dimensions	240 mm x 190 mm x 49 mm (9.45 " x 7.48 " x 1.46 ")
Mounting Holes	Suitable for M6 bolts
Mounting Hole Centres	218 mm x 168 mm (8.58 " x 6.61 ")
Mounting Bolt Material Recommendation	Steel or Stainless Steel
Mounting Bolt Tightening Torque	8 Nm +/- 2 Nm
Overall Shipping Weight	1.58 kg

SURFACE

The controller must be mounted on a flat surface.
Use compensating elements if there is no flat mounting surface available.
For steel surfaces, ensure that it is protected against corrosion.

MOUNTING

Install the controller in such a way to allow any condensation that may form to flow out.



CONNECTORS AND HARNESES

Description	DSE Part	Manufacturer Part	Manufacturer
DSEM640 Connector Kit (Set of 3)	007-035	770680-1 776164-4 776164-1	TE Connectivity
DSEM643 Connector Kit (Set of 2)	007-1020	770680-1 776164-1	TE Connectivity
Connector Pin Crimp	N/A	770854-1	TE Connectivity
DSEM640 Connector Harness Kit (Set of 3)	007-036	N/A	DSE
DSEM643 Connector Harness Kit (Set of 2)	016-174	N/A	DSE
M12 to Ethernet Cable	016-160	VS-M12MS-IP20-93R-L1/2	Phoenix
M12 to USB Cable	016-161	N/A	DSE
M12 Sealing O-Ring	011-137	N/A	DSE
Belden 9841	016-030	9841	Belden