



SWITCH MODE ISOLATION TRANSFORMERS

Mass GI 3.5, 7.0 & 7.0 multi tap

Light weight & compact ship-to-shore connection

Safe shore power

Safety is essential when you are staying on your yacht, whether out at sea or in the harbour with your on board electrical system connected to the shore power. Next to safety, galvanic corrosion is another common threat for your ship. Selecting the right components for your shore power installation is a key factor here.

The best way to avoid galvanic corrosion and to achieve the highest grade of safety is to isolate the on board electricity system from the shore. This can be achieved by means of a galvanically isolated battery charger, but in larger installations, you will need a galvanic isolation device. Mastervolt has several options for you to choose from.

Switch mode technology

Mastervolt is proud to present a new generation of isolation transformers. Many years of engineering experience with switch mode technology for battery chargers and inverters has contributed to this revolutionary new technology. Mastervolt introduces world's first light weight transformer: the Mass GI switch mode isolation transformer.

Besides safety and the protection against galvanic corrosion, the Mass GI is also the ultimate component to isolate and protect

sensitive, expensive equipment from noisy electrical system grounds, ground loops and other power line disruptions.

Easy to install

Traditional isolation transformers contain a lot of copper and sheet metal making the transformer very heavy and thus difficult to handle and to install in small compartments as often available on a ship.

As the Mass GI is developed with HF technology, heavy weight transformers were eliminated. This has resulted in a weight reduction of approximately 75% compared to traditional isolation transformers. The switch mode technology has also led to another improvement: the absence of the humming sound as often produced by traditional transformers which can be heard all over the ship, giving you sleepless nights.

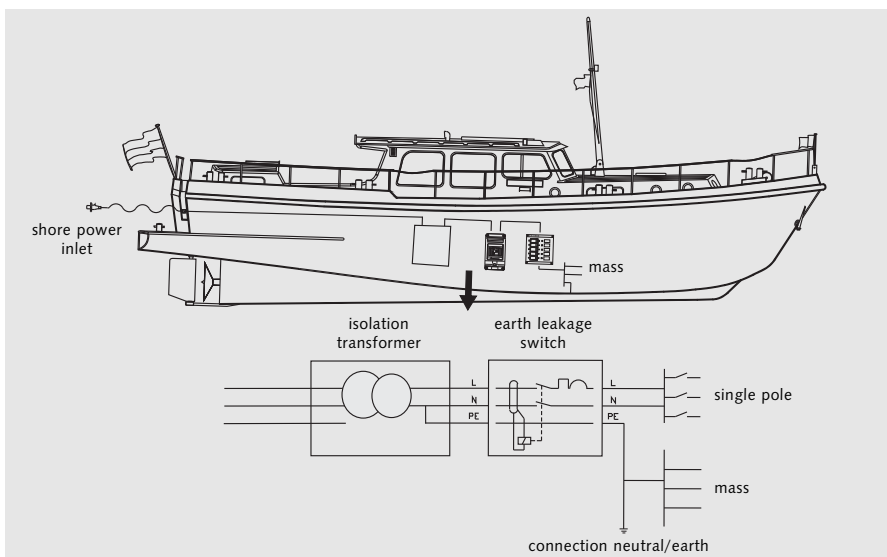
Readout of diagnostics

A clear LED bar on the front of the cabinet shows the actual transformed power. In case of a fault situation, like overload, a combination of error LEDs indicates the cause of the failure. Furthermore the Mass GI is offered as a complete, stand-alone unit with integral softstart, protective circuits and potential free alarm contact which can



be used to operate an external alarm or an additional relay. This offers you the possibility to start a generator or to switch off non-preferent loads in order to reduce the load.

- ULTRA LIGHT WEIGHT: 75% WEIGHT REDUCTION
- ULTRA SMALL, 60% VOLUME REDUCTION
- EASY INSTALLATION
- SILENT OPERATION
- SOFTSTART INCLUDED
- SOURCE INDICATORS & SYSTEM DIAGNOSTICS
- POTENTIAL FREE ALARM CONTACTS
- CAN RUN IN PARALLEL FOR MORE POWER
- LOW NO-LOAD CONSUMPTION
- OPTION FOR REMOTE MONITORING



TECHNICAL SPECIFICATIONS SWITCH MODE ISOLATION TRANSFORMERS

Model	Mass GI 3.5	Mass GI 7.0*	Mass GI 7.0 multi tap**
Article number	88000355	88000705	88060705
GENERAL SPECIFICATIONS			
Nominal power	3500 VA	7000 VA	7000 VA @ 230 V/3500 VA @ 120 V
Input voltage	90 - 255 V AC	90 - 255 V AC	90 - 145 or 180 - 255 V AC
Input current	16 A cont. @ 40 °C/104 °F	32 A cont. @ 40 °C/104 °F	32 A cont. @ 40 °C/104 °F
Input frequency	45 - 65 Hz	45 - 65 Hz	45 - 65 Hz
Output voltage	same as input voltage, ±5%	same as input voltage, ±5%	230 V, ±5%
Output frequency	same as input frequency	same as input frequency	same as input frequency
ENVIRONMENT			
Dimensions (HxWxD)	340x261x144 mm/13.4x10.3x5.7"	340x261x280 mm/13.4x10.3x11"	340x261x280 mm/13.4x10.3x11"
Weight	5.5 kg/12 lbs	10 kg/22 lbs	10 kg/22 lbs
Operation temperature	full specifications from 0 °C/32 °F to 40 °C/104 °F. Derating thereafter with 5%/°C or 2.8%/°F.		
Storage temperature	ambient temperature -50°C/-58°F to 100°C/212°F		
Relative humidity	protected against humidity and condensing air by conformal coating on both sides of all PCB's, max 95% relative humidity, non condensing		
Directives	CE compliant and comply with all EU recreational craft directories. <ul style="list-style-type: none"> • EMC: 89/336/EEC, amendments 92/31/EEC, 93/68/EEC • safety: 73/23/EEC, amendment 93/68/EEC. Automotive: 95/54/EC • IEC: 60950 		
OPTIONS			
MasterView Easy	touch screen to control and monitor all MasterBus products		
Parallel mode operation	yes, using MasterBus		

* Available from December 2008.

** Available from February 2009.

Parallel configuration for high power requirements

For example: 64 A, total weight 20 kg.

