

IGBT Fault Interrupter

Description

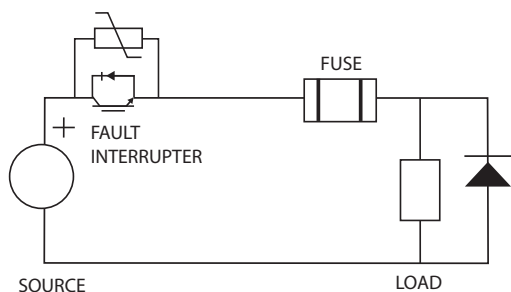
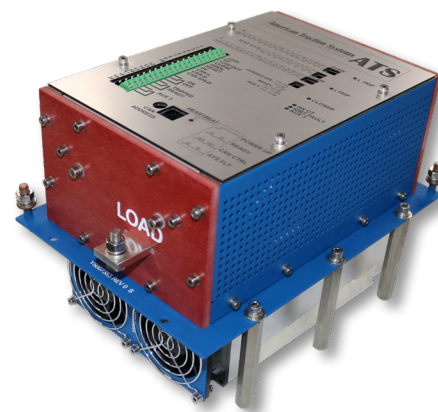
The ATS IGBT (Insulated Gate Bipolar Transistor) Fault Interrupter is used to interrupt short circuit fault currents from large battery banks. The solid state circuit limits the energy let through to the fault to levels much lower than can be achieved using conventional circuit protection devices such as electromechanical circuit breakers and fuses. It is intended to coordinate with conventional protective devices to prevent the melting of fuses and activation of overcurrent protection, allowing the battery power source to remain available for continued operation of healthy load circuits after the faulty circuit has been isolated.

Applications

- Bus systems
- Marine
- Rail

Features

- Uses electronic current measurement and fast switching capability of the IGBT to detect and clear a short circuit fault in less than 10 μ s.
- Allows battery power source to remain active by isolating faulty circuit.
- For common DC Bus systems, marine re-charging stations, rail and electric vehicle traction applications operating from battery voltages up to 750 V_{DC}



The IGBT switch is a 3300V IGBT protected by a MOV. The collector voltage is limited to approximately 2200V while absorbing the inductive switching energy.

Dimensions

Height	215mm (8.5")
Width	216mm (8.5")
Depth	323mm (12.7")
Weight	9 kgs (20 lbs)

Electrical Specifications

Voltage Range Input	0 - 1100 V _{DC}
Rated Power @ Rated Volts Input	375kW
Frequency Range	DC
Amps @ Rated Power Input	500A

Environmental Specifications

Description	Specifications
Ambient Operating Temperature	-20°C to +50°C (-4°F to 122°F)
Heatsink Temperature	110°C (230°F) Maximum
Storage Temperature	-40°C to +60°C (-40°F to 140°F)
Relative Humidity	<90% No condensation
Altitude	1000 meters (3300 feet) de-rate above 3000 meters

