



victron energie

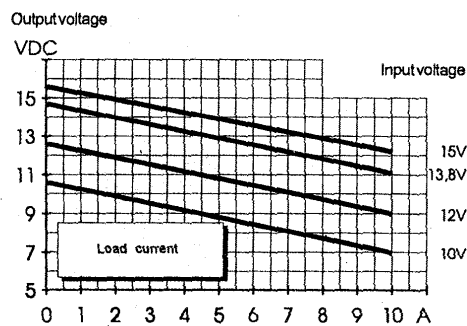
USER MANUAL

Orion 12/24/8

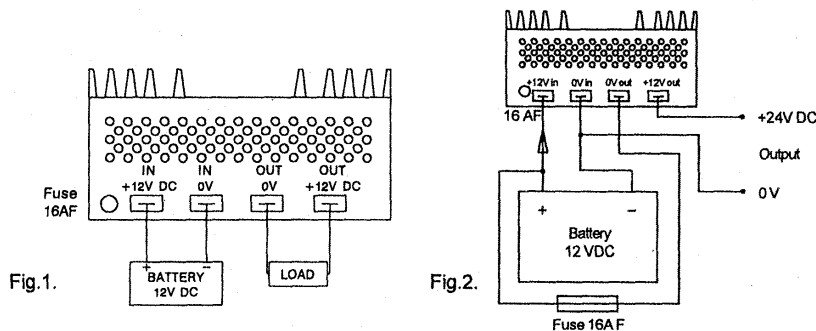
Orion 12/24/8 is a push-pull converter with a galvanic separation between input and output.

The input voltage can vary from 10V DC to 16V DC. The output voltage is almost the same as the input voltage, (which can vary from 10V DC to approx. 16V DC). When loaded, the output voltage falls to below 10V DC when the input voltage is low.

Graph showing input voltage, output voltage and load current.



In order not to drain the battery, the converter should be disconnected from the battery when it is not in use, as it has an idling current of approx. 0.4A.



The converter generates heat during operation, and shall therefore not be placed in a warm location. Positioning in a humid location should also be avoided.

If the converter is used for long periods with overload and/or in excessively warm ambient temperatures, its lifetime may be reduced drastically.

In order to reduce noise and to achieve lower voltage loss from the leads, the leads from the battery should be positioned along parallel lines and be as short as possible. The leads out to the load should also be placed in parallel lines. Recommended minimum lead cross-section: 2.5 MM²

The converter can also be used as a voltage doubler from 12V DC to 24V DC, but without galvanic isolation between the input and output. The output is connected in series with the battery so that the output voltage is equivalent to the battery voltage plus the output voltage of the converter. Connect as shown in fig. 2. above.

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