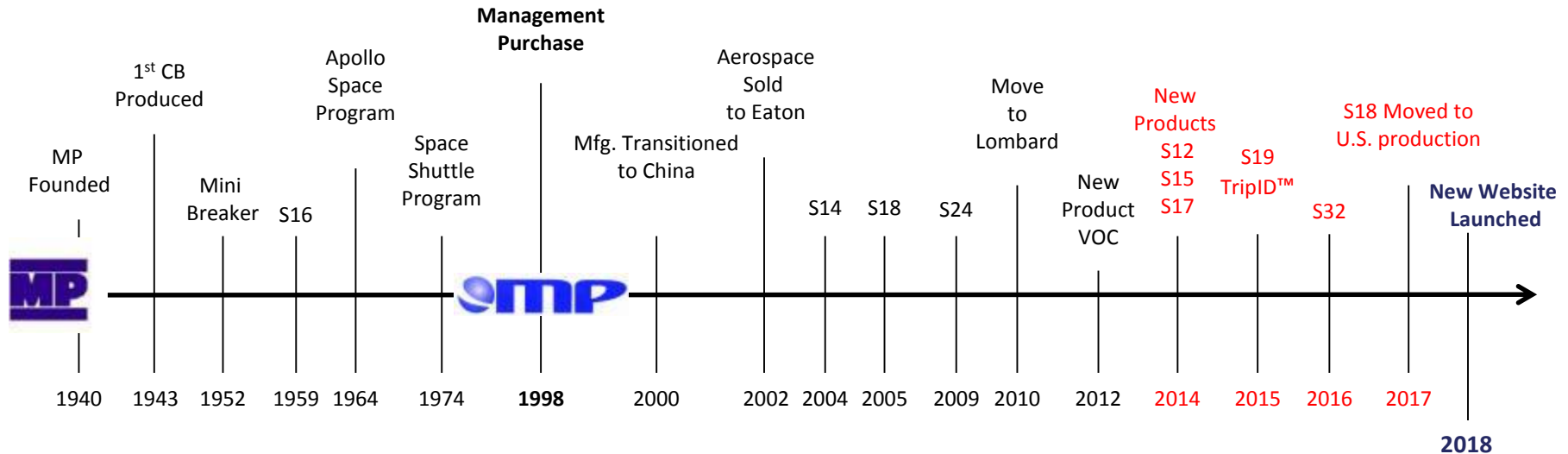




America's leading
manufacturer of thermal
circuit protection devices



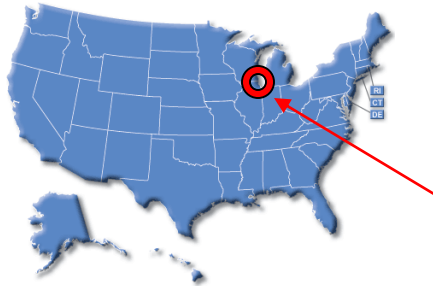
MP Company History



MP's products are known for the same proven design performance as the MP Aerospace Designs that preceded them.



MP Company Locations



Lombard, IL, USA

MP Headquarters

- Product Design & Engineering
- Sales, Marketing, Customer Service
- Lab Testing Capabilities
- Manufacturing (*from 2013*)
- ISO 9001:2018 Certified
- Short Run, Quick Response
- Distribution Center



Lombard, IL



Dong Guan, China

MP Manufacturing (Asia)

- 180,000 sq. ft. Low-cost Manufacturing, Assembly & Test Facility
- ISO 9001 Certified
- Engineering
- Warehousing / Distribution Center



Dong Guan, China



Service Capabilities

MP Inventory Program / Sampling Program

- Customs are Standard for MP
- Prototyping Capabilities
- Quick Response, sample or small order delivery

Complete Lab/Testing Facility

- Environmental Chamber
- Vacuum Chamber
- Temperature Ramp Testing
- Salt Spray Bath
- X-Ray
- Endurance Cycling
- Electrical Testing
- Humidity Chamber
- Fluoroscope
- G-Force Testing
- Vibration Testing
- Optical Comparator

Agency Testing





Typical Applications

- Construction & Electrical Generation
- Marine
- Medical – Portable Equipment
- Military Vehicles
- Power Management & Battery Backup
- Recreation Vehicles (RV)
- Residence & Appliance
- Specialty Vehicles
- Off road Vehicles
- Food Service
- Industrial





Product Overview (AC/DC)



SWITCHABLE



Series 07

- UL 489 Push / Pull Branch Molded Case Circuit Breakers
- UL 1077 Push / Pull Supplementary Protectors



Series 24

- UL 1077 One / Two Pole Rocker Style Snap-In Circuit Protectors

Push-to-Reset



Series 02

- UL 489 Resettable Branch Molded Case CB
- UL 1077 Resettable Supplementary Protectors



Series 14

- UL 1077 Supplementary Protectors, Ignition Protected, Economical, 3-20 Amp

Push-to-Reset



Series 12 **GOOD**

- UL 1077 Supplementary Protectors, Ignition Protected Very Economical, 3-20 Amp



Series 15 **BETTER**

- UL 1077 Supplementary Protectors, Ignition Protected, Economical, Same Compact Size 3-40 Amp



Series 16 **BEST**

- UL 1077 Robust, Configurable Supplementary Circuit Protectors



Product Overview (DC)



Push-to-Reset Heavy Truck & Equipment Circuit Breakers



Series 17

- UL 1500, Weatherproof, PTT,
- Manual or Auto Reset Circuit Breaker ---- RE-ENGINEERED !!



Series 19

- UL 1500, IP67 & IP69K Weatherproof, Manual or
- Auto Reset CB with
- Integrated LED Option



Series 18

- UL 1500, Weatherproof,
- Manual or Auto Reset
- Circuit Protector



Series 32

- UL1500, IP66 Manual & Auto Reset CB



Markets – Harsh Environment Breakers

- Agriculture - Vehicles & Equipment
- Construction - Vehicles & Equipment
- Marine - Boats / Marine Engines
- Buses - Transit, School, Specialty
- Military Vehicles
- Emergency Vehicles
 - Ambulances, Fire Trucks, Police Cars*
- Liftgate Mfg - Handicap & Cargo
- Recreational Vehicles / Motor Homes
- Trucks
 - Class 3-8, Snow Plows, Utility Trucks*
- Specialty Vehicles - 12 /24VDC systems

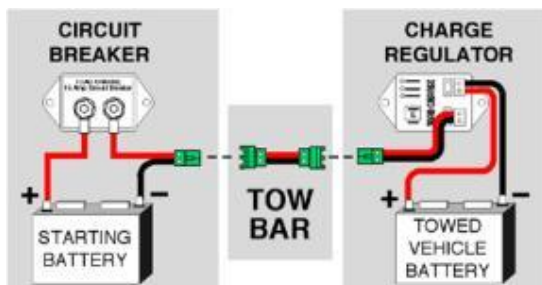




Applications - Series 17-18-19-32

To Protect *In the event of short circuit or overload condition*

- Wiring
- Components
- Lighting
- Batteries
- Battery Power Distribution Control
- DC to DC Power Conversion Products
- Electrical Motors, Trolling Motors
- Sub-Assemblies
- Hydraulic Pump Power Feeds
- Alternator
- Air Conditioning System
- Air Compressors on Utility Trucks





What does MP bring to the table?

- 100+ Years of circuit protection
- Expertise in Thermal Breakers
- High Quality & Repeatable Performance
- RoHS compliance and a broad base of approvals like UL, CSA, VDE, CCC, ABYC, SAE
- MADE IN USA & China
- Engineered Solutions for diverse applications
- Inventory stocking programs
- Competitively Priced
- Local support
- Local and low cost manufacturing



Questions / Discussion

ALL MATERIAL CONFIDENTIAL





New Products 2019

**PATENT
PENDING**



Battery Disconnect Circuit Breaker



Battery Selector Disconnect Switch
with integrated Circuit Breaker

➤ One-piece terminal stud design



Testing Performed:

Superior Specifications for:

- Electrical Performance
- Harsh Environments
- Shock, Vibration
- Ingress Protection
- Corrosion & Humidity

