DSEPower®

DSE®

DSE9476

INTELLIGENT BATTERY CHARGER

24 V 20 AMP



ADVANCED FEATURES

- Intelligent two, three and four stage charging profiles for different battery chemistries
- Adjustable current limit (maximum 20 A)
- Can be used as a battery charger, power supply or both at the same time
- 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 tight load & line regulation
- Four indication LEDs
- Integrated ORing diode for paralleing applications
- 570W max output power

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 reverse polarity with auto recovery
- Automatic power de-rating at high ambient temperatures
- Optional battery temperature compensation using PT1000 temperature sensor
- Active power factor correction, 0.99 at full load (low line)

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 into external systems through MODBUS RTU using RS485
- Fully configurable via DSE Configuration Suite PC Software for special charging requirements
- External remote LCD option
- DSENet® compatibility

KEY BENEFITS

- Fully flexible to maximise the life of the battery
- Suitable for a wide range of battery types
- Switched mode design
- Fault output
- 94.5% effiency at high line, full load
- No external intervention for 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
- Lightweight design <2Kg
- Works at very high ambient temperatures (80 °C/185 °F)
- Fanless design
- Wide line voltage operation
- Plastic terminal cover available for safety
- Deep sleep mode to reduce power consumption from battery when mains supply unavailable

SPECIFICATIONS

AC SUPPLY
VOLTAGE RANGE
95 V to 305 V (L-N)

FREQUENCY RANGE
47 Hz to 63 Hz (L-N)

DC OUTPUT
DSE9476 OUTPUT
20 A DC at 24 V DC

RIPPLE AND NOISE
1%

EFFICIENCY (At Full Load)
>92%

REGULATION
LINE
<0.5%

LOAD
1%

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
183 mm x 233 mm x 76 mm
7.2” x 9.2” x 3.0”

WEIGHT
1.8 kg

OPERATING TEMPERATURE RANGE
-30 °C to +80 °C
-22 °F to +176 °F

STORAGE TEMPERATURE RANGE
-40 °C to +85 °C
-40 °F to +185 °F

RELATED MATERIALS

TITLE	PART NO.
DSE9400 Series Configuration Suite PC Software Manual	057-159
DSE Configuration Suite Installation & Operator Manual	057-151
DSE9476 Installation Instructions	053-235
DSE9400 Operator Manual	057-085

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The DSE9476 intelligent battery charger can be programmed for different charging curves to maximise the life of the battery.

The DSE9476 is programmed using the user-friendly DSE Configuration Suite PC software.

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

The chargers do not include any moving parts to give added durability and reliability. They will also continue to operate during engine cranking and running.

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 ºC
BS EN 60068-2-2
Bb/Be Dry Heat +80 ºC
* Refer to de-rating curve in the DSE9476 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 ºC at 95% RH 48 Hours
BS EN 60068-2-78
Cab Damp Heat Static 40 ºC 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

