

Charge Mate



- Easy to install in existing installation
- Charge two battery banks at once
- Bi directional
- Multiple functions
- Start assist mode
- Microprocessor controlled

PN 83302502

Description

The Mastervolt Charge Mate is an automatic battery relay which connects two battery banks when the voltage rises above a pre-set value for at least 30 seconds, allowing these battery banks to be charged simultaneously. When the voltage drops, the battery banks will be isolated again.

This auto mode is the default setting when no optional remote is connected. An extra mode is Start Assist. In this mode a single push of a button connects the extra bank to the main battery bank for assistance of the main bank by the extra bank. The connection will be disconnected after 30 seconds.

The Charge Mate gives accurate information about the connection state of the batteries. An unlit LED indicates an open relay. When one of the batteries is being charged the LED will start to flash slowly to indicate it is counting to 30 seconds before closing the relay. When closed, the LED will be lit continuously

Specifications

Model

Charge Mate 2502

GENERAL SPECIFICATIONS

Nominal battery voltage	12V / 24V
Continuous rating	500A
Cranking rating	2000A
Inrush current	2000A
Inrush duration	250ms
Operational temperature	40 to 65°C
Weight	0.65 kg
Protection degree	IP21

TECHNICAL SPECIFICATIONS

Number of modes	4 (on, off, auto, Start Assist)
Power consumption, switch open	< 1mA @ 12.0V DC
Power consumption, switch closed	150mA@12.0V DC / 90mA@24.0V DC
Peak power consumption:	1A@12V DC / 0.8A@24V DC

MODE AUTO

Switch on voltage	13.615.0V DC@12V DC / 27.230.0V DC@24V DC
Switch on delay	30 seconds
Switch off voltage	<12.6V DC@12V DC / <25.2V DC@24V DC
Switch off delay	no
Alarms	relay does not close when voltage drop > 8.0V DC, relay opens at > 0.5V DC across when closed

MODE ON/OFF

Activation	relay follows switch
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MODE START ASSIST

Turn on	immediately
Turn off	after 30 seconds
Activation	normally open, closes by pulse from switch

ENVIRONMENT

Operating temperature specified (will meet specified tolerances)	full specs, -40°C to 65°C ambient temperature
Relative humidity	protected against humidity and condensing air by conformal coating on both sides of all PCB's, max. 95% relative humidity, none condensing
Dimensions (hxwxd)	90x80x85 mm

Accessories



Control button emergency start



Switch (waterproof) on-off-(on) 1p