



# TBC-10 Battery Charger

T I D E L A N D • S I G N A L

Tideland Signal's TBC-10 automatic battery charger maintains the correct state of charge to secondary storage batteries from 6 to 30 volts.

## Features

- The TBC-10 provides terminals for two outputs and can maintain two independent battery banks in parallel by a sealed relay while a.c. input power is present. Should mains input fail, the two outputs are automatically separated.
- The problem of overcharging one battery bank and undercharging the other, which is encountered in the use of a regulated constant voltage charger with blocking diodes for battery separation, is eliminated.
- Charging is accomplished through peak power pulsing which automatically equalises cell voltages and insures full rated battery capacity over an extended life.
- Proper float charge is maintained by automatic monitoring of the battery voltage twice per input a.c. cycle.
- A unique metre function switch and pulse metre provide three-way monitoring; the user can measure charging current, battery voltage and monitor the operation of the charging circuits.
- The GMU charge fail monitor output has an active pull-up. The EX version has a normally closed zero-volt contact output.



*TBC-10, E Box Type  
(P.N. 040.1039)*



*TBC-10, Explosion Protected Type  
(P.N. 040.1040)*

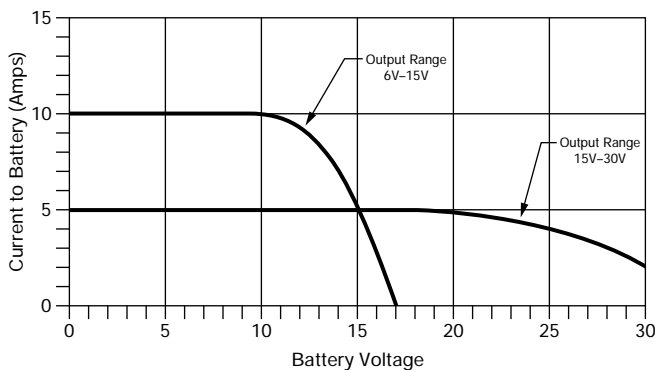
*Explosion protected and dust-tight junction box. Class I, Group D;  
Class II, Groups E, F and G; NEMA 7 and NEMA 9.*

*Note: No cable gland bushings are provided with explosion protected type.  
All external wiring must comply with appropriate provisions of the most  
current edition of NFPA National Electrical code.  
Aluminium alloy, copper content 0.3% maximum.*

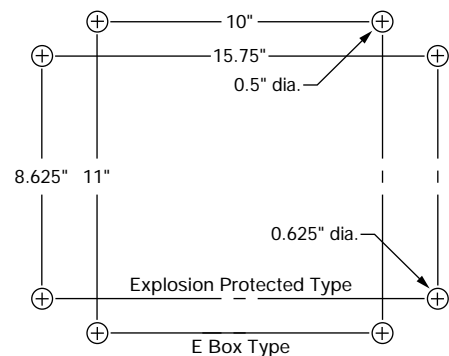
## SPECIFICATIONS

Input Voltage:	Two input voltages available: 120 VAC or 240VAC (50 or 60 Hz). Customer to specify for factory pre-set.
Input Power:	Maximum: 500 watts
Output Range:	Two voltage ranges are offered: 6V-15V and 15V-30V. Customer to specify for factory pre-set.
Charge Current:	Electronic circuitry monitors the state of battery charge, activates pulsed charging when state is found below factory pre-set float level, and limits the output current to 10 amps for batteries from 6-15 volts; 5 amps for batteries from 15-30 volts. Customer to specify number and type of cells-in-series to be charged for factory pre-set of float charge.
Fusing:	7 amp input fuse
Enclosure:	Tideland E box case in #356 aluminium (copper content 0.25% max.), polyurethane enamel coated, 4 brass swing bolt closures, 4 NavGrip® cable gland bushings 3/4" NPT plugged with removable rubber seals.
Shipping Weight:	Tideland E box type: 14.51 kg (32 lb); Explosion protected type: 37.20 kg (82 lb)

**TBC-10 MAXIMUM CURRENT OUTPUT VS. BATTERY VOLTAGE  
(Typical Installation)**



**MOUNTING DIMENSIONS**



*Tideland Signal Corporation maintains ISO 9001 accreditation. It is company policy to provide products and services that meet the highest standards of quality in the industry.*

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Printed in U.S.A.

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