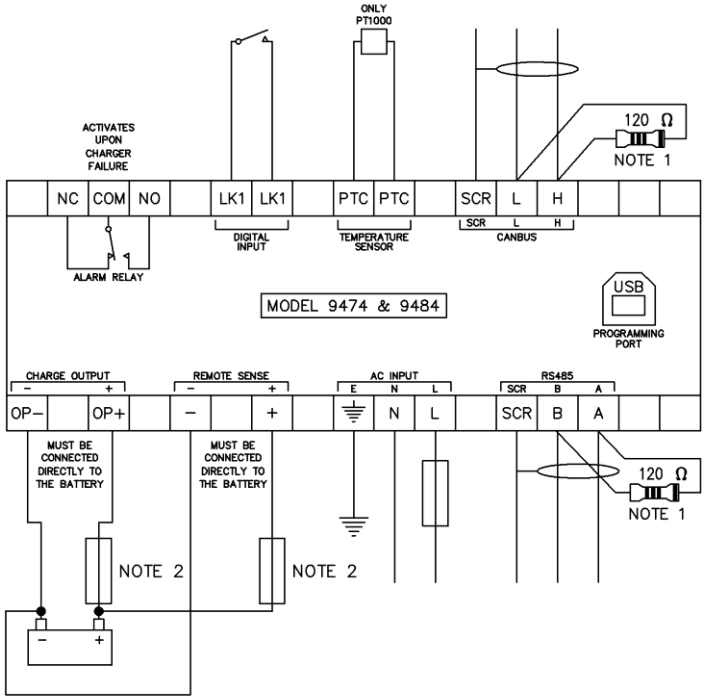
TYPICAL WIRING DIAGRAM

NOTE: A larger version of the Typical Wiring Diagram is available in the product's operator manual, refer to DSE Publication: *057-231 DSE 9474/9484 Operator Manual* available from www.deepseaelectronics.com for more information.



NOTE 1
A 120 OHM TERMINATION RESISTOR MUST BE FITTED IF IT IS THE FIRST OR LAST DEVICE ON THE CANBUS OR RS485 LINK

NOTE 2
FUSE APPROPRIATELY AND AS CLOSE TO THE BATTERY AS POSSIBLE TO PROTECT THE CABLES AND BATTERY

DANGER OF DEATH: LIVE PARTS exist within the enclosure. The enclosure cover must not be removed when connected to an AC supply

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DSE9474 & DSE9484 Installation Instructions

INSTALLATION

The DSE9474 & DSE9484 battery chargers are designed to be mounted within a control panel, utilising the integral mounting holes. The DSE9474 & DSE9484 battery chargers are fit-and-forget. It may be permanently connected to the supply and the load, with no requirement to disable the charger during times of heavy load (such as engine cranking) or when in parallel with a charging alternator.

WARNING!: For safe operation, the charger MUST be installed in an enclosure which prevents accidental contact with Hazardous Voltages.

BATTERY SUITABILITY

The standard DSE9474 & DSE9484 chargers are factory set by DSE to suit Lead Acid batteries but can be altered for other battery types using the DSE Configuration Suite PC software. Care must be taken to ensure the batteries connected to the charger are of the correct technology to suit the setting of the charger.

INDICATIONS

The DSE9474 & DSE9484 Battery Chargers feature LED indicators to show the battery charger status.

NOTE: Please refer to DSE Publication: *057-231 DSE 9474/9484 Operator Manual* for further details.

BOOST MODE

Boost mode is operated automatically or by activation of the digital input (if configured to perform this function). This raises the battery charger voltage to the *boost voltage* setting.

NOTE: Please refer to DSE Publication: 057-159 DSE9476 DSE94xx Battery Charger Series Configuration Suite PC Software Manual for further information.

AC SUPPLY CONNECTIONS

The battery charger is protected by an internal fuse. However to protect the A.C. supply cables should a fault arise between the supply and the connection to the battery charger, it is recommended to fit a fuse in the supply line as close to the source of supply as possible.
As the fuse is for cable protection only, the same fuse may be used regardless of the supply voltage.

AC Input Voltage	Recommended Fuse Size
110 V AC	20 A anti-surge
230 V AC	20 A anti-surge

Terminal	Function	Recommended Size	Comments
L	AC Live	4 mm² (AWG 12)	
N	AC Neutral	4 mm² (AWG 12)	
⏚ E	Earth	4 mm² (AWG 12)	

INPUT, OUTPUT, AND RS485 CONNECTIONS

Terminal	Function	Recommended Size	Comments
REMOTE SENSE -	Remote Sensing Wire negative terminal.	1 mm² (AWG 16)	Low current Sensing Wires used to measure the voltage at the battery terminals.
REMOTE SENSE +	Remote Sensing Wire positive terminal.	1 mm² (AWG 16)	
LK1	Configurable Input	1 mm² (AWG 16)	Connect the terminals together to activate the input. The Factory Setting for the digital input provides the Lamp Test function. Customer configurable using DSE Configuration Suite PC Software.
LK1	Configurable Input	1 mm² (AWG 16)	
NC	Normally Closed Contact of the Charge failure relay	0.5 mm² (AWG 22)	Changes State Under Charge Fail Conditions
COM	Charge failure relay Contact Common	0.5 mm² (AWG 22)	
NO	Normally Open Contact of the Charge failure relay	0.5 mm² (AWG 22)	
RS485 A	RS485 A (-) terminal.	0.5 mm² (AWG 22)	Recommended Belden 9841 cable.Ensure correctly fitted 120 Ω termination resistors at the first and last devices on the RS485 link.
RS485 B	RS485 B (+) terminal.	0.5 mm² (AWG 22)	
RS485 SCR	RS485 screen terminal.	0.5 mm² (AWG 22)	

BATTERY CONNECTIONS

NOTE: Use correct size cables for the battery connection to ensure minimum voltage drop.

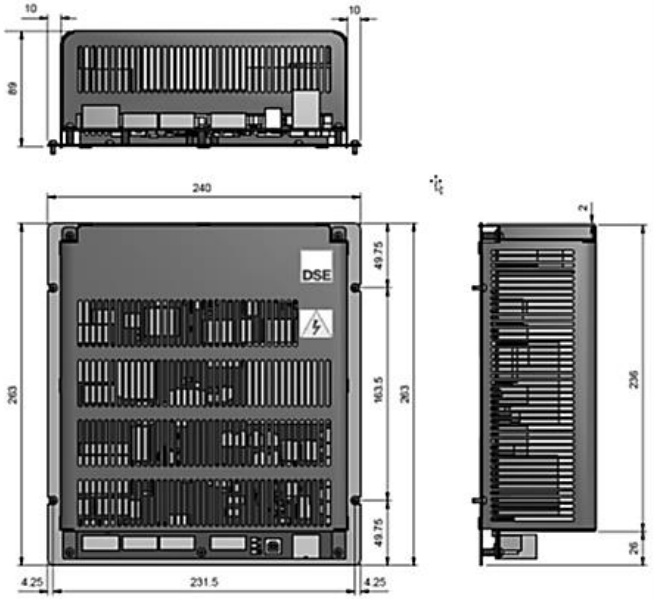
Terminal	Function	Recommended Size	Comments
-OP	Load Negative	10 mm² (AWG 6)	Battery negative terminal. This terminal is not internally connected to Earth.
+OP	Load Positive	10 mm² (AWG 6)	Battery positive terminal

CANBUS AND TEMP SENSOR CONNECTIONS

Terminal	Function	Recommended Size	Comments
CANBUS SCR	CAN Screen Terminal.	0.5 mm² (AWG 22)	Recommended Belden 9841 cable.Ensure correctly fitted 120 Ω termination resistors at the first and last devices on the CAN link.
CANBUS L	CAN L Terminal.	0.5 mm² (AWG 22)	
CANBUS H	CAN H Terminal.	0.5 mm² (AWG 22)	
PT1000 TEMP SENSOR	PT1000 Sensor	As fitted to the PT1000 Sensor	Battery Temperature Sensing. Used for Battery Temperature Compensation.
PT1000 TEMP SENSOR	PT1000 Sensor		

DIMENSIONS AND MOUNTING

NOTE: DSE9474 & DSE9484 are designed to be mounted with the base to a vertical surface with the terminal strips running horizontally.



Parameter	Specification
Weight	2.5 kg
Case Dimensions	240 mm x 269 mm x 89 mm (9.4” x 10.4” x 3.5”)
Mounting Holes Dimensions	Suitable for M5 (3/16” diameter)
Mounting Hole Spacings	231.5 mm x 163.5 mm (9.1” x 6.4”)