

ATLAS MARINE SYSTEMS

TPB Series **TecPOWER™** POWER MANAGEMENT SYSTEM

Atlas Marine Systems is the world leader in the design of marine electrical power systems. Atlas can provide electrical engineering services to define the vessel electrical distribution system and application of its TecPOWER™ power management system & ShorPOWER® frequency converters. With over 100 years of experience and almost 1000 satisfied customers, Atlas supplies products with a field proven history greater than all of its known competitors combined and is supported by a worldwide authorized service network.



APPLICATION:

The TecPOWER™ *TPB Series* power management system provides breakthrough technology for marine electrical power systems.

Now, Atlas Marine Systems has made the Automated Power Management capability usually found on vessels 120' and above available to smaller vessels with limited space for power management controls. Technology advancements in control components have allowed full power management controls to be placed in the same size enclosure as a manual switchboard. This results in a giant leap forward bringing smaller yachts in line with larger yachts.

Automated power management simplifies the operation of the electrical power system by monitoring the electrical loads on the vessel and starting and stopping generators as needed. Generator paralleling is provided as well as seamless transfers between generators, and between generators and shore. This makes "dead ship" when transferring to shore and back a thing of the past.

Designed with ergonomics and ease of operation in mind, the *TPB Series* is very user-friendly and simple to operate, even for an inexperienced crew member. Likewise, owner-operated vessels will be easier to operate and more enjoyable. Automated power management often eliminates the need for additional crew to operate the electrical system and in addition, the resale value of the vessel will be higher.

POWER MANAGEMENT FEATURES:

- Auto start & seamless transfer to on-board generator when shore failure or shore overload occurs
- Automatic parallel of standby generator when loading increases
- Automatic rotation of generators on and off line to extend life
- Automatic seamless transfer to and from all power sources
- Dead bus transfer automatically connects a standby source to a dead bus
- Failing generator's pre-alarms automatically start & transfer to standby generator
- Generator pre-start alarm warns engine room personnel of imminent generator operation
- Load shed intelligently sheds & reconnects load to the bus as power availability permits

All TecPOWER™ power management systems feature the quality and workmanship that makes Atlas products a cut above the rest.

The switchboards, load management and power management configurations are offered with many individual features and options to select from, and will meet most requirements. Reference to **Table 1** will assist you in determining what configurations best meet your individual needs. Specific mechanical information needed to properly facilitate the TecPOWER™ selected is available by contacting Atlas Marine Systems to obtain a comprehensive proposal.

ATLAS MARINE SYSTEMS - TecPOWER™ TPB Series

SWITCHBOARDS	TPB-1	TPB-2				
LOAD MANAGEMENT SYSTEM				TPB-3		
POWER MANAGEMENT SYSTEMS				TPB-4	TPB-5	TPB-6
Compact and light weight design	F	F	F	F	F	F
Drip proof enclosure with windowed gasketed doors	F	F	F	F	F	F
Keyed hinged doors held open with door stays	F	F	F	F	F	F
Non-conductive safety handrails on front	F	F	F	F	F	F
Control circuit breakers throughout - no fuses anywhere	F	F	F	F	F	F
Source circuit breaker electrical interlock	F	F	F	F	F	F
Power available lights package	F	F	F	F	F	F
Analog metering package	F	F	F	F	F	F
Din rail distribution circuit breaker section	F	F	F	F	F	F
Single bus design	F	F	F	F	F	F
Pushbutton operated motorized source circuit breakers		F	F	F	F	F
Ground Fault metering package	O	O	F	F	F	F
Seamless power transfer system - analog				F	F	F
Generator paralleling and load sharing system - analog				F	F	F
Synchronization monitoring system				F	F	F
Total power management system						F
Touch screen display and control panel						F
Digital metering package					O	F
Load shedding system (internal - distribution breakers)			F	O	F	F
Load shedding system (external - three levels)						F
Load shedding system (external - one level)			O		O	
Generator alarm interface package						F
Generator start / stop control - automatic						F
Ground fault alarm system	O	O	O	O	O	F
DC power interior lighting	O	O	O	O	O	O
Analog kW metering package					O	O
Overload indicator light			O		O	O
Emergency stop pushbuttons		O	O	O	O	O
Remote touch screen display						O
Remote communications package (RS232, RS485 or Ethernet)						O
Shore cord phase rotation indicator	O	O	O	O	O	O
Shore cord phase rotation correction system	O	O	O	O	O	O
Split bus design package	O	O	O	O	O	O
Hot swap source breaker option	O	O	O	O	O	O
Classification by any marine agency	O	O	O	O	O	O
Generator paralleling and load sharing system - digital				O	O	O
Generator engine speed controller system				O	O	O
Generator engine start / stop control - manual				O	O	
Generator manual engine speed controller package				O	O	O
Generator manual voltage adjust package				O	O	O
Motor control center option				O	O	O

NOTES: 1. ' F ' indicates a feature of a TPB configuration and ' O ' indicates an option.
2. Some options may require larger enclosure.

TPB Features - Rev. NC