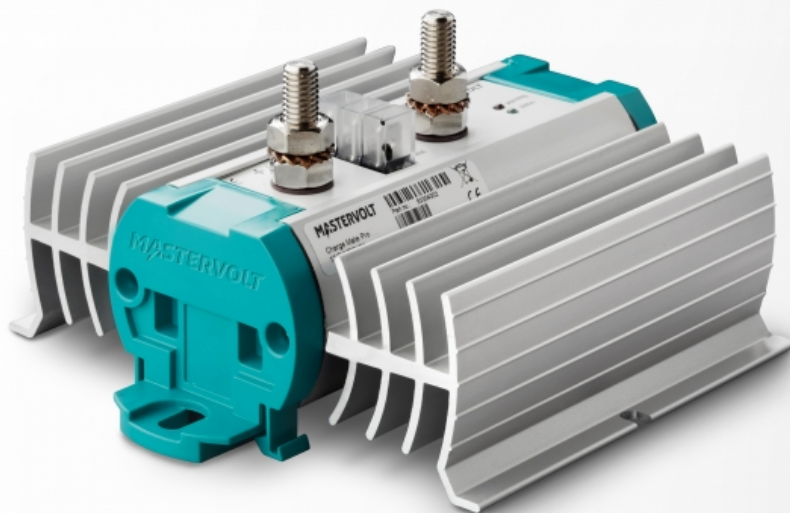


# Charge Mate Pro 90



Product code: 83309002

## Current limited electronic charge relay with high efficiency and reverse current protection

A secondary battery on board requires a dedicated charging solution. The Charge Mate Pro charging relay makes it possible to distribute the charger or alternator current effectively between two battery banks such as a starter and a service battery. The Charge Mate Pro connects both batteries during charging and keeps them isolated when discharging. This significantly reduces the risk of a flat starter battery for example.

The Charge Mate Pro offers an additional advantage over mechanical charge relays, by limiting the charge current to the second battery. The primary battery, like a starter battery, is therefore charged with priority. The return current is automatically blocked even when the secondary battery has a higher voltage. An emergency start function is possible by connecting an optional bypass switch to the Charge Master Pro.

A marine application example is the connection of a bow thruster battery to a service battery. The Charge Mate Pro ensures that the service battery is always charged with priority. The blocking of the return current from the bow thruster battery guarantees that the bow battery remains charged while the current limiting also prevents power dips of the onboard electrical network.

The Charge Mate Pro series consist of a 40 Amp and a 90 Amp version, both suitable for charger or alternator applications. The Charge Mate Pro 90 ensures a higher charge current for example when charging Lithium-Ion batteries. It is also perfectly suitable for large automotive alternators up to 180 A and can be used in parallel operation with a 225 Amp alternator to fulfil even higher continuous power demands of your equipment on board.

Charge Mate Pro: for controlled charging from a single source.

### Applications

Leisure and professional marine and mobile applications. An effective solution for high power demand on board and/or the need of prioritised or current limited charging.

### Features

- Charges two battery banks from a single source.
- Electronic charge coupling with very low voltage drop.
- Makes effective dual charging possible.
- Suitable for charging from AGM/GEL starter batteries to AGM/GEL/Lithium service batteries.
- Charge current secondary battery limited to 40 or 90 A.
- High system reliability by prioritised charging of the main battery.
- Unidirectional which blocks return current under all circumstances.
- Prevents power dips of the onboard electrical network.
- Suitable for all kinds of chargers and alternators.
- Monitoring with LED status indication.
- IP65 electronics in a corrosion resistant casing with aluminum heat sinks.
- Fast and easy installation.

# Specifications

## General specifications

Monitoring	LED (warnings and status indication)
Output current	limited to 90 A; > 25 °C derating power
Number of battery outlets	2
Input voltage range	9-32 V
Parallel configuration	yes
Battery voltage	automatic 12/24 V detection
Remote switch functions	on, off, auto, start assist
Dimensions, hxxwxd	157 x 140 x 80 mm 6.2 x 5.5 x 3.1 inch
Weight	0.88 kg 1.9 lb
Compliance	CE

## Technical specifications

Connection possibilities	3 x faston connectors (switch, ground and status) o switch: for an optional single pole ON-OFF-ON switch for remote operation o status: for an optional LED indicator
Power consumption	switch open: < 1 mA at 12/24 V DC
Battery types	Suitable for charging from AGM/GEL starter batteries to all types of batteries (for lithium starter battery applications, please use 83309004)
Switch on voltage	13.5 V (12 V) / 27 V (24 V)
Switch on delay	5 sec
Switch off voltage	12.75 V (12 V) / 25.5 V (24 V)
Switch off delay	2.5 sec
Relay	electronically (MOSFETs with low voltage drop of max 0.2 V)
Temperature range (ambient temp.)	-40 °C to 60 °C -40 to 140 °F
Protection degree	IP65