

Description

The Mertech 12V or 24V 5 Amp battery chargers have been designed to be permanently connected to a battery, keeping it charged to maximum capacity.

The chargers can be either mounted vertically via DIN rail or to the panel chassis, using the fixing holes that extend from the case. The chargers stylish design includes an LED indicator on the front that shows when the charger is in a normal or overload condition.

The charger will continue to operate during cranking and running. The charger can accept multiple AC voltage connections.

The Mertech vertical battery chargers are expertly designed using high grade components and capacitors allowing the unit to function more efficiently, providing a longer and more reliable life-span than other chargers in their class. Their in-built robustness makes them ideal for the rigours of a wide variety of markets including heavy and light industrial environments.

Multi-Stage Charging

- Constant current - maximum current available during charge recovery phase
- Constant voltage
- Chargers automatically return to float mode when charging is complete

Low Output Ripple

- Makes the chargers ideal for all battery types

Full Protection

- Reverse polarity protection, short circuit protection and current limiting
- Automatic recovery after the removal of fault conditions
- Battery charger thermal de-rate facility



Boost Mode

- Boosts and equalises cell charge improving battery performance and life
- Simple boost connection using on-board terminals

Power Save Mode

- Once the battery is fully charged the chargers switch to Eco-Power to save energy

Key Benefits

- Small and compact size
- Suitable for a wide range of battery types
- No moving parts for longer battery charger life
- Switched mode design
- Charge fail output
- Minimum 80% efficiency throughout full operating range

BATTERY CHARGER

DATA SHEET

Series MS-BC

SPECIFICATION

AC SUPPLY

FREQUENCY RANGE

45 Hz to 65 Hz

VOLTAGE RANGE

90 V to 305 V (L-N)

DC OUTPUT

MSBC 1205 OUTPUT

5 A DC 12 V DC

MSBC 2405 OUTPUT

5 A DC 24 V DC

RIPPLE AND NOISE

<1%

EFFICIENCY

>80%

REGULATION

LINE

<0.001% Vo

LOAD

1% Vo

PROTECTIONS

Short Circuit

Over Voltage

Over Current

Reverse Polarity

DIMENSIONS

DIN Rail Mounted

48 mm x 133 mm x 110 mm

1.9" x 5.2" x 4.3"

Screw Mounted

48 mm x 153 mm x 112 mm

1.9" x 6.0" x 4.4"

WEIGHT

0.4 kg

OPERATING TEMPERATURE RANGE

-30 °C to +55 °C

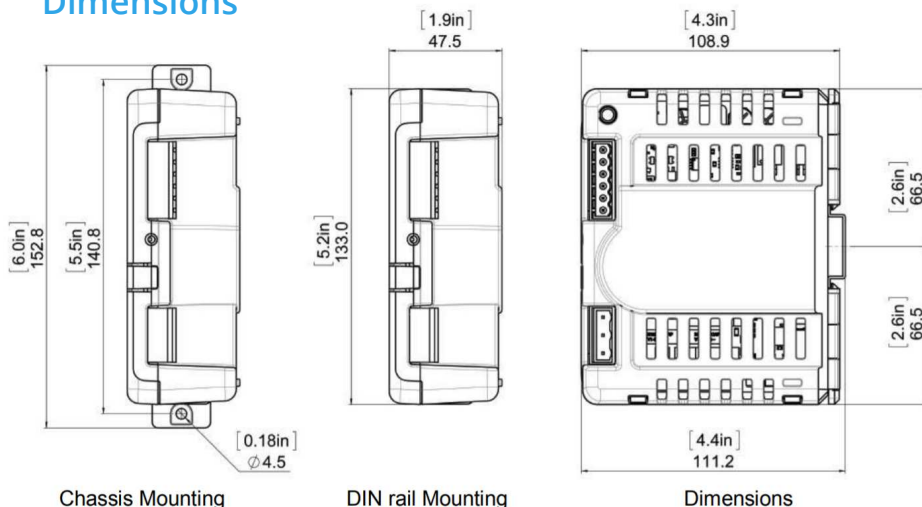
-22 °F to +122 °F

STORAGE TEMPERATURE RANGE

-40 °C to +85 °C

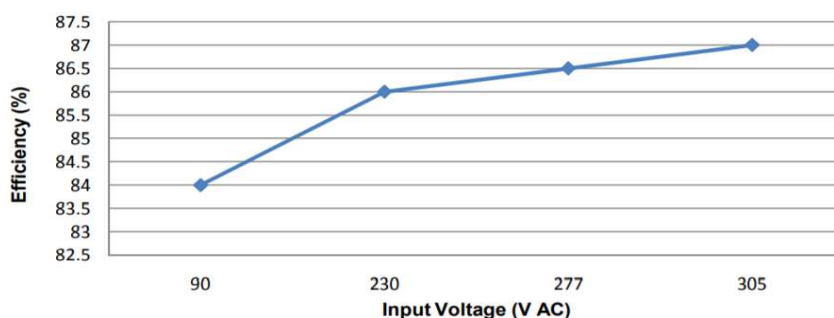
-40 °F to +185 °F

Dimensions



Parameter	Min	Nom.	Max	Comments
Output Voltage (12 V DC Battery)	12.5 V	13.7 V	14.5 V	Specify float voltage on ordering.
Output Charging Current (A)	0 A	5 A		
Current Limit Threshold (A)	4.75 A	5.0A	5.25 A	Thermal foldback above 55 °C
Recovery From Current Limit (A)	5 A	5.2 A		
Full Load AC Input Current (A)	0.65 A		1.5 A	With output at 14.5 V DC
AC Input Inrush (10ms) Current (A)		50 A		With AC input 230 V

MSBC 1205 Efficiency Curve at 5A



Parameter	Min	Nom.	Max	Comments
Output Voltage (24 V DC Battery)	25.0 V	27.4 V	30.0 V	Specify float voltage on ordering.
Output Charging Current (A)	0 A	5 A		
Current Limit Threshold (A)	4.75 A	5.0 A	5.25 A	Thermal foldback above 55 °C
Recovery From Current Limit (A)	5 A	5.2 A		
Full Load AC Input Current (A)	0.65 A		2.5 A	With output at 27.6 V DC
AC Input Inrush (10ms) Current (A)		50 A		With AC input 230 V

MSBC 2405 Efficiency Curve at 5A

