



# DSE**9470**, DSE**9472**, SE**9480 & DSE<b>9481**

MKII INTELLIGENT BATTERY CHARGERS 5 AMP & 10 AMP, 12 VOLT & 24 VOLT OPTIONS

# **FEATURES**



The DSE9400 series is a range of intelligent battery chargers that can be programmed for different charging curves to maximise the life of the battery.

The DSE9400 series of intelligent battery chargers are programmed using the user-friendly DSE Configuration Suite PC software.

The chargers can be either DIN rail or chassis mounted, using the fixing holes that are built into the case. The charger's 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 running.

Multiple modules can be linked together to provide a larger current

# **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 +80 °C
\* Refer to de-rating curve in the DSE9000
Operator Manual

#### VIBRATION

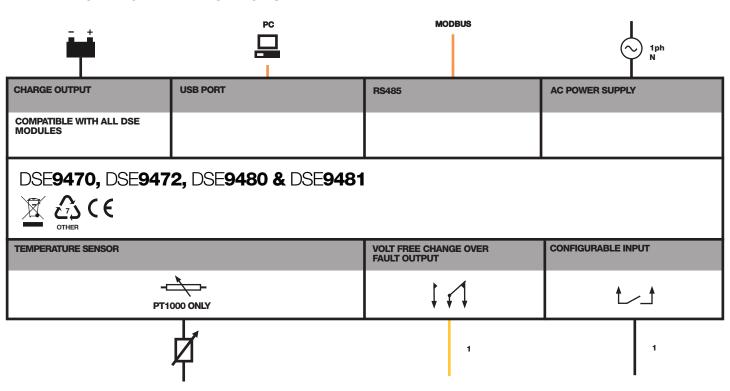
BS EN 60068-2-6 Ten sweeps in each of three major axes 5 Hz to 8 Hz @ +/-7.5 mm, 8 Hz to 500 Hz @ 2 gn

# HUMIDITY

BS EN 60068-2-30 Db Damp Heat Cyclic 20/55 °C @ 95% RH 48 Hours BS EN 60068-2-78 Cab Damp Heat Static 40 °C @ 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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IKII INTELLIGENT BATTERY CHARGERS

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# **ADVANCED FEATURES**

- Intelligent three and four stage charging profiles
- Configurable to suit 12V and 24V applications
- Adjustable current limit (Max
- 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 superb line regulation
- Three LED indicators
- Switched mode design
- Fully customisable battery charging curves

# **Full Protection**

- AC input under voltage
- AC input over voltage

- Battery charger output over voltage
- Battery charger output over current
- Battery under voltage alarm
- Automatic battery detection
- Automatic battery charger self test
- 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 with over temperature protection

# **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 ecopower to save energy

# Communication

- Can be integrated into external systems through MODBUS RTU using RS485
- Fully configurable via DSE Configuration Suite PC Software
- External remote display option -DSE2541

# **KEY BENEFITS**

PART NO'S

057-159

057-151

057-049 057-085

- Fully flexible to maximise the life of the battery
- Suitable for a wide range of battery types
- Minimum 86% efficiency throughout full operating range
- No external intervention for boost mode
- Multiple chargers can be linked together to provide larger current output
- Can be permenantly connected to battery and AC supply. No need to disconnect through high load conditions such as cranking or when the engine is running.

## SPECIFICATION

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

# FREQUENCY RANGE

48 Hz to 64 Hz (L-N)

# DC OUTPUT DSE9470 OUTPUT

10 A DC at 24 V DC

# DSE9472 OUTPUT

### DSE9480 OUTPUT 10 A DC at 12 V DC

DSE9481 OUTPUT 5 A DC at 12 V DC

# RIPPLE AND NOISE

# **EFFICIENCY**

# REGULATION

LINE < 0.5%

# LOAD

# **TEMPERATURE SENSOR INPUT**

# PROTECTIONS

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

# CHARGE FAILURE RELAY

3 A at 30 V DC volt free relay

# DIMENSIONS

# OVERALL

70 mm x 200 mm x 130 mm 2.7" x 7.9" x 5.1"

# WEIGHT

#### **OPERATING TEMPERATURE RANGE** -30 °C to +55 °C

STORAGE TEMPERATURE RANGE

# **RELATED MATERIALS**

# TITLE

DSE9400 Series Configuration Suite PC Software Manual DSE Configuration Suite Installation & Operator Manual DSE9000 Series Installation Instructions DSE9000 Series Operator Manual

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