

DSE9450, DSE9452 & DSE9479

INTELLIGENT BATTERY CHARGERS

50 AMP & 100 AMP, 24 V & 48 V OPTIONS



ADVANCED FEATURES

- Intelligent two, three and four stage charging profiles
- Remote voltage sensing to compensate for voltage drop
- Adjustable current limit
- 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.

SPECIFICATIONS

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

RIPPLE AND NOISE
1%

EFFICIENCY
>90%

CHARGE OUTPUT DSE9452
RATING AT 90 V TO 305 V SUPPLY
50 A DC at 24 V DC

RIPPLE AND NOISE
1%

EFFICIENCY
>90%

CHARGE OUTPUT DSE9479
RATING AT 180 V TO 305 V SUPPLY
100 A DC at 24 V DC

RATING AT 90 V TO 170 V SUPPLY
60 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 & Operator Manual
DSE9450, DSE9452 & DSE9479 Installation Instructions
DSE9450 & DSE9452 Operator Manual
DSE9479 Operator Manual

PART NO.

057-159
057-151
053-178
057-240
057-264

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INTELLIGENT BATTERY CHARGERS

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The DSE9450, DSE9452 and DSE9479 are intelligent battery chargers that can be programmed for different charging curves to maximise the life of the battery.

All chargers 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

