

# ARTICLE NO. M038N

Preisgruppe: 6 Price group: 6



# Spannungswandler

von 24 V= auf 12 V= (13.8 V=).

max. 3 A



...zum Betrieb von 12 Volt= Geräten an einer 24 Volt= LKW - oder Bootsbatterie. Kurzschlussfestes, rüttelsicheres Modul.



### Converter

from 24 V= to 12 V= (13,8 V=), max. 3 A

...for operation of 12 Volt= devices at a 24 Volt= lorry or boat battery. Short circuit-proof, shock-proof module.



Transformador de tensión de 24 V= a 12 V= (13,8 V=), máx. 3 A





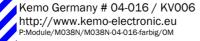
Spanningsomvormer van 24 V= naar 12 V= (13,8 V=), max. 3 A



Conversor de tensão de 24 V= para 12 V= (13.8 V=), máx, 3 A



Преобразователь постоянного напряжения из 24Вольт на 12 Вольт (13.8 Вольт), макс. З А





The module may possibly become considerable hot during operation. Therefore, it is necessary to fix with screws the base plate at the module either at a cooling angle (cooling fin min.  $50 \times 100 \times 30$  mm) or at any other cooling metal plate. The base plate should be placed as plane as possible in order to achieve high elimination of heat. It is advisable to mount the module at a well ventilated spot. Whenever the base plate has not been sufficiently ventilated, the module will automatically switch off by any overheating and switch on after having cooled off. As each module has been carefully tested before being delivered, there is no possibility of any compensation!

ATTENTION! The module is solely capable to convert voltages from 24 V to 12 V not vice versa from 12 V up to 24 V! Use as directed:

Voltage reduction from 24 V battery to 12 V for operation of 12 V devices at 24 V truck or boot batteries.

## Setting into operation:

If the module has been installed in a cool place according to the assembly instructions, the voltage may be switched on and the module may be set into operation.

#### Check list for troubleshooting:

The module heats up a lot and disconnects after a few minutes. There may be several reasons: either the module is not cooled sufficiently (cooling surface is too small, bad heat transfer, etc.) and / or the module is not ventilated sufficiently. Cooling of the module should be that good so that the base plate does not heat up to more than 40 degree C during normal operation. If it gets hotter, this indicates that the heat is not removed sufficiently.

### Technical data:

Input voltage: 24...26 V

Output voltage: 13,8 V (equivalent to a full loaded 12 V battery)

Maximum current: 3 A

Dimensions: approx. 86 x 60 x 32 mm