

DSE9450 & DSE9452

INTELLIGENT BATTERY CHARGERS

50 AMP 48 V & 50 AMP 24 V

The DSE9450 & DSE9452 are intelligent battery chargers that can be programmed for different charging curves to maximise the life of the battery.

The DSE9450 & DSE9452 are programmed using the user-friendly DSE Configuration Suite PC software.

The chargers are mounted to the chassis using the fixing holes that are built into the case and via a supplied bracket. The chargers' stylish design includes three coloured LEDs to indicate charging status and fault conditions.

Multiple chargers can be linked together to provide a larger current output.

ENVIRONMENTAL TESTING STANDARDS

ELECTRO-MAGNETIC COMPATIBILITY

BS EN 61000-6-2
EMC Generic Immunity Standard for the Industrial Environment
BS EN 61000-6-4
EMC Generic Emission Standard for the Industrial Environment

OPERATING TEMPERATURE RANGE

BS EN 60068-2-1
Ab/Ae Cold Test -30 °C
BS EN 60068-2-2
Bb/Be Dry Heat +70 °C
* Refer to de-rating curve in the DSE9450 Operator Manual

VIBRATION

BS EN 60068-2-6
Ten sweeps in each of three major axes
5 Hz to 8 Hz ar +/-7.5 mm,
8 Hz to 500 Hz at 2 gn

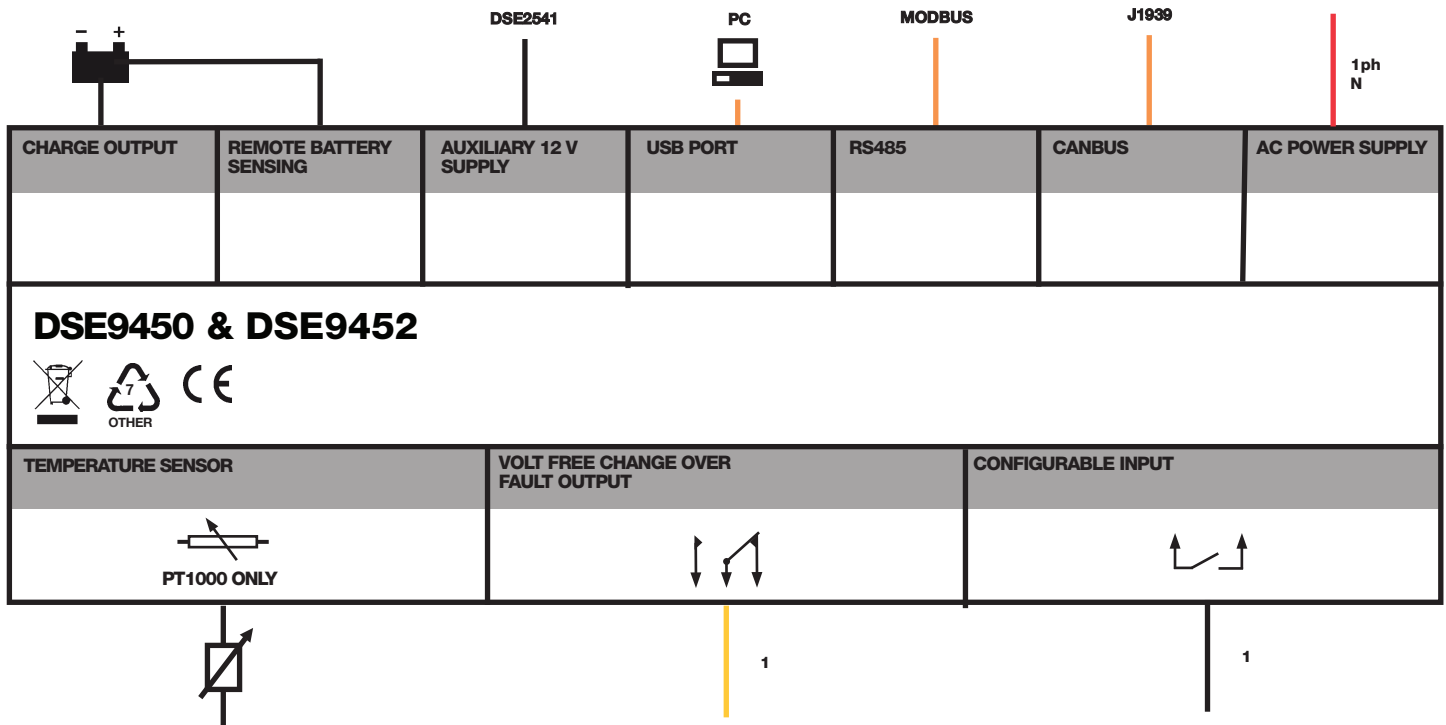
HUMIDITY

BS EN 60068-2-30
Db Damp Heat Cyclic 20/55 °C at 95% RH 48 Hours
BS EN 60068-2-78
Cab Damp Heat Static 40 °C at 93% RH 48 Hours

SHOCK

BS EN 60068-2-27
Three shocks in each of three major axes
15 gn in 11 ms

COMPREHENSIVE FEATURE LIST TO SUIT A WIDE VARIETY OF BATTERY CHARGER APPLICATIONS



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ADVANCED FEATURES

- Intelligent two, three and four stage charging profiles
- Remote voltage sensing to compensate for voltage drop
- Adjustable current limit (Maximum 50 A)
- Can be used as a battery charger, power supply or both at the same time
- Additional auxiliary 12 V supply output
- Automatic or manual boost and storage charge functions to help maintain battery condition
- Digital microprocessor technology
- Temperature compensation for battery charging
- Low output ripple and superb line regulation
- Three LEDs indication

Full Protection

- AC input under voltage
- AC input over voltage
- Battery charger output over voltage

- Battery charger output over current
- Battery low voltage detection
- Battery temperature compensation with over temperature protection
- Output short circuit and inversion polarity with auto recovery
- Automatic power de-rating at high ambient temperatures.
- Optional battery temperature compensation using PT1000 temperature sensor

Automatic Boost Mode

- Boosts and equalises cell charge improving battery performance and life

Power Save Mode

- Once the battery is fully charged the chargers switch to eco-power to save energy

Communication

- Can be integrated in to external systems through MODBUS RTU using RS485 & J1939 using CANBUS

- Fully configurable via DSE Configuration Suite PC Software
- External remote LCD option - DSE2541

KEY BENEFITS

- Fully flexible to maximise the life of the battery
- Suitable for a wide range of battery types
- Switched mode design
- Charge fail output
- Minimum 90% efficiency throughout full operating range
- Manual / Automatic boost mode
- Multiple chargers can be linked together to provide larger current output
- Can be permanently connected to battery and AC supply. No need to disconnect through high load conditions.

SPECIFICATION

AC SUPPLY

NOMINAL VOLTAGE RANGE
90 V to 305 V (L-N)

FREQUENCY RANGE

45 Hz to 65 Hz (L-N)

CHARGE OUTPUT - DSE9450

RATING AT 180 V TO 305 V SUPPLY
50 A DC at 48 V DC

RATING AT 90 V TO 170 V SUPPLY

30 A DC at 48 V DC

CHARGE OUTPUT - DSE9452

RATING AT 90 V TO 305 V SUPPLY
50 A DC at 24 V DC

RIPPLE AND NOISE

1%

EFFICIENCY

>90%

REGULATION

LINE
1%

LOAD

3%

AUXILIARY SUPPLY

100 mA DC at 12 V DC

TEMPERATURE SENSOR INPUT

PT1000

PROTECTIONS

Short Circuit
DC Under & Over Voltage
DC Over Current
Reverse Polarity
Over Temperature
AC Under & Over Voltage

CHARGE FAILURE RELAY

3 A 30 V DC volt free relay

DIMENSIONS

OVERALL
523 mm x 275 mm x 131 mm
20.2" x 10.3" x 4.9"

WEIGHT

8.5 kg

OPERATING TEMPERATURE RANGE

-30 °C to +70 °C
-22 °F to +158 °F

STORAGE TEMPERATURE RANGE

-30 °C to +70 °C
-22 °F to +158 °F

RELATED MATERIALS

TITLE

DSE9400 Series Configuration Suite PC Software Manual
DSE Configuration Suite Installation & Operators Manual
DSE9450 & DSE9452 Installation Instructions
DSE9450 & DSE9452 Operators Manual

PART NO'S

057-159
057-151
053-178
057-240

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