The iesy Trailer Converter TDC 650 IP65 provides a 12V (boat) trailer to a 24V system (truck or towing vehicle) to connect the lighting of the trailer with the correct voltage. For this purpose, six independent inputs and outputs are available. Each will transform the 24V to 12V, independent of each other. Every output can deliver 5A max.

Series iesy TDC
DC/DC Trailer Converter TDC 650 IP65

Technical specification Trailer Converter TDC650:

Input voltage	12-30VDC
Output voltage	14,4VDC max.
Load	40W

Current is limited
Temperatur is limited
Short circuit protected
Reverse polarity protection on input
Dimensions (220)125*163*64mm including connectors
Not galvanic isolated
Enclosure IP65 waterproof

Technical Specification Linear Converter iesy LC06 & SMUC 1 Booster (IP67):

LC06: Input: 18-30V_{DC} => Output: 13,8V_{DC} / 5Amp.
Not galvanic isolated
Chassis mount needed to dissipate heat / cooling
Dimensions LxWxH 85x40x16mm incl. 6.3 mm (2.5 inches) conn.
Waterproof IP67, Weight: 50 g
SMUC 1: Input: 9-18VDC => Output: 24VDC / 1Amp.
Not galvanic isolated
Dim. LxWxH 80x41x18mm incl. 6.3 mm (2.5 inches) flat blade.
Waterproof IP67, Weight: 70 g

Series iesy LC6 IP67 & SMUC 1 IP67
Linear Converter LC06 & Switch Mode Up Converter

LC 06 (IP67)
(24V_{DC}=>12V_{DC}/5A)

SMUC 1 (IP67)
(12V_{DC}=>24V_{DC}/1A)

Prevention of electrolytic corrosion

Galvanic corrosion (rust) occurs when two dissimilar metals in electrical contact are simultaneously exposed to an electrically conducting fluid. Seawater and, to a lesser extent, fresh water are such fluids. In general, the more active alloy of the couple corrodes preferentially while the less active (more noble) material is cathodically protected. The rate of galvanic corrosion is a function of several variables including area ratios, conductivity of the fluid, temperature, nature of the materials, etc.
It is a misunderstanding that galvanic corrosion occurs only in metal and aluminium hulls. In fact it can occur on any boat as soon as a metallic part (the shaft and propeller) is in contact with water. Galvanic corrosion will quickly dissolve your sacrificial anodes, and attack the shaft, propeller and other metal parts in contact with water as soon as the boat is connected to the shore-side supply.
It might therefore be tempting not to connect the ground conductor: this is however extremely dangerous because GFCI's will not work nor will a fuse blow in case of a short circuit to a metal part on the boat.
In practice, for example, the ships in the circuit between the different metals by the combination of the grounding line of the land connection with the metal parts of the ship (earth) is necessarily closed. This leads, as described above, to galvanic corrosion. Ship between the metal (metal parts such as propellers, the drive shaft or the metal shell) and the metal to country (sheet piling, dock lines or even in addition to ships), a current flows. In this way will, the anodes, the propeller or the vessel, to be attacked. By placing the galvanic isolator iesy GI-16 this damage can be avoided.

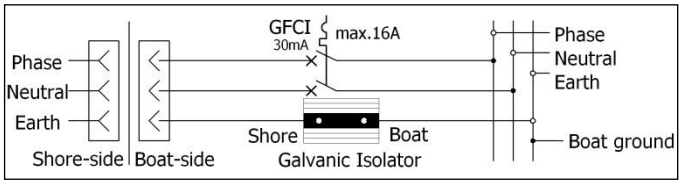
Series iesy GI-16
Galvanic Isolator
to prevent corrosion

iesy Corrosion stopper!

Technical specification Galvanic Isolator GI-16:

Galv. Isolator GI-16	Waterproof
Max. current	16 A
Peak current	1600 A / 20 ms
Connections	2x Bolt M6
Enclosure:	
Material	Anodisiertes Aluminium
Protection category	IP 67 (100% waterproof)
Weight	1 kg
Dimensions (HxWxL)	55 x 120 x 200 mm
Test	ANSI/ABYC A-28

The connection of the grounding (earth wire) of the land connection to the metal parts of the vessel, leads to galvanic corrosion!



Specials and/or private label on request / For more information see Manuals