

Class T Fuse Block

Introduction

The IPS® Class T Fuse Block is designed to provide code compliant overcurrent protection for mobile applications. It protects the battery bank, inverter and cables from damage caused by short circuits and overloads. It uses a fast acting, current limiting class T fuse cartridge which provides instantaneous protection in the event of a short circuit but also employs a time delay to allow momentary current surges common in inverter applications.

Integrated Power Systems LLC, offers a complete line of IPS® class "T" fuse blocks. Available in 110, 200, 300, 350 and 400 amp models. IPS® fuse blocks are ideal in mobile applications where over-current protection is required for high current components such as inverters and chargers. A rugged injection molded base and thermoformed ABS cover provide durability, easy installation and good looks all in a compact, cost effective package.

Fuse Selection

Fuse size is determined based upon the size of the conductor between the battery and the load. Factors such as length of the cable between battery and load and wire type of the conductor as well as conductor temperature rating all affect the conductor's current carrying capability.

The following information provides general guidelines in fuse selection.

<u>Conductor Gauge</u>	<u>Current Capacity*</u>	<u>Recommended Fuse Rating</u>
4/0 AWG	360	400
3/0 AWG	310	300
2/0 AWG	265	200
1/0 AWG	230	200
#2 AWG	170	110
#4 AWG	125	110

*Based on 75° C Cable rating in free air @ 86° F

Installation

The fuse should be installed between the battery and the load in the ungrounded conductor. This is normally the positive or red color-coded conductor. Install the fuse block in an easily accessible location. For code compliance, locate the fuse within 18" of the battery with at least 6" of clearance from other equipment. Attach the fuse block securely to a solid mounting surface using appropriately sized hardware.

Connections to the fuse block require ring terminals. 110 and 200 amp fuse blocks use 5/16" hardware and 300 and 400 amp fuse blocks use 3/8" hardware. Make the cable connections to the fuse block first, then to the battery and finally the load (inverter). Always check cables for correct polarity before making final connections.

Place the ring terminal on the end of the cable over the stud on the fuse block. Install the flat washer, the lock washer and the nut in that order. Do not put any washers between the ring terminal and the fuse, as this will cause overheating and premature fuse failure. Torque 5/16" hardware to 150 inch-pounds (12½ ft. lbs.) and 3/8 " hardware to 250 inch-pounds (21 ft. lbs.) Threads are specially lubricated to assist in future disassembly.

WARNING: Exceeding torque specifications will result in damage and premature failure of the product. Failures caused by exceeding torque specifications are not covered by warranty.

For more information contact:



56716 C.R. 31, Goshen, IN 46528
Phone: 574-825-9152 Fax: 574-825-1035
E-mail: Integratedpwr@cs.com