

POWERBOOZT

Trc M / IGN

12-12 50A

12-24 25A

24-24 50A



Charger / booster
Motion Controlled



Owners Manual
V21.1

Feature Trc-M

- Simple installation
- Soft start
- Temperature compensated
- Charger
- EURO 5/6 motion

Feature Trc-IGN

Same as Trc-M, except Motion Controlled function: Trc-IGN is controlled by Ignition Signal (D+ or motor running signal from alternator). The (double) connection is mounted below the + input from the starter battery.

Purpose

Supplying stable boost or increased charge power in vehicle and/or craft.

Installation

Connect the load/secondary battery to the positive terminal (+ output) of the Trc-M.

1. Connect the load/secondary battery to the negative terminal (-) of the Trc-M.
2. Connect the power supply/primary battery to the positive terminal (+ input) of the Trc-M.
3. Connect the power supply/primary battery to the negative terminal (-) of the Trc-M.

Only for Trc-IGN

4. Connect the IGN to the D+ of the alternator (Motor running signal)

Warnings:

The product must only be connected by skilled fitters/mechanics who are aware of the regulations for working with high battery voltages.

The product may be damaged if you use inferior connection material and/or wiring that is too thin.

A short circuit between the positive and negative terminals of the battery may severely damage your system.

Always use 100 A fuse on the input and 100 A fuse on the output.

Operation

The Trc-M 12-12 50A and 12-24-25A switch on when engine vibrations are detected and input voltage >12.6 VDC.

The Trc-M 24-24 50A switches on when engine vibrations are detected and input voltage >25.2 VDC.

The Trc-IGN 12-12 50A and 12-24-25A switch on when D+ signal is detected and input voltage >12.6 VDC.

The Trc-IGN 24-24 50A switches on when D+ signal is detected and input voltage >25.2 VDC.

Cut-in voltage

When the input voltage is higher than 12.6 V (For Trc-M : combined with engine vibration), the Trc-M/IGN 12-12 50A and 12-24-25A will switch on. Trc-M/IGN 24-24 50A will switch on as soon as the input voltage is higher as 26.2V (For Trc-M: combined with engine vibration),

CHARGE and STANDBY Mode

For Trc-M/IGN 24-24 50A Maximum voltage in charge mode is 28.8V. When a voltage of 28.4 V is measured on the output, a timer will start and run for an hour. After this hour, it will be set to the "Standby mode". The Trc-M sends out 27.6 V in the "Standby mode" and the green LED stays on.

It will only be switched to the "Charge mode" again if:

- The voltage on the output falls below 26.4 V (for 5 s).
- The Trc-M/IGN has been in the "Standby mode" for 24 consecutive hours.

For Trc-M/IGN 12-12 50A and 12-24-25A Maximum voltage in charge mode is 14.4V. When a voltage of 14.2 V is measured on the output, a timer will start and run for an hour. After this hour, it will be set to the "Standby mode". The Trc-M/IGN sends out 13.8 V in the "Standby mode" and the green LED stays on.

It will only be switched to the "Charge mode" again if:

- The voltage on the output falls below 26.4 V (for 5 s).
- The Trc-M /IGN has been in the "Standby mode" for 24 consecutive hours

Temperature limitation

When the temperature of the converter is higher than 40 °C, the output current will be adjusted back in steps of 20% – 10 A. If the temperature again is below 60 °C, the output current will again be increased in steps of 20% until the maximum deliverable output current is reached.

Undervoltage and overvoltage protection

Trc-M/IGN 1212-50 and Trc-M/IGN 1224-25 : When the output voltage is lower than 12.2V for 5 seconds or higher than 17 V, the unit will switch off.

Trc-M/IGN 2424-50 : When the output voltage is lower than 24.4 V for 5 seconds or higher than 34 V, the unit will switch off.

LED

The LED will light up when the Trc-M/IGN is in CHARGE and STANDBY Mode.

TECHNICAL

Trc-M 1212-50

Output voltage charge	14.4 V
Output voltage standby	13.8 V
Charge transition	<13.2 V
Charge forcing	Every 24 hours 50 A
Constant Current	A
Undervoltage switch off	12.2 V
Voltage switch on	12.6 V
Overvoltage protection	17.0 V
Efficiency	±92%
Environment operating Temperature	-10°C...+ Derating u

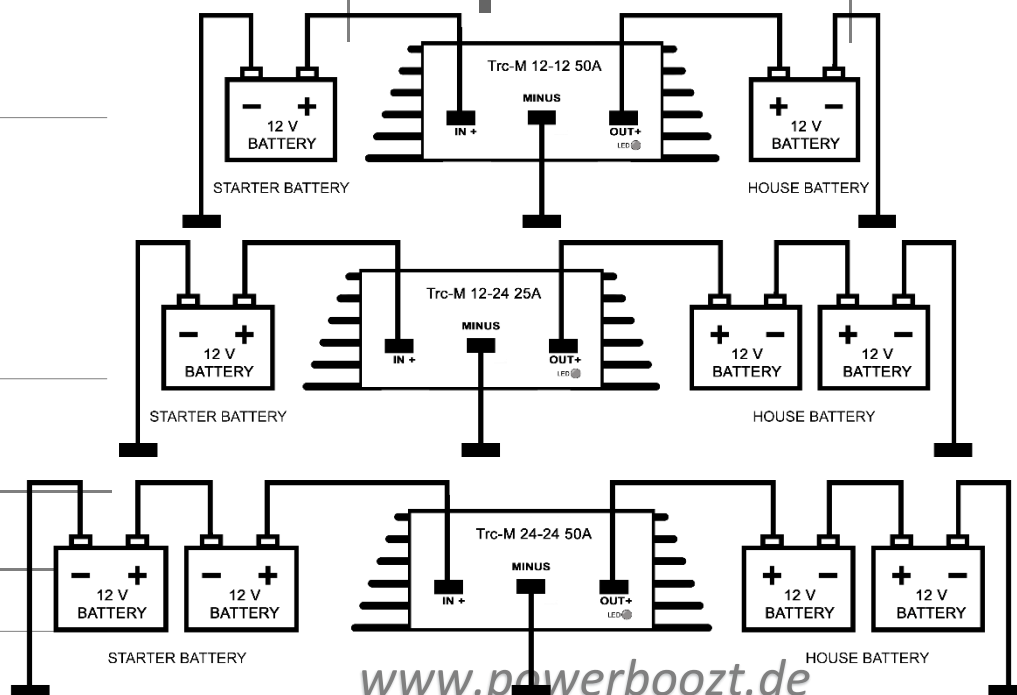
Trc-M 1224-25

Output voltage charge	28.8 V
Output voltage standby	27.6 V
Charge transition	<26.4 V
Charge forcing	Every 24 hours 50 A
Constant Current	A
Undervoltage switch off	12.2 V
Voltage switch on	12.6 V
Overvoltage protection	17.0 V
Efficiency	±92%
Environment operating temperature	-10°C...+ Derating u

Trc-M 2424-50

Output voltage charge	28.8 V
Output voltage standby	27.6 V
Charge transition	<26.4 V
Charge forcing	Every 24 hours 50 A
Constant Current	A
Undervoltage switch off	24.4 V
Voltage switch on	25.2 V
Overvoltage protection	34.0 V
Efficiency	±92%
Environment operating temperature	-10°C...+ Derating u

Dimensions	Height	64 mm
	Width	335 mm
	Depth	163 mm
Weight	2,250 gram	
Connections	3 x M6	



TECHNICAL

Trc-IGN 1212-50

Output voltage charge	14.4 V
Output voltage standby	13.8 V
Charge transition	<13.2 V
Charge forcing	Every 24 hours 50
Constant Current	A
Undervoltage switch off	12.2 V
Voltage switch on	12.6 V
Overvoltage protection	17.0 V
Efficiency	±92%
Environment operating Temperature	-10°C...+ Derating u

Trc-IGN 1224-25

Output voltage charge	28.8 V
Output voltage standby	27.6 V
Charge transition	<26.4 V
Charge forcing	Every 24 hours 50
Constant Current	A
Undervoltage switch off	12.2 V
Voltage switch on	12.6 V
Overvoltage protection	17.0 V
Efficiency	±92%
Environment operating temperature	-10°C...+ Derating u

Trc-IGN 2424-50

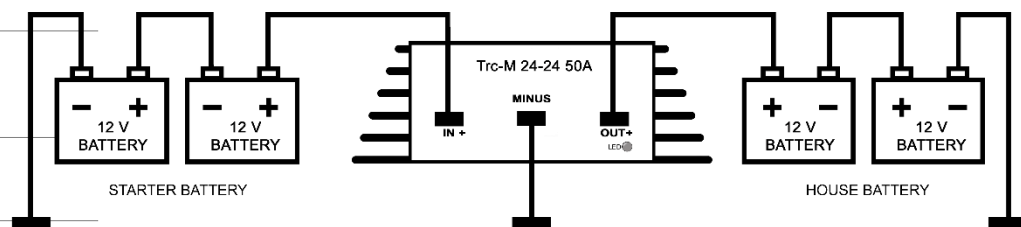
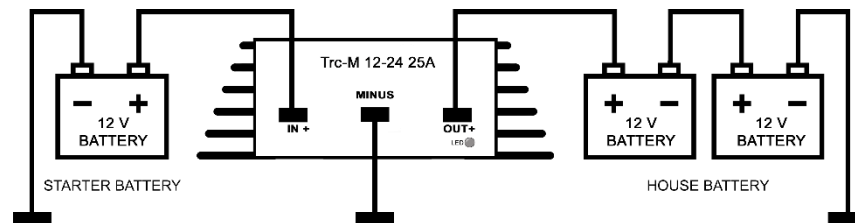
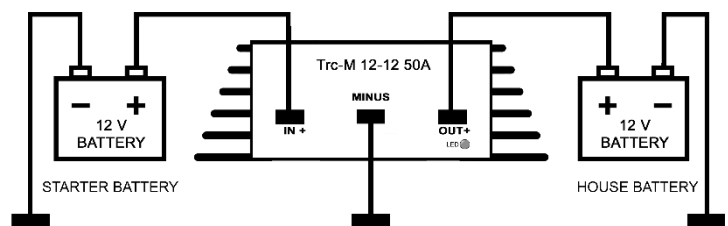
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Charge forcing	Every 24 hours 50
Constant Current	A
Undervoltage switch off	24.4 V
Voltage switch on	25.2 V
Overvoltage protection	34.0 V
Efficiency	±92%
Environment operating temperature	-10°C...+ Derating u

Dimensions	Height	64 mm
	Width	335 mm
	Depth	163 mm

Weight 2,250 gram

Connections 3 x M6

Cooling Passive



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