

# **CB126A Battery Charger**









# \* Not for new designs.

## Features:

- Input: Single-phase 115 230 277 VAC
- Output: Battery charging 12 VDC; 6 A
- Suited for the following battery types:
- Open Lead Acid, Sealed Lead Acid, lead Gel and Ni-Cd (option)
- Automatic diagnostic of battery status. Charging curve IUoUo, constant voltage and current
- Switching technology, output voltage 14.4 VDC
- Three charging levels: Boost, Trickle, Recovery.
- Protected against short circuit, inverted polarity, over load.
- Signal output (contact free) for fault battery state
- Protection degree IP20 DIN rail mountable.

# INPUT

# **BATTERY** OUTPUT

# GENERAL DATA

### **ENVIRONMENT**

# SAFETY & EMC

# **OTHERS**

#### Cat. No. **CB126A Input Data**

115 ~ 230 ~ 277 VAC Nominal Input Voltage (2 x VAC) Input Voltage range (VAC) 90 ~ 305 VAC Inrush Current (Vn and In Load) 12t  $\leq$  11 A  $\leq$  5 msec. Frequency  $47 \sim 63 \text{ Hz } \pm 6\%$ 1 A ~ 115 VAC; 0.7 A 230 VAC Input Current Internal Fuse 4 A

External Fuse (recommended) 10 A (MCB curve B) **Battery Output (Battery Care)** 

Boost charge (25°C) (typ. at In) 14.4 VDC Max. time Bust Charge (tpy. at In) 15 h Min. time Bust Charge (tpy. at In) 70 min. Trickle charge (25°C) (typ. at In) 13.75 VDC Recovery Charge 2 ~ 7 VDC Charging. Max  $I_{batt} < 40^{\circ}C$  ( $I_{n}$ )  $6 A \pm 5\%$ Charging. Max  $I_{batt} > 40^{\circ} \text{C (I}_{\text{n}})$ 4 A Efficiency (50% - In) 81% ≤ 100 mA

Charging current limiting ladi  $20 - 100 \% I_n$ Quiescent Current Charging Curve automatic: IUoUo 3 stage Detection of element in short circuit Yes Short-circuit protection Yes Over Load protection Yes Over Voltage Output protection Yes Jumper Configuration battery type 2.23;2,25;2,27;2,3;

(V cell) Ni-Cd (optional) 1,41-1,5 (20 elem.)

# **General Data** Insulation voltage (In /Out)

Insulation voltage (In / PE) 1605 VAC Insulation voltage (Out / PE) 500 VAC Protection Class (EN/IEC 60529) IP20 Protection class I, with PE connected Reliability: MTBF IEC 61709 > 300.000 hours Pollution Degree Environment

Connection Terminal Blocks screw Type 2,5mm (24~14AWG) Dimensions (W-H-D) 45x100x100 mm (1.78 x 3.94 x 3.94 in.)

0.30 Kg approx. (0.65 lbs.) Weight

#### **Climate Data**

-25 - +70°C (-13~158°F) Ambient temperature (operation) De Rating Ta > 50°C - 2.5%(In) / °C Ambient temperature Storage -40 - +85°C (-40~185°F) Humidity at 25°C no condensation 95% to 25°C **Auto Convention** Cooling

# **Norms and Certifications**

Conforming to: IEC/EN 60335-2-29,EN60950/UL1950, Electrical safety, 89/336/EEC, EMC Directive, 2006/95/EC (Low Voltage), DIN41773 (Charging cycle), Emission:IEC 61000-6-4,Immunity: IEC 61000-6-2.CE

3000 VAC

# Signal Output (free switch contact)

Main or Backup Power Yes Low Battery Yes **Fault Battery** Yes

## **Type of Signal Output Contact**

Max. current can be switched (EN60947.4.1): Max. DC1: 30 VDC 1 A; AC1: 60 VAC 1A Min.1mA at 5 VDC

Resistive load Min load

# CB126A Battery Charger

# Altech Corp.

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### **Technical Features**

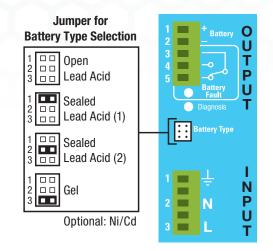
The CB series battery chargers are designed with advanced multistage battery charging method, completely automatic and suited to meet the most advanced requirements of battery manufacturers. The Battery Care concept is base on algorithms that implement rapid and automatic charging, battery charge optimization during time, flat batteries recovery and real time diagnostic during installation and operation. The Real Time Autodiagnostic system, monitoring battery faults such as, elements in short circuit, accidental reverse polarity connection, disconnection of the battery, they can easily be detected and removed by help of Blink Code of Diagnosis Led; during the installation and after sell. Each device is suited for all battery types, by means of jumpers it is possible setting predefined curves for Open Lead Acid, Sealed Lead Acid, Gel, Ni-Cd(option). They are programmed for two charging levels, boost and trickle. A rugged casing with bracket for DIN rail mounting provide IP20 protection degree. They are extremely compact and cost-effective.

#### Charging

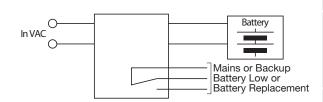
Automatic multi-stage charging and real time diagnostic allow fast recharge and recovery of deep discharged batteries, adding value and reliability to the system hosting. Type of charging is Voltages and current stabilized IUoUo. The state of charging battery and Autodiagnosis of the systems are identified by a flashing code on a Diagnosis LED and Fault Battery LED:

	State	Diagnosis LED	Battery Fault LED
Charging	Trickle	1 Blink/sec	0FF
Type	Boost	2 Blink/sec	0FF
	Recovery	5 Blink/sec	0FF
Auto	Reverse polarity	<b>⅃</b> L1 Blink	ON
diagnosis	Battery No connect	<b>Л</b> L2 Blink	ON
	Element in Short C.	<b>∭</b> L3 Blink	ON
	Replace Battery	<b>JMM</b> L5 Blink	ON

# **Wiring Terminals and Jumper Settings**



# **Wiring Diagram**



osc Class 2 series

DSA FIRX Series

PSB FIEX Series

PS-S Slim Series

as Low Profile Serve

os Industrial Series

PSC & W Series

CBI TYPE

CB Type Chargers

Accessories

*Nopendix* 

## **CB Charging Diagram**

